STATE OF COLORADO

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

GCC M2002004 4Q 2024 Groundwater Report

1 message

Meghan Way <meghanway@gcc.com> Mon, Jan 20, 2025 at 3:07 PM
To: Jocelyn Carter - DNR <jocelyn.carter@state.co.us>
Cc: Landon Beck <lbeck@slrconsulting.com>

Hi Jocelyn,

Attached is the 2024 4Q groundwater data report for GCC's Pueblo Plant, M2002004. This submittal includes a letter reviewing the sampling methodology including time series graphs as requested by DRMS. Please let me know if you have any questions concerning this.

Thank you,

GCC

Meghan Way

Environmental Engineer- Pueblo Plant

O: 719-647-6861

C: 719-963-9308

GCC.com

3 attachments

GCC Pueblo 2024Q4 Field Forms.pdf
2993K

GCC Pueblo 2024Q4 Lab Reports.pdf
1215K

SLR Letter - GCC Pueblo 2024Q4 Quarterly GW Report 17JAN2025.pdf
667K

SLR International Corporation
Durango, CO

January 17, 2025

Ms. Meghan Way
GCC Rio Grande, Inc.
3372 Lime Road
Pueblo, CO 81004
meghanway@gcc.com

RE: 2024 Q4 Quarterly Groundwater Report; Pueblo Plant, Permit #M-2002-004

Dear Ms. Way,

This letter addresses the 2024, quarter 4 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, laboratory data validation report, 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, 2ndQuarter, 3rd Quarter, 4th Quarter, Permit #M-2002-004.

During 2024 Q4 monitoring all wet monitoring 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-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-18, MW-19, MW-20, MW-21, and MW-23 despite keeping purge and sample flow rates within the target 0.03 to 0.10 gpm and the total purge and sample production time post-tubing volume purge to a minimum. Regardless, as there is a historical data set of more than 10 quarters for all of the pre-TR-12 wells, time-series plots for several constituents shown in Figures 1, 2, and 3 below indicate a data consistency to support that the current sample collection method, despite drawdown exceeding EPA methodology, does produce representative groundwater chemistry results. The ten new TR-12 monitoring wells, each now with two monitoring events, are also plotted.

It is noted that in 2024 Q4, for all wells the total purge volumes at sample collection time were aligned with the respective sample pump full tubing volumes, whereby stabilization parameter documentation began at the time the full target tubing volume was produced. Per the TR-11 SAP Appendix 1 GCC Rio Grande Pueblo Plant Groundwater Monitoring Well Compliance Sampling Procedure, step 7(i) “Once the given target tubing purge volume has been discharged, monitor the individual water quality field parameters utilizing the VuSitu app for stabilization over 3 consecutive measurements…”. During 2024 Q4 compliance monitoring at each well, the three sets of recorded stabilization parameters were recorded, each three minutes apart, including the final (third) set of sample parameters, which was not recorded until the initial prescribed tubing volume was produced, based on observed totals in the purge bucket.

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 Q4 all wells were purged based on these calculations, so all stagnant water from the tubing was purged prior to sample collection by 0.02 gallons or more, with the exception of MW-6, MW-7, MW-10, MW-11, MW-19, MW-20, and MW-21. All but MW-6 were within hundredths of a gallon and are likely within the range of reading error using the bucket volume

incrementations. The last column in Table 1 shows what is effectively a corrected purge difference value for each well, demonstrating all wells in 2024 Q4, with the exception of MW-19, were otherwise purged beyond the minimum required to obtain representative samples. Comparison of field and laboratory parameters between 2024 Q2, 2024 Q3, and 2024 Q4 in the data summary Table 2 indicate very little differences, suggesting the very slight under-purge of MW-19 by 0.03 gal in 2024 Q4 did not compromise the validity of these results.

Table 1 – 2024 Q4 Sampling Purge Rates, Volumes, & Drawdowns

	2024 Q4 Sampling Event										
Monitoring Well ID	**Purge & Sample Flow Rate as Measured in Graduated Beaker** (gpm)	**Sample Pump Tubing Volume - Fixed Length on Dedicated Pump** (gal)	**Purge & Sample Flow Volume as Measured in Bucket at Sample Collection** (gal)	**Target Total Purge Volume Based on Measured Purge Flow Rate** (gal)	**Total Purge Volume Difference Target vs Actual** (gal)	**Static Water Level** (ft TOC)	**Pumping Water Level at Sample Collection** (ft TOC)	**Purge & Sample Drawdown** (ft)	**Pump Set Depth** (ft TOC)	**Actual Tubing Volume to Displace Factoring Tubing Water Column Length** (gal)	**Total Purge Volume Difference Target Corrected for Tubing Water Column vs Actual** (gal)
MW-5	Dry										
MW-6	0.06	0.3	0.50	0.66	**-0.16**	28.88	31.45	**2.57**	55.7	0.14	0.00
MW-7	0.04	0.3	0.50	0.54	**-0.04**	28.59	31.28	**2.69**	55.0	0.14	0.12
MW-8	0.03	0.4	0.60	0.58	0.02	28.32	34.78	**6.46**	62.5	0.16	0.26
MW-9	0.03	0.2	0.50	0.38	0.12	24.66	28.07	**3.41**	38.6	0.06	0.26
MW-10	0.05	0.5	0.75	0.80	**-0.05**	23.95	32.01	**8.06**	79.0	0.27	0.18
MW-11	0.03	0.4	0.55	0.58	**-0.03**	51.44	54.38	**2.94**	68.5	0.08	0.29
MW-12	0.03	0.5	0.75	0.68	0.07	56.65	64.56	**7.91**	85.4	0.12	0.45
MW-13	0.04	1.0	1.25	1.24	0.01	114.53	117.37	**2.84**	167.5	0.29	0.72
MW-14	0.06	1.2	1.70	1.56	0.14	92.50	94.68	**2.18**	203.6	0.60	0.74
MW-15	Dry										
MW-16	Dry										
MW-17	Dry										
MW-18	0.04	0.3	0.60	0.54	0.06	35.37	38.65	**3.28**	58.0	0.11	0.25
MW-19	0.03	0.4	0.50	0.58	**-0.08**	11.82	14.97	**3.15**	76.7	0.35	**-0.03**
MW-20	0.03	0.6	0.75	0.78	**-0.03**	11.92	20.43	**8.51**	99.5	0.45	0.12
MW-21	0.04	0.7	0.90	0.94	**-0.04**	41.21	44.82	**3.61**	127.0	0.47	0.19
MW-22	Dry										
MW-23	0.04	0.5	0.75	0.74	0.01	73.37	79.25	**5.88**	81.8	0.01	0.50
MW-24	Dry										

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

Time series plots for concentrations of sulfate, total dissolved solids (TDS), and total alkalinity are provided as Figures 1, 2, and 3, respectively, to demonstrate consistency of the 2024 Q4 data with respect to conservative constituent concentrations and trends through time within the Fort Hayes Limestone, Codell Sandstone, and Blue Hills Shale lithologic units. Further discussion of major ion and trace element chemistry is provided in the annual groundwater report submitted in January of each year.

Groundwater quality at monitoring locations completed in the Ft. Hayes Limestone (MW-6, MW-7, MW-11, MW-13, MW-19, MW-21, and MW-23) during the 2024 Q4 sampling event was consistent with concentrations and trends through time for sulfate, TDS, and total alkalinity (Figures 1 through 3). Concentrations of sulfate, TDS, and total alkalinity at newly installed wells MW-19, MW-21, and MW-23 were consistent with other wells completed in the Ft. Hayes Limestone and will continue to be monitored for trends through time.

Similarly, groundwater quality at monitoring locations completed in the underlying Codell Sandstone (MW-8, MW-9, MW-12, MW-14, MW-18, and MW-20) during the 2024 Q4 sampling event was consistent with concentrations and trends through time (Figures 1 through 3). In 2024 Q4 MW-22 and MW-24 were dry or had too little water available to produce a sample. Concentrations of TDS have increased through time and appear to have stabilized in the downgradient MW-14 location. Concentrations of alkalinity at MW-14 have decreased since 2023 Q4. Concentrations of sulfate, TDS, and total alkalinity at newly

installed wells MW-18 and MW-20 appear to be lower than observed in the other Codell Sandstone wells, however, trends for these locations have not been established after only two monitoring events.

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 Q4 sampling results trending in line with previous sampling events (Figures 1 through 3).

As already discussed in the previous email from GCC to DRMS dated December 16, 2024, in 2024 Q4 there were exceedances of laboratory-reported fluoride, selenium, boron, and manganese concentrations at select wells, all which are qualified with explanations as background. Furthermore, the manganese and boron exceedances are excepted by rule per Water Quality Control Commission Regulation 41.

Finally, the data validation report for all 2024 Q4 laboratory data has been received and reviewed to find no concerns and the data fully usable. The report, prepared by DSA is included in this submittal below.

Regards,

SLR International Corporation

Landon Beck
Principal Hydrogeologist
lbeck@slrconsulting.com

Electronic Attachments: 2024 Q4 GW monitoring field forms, 2024 Q4 lab reports

CC: None

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

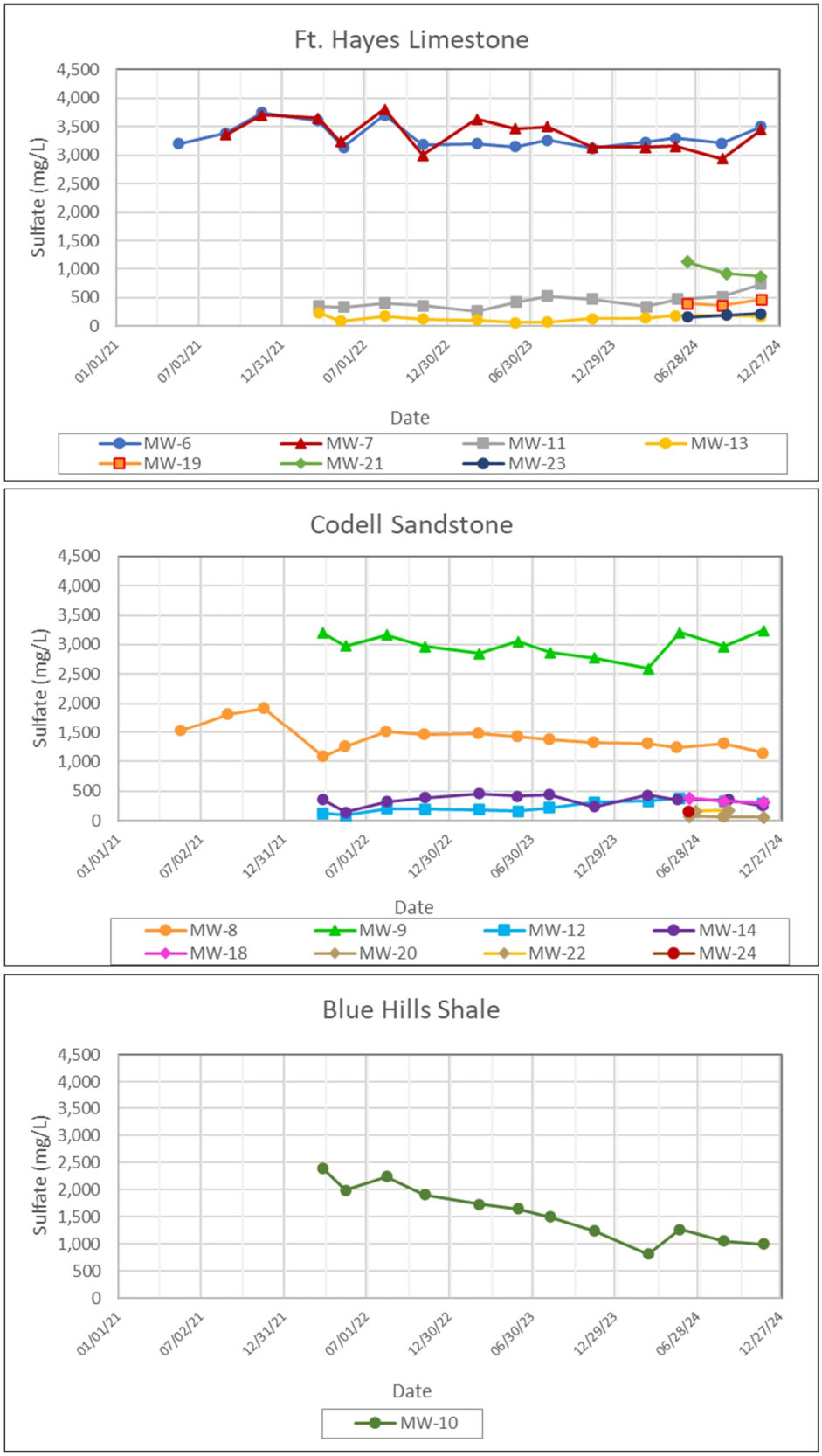

Figure 2. Concentrations of Total Dissolved Solids in the Ft. Hayes Limestone, Codell Sandstone, and Blue Hills Shale.

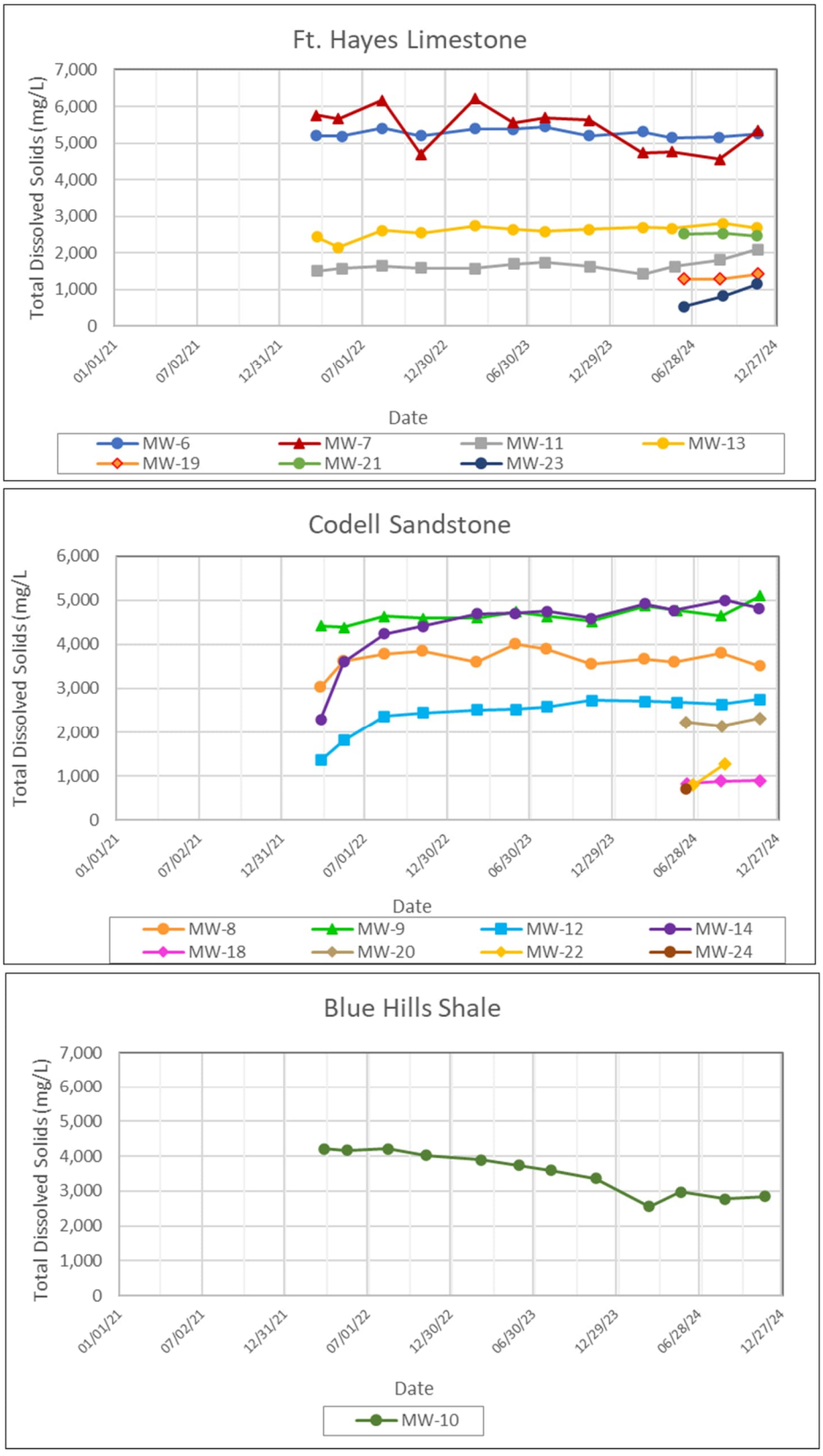

Figure 3. Total Alkalinity in the Ft. Hayes Limestone, Codell Sandstone, and Blue Hills Shale.

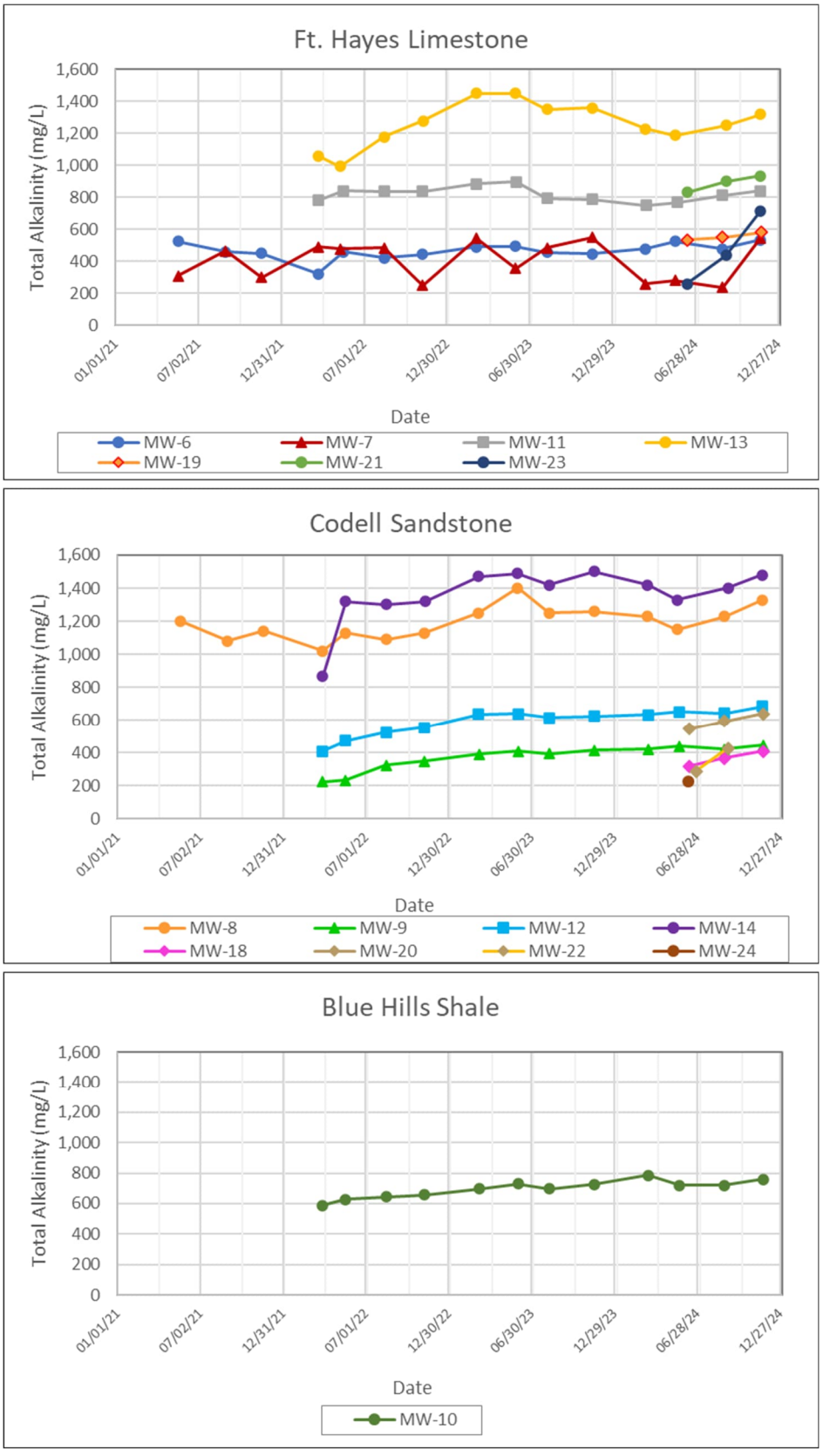

Table 2

Location ID	Sample Date	Depth to Water (ft BTOC)	Field pH (SU)	Field Specific Conductance (µS/cm)	Field Temperature (Degrees C)	Total Dissolved Solids (mg/L)	Total Alkalinity (mg/L)	Bicarbonate as CaCO3 (mg/L)	Carbonate as CaCO3 (mg/L)	Hydroxide as CaCO3 (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Fluoride (mg/L)	Nitrate (mg/L)	Nitrate/Nitrite (mg/L)	Nitrite (mg/L)
MW-5	5/15/2024	DRY														
MW-5	11/18/2024	DRY														
MW-6	3/11/2024	34.16	6.93	5,147	14.5	5,310	480	480	<2	<2	83	3,230	0.53	<0.02	<0.02	<0.01
MW-6	5/15/2024	32.14	6.89	4,960	16.3	5150	524	524	<2	<2	83	3,300	0.52	<0.02	<0.02	<0.01
MW-6	8/26/2024	32.12	6.92	5,077	16.9	5,160	477	477	<2	<2	83	3,210	0.49	<0.02	<0.02	<0.01
MW-6	11/19/2024	31.40	7.03	4,830	12.5	5,090	535	535	< 2	< 2	94	3,500	0.50	< 0.02	< 0.02	< 0.01
MW-7	3/11/2024	34.06	7.09	4,728	14.5	4,740	260	260	<2	<2	45	3,140	0.51	5.41	5.41	<0.01
MW-7	5/15/2024	30.46	7.08	4,876	15.8	4,760	283	283	<2	<2	46	3,160	0.55	4.87	4.92	0.048
MW-7	8/27/2024	32.12	7.20	4,558	17.1	4,560	237	237	<2	<2	47	2,940	0.49	3.75	3.82	0.074
MW-7	11/19/2024	31.25	7.00	5,099	12.2	5,450	548	548	< 2	< 2	114	3,450	0.54	0.23	0.23	< 0.01
MW-8	3/11/2024	33.10	7.16	4,969	14.4	3,660	1,230	1,230	<2	<2	315	1,300	1.03	<0.02	<0.02	<0.01
MW-8	5/15/2024	31.12	7.14	5,103	16.0	3,600	1,150	1,150	<2	<2	314	1,230	0.96	0.098	0.098	<0.01
MW-8	8/27/2024	31.21	7.19	4,834	17.3	3,800	1,230	1,230	<2	<2	322	1,300	0.96	0.023	0.023	<0.01
MW-8	11/19/2024	30.48	7.28	4,427	13.5	3,570	1,330	1,330	< 2	< 2	342	1,150	0.94	0.026	0.026	< 0.01
MW-9	3/11/2024	25.77	6.86	5,087	15.6	4880	421	421	<2	<2	45	2,590	0.42	<0.02	<0.02	<0.01
MW-9	5/20/2024	26.92	6.82	5,326	18.5	4780	438	438	<2	<2	43	3,210	0.53	<0.02	<0.02	<0.01
MW-9	8/26/2024	26.98	6.83	5,147	18.1	4,650	421	421	<2	<2	45	2,970	0.38	<0.02	0.038	0.02
MW-9	11/20/2024	26.74	6.92	4,638	15.2	4,710	444	444	< 2	< 2	45	3,240	0.40	< 0.02	< 0.02	< 0.01
MW-10	3/11/2024	25.21	7.76	3,502	15.1	2,550	784	784	<2	<2	382	806	1.40	<0.02	<0.02	<0.01
MW-10	5/20/2024	26.04	7.76	4,423	17.9	2,980	721	721	<2	<2	397	1,260	1.43	<0.02	<0.02	<0.01
MW-10	8/26/2024	26.42	7.79	1,661	19.4	2,780	719	719	<2	<2	386	1,050	1.35	<0.02	<0.02	<0.01
MW-10	11/20/2024	26.19	7.88	3,660	14.7	2,790	759	759	< 2	< 2	397	993	1.38	< 0.02	< 0.02	< 0.01
MW-11	3/11/2024	54.60	7.25	2,092	15.4	1,420	752	752	<2	<2	103	343	0.86	<0.02	<0.02	<0.01
MW-11	5/20/2024	53.34	7.77	----	27.9	1,630	769	769	<2	<2	111	476	1.14	<0.02	<0.02	<0.01
MW-11	8/27/2024	54.84	7.37	2,730	18.4	1,800	814	814	<2	<2	129	519	0.83	<0.02	<0.02	<0.01
MW-11	11/19/2024	53.62	7.41	2,866	10.6	2,060	841	841	< 2	< 2	149	737	0.79	0.027	0.027	< 0.01
MW-12	3/11/2024	58.65	7.70	4,510	14.7	2,710	632	632	<2	<2	984	326	1.84	<0.02	<0.02	<0.02
MW-12	5/20/2024	58.90	7.68	4,591	17.9	2,690	651	651	<2	<2	975	380	1.93	<0.02	<0.02	<0.02
MW-12	8/27/2024	58.70	7.75	4,271	19.0	2,640	643	643	<2	<2	985	328	1.77	0.046	0.046	<0.01
MW-12	11/19/2024	58.94	7.81	4,195	13.5	2,670	684	684	< 2	< 2	1,060	299	1.74	< 0.02	< 0.02	< 0.01
MW-13	3/11/2024	117.18	7.95	3,783	15.3	2,700	1,230	1,230	<2	<2	656	138	**6.34**	<0.02	<0.02	0.012
MW-13	5/15/2024	107.82	7.91	4,019	16.8	2,670	1,190	1,190	<2	<2	643	187	**6.22**	<0.02	<0.02	0.017
MW-13	9/4/2024	117.50	8.04	4,079	17.5	2,810	1,250	1,250	<2	<2	645	197	**6.13**	<0.02	<0.02	<0.01
MW-13	11/18/2024	116.72	8.03	3,599	15.6	2,750	1,320	1,320	< 2	< 2	671	169	**6.05**	< 0.02	< 0.02	< 0.01
MW-14	3/11/2024	97.32	7.57	6,462	14.7	4,920	1,420	1,420	<2	<2	1,700	429	**2.98**	<0.02	<0.02	<0.01
MW-14	5/15/2024	98.34	7.57	6,596	16.4	4,780	1,330	1,330	<2	<2	1,730	352	**2.87**	<0.02	<0.02	<0.01
MW-14	9/4/2024	96.10	7.69	6,580	18.8	5,000	1,400	1,400	<2	<2	1,830	357	**3.03**	<0.02	<0.02	<0.01
MW-14	11/18/2024	94.61	7.74	6,326	15.3	4,590	1,480	1,480	< 2	< 2	1,830	253	**3.03**	0.021	0.021	< 0.01
MW-15	6/11/2024	DRY														
MW-15	8/26/2024	DRY														
MW-15	11/20/2024	DRY														
MW-16	6/25/2024	DRY														
MW-16	8/26/2024	DRY														
MW-16	11/20/2024	77.25	**NOT ENOUGH WATER TO OBTAIN SAMPLE**													
MW-17	6/11/2024	DRY														
MW-17	8/26/2024	DRY														
MW-17	11/20/2024	DRY														
MW-18	6/11/2024	38.69	7.58	1,041	18.9	830	319	319	<2	<2	23	377	1.22	1.36	1.36	<0.01
MW-18	8/26/2024	39.08	7.72	1,296	16.9	880	366	366	<2	<2	25	333	1.25	0.023	0.023	<0.01
MW-18	11/20/2024	38.24	7.76	1,220	14.8	900	407	407	< 2	< 2	29	304	1.36	< 0.02	< 0.02	< 0.01
MW-19	6/10/2024	12.42	8.09	1,710	18.0	1,290	535	535	<2	<2	123	393	1.40	<0.02	<0.02	<0.01
MW-19	8/27/2024	14.54	8.14	2,014	17.9	1,290	550	550	<2	<2	123	362	1.40	<0.02	<0.02	<0.01
MW-19	11/20/2024	14.56	8.22	1,948	13.2	1,360	583	583	< 2	< 2	122	466	1.55	< 0.02	< 0.02	< 0.01
MW-20	6/10/2024	48.08	8.14	2,854	18.9	2,230	546	546	<2	<2	848	78	**2.23**	0.363	0.38	0.017
MW-20	8/27/2024	20.73	7.50	NM	19.7	2,140	593	593	<2	<2	1,010	65	**2.37**	<0.02	0.026	0.013
MW-20	11/20/2024	14.67	8.15	3,462	14.4	2,220	640	640	< 2	< 2	998	61	**2.41**	< 0.02	< 0.02	< 0.01
MW-21	6/10/2024	44.68	8.20	3,209	16.4	2,520	833	833	<2	<2	146	1,130	1.47	<0.02	<0.02	<0.01
MW-21	9/4/2024	47.57	8.40	3,505	17.8	2,530	901	901	<2	<2	153	926	1.64	<0.02	<0.02	<0.01
MW-21	11/18/2024	43.81	8.37	3,180	16.4	2,520	935	935	< 2	< 2	160	875	1.40	0.044	0.044	< 0.01
MW-22	6/25/2024	149.03	**9.10**	1,122	19.9	792	286	286	<2	<2	161	163	1.99	0.028	0.183	0.155
MW-22	9/4/2024	149.71	8.39	NM	24.0	1,280	426	426	<2	<2	346	180	1.91	0.952	1.19	0.238
MW-22	11/18/2024	153.33	**NOT ENOUGH WATER TO OBTAIN SAMPLE**													
MW-23	6/10/2024	71.41	8.26	713	17.4	534	261	261	<2	<2	27	158	0.95	0.709	0.753	0.044
MW-23	9/4/2024	73.84	7.85	1,297	19.2	818	439	439	<2	<2	42	190	1.08	0.75	0.782	0.032
MW-23	11/18/2024	76.17	7.87	1,628	15.8	1,110	717	717	< 2	< 2	71	217	0.70	1.26	1.34	0.083
MW-24	6/10/2024	103.26	**9.34**	720	18.3	704	221	<2	221	<2	50	147	**2.06**	0.033	0.36	0.327
MW-24	9/4/2024	111.56	**8.92**	1,634	20.6	4.84	754	well not recovered, sample not collected								
MW-24	11/18/2024	112.79	**NOT ENOUGH WATER TO OBTAIN SAMPLE**													
MW-6 (duplicate)	5/15/2024	----	**----**	----	----	5,060	525	525	<2	<2	82	3,510	0.53	<0.02	<0.02	<0.01
MW-6 (duplicate)	8/26/2024	----	**----**	----	----	5,380	480	480	<2	<2	82	3,140	0.49	0.023	0.023	<0.01
MW-7 (duplicate)	3/11/2024	----	**----**	----	----	4720	247	247	<2	<2	43	2,870	0.50	6.45	6.45	<0.01
MW-21 (duplicate)	6/10/2024	----	**----**	----	----	2,480	838	838	<2	<2	146	1,120	1.38	0.04	0.04	<0.01
MW-21 (duplicate)	9/4/2024	----	**----**	----	----	2,430	889	889	<2	<2	154	1,040	1.67	<0.02	<0.02	<0.01
MW-23 (duplicate)	11/18/2024	----	----	----	----	1,130	702	702	< 2	< 2	69	190	0.72	1.46	1.55	0.091
CDPHE Regulation 41 Table 3 Groundwater Quality Reference Standards (Agricultural Use)[1]			*6.5 -8.5*	----	----	*10,000*	----	----	----	----	----	----	*2.00*	----	*100*	*10*

Notes:

- Concentration in bold indicate exceedance of the 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; 0.75 mg/L and 1.5 x background, respectively.
- MW-5 has been dry since installation and initial monitoring on 7/14/2008

Table 2 (Cont)

Location ID	Sample Date	Aluminum (mg/L)	Arsenic (mg/L)	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Calcium (mg/L)	Iron (mg/L)	Lead (mg/L)	Lithium (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)	Barium (mg/L)
MW-5	5/15/2024	DRY																					
MW-5	11/18/2024	DRY																					
MW-6	3/11/2024	<0.25	0.00120	<0.01	0.26	<0.00025	<0.02	0.036	<0.01	386	1.35	<0.0005	0.4	398	**0.42**	<0.0002	0.068	9.9	**<0.0005**	543	<0.01	0.095	----
MW-6	5/15/2024	<0.25	0.00146	<0.05	0.287	0.000153	<0.1	0.0298	<0.05	402	0.784	<0.0001	0.383	389	**0.44**	<0.0002	0.0745	10.5	0.0002	605	<0.05	<0.1	----
MW-6	8/26/2024	<0.35	0.00191	<0.05	0.261	<0.00025	<0.1	0.034	<0.05	376	1.04	<0.0005	0.37	357.00	0.42	<0.0002	0.0495	9.4	**<0.0005**	584	<0.05	<0.1	----
MW-6	11/19/2024	< 0.35	0.00275	< 0.05	0.334	0.000051	< 0.1	0.0238	< 0.05	354	1.49	< 0.0001	0.38	337.00	**0.45**	< 0.0002	0.0515	9.2	0.00021	639	< 0.05	< 0.1	----
MW-7	3/11/2024	<0.05	<0.001	<0.01	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-7	5/15/2024	<0.25	<0.0002	<0.05	0.16	0.000125	<0.1	0.00367	0.174	475	<0.3	<0.0001	0.308	369	<0.05	<0.0002	<0.04	12.5	**0.0386**	399	<0.05	<0.1	----
MW-7	8/27/2024	<0.14	<0.001	<0.02	0.135	<0.00025	<0.04	0.00216	<0.02	449	<0.12	<0.0005	0.29	337.00	<0.02	0.00034	0.033	11.3	**0.0262**	366	<0.02	<0.04	----
MW-7	11/19/2024	< 0.35	0.0004	< 0.05	0.362	< 0.00005	< 0.1	0.0022	< 0.05	364	0.549	< 0.0001	0.48	349.00	0.07	< 0.0002	< 0.04	9.7	0.00375	718	< 0.05	< 0.1	----
MW-8	3/11/2024	<0.05	<0.001	<0.01	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-8	5/15/2024	<0.1	0.00058	<0.02	0.90	0.000084	<0.04	0.000421	<0.02	58	0.63	<0.0001	0.33	25	0.18	<0.0002	<0.016	5.4	<0.0002	1260	<0.02	<0.04	----
MW-8	8/27/2024	<0.14	0.00071	<0.02	0.845	<0.0001	<0.04	0.000212	<0.02	52.9	0.467	<0.0002	0.33	23.10	0.16	0.00041	<0.016	5.0	0.00058	1140	<0.02	<0.04	----
MW-8	11/19/2024	< 0.14	0.00034	< 0.02	0.873	< 0.00005	< 0.04	0.000225	< 0.02	48.7	0.34	< 0.0001	0.32	22.20	0.13	< 0.0002	< 0.016	5.1	0.00294	1130	< 0.02	< 0.04	----
MW-9	3/11/2024	<0.05	0.00092	<0.01	1.40	<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-9	5/20/2024	<0.25	<0.001	<0.05	1.47	<0.00025	<0.1	0.0021	<0.05	414	2.1	<0.0005	0.415	159	**0.41**	<0.0002	<0.04	8.69	<0.0005	830	<0.05	<0.1	----
MW-9	8/26/2024	<0.35	<0.001	<0.05	1.39	<0.00025	<0.1	0.00143	<0.05	405	2.16	<0.0005	0.39	156.00	**0.36**	<0.0002	<0.04	8.8	<0.0005	816	<0.05	<0.1	----
MW-9	11/20/2024	< 0.35	0.00122	< 0.05	1.5	< 0.00005	< 0.1	0.0013	< 0.05	435	2.63	< 0.0005	0.47	179.00	**0.40**	< 0.0002	< 0.04	9.4	< 0.0001	915	< 0.05	< 0.1	----
MW-10	3/11/2024	<0.05	0.00156	<0.01	1.31	<0.0001	<0.02	<0.0001	<0.01	25	0.32	0.0002	0.21	7.59	0.01	<0.0002	<0.008	4.1	<0.0002	829	<0.01	0.082	----
MW-10	5/20/2024	<0.25	0.0007	<0.05	1.33	<0.0001	<0.1	0.000163	<0.05	33.4	<0.3	<0.0002	0.23	11	<0.05	<0.0002	<0.04	4.4	<0.0002	982	<0.05	<0.1	----
MW-10	8/26/2024	<0.14	0.00072	<0.02	1.27	<0.0001	<0.04	<0.0001	<0.02	27.4	0.218	<0.0002	0.22	9.03	<0.02	<0.0002	<0.016	4.2	<0.0005	921	<0.02	<0.04	----
MW-10	11/20/2024	< 0.14	0.00063	< 0.02	1.24	< 0.00005	< 0.04	0.000082	< 0.02	28.2	0.254	< 0.0001	0.25	9.65	0.02	< 0.0002	< 0.016	4.4	< 0.0002	958	< 0.02	< 0.04	----
MW-11	3/11/2024	<0.05	0.00021	<0.01	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-11	5/20/2024	<0.05	0.00023	<0.01	0.43	<0.00005	<0.02	0.000505	<0.01	55	<0.06	<0.0001	0.15	31	0.01	<0.0002	<0.008	3.4	**0.0487**	455	<0.01	<0.02	----
MW-11	8/27/2024	<0.07	<0.0002	<0.01	0.437	<0.00005	<0.02	0.000256	<0.01	56.9	<0.06	<0.0001	0.16	33.80	<0.01	0.00036	<0.008	3.6	**0.0284**	513	<0.01	<0.02	----
MW-11	11/19/2024	< 0.14	< 0.001	< 0.02	0.465	< 0.00025	< 0.04	< 0.00025	< 0.02	54.2	< 0.12	< 0.0005	0.19	35.70	< 0.02	< 0.0002	< 0.016	3.9	**0.123**	606	< 0.02	< 0.04	----
MW-12	3/11/2024	<0.05	0.00271	<0.01	0.90	<0.0001	<0.02	0.000756	<0.01	26	0.19	<0.0002	0.21	10.20	0.08	<0.0002	<0.008	4.03	<0.001	971	<0.01	0.092	----
MW-12	5/20/2024	<0.25	0.00263	<0.05	0.96	<0.0001	<0.1	0.000603	<0.05	24	<0.3	<0.0002	0.21	9.63	0.06	<0.0002	<0.04	3.82	<0.0002	977	<0.05	<0.1	----
MW-12	8/27/2024	<0.14	0.00285	<0.02	0.889	<0.0001	<0.04	0.000592	<0.02	22.6	<0.12	<0.0002	0.22	9.53	0.05	<0.0002	<0.016	4.0	0.00472	973	<0.02	<0.04	----
MW-12	11/19/2024	< 0.14	0.00257	< 0.02	0.898	< 0.00005	< 0.04	0.000421	< 0.02	21.1	< 0.12	< 0.0001	0.21	8.86	0.04	< 0.0002	< 0.016	3.9	< 0.0002	950	< 0.02	< 0.04	----
MW-13	3/11/2024	<0.05	<0.0001	<0.02	1.07	<0.00025	<0.02	<0.00025	<0.01	7	<0.06	<0.0005	0.22	1.93	<0.01	<0.0002	<0.008	2.9	<0.0005	976	<0.02	0.067	----
MW-13	5/15/2024	<0.1	0.00044	<0.02	1.12	<0.00005	<0.04	0.000087	<0.02	8	<0.12	<0.0001	0.218	1.98	<0.02	<0.0002	<0.016	3.09	<0.0002	1100	<0.02	<0.04	----
MW-13	9/4/2024	<0.14	0.00043	<0.02	1.04	<0.00005	<0.04	0.000065	<0.02	6.8	<0.12	<0.0001	0.24	2.05	<0.02	<0.0002	<0.016	2.5	<0.0002	1040	<0.02	<0.04	----
MW-13	11/18/2024	< 0.14	0.00047	< 0.02	1.04	< 0.00005	< 0.04	0.000058	< 0.02	6.75	< 0.12	< 0.0001	0.22	1.85	< 0.02	< 0.0002	< 0.016	2.8	< 0.0002	1020	< 0.02	< 0.04	----
MW-14	3/11/2024	<0.05	0.0036	<0.01	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	----
MW-14	5/15/2024	<0.25	0.00435	<0.05	1.28	0.000178	<0.1	0.000192	<0.05	18	0.92	<0.0001	0.40	5.43	<0.05	<0.0002	<0.04	5.6	<0.0002	1900	<0.05	<0.1	----
MW-14	9/4/2024	<0.35	0.00303	<0.05	1.34	<0.00025	<0.1	0.000113	<0.05	18.6	0.977	<0.0005	0.45	6.35	<0.05	<0.0002	<0.04	4.7	<0.0005	1840	<0.05	<0.1	----
MW-14	11/18/2024	< 0.35	0.00269	< 0.05	1.23	< 0.00025	< 0.1	< 0.00025	< 0.05	16	0.699	< 0.0005	0.40	5.16	< 0.05	< 0.0002	< 0.04	5.3	< 0.0005	1800	< 0.05	< 0.1	----
MW-15	6/11/2024	DRY																					
MW-15	8/26/2024	DRY																					
MW-15	11/20/2024	DRY																					
MW-16	6/25/2024	DRY																					
MW-16	8/26/2024	DRY																					
MW-16	11/20/2024	NOT ENOUGH WATER TO OBTAIN SAMPLE																					
MW-17	6/11/2024	DRY																					
MW-17	8/26/2024	DRY																					
MW-17	11/20/2024	DRY																					
MW-18	6/11/2024	<0.07	0.00153	0.011	0.51	<0.00005	<0.02	0.000771	<0.01	58	0.07	<0.0001	0.12	13.40	0.05	<0.0002	<0.008	3.4	0.00137	220	<0.01	<0.02	----
MW-18	8/26/2024	<0.07	0.00236	<0.01	0.636	<0.00005	<0.02	0.000582	<0.01	42	<0.06	<0.0001	0.12	10.30	0.05	<0.0002	<0.008	2.9	<0.0001	252	<0.01	<0.02	----
MW-18	11/20/2024	< 0.07	0.00448	< 0.01	0.724	< 0.00005	< 0.02	0.000208	< 0.01	30.1	0.108	< 0.0001	0.13	8.23	0.08	< 0.0002	< 0.008	2.7	< 0.0001	276	< 0.01	< 0.02	----
MW-19	6/10/2024	<0.07	<0.0002	<0.01	0.45	<0.00005	<0.02	0.000105	<0.01	12.7	<0.06	<0.0001	0.12	5.72	<0.01	<0.0002	<0.008	2.6	<0.002	491	<0.01	<0.02	----
MW-19	8/27/2024	<0.07	<0.0002	<0.01	0.421	<0.00005	<0.02	0.000062	<0.01	10.9	<0.06	<0.0001	0.11	5.64	<0.01	<0.0002	<0.008	2.4	0.00209	456	<0.01	<0.02	----
MW-19	11/20/2024	< 0.07	< 0.0002	< 0.01	0.435	< 0.00005	< 0.02	< 0.00005	< 0.01	10.5	< 0.06	< 0.0001	0.12	5.23	< 0.01	< 0.0002	< 0.008	2.5	< 0.0005	469	< 0.01	< 0.02	----
MW-20	6/10/2024	<0.14	0.00392	<0.02	0.78	<0.00005	<0.04	0.000329	<0.02	15.1	<0.12	<0.0001	0.17	4.06	<0.02	<0.0002	<0.016	3.9	<0.0002	840	<0.02	<0.04	----
MW-20	8/27/2024	<0.14	0.00319	<0.02	0.763	<0.0001	<0.04	0.000176	<0.02	10.1	<0.12	<0.0002	0.18	3.69	0.02	<0.0002	<0.016	3.8	<0.0002	823	<0.02	<0.04	----
MW-20	11/20/2024	< 0.14	0.00335	< 0.02	0.796	< 0.00005	< 0.04	0.000123	< 0.02	9.3	< 0.12	< 0.0001	0.19	3.44	0.02	< 0.0002	< 0.016	3.7	< 0.0005	850	< 0.02	< 0.04	----
MW-21	6/10/2024	<0.14	<0.0002	<0.02	0.68	<0.00005	<0.04	0.000133	<0.02	12.2	<0.12	<0.0001	0.26	9.03	<0.02	<0.0002	<0.016	2.9	<0.0002	910	<0.02	<0.04	----
MW-21	9/4/2024	<0.14	<0.0002	<0.02	0.636	<0.00005	<0.04	0.000101	<0.02	8.87	<0.12	<0.0001	0.24	6.10	<0.02	<0.0002	<0.016	2.1	<0.0002	857	<0.02	<0.04	----
MW-21	11/18/2024	< 0.14	< 0.0002	< 0.02	0.612	< 0.00005	< 0.04	0.000108	< 0.02	7.85	< 0.12	< 0.0001	0.23	5.29	< 0.02	< 0.0002	< 0.016	2.5	< 0.0002	834	< 0.02	< 0.04	----
MW-22	6/25/2024	<0.07	0.00751	<0.01	0.29	<0.00005	<0.02	0.00011	<0.01	4.6	<0.06	<0.0001	0.06	0.82	0.03	<0.0002	<0.008	0.8	0.00119	286	<0.01	0.125	----
MW-22	9/4/2024	<0.07	0.00484	<0.01	0.386	<0.00005	<0.02	0.000143	0.016	4.04	<0.06	<0.0001	0.09	0.98	0.01	<0.0002	<0.008	1.4	<0.0001	475	<0.01	<0.02	----
MW-22	11/18/2024	NOT ENOUGH WATER TO OBTAIN SAMPLE																					
MW-23	6/10/2024	<0.07	0.00146	<0.01	0.11	<0.00005	<0.02	0.000433	<0.01	21.2	<0.06	<0.0001	0.05	6.89	0.02	<0.0002	<0.008	3.3	0.0112	165	<0.01	<0.02	----
MW-23	9/4/2024	<0.07	0.00149	<0.01	0.165	<0.00005	<0.02	0.000487	<0.01	21.7	0.066	<0.0001	0.08	7.34	0.01	<0.0002	<0.008	3.1	0.00935	277	<0.01	<0.02	----
MW-23	11/18/2024	< 0.07	0.00126	< 0.01	0.24	< 0.00005	< 0.02	0.000374	< 0.01	20.3	0.388	< 0.0001	0.11	8.41	0.02	< 0.0002	< 0.008	3.9	0.00139	395	< 0.01	< 0.02	----
MW-24	6/10/2024	<0.07	0.00651	<0.01	0.28	<0.00005	<0.02	0.000067	<0.01	4.57	<0.06	<0.0001	0.03	1.40	<0.01	<0.0002	<0.008	1.3	0.00284	181	<0.01	<0.02	----
MW-24	9/4/2024	well not recovered, sample not collected																					
MW-24	11/18/2024	NOT ENOUGH WATER TO OBTAIN SAMPLE																					
MW-6 (duplicate)	5/15/2024	<0.25	0.0013	<0.05	0.261	0.000133	<0.1	0.0303	<0.05	400	0.69	<0.0001	0.384	386	**0.44**	<0.0002	0.07	10.3	0.00017	589	<0.05	<0.1	----
MW-6 (duplicate)	8/26/2024	<0.35	0.00155	<0.05	0.256	<0.00025	<0.1	0.0328	<0.05	383	0.9	<0.0005	0.38	363.00	**0.44**	<0.0002	0.046	9.8	<0.0005	589	<0.05	<0.1	----
MW-7 (duplicate)	3/11/2024	<0.05	<0.0001	<0.01	0.14	<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-21 (duplicate)	6/10/2024	<0.14	<0.0002	<0.02	0.68	<0.00005	<0.04	0.000139	<0.02	12.1	<0.12	<0.0001	0.25	8.43	<0.02	<0.0002	<0.016	2.8	<0.0002	920	<0.02	<0.04	----
MW-21 (duplicate)	9/4/2024	<0.14	<0.0002	<0.02	0.637	<0.00005	<0.04	0.000103	<0.02	8.71	<0.12	<0.0001	0.24	6.06	<0.02	<0.0002	<0.016	2.2	<0.0002	857	<0.02	<0.04	----
MW-23 (duplicate)	11/18/2024	< 0.07	0.00122	< 0.01	0.238	< 0.00005	< 0.02	0.000372	< 0.01	20.4	0.395	< 0.0001	0.10	8.45	0.02	< 0.0002	< 0.008	3.8	< 0.0001	389	< 0.01	< 0.02	----
CDPHE Regulation 41 Table 3 Groundwater Quality Reference Standards (Agricultural Use)[1]		*5.00*	*0.1000*	*0.10*	*5.00*	*0.01000*	*0.10*	*0.05000*	*0.2*	*----*	*5.00*	*0.1000*	*2.50*	*----*	*0.20*	*0.0100*	*0.200*	*----*	*0.0200*	*----*	*0.10*	*2.00*	*----*

Notes:

- Concentration in bold indicate exceedance of the 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; 0.75 mg/L and 1.5 x background, respectively.
- MW-5 has been dry since installation and initial monitoring on 7/14/2008

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

SDG	L91579, L91595, L91640		
PROJECT	GCC Rio Grande –Fourth Quarter 2024, Resource Hydrogeologic Services and GCC, Pueblo CO		
LABORATORY	ACZ Laboratories, Steamboat Springs, CO		
SAMPLE MATRIX	Water	SAMPLING DATE:	11/18, 11/19, 11/20/2024
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), SM 2320 B-2011 (Alkalinity)		
SAMPLE NUMBER	MW-13, MW-14, MW-21, MW-23, MW-2B, MW-11, MW-12, MW-6, MW-7, MW-8, MW-10, MW-18, MW-19, MW-20, MW-9		

DATA REVIEWER: John Huntington

QA REVIEWER: Diane Short & Associates, Inc. INITIALS/DATE: ___ DLS __12/23/2024_

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), SM 2320 B-2011 (Alkalinity). Note that for these SDGs, pH was not requested.

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

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

II. ANALYTICAL REPORT FORMS

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

Yes 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

SDG L91579– 4th Quarter-The method holding times were met for all analyses except for one TDS sample. Results reported by the lab outside of hold 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. In this case, the holding time was missed because the laboratory had to dilute the sample and reprepare it to meet method criteria.

SDG L91595 – 4th Quarter. All nitrate, nitrite, and nitrate-nitrite are qualified as out of holding time in the laboratory reports. The holding time for nitrite and nitrate is 48 hours per 40CFR. Recalculating the holding time using the reported sample and analysis date and time, however, shows that none of the samples were analyzed past the 48-hour hold. The laboratory appears to have performed the holding time calculations to the nearest day, but because the EPA hold time is stated in hours for these methods, it should be calculated to the nearest hour. No qualifiers are applied because in fact all samples are in hold.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab flag	MDL	PQL	DSA	EPA
MW-2B	L91579-05	Residue, Filterable (TDS) @180C	1130	H	20	40	JH2.3	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.

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 X No _____

Analytes reported as contaminants in the Preparation Blank are qualified with the DSA qualifier “UMB#,” where # is the value of the associated blank. Only detected data less than 10x the blank for metals or 5x the blank for other analyses are qualified. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit. The alkalinity method blank has low detections in all SDGS. All alkalinity results in this sampling set are >5x the method blank, and so no qualifiers are required.

Note that that in metals analysis, a formal preparation blank is only used for mercury. The other metals are direct injection of sample and preparation is not performed ICBs and CCBs serve the same function. This is acceptable per method.

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

Yes _____ No _____ N/A X

VII. CALIBRATION BLANKS

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

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

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

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

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

4th Quarter - For metals analysis, ICBs and/or CCBs have some detections of calcium, sodium, selenium, and vanadium. Only selenium required qualification. Qualifiers added are shown in the table below.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-23	L91579-04	Selenium, dissolved	0.00139		0.0001	0.00025	UCB0.00019	UB
MW-6	L91595-01	Selenium, dissolved	0.00021	B	0.0001	0.00025	UCB0.00019	UB

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

Yes _____ No X N/A _____

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

Yes _____ No _____ N/A X

VIII. INTERNAL STANDARD RESPONSES (*)

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

Yes X No _____

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

Yes X No _____
For the analytes reported.

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

Yes _____ No _____ N/A X

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

Yes _____ No _____ N/A X

IX. MATRIX SPIKES

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

Yes X No _____

Matrix spikes, duplicates, and matrix spike duplicates were present (note that for most metals on this project these are post-spikes since analysis is by direct injection with no separate preparation step). For wet chemistry, a matrix spike and a matrix duplicate are analyzed. The project manager will determine if the project frequency is met for these methods over the entire year. The frequency of this event is met. 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. These samples are collected quarterly.

Spiked Sample - L91579	**Methods**
MW-2B	EPA 200.8, EPA 200.7, ASTM D516-07/-11/-16 (Sulfate)
MW-14	245.1 (mercury)
Spiked Sample - L91595	
MW-12	M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen)
MW-6	245.1 (mercury), SM4500F-C (Fluoride)
MW-7	ASTM D516-07/-11/-16 (Sulfate)
Spiked Sample - L91640	
MW-18	EPA 200.8
MW-20	245.1 (mercury) , SM4500F-C (Fluoride)

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.

SDG L91579: MW-14 produced a low mercury recovery in the MS/MSD analysis. The parent sample is qualified as shown in the table below.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-14	L91579-01	Mercury, dissolved		U	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 associated with samples from the 4th quarter sampling are present for TDS, alkalinity, and nitrite. Other lab duplicates are associated with other SDGs and are not evaluated here. Matrix duplicates and MS/MSD RPDS are in control.

Parent Sample SDG **L91579**	Methods
MW-23	SM2540C (total dissolved solids
Parent Sample SDG **L91595**	
MW-6	SM 2320 B-2011 (Total Alkalinity)
MW-11	M353.2 (nitrite as nitrogen)

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 _____
4th Quarter Field Duplicates:

Sample MW-2B is a field duplicate of MW-23.

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 dilution.

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

Yes _____ No _____ N/A X
When outliers are present, data are qualified with the DSA qualifier JE#, where # is the %D. Data could be biased, usually high, due to non-linear matrix or chemical effects.

XIV. CALCULATIONS

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

Yes X No _____
Over 25% of the data were checked from the raw data to the EDD values for each method and each SDG.

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

Yes X No _____

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

XV. OVERALL ASSESSMENT OF THE CASE

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

Data were submitted for EPA 200.7 (16 metals by ICP, dissolved), EPA 200.8 (4 metals by ICPMS, dissolved), EPA 245.1 (mercury, dissolved), SM4500F-C (Fluoride), M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen); SM2540C (total dissolved solids); D516-02/-07/-11 -Sulfate by turbidimetry; SM4500Cl-E (Chloride), SM 2320 B-2011 (Alkalinity). Note that for these SDGs, pH was not requested.

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

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

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

Holding Times
SDG L91579– 4th Quarter-The method holding times were met for all analyses except for one TDS sample. Results reported by the lab outside of hold 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. In this case, the holding time was missed because the laboratory had to dilute the sample and reprepare it to meet method criteria.

SDG L91595 – 4th Quarter. All nitrate, nitrite, and nitrate-nitrite are flagged as out of holding time in the laboratory reports. The holding time for nitrite and nitrate is 48 hours per 40CFR. Recalculating the holding time using the reported sample and analysis date and time, however, shows that none of the samples were analyzed past the 48-hour hold. The laboratory appears to have performed the holding time calculations to the nearest day, but because the EPA hold time is stated in hours for these methods, it should be calculated to the nearest hour. No qualifiers are applied because in fact all samples are in hold.

Method Blanks 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

The ICB is used as the method blank for metals. This is acceptable since no digestion was performed on the other analyses are qualified. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit. The alkalinity method blank has low detections in all SDGS. All alkalinity results in this sampling set are >5x the method blank, and so no qualifiers are required.

Note that that in metals analysis, a formal preparation blank is only used for mercury. The other metals are direct injection of sample and preparation is not performed ICBs and CCBs serve the same function. This is acceptable per method.

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

4th Quarter - For metals analysis, ICBs and/or CCBs have some detections of calcium, sodium, selenium, and vanadium. Only selenium required qualification as shown in the table below.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-23	L91579-04	Selenium, dissolved	0.00139		0.0001	0.00025	UCB0.00019	UB
MW-6	L91595-01	Selenium, dissolved	0.00021	B	0.0001	0.00025	UCB0.00019	UB

Field Blanks
No field blanks are included in the 4th quarter sampling data set.

Matrix Spikes:

Matrix spikes, duplicates, and matrix spike duplicates were present (note that for most metals on this project these are post-spikes since analysis is by direct injection with no separate preparation step). For wet chemistry, a matrix spike and a matrix duplicate are analyzed. The project manager will determine if the project frequency is met for these methods over the entire year. The frequency of this event is met. 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. These samples are collected quarterly. MS/MSDs in the 4th quarter results are shown below:

Spiked Sample - L91579	**Methods**
MW-2B	EPA 200.8, EPA 200.7, ASTM D516-07/-11/-16 (Sulfate)
MW-14	245.1 (mercury)
Spiked Sample - L91595	
MW-12	M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen)
MW-6	245.1 (mercury), SM4500F-C (Fluoride)
MW-7	ASTM D516-07/-11/-16 (Sulfate)
Spiked Sample - L91640	
MW-18	EPA 200.8
MW-20	245.1 (mercury) , SM4500F-C (Fluoride)

SDG L91579: MW-14 produced a low mercury recovery in the MS/MSD analysis. The parent sample is qualified as shown in the table below.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Falg	MDL	PQL	DSA	EPA
MW-14	L91579-01	Mercury, dissolved		U	0.0002	0.001	JMS48	J-

Matrix Duplicates:

Lab duplicates associated with samples from the 4th quarter sampling are present for TDS, alkalinity, and nitrite. Other lab duplicates are associated with other SDGs and are not evaluated here. Matrix duplicates and MS/MSD RPDS are in control.

Parent Sample SDG **L91579**	Methods
MW-23	SM2540C (total dissolved solids
Parent Sample SDG **L91595**	
MW-6	SM 2320 B-2011 (Total Alkalinity)
MW-11	M353.2 (nitrite as nitrogen)

Field QC

4th Quarter Field Duplicates:

Sample MW-2B is a field duplicate of MW-23. The results meet field duplicate criteria.

Cation-Anion Balance and Calculated TDS

TABLE OF QUALIFIED DATA

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-2B	L91579-05	Residue, Filterable (TDS) @180C	1130	H	20	40	JH2.3	J-
MW-23	L91579-04	Selenium, dissolved	0.00139		0.0001	0.00025	UCB0.00019	UB
MW-6	L91595-01	Selenium, dissolved	0.00021	B	0.0001	0.00025	UCB0.00019	UB
MW-14	L91579-01	Mercury, dissolved		U	0.0002	0.001	JMS48	J-

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-20241213-1314032001-18389796908	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 2:22:32 PM MST**

SITE INFORMATION

Location

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

Misc

Site Photo

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	32
Date	Nov 18, 2024
Time	10:00:00 AM MST

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389797220	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 2:01:36 PM MST**

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.52
Static Depth to Water (ft)	31.40
Well Total Depth (ft below top of casing)	56.4
Depth to Water below ground Surface (ft)	28.88
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	34
Date	Nov 19, 2024
Time	9:48:00 AM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 19, 2024 9:42:00 AM MST
Flow Rate (gpm) #1	0.06
Sample Temperature (°C)	13.48
Specific Conductivity (µS/cm)	4806.26
pH (S.U.)	7.04
Oxygen Reduction Potential (mV)	200.17

Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	1.12

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 19, 2024 9:45:00 AM MST
Flow Rate (gpm) #2	0.06
Sample Temperature (°C)	12.67
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	4826.79
pH (S.U.)	7.04
Oxygen Reduction Potential (mV)	199.11
Dissolved Oxygen (mg/L)	1.17

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 19, 2024 9:48:00 AM MST
Flow Rate (gpm) #3	0.06
Sample Temperature (°C)	12.49
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	4830.16
pH (S.U.)	7.03
Oxygen Reduction Potential (mV)	191.93
Dissolved Oxygen (mg/L)	1.06

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	31.45
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.06
Total Purged (gal)	0.50

Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.1294097457561 altitude: 1536.154 longitude: -104.60632012911388 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-6 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-6
Sample Date/Time	Nov 19, 2024 9:48:00 AM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389797599	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 2:17:10 PM MST**

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.66
Static Depth to Water (ft)	31.25
Well Total Depth (ft below top of casing)	56.1
Depth to Water below ground Surface (ft)	28.59
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	34
Date	Nov 19, 2024
Time	10:21:00 AM MST
Comments	Depth meter issues

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 19, 2024 10:15:00 AM MST
Flow Rate (gpm) #1	0.04
Sample Temperature (°C)	11.99
Are you sure? This value seems very unlikely based on past data.	Yes

Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	5086.60
pH (S.U.)	7.01
Oxygen Reduction Potential (mV)	133.95
Dissolved Oxygen (mg/L)	2.12

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 19, 2024 10:18:00 AM MST
Flow Rate (gpm) #2	0.04
Sample Temperature (°C)	12.07
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	5118.23
pH (S.U.)	7.01
Oxygen Reduction Potential (mV)	133.02
Dissolved Oxygen (mg/L)	1.89

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 19, 2024 10:21:00 AM MST
Flow Rate (gpm) #3	0.04
Sample Temperature (°C)	12.17
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	5098.96
pH (S.U.)	7.00
Oxygen Reduction Potential (mV)	133.10
Dissolved Oxygen (mg/L)	1.67

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	31.28
Was flow rate measured?	Flow Rate was measured.

Static Flow Rate (gpm)	0.04
Total Purged (gal)	0.50
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12933349609375 altitude: 1535.7037 longitude: -104.6064204640795 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-7
Sample Date/Time	Nov 19, 2024 10:21:00 AM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389756686	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 9:45:50 AM MST**

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.16
Static Depth to Water (ft)	30.48
Well Total Depth (ft below top of casing)	65.65
Depth to Water below ground Surface (ft)	28.32
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	37
Date	Nov 19, 2024
Time	12:16:00 PM MST
Comments	Slight sulfur smell

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 19, 2024 12:10:00 PM MST
Flow Rate (gpm) #1	0.03
Sample Temperature (°C)	13.59
Are you sure? This value seems very unlikely based on past data.	Yes

Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	4447.94
pH (S.U.)	7.29
Oxygen Reduction Potential (mV)	36.80
Dissolved Oxygen (mg/L)	1.16

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 19, 2024 12:13:00 PM MST
Flow Rate (gpm) #2	0.03
Sample Temperature (°C)	13.59
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	4433.39
pH (S.U.)	7.29
Oxygen Reduction Potential (mV)	45.94
Dissolved Oxygen (mg/L)	1.02

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 19, 2024 12:16:00 PM MST
Flow Rate (gpm) #3	0.03
Sample Temperature (°C)	13.50
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	4426.64
pH (S.U.)	7.28
Oxygen Reduction Potential (mV)	55.68
Dissolved Oxygen (mg/L)	1.03

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	34.78
Was flow rate measured?	Flow Rate was measured.

Static Flow Rate (gpm)	0.03
Total Purged (gal)	0.60
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129341984851436 altitude: 1535.9204 longitude: -104.60637411953712 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-8 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-8
Sample Date/Time	Nov 19, 2024 12:16:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389761418	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 10:17:22 AM MST**

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.08
Static Depth to Water (ft)	26.74
Well Total Depth (ft below top of casing)	42.23
Depth to Water below ground Surface (ft)	24.66
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	46
Date	Nov 20, 2024
Time	2:00:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 20, 2024 1:54:00 PM MST
Flow Rate (gpm) #1	0.03
Sample Temperature (°C)	14.72
Specific Conductivity (µS/cm)	4664.46
pH (S.U.)	6.93
Oxygen Reduction Potential (mV)	644.16

Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	1.14

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 20, 2024 1:57:00 PM MST
Flow Rate (gpm) #2	0.03
Sample Temperature (°C)	14.94
Specific Conductivity (µS/cm)	4652.94
pH (S.U.)	6.92
Oxygen Reduction Potential (mV)	662.44
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.71

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 20, 2024 2:00:00 PM MST
Flow Rate (gpm) #3	0.03
Sample Temperature (°C)	15.17
Specific Conductivity (µS/cm)	4638.25
pH (S.U.)	6.92
Oxygen Reduction Potential (mV)	675.23
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.49

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	28.07
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.03
Total Purged (gal)	0.50

Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129341984851436 altitude: 1535.9204 longitude: -104.60637411953712 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-9 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-9
Sample Date/Time	Nov 20, 2024 2:00:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389761309	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 10:10:28 AM MST**

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.24
Static Depth to Water (ft)	26.19
Well Total Depth (ft below top of casing)	82.55
Depth to Water below ground Surface (ft)	23.95
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	46
Date	Nov 20, 2024
Time	1:28:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 20, 2024 1:22:00 PM MST
Flow Rate (gpm) #1	0.05
Sample Temperature (°C)	14.79
Specific Conductivity (µS/cm)	3798.44
pH (S.U.)	7.88
Oxygen Reduction Potential (mV)	572.31

Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.23

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 20, 2024 1:25:00 PM MST
Flow Rate (gpm) #2	0.05
Sample Temperature (°C)	15.13
Specific Conductivity (µS/cm)	3688.13
pH (S.U.)	7.88
Oxygen Reduction Potential (mV)	574.50
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.15

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 20, 2024 1:28:00 PM MST
Flow Rate (gpm) #3	0.05
Sample Temperature (°C)	14.65
Specific Conductivity (µS/cm)	3659.75
pH (S.U.)	7.88
Oxygen Reduction Potential (mV)	571.97
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.14

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	32.01
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.05
Total Purged (gal)	0.75

Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129341984851436 altitude: 1535.9204 longitude: -104.60637411953712 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-10 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-10
Sample Date/Time	Nov 20, 2024 1:28:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389761136	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 10:03:48 AM MST**

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.18
Static Depth to Water (ft)	53.62
Well Total Depth (ft below top of casing)	72.68
Depth to Water below ground Surface (ft)	51.44
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	44
Date	Nov 19, 2024
Time	4:24:00 PM MST
Comments	Sulfur smell

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 19, 2024 4:18:00 PM MST
Flow Rate (gpm) #1	0.03
Sample Temperature (°C)	10.55
Are you sure? This value seems very unlikely based on past data.	Yes

Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	2833.16
pH (S.U.)	7.41
Oxygen Reduction Potential (mV)	-159.70
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	1.56

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 19, 2024 4:21:00 PM MST
Flow Rate (gpm) #2	0.03
Sample Temperature (°C)	10.34
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	2824.16
pH (S.U.)	7.42
Oxygen Reduction Potential (mV)	-159.22
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	1.58

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 19, 2024 4:24:00 PM MST
Flow Rate (gpm) #3	0.03
Sample Temperature (°C)	10.58
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	2866.28
pH (S.U.)	7.41
Oxygen Reduction Potential (mV)	-123.73

Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	1.27

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	54.38
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.03
Total Purged (gal)	0.55
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129341984851436 altitude: 1535.9204 longitude: -104.60637411953712 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-11 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-11
Sample Date/Time	Nov 19, 2024 4:24:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389756793	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 9:52:56 AM MST**

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.29
Static Depth to Water (ft)	58.94
Well Total Depth (ft below top of casing)	88.8
Depth to Water below ground Surface (ft)	56.65
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	44
Date	Nov 19, 2024
Time	3:42:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 19, 2024 3:36:00 PM MST
Flow Rate (gpm) #1	0.03
Sample Temperature (°C)	13.59
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate

Specific Conductivity (µS/cm)	4221.75
pH (S.U.)	7.81
Oxygen Reduction Potential (mV)	81.00
Dissolved Oxygen (mg/L)	0.42

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 19, 2024 3:39:00 PM MST
Flow Rate (gpm) #2	0.03
Sample Temperature (°C)	13.58
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	4199.78
pH (S.U.)	7.81
Oxygen Reduction Potential (mV)	95.34
Dissolved Oxygen (mg/L)	0.35

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 19, 2024 3:42:00 PM MST
Flow Rate (gpm) #3	0.03
Sample Temperature (°C)	13.50
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	4195.45
pH (S.U.)	7.81
Oxygen Reduction Potential (mV)	107.22
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.35

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	64.56

Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.03
Total Purged (gal)	0.75
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129341984851436 altitude: 1535.9204 longitude: -104.60637411953712 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - 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	Nov 19, 2024 3:42:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241212-1314032001-18389685352	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 12, 2024 2:28:18 PM MST**

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.19
Static Depth to Water (ft)	116.72
Well Total Depth (ft below top of casing)	177.88
Depth to Water below ground Surface (ft)	114.53
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	53
Date	Nov 18, 2024
Time	12:11:00 PM MST
Comments	Measuring an accurate depth on this well is difficult

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 18, 2024 12:05:00 PM MST
Flow Rate (gpm) #1	0.04
Sample Temperature (°C)	15.48
Specific Conductivity (µS/cm)	3634.69
pH (S.U.)	8.02

Oxygen Reduction Potential (mV)	78.17
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.39

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 18, 2024 12:08:00 PM MST
Flow Rate (gpm) #2	0.04
Sample Temperature (°C)	15.57
Specific Conductivity (µS/cm)	3615.64
pH (S.U.)	8.02
Oxygen Reduction Potential (mV)	80.76
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.27

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 18, 2024 12:11:00 PM MST
Flow Rate (gpm) #3	0.04
Sample Temperature (°C)	15.58
Specific Conductivity (µS/cm)	3599.06
pH (S.U.)	8.03
Oxygen Reduction Potential (mV)	85.07
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.16

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	117.37
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.04

Total Purged (gal)	1.25
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-13 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-13
Sample Date/Time	Nov 18, 2024 12:11:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241212-1314032001-18389685350	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 12, 2024 2:39:57 PM MST**

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.11
Static Depth to Water (ft)	94.61
Well Total Depth (ft below top of casing)	207.83
Depth to Water below ground Surface (ft)	92.50
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	47
Date	Nov 18, 2024
Time	10:45:00 AM MST
Comments	Depth reader is not working properly; battery replaced to fix

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 18, 2024 10:39:00 AM MST
Flow Rate (gpm) #1	0.06
Sample Temperature (°C)	15.12
Specific Conductivity (µS/cm)	6756.95
pH (S.U.)	7.72

Oxygen Reduction Potential (mV)	226.80
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect general instrument malfunction
Dissolved Oxygen (mg/L)	0.21

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 18, 2024 10:42:00 AM MST
Flow Rate (gpm) #2	0.06
Sample Temperature (°C)	15.23
Specific Conductivity (µS/cm)	6584.01
pH (S.U.)	7.72
Oxygen Reduction Potential (mV)	233.80
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect general instrument malfunction
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 18, 2024 10:45:00 AM MST
Flow Rate (gpm) #3	0.06
Sample Temperature (°C)	15.31
Specific Conductivity (µS/cm)	6325.84
pH (S.U.)	7.74
Oxygen Reduction Potential (mV)	244.10
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect general instrument malfunction
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)	94.68
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.06
Total Purged (gal)	1.70
Geographic Sample Location	

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

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-14 – Dedicated QED SS Well Wizard T1300 low-flow bladder pump
Lab Sample Name	MW-14
Sample Date/Time	Nov 18, 2024 10:45:00 AM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389764570	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 11:11:24 AM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-15
Water present to measure/sample?	No
Is the water present within 0.25 feet of the well TD?	No
Dry Well	Yes

Misc

Site Photo

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	48
Date	Nov 20, 2024
Time	2:56:00 PM MST

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389779831	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 11:54:45 AM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-16
Water present to measure/sample?	No
Is the water present within 0.25 feet of the well TD?	No
Dry Well	Yes

Misc

Site Photo

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	48
Date	Nov 20, 2024
Time	3:02:00 PM MST
Comments	Purged dry; slightly cloudy; total purge only 0.2 gal

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389764560	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 11:10:54 AM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-17
Water present to measure/sample?	No
Is the water present within 0.25 feet of the well TD?	No
Dry Well	Yes

Misc

Site Photo

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	49
Date	Nov 20, 2024
Time	2:46:00 PM MST

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389764537	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 11:09:24 AM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-18
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.87
Static Depth to Water (ft)	38.24
Well Total Depth (ft below top of casing)	55.74
Depth to Water below ground Surface (ft)	35.37
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	48
Date	Nov 20, 2024
Time	2:35:00 PM MST
Comments	Slightly cloudy purge

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 20, 2024 2:29:00 PM MST
Flow Rate (gpm) #1	0.04
Sample Temperature (°C)	14.37
Specific Conductivity (µS/cm)	1247.79
pH (S.U.)	7.72
Oxygen Reduction Potential (mV)	452.24

Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	1.91

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 20, 2024 2:32:00 PM MST
Flow Rate (gpm) #2	0.04
Sample Temperature (°C)	14.67
Specific Conductivity (µS/cm)	1221.70
pH (S.U.)	7.74
Oxygen Reduction Potential (mV)	454.55
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	1.62

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 20, 2024 2:35:00 PM MST
Flow Rate (gpm) #3	0.04
Sample Temperature (°C)	14.76
Specific Conductivity (µS/cm)	1219.74
pH (S.U.)	7.76
Oxygen Reduction Potential (mV)	454.00
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	1.33

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	38.65
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.04
Total Purged (gal)	0.60

Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12935746527857 altitude: 1535.6771 longitude: -104.60638895038788 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - 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-18 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-18
Sample Date/Time	Nov 20, 2024 2:35:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241212-1314032001-18389685907	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 12, 2024 3:09:28 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-19
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.74
Static Depth to Water (ft)	14.56
Well Total Depth (ft below top of casing)	75.01
Depth to Water below ground Surface (ft)	11.82
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	47
Date	Nov 20, 2024
Time	4:29:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 20, 2024 4:23:00 PM MST
Flow Rate (gpm) #1	0.02
Sample Temperature (°C)	13.22
Specific Conductivity (µS/cm)	1963.56
pH (S.U.)	8.20
Oxygen Reduction Potential (mV)	364.25

Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	2.75

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 20, 2024 4:26:00 PM MST
Flow Rate (gpm) #2	0.02
Sample Temperature (°C)	13.50
Specific Conductivity (µS/cm)	1939.86
pH (S.U.)	8.21
Oxygen Reduction Potential (mV)	373.31
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	2.61

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 20, 2024 4:29:00 PM MST
Flow Rate (gpm) #3	0.02
Sample Temperature (°C)	13.24
Specific Conductivity (µS/cm)	1948.10
pH (S.U.)	8.22
Oxygen Reduction Potential (mV)	302.33
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	2.17

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	14.97
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.03
Total Purged (gal)	0.50

Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129345254240725 altitude: 1535.6903 longitude: -104.60637974764066 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - 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-19 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-19
Sample Date/Time	Nov 20, 2024 4:29:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389783494	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 12:08:22 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-20
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.75
Static Depth to Water (ft)	14.67
Well Total Depth (ft below top of casing)	97.4
Depth to Water below ground Surface (ft)	11.92
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	48
Date	Nov 20, 2024
Time	3:57:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 20, 2024 3:51:00 PM MST
Flow Rate (gpm) #1	0.03
Sample Temperature (°C)	13.88
Specific Conductivity (µS/cm)	3485.02
pH (S.U.)	8.16
Oxygen Reduction Potential (mV)	421.72

Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	1.14

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 20, 2024 3:54:00 PM MST
Flow Rate (gpm) #2	0.03
Sample Temperature (°C)	14.33
Specific Conductivity (µS/cm)	3562.17
pH (S.U.)	8.15
Oxygen Reduction Potential (mV)	412.97
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.74

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 20, 2024 3:57:00 PM MST
Flow Rate (gpm) #3	0.03
Sample Temperature (°C)	14.41
Specific Conductivity (µS/cm)	3461.98
pH (S.U.)	8.15
Oxygen Reduction Potential (mV)	422.20
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	0.51

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	20.43
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.03
Total Purged (gal)	0.75

Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12936899872087 altitude: 1535.6796 longitude: -104.60635673630826 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 2

Details

Method of Sample Collection	MW-20 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-20
Sample Date/Time	Nov 20, 2024 3:57:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

LAB SAMPLE 2 OF 2

Details

Method of Sample Collection	MW-5 – No pump
Lab Sample Name	MW-3B
Sample Date/Time	Dec 2, 2024 1:00:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Field 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-20241212-1314032001-18389685353	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 12, 2024 2:17:39 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-21
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.6
Static Depth to Water (ft)	43.81
Well Total Depth (ft below top of casing)	124.88
Depth to Water below ground Surface (ft)	41.21
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:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	56
Date	Nov 18, 2024
Time	1:08:00 PM MST
Comments	Slight sulfur smell,cloudy

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 18, 2024 1:02:00 PM MST
Flow Rate (gpm) #1	0.04
Sample Temperature (°C)	16.11
Specific Conductivity (µS/cm)	3182.92
pH (S.U.)	8.38
Oxygen Reduction Potential (mV)	188.64

Dissolved Oxygen (mg/L)	0.38

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 18, 2024 1:05:00 PM MST
Flow Rate (gpm) #2	0.04
Sample Temperature (°C)	16.07
Specific Conductivity (µS/cm)	3191.42
pH (S.U.)	8.37
Oxygen Reduction Potential (mV)	199.94
Dissolved Oxygen (mg/L)	0.28

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 18, 2024 1:08:00 PM MST
Flow Rate (gpm) #3	0.04
Sample Temperature (°C)	16.38
Specific Conductivity (µS/cm)	3180.34
pH (S.U.)	8.37
Oxygen Reduction Potential (mV)	209.41
Dissolved Oxygen (mg/L)	0.24

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	44.82
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.04
Total Purged (gal)	0.90
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - 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-21 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-21
Sample Date/Time	Nov 18, 2024 1:08:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389797255	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 2:03:16 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-22
Water present to measure/sample?	No
Is the water present within 0.25 feet of the well TD?	No
Dry Well	Yes

Misc

Site Photo

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	59
Date	Nov 18, 2024
Time	1:38:00 PM MST
Comments	No water purged, pump at max voltage. DTW measured at 153.33’

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241212-1314032001-18389685351	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 12, 2024 2:05:23 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-23
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.8
Static Depth to Water (ft)	76.17
Well Total Depth (ft below top of casing)	80
Depth to Water below ground Surface (ft)	73.37
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 4, 2024 3:17:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	61
Date	Nov 18, 2024
Time	2:43:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Nov 18, 2024 2:37:00 PM MST
Flow Rate (gpm) #1	0.04
Sample Temperature (°C)	15.79
Specific Conductivity (µS/cm)	1624.75
pH (S.U.)	7.92
Oxygen Reduction Potential (mV)	275.98
Dissolved Oxygen (mg/L)	0.61

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Nov 18, 2024 2:40:00 PM MST
Flow Rate (gpm) #2	0.04
Sample Temperature (°C)	15.85
Specific Conductivity (µS/cm)	1626.38
pH (S.U.)	7.90
Oxygen Reduction Potential (mV)	286.28
Dissolved Oxygen (mg/L)	0.51

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Nov 18, 2024 2:43:00 PM MST
Flow Rate (gpm) #3	0.04
Sample Temperature (°C)	15.76
Specific Conductivity (µS/cm)	1627.72
pH (S.U.)	7.87
Oxygen Reduction Potential (mV)	296.43
Dissolved Oxygen (mg/L)	0.37

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	79.25
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.04
Total Purged (gal)	0.75
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer

Sampler's Signature

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 2

Details

Method of Sample Collection	MW-23 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-23
Sample Date/Time	Nov 18, 2024 2:43:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

LAB SAMPLE 2 OF 2

Details

Method of Sample Collection	MW-23 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-2B
Sample Date/Time	Nov 18, 2024 12:00:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Duplicate

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20241213-1314032001-18389796990	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Dec 13, 2024 2:25:46 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-24
Water present to measure/sample?	No
Is the water present within 0.25 feet of the well TD?	Yes
Dry Well	Yes

Misc

Site Photo

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	61
Date	Nov 18, 2024
Time	3:15:00 PM MST
Comments	Initial DTW 112.79’ (within 0.25’ of bottom). Only able to purge 0.15 gallons before well ran dry

Sampler

Sampler Name	Meghan Way - GCC Pueblo Environmental Engineer
Sampler's Signature	

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

Analytical Report

December 09, 2024

Report to:
Meghan Way
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Meghan Way
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID:
ACZ Project ID: L91579

Meghan Way:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on November 19, 2024. This project has been assigned to ACZ's project number, L91579. 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 L91579. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after December 09, 2025. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

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

Sue Webber has reviewed and approved this report.

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

Inorganic Analytical Results

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

ACZ Sample ID: ***L91579-01***
Date Sampled: ***11/18/24 10:45***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.35	U		mg/L	0.35	1.25	12/05/24 20:12	wtc
Arsenic, dissolved	EPA 200.8	5	0.00269	B	*	mg/L	0.001	0.005	11/22/24 16:51	aps
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	12/05/24 20:12	wtc
Boron, dissolved	EPA 200.7	5	1.23			mg/L	0.15	0.5	12/05/24 20:12	wtc
Cadmium, dissolved	EPA 200.8	5	<0.00025	U	*	mg/L	0.00025	0.00125	11/22/24 16:51	aps
Calcium, dissolved	EPA 200.7	5	16.0			mg/L	0.5	2.5	12/05/24 20:12	wtc
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	12/05/24 20:12	wtc
Cobalt, dissolved	EPA 200.8	5	<0.00025	U	*	mg/L	0.00025	0.00125	11/22/24 16:51	aps
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	12/05/24 20:12	wtc
Iron, dissolved	EPA 200.7	5	0.699	B		mg/L	0.3	0.75	12/05/24 20:12	wtc
Lead, dissolved	EPA 200.8	5	<0.0005	U	*	mg/L	0.0005	0.0025	11/22/24 16:51	aps
Lithium, dissolved	EPA 200.7	5	0.398			mg/L	0.04	0.2	12/05/24 20:12	wtc
Magnesium, dissolved	EPA 200.7	5	5.16			mg/L	1	5	12/05/24 20:12	wtc
Manganese, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	12/05/24 20:12	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	11/30/24 13:41	rjw
Nickel, dissolved	EPA 200.7	5	<0.04	U		mg/L	0.04	0.2	12/05/24 20:12	wtc
Potassium, dissolved	EPA 200.7	5	5.33			mg/L	2.5	5	12/05/24 20:12	wtc
Selenium, dissolved	EPA 200.8	5	<0.0005	U		mg/L	0.0005	0.00125	11/25/24 15:05	aps
Sodium, dissolved	EPA 200.7	5	1800		*	mg/L	1	5	12/05/24 20:12	wtc
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	12/05/24 20:12	wtc
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	12/05/24 20:12	wtc

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

ACZ Sample ID: ***L91579-01***
Date Sampled: ***11/18/24 10:45***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	1480			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	1480			mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.0			%			12/09/24 0:00	calc
Sum of Anions			86			meq/L			12/09/24 0:00	calc
Sum of Cations			81			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	100	1830		*	mg/L	100	200	11/21/24 11:32	jqr
Fluoride	SM 4500-F C-2011	1	3.03			mg/L	0.15	0.35	12/06/24 11:36	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		61			mg/L	1	30	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		0.021	B		mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.021	B		mg/L	0.02	0.1	11/20/24 1:52	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	11/20/24 1:20	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	4590			mg/L	40	80	11/20/24 16:04	jck
Sulfate	ASTM D516-07/-11/-16	25	253		*	mg/L	25	125	11/20/24 15:45	jqr
TDS (calculated)	Calculation		4820			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.95						12/09/24 0:00	calc

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

ACZ Sample ID: ***L91579-02***
Date Sampled: ***11/18/24 12:11***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U		mg/L	0.14	0.5	12/05/24 20:15	wtc
Arsenic, dissolved	EPA 200.8	1	0.00047	B		mg/L	0.0002	0.001	11/22/24 16:52	aps
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/05/24 20:15	wtc
Boron, dissolved	EPA 200.7	2	1.04			mg/L	0.06	0.2	12/05/24 20:15	wtc
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	11/22/24 16:52	aps
Calcium, dissolved	EPA 200.7	2	6.75			mg/L	0.2	1	12/05/24 20:15	wtc
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/05/24 20:15	wtc
Cobalt, dissolved	EPA 200.8	1	0.000058	B		mg/L	0.00005	0.00025	11/22/24 16:52	aps
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/05/24 20:15	wtc
Iron, dissolved	EPA 200.7	2	<0.12	U		mg/L	0.12	0.3	12/05/24 20:15	wtc
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	11/22/24 16:52	aps
Lithium, dissolved	EPA 200.7	2	0.218			mg/L	0.016	0.08	12/05/24 20:15	wtc
Magnesium, dissolved	EPA 200.7	2	1.85	B		mg/L	0.4	2	12/05/24 20:15	wtc
Manganese, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/05/24 20:15	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	11/30/24 13:44	rjw
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	12/05/24 20:15	wtc
Potassium, dissolved	EPA 200.7	2	2.84			mg/L	1	2	12/05/24 20:15	wtc
Selenium, dissolved	EPA 200.8	2	<0.0002	U		mg/L	0.0002	0.0005	11/25/24 15:07	aps
Sodium, dissolved	EPA 200.7	2	1020		*	mg/L	0.4	2	12/05/24 20:15	wtc
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	12/05/24 20:15	wtc
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/05/24 20:15	wtc

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

ACZ Sample ID: ***L91579-02***
Date Sampled: ***11/18/24 12:11***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	1320			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	1320			mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.3			%			12/09/24 0:00	calc
Sum of Anions			49			meq/L			12/09/24 0:00	calc
Sum of Cations			45			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	50	671		*	mg/L	50	100	11/21/24 11:32	jqr
Fluoride	SM 4500-F C-2011	1	6.05			mg/L	0.15	0.35	12/06/24 11:40	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		25			mg/L	0.5	10	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	U		mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	11/20/24 1:21	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	11/20/24 1:21	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2750			mg/L	40	80	11/20/24 16:06	jck
Sulfate	ASTM D516-07/-11/-16	25	169		*	mg/L	25	125	11/20/24 15:46	jqr
TDS (calculated)	Calculation		2680			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.03						12/09/24 0:00	calc

GCC Rio Grande
Project ID:
Sample ID: MW-21

ACZ Sample ID: ***L91579-03***
Date Sampled: ***11/18/24 13:08***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U		mg/L	0.14	0.5	12/05/24 20:18	wtc
Arsenic, dissolved	EPA 200.8	1	<0.0002	U		mg/L	0.0002	0.001	11/22/24 16:54	aps
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/05/24 20:18	wtc
Boron, dissolved	EPA 200.7	2	0.612			mg/L	0.06	0.2	12/05/24 20:18	wtc
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	11/22/24 16:54	aps
Calcium, dissolved	EPA 200.7	2	7.85			mg/L	0.2	1	12/05/24 20:18	wtc
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/05/24 20:18	wtc
Cobalt, dissolved	EPA 200.8	1	0.000108	B		mg/L	0.00005	0.00025	11/22/24 16:54	aps
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/05/24 20:18	wtc
Iron, dissolved	EPA 200.7	2	<0.12	U		mg/L	0.12	0.3	12/05/24 20:18	wtc
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	11/22/24 16:54	aps
Lithium, dissolved	EPA 200.7	2	0.227			mg/L	0.016	0.08	12/05/24 20:18	wtc
Magnesium, dissolved	EPA 200.7	2	5.29			mg/L	0.4	2	12/05/24 20:18	wtc
Manganese, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/05/24 20:18	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	11/30/24 13:47	rjw
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	12/05/24 20:18	wtc
Potassium, dissolved	EPA 200.7	2	2.53			mg/L	1	2	12/05/24 20:18	wtc
Selenium, dissolved	EPA 200.8	2	<0.0002	U		mg/L	0.0002	0.0005	11/25/24 15:09	aps
Sodium, dissolved	EPA 200.7	2	834		*	mg/L	0.4	2	12/05/24 20:18	wtc
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	12/05/24 20:18	wtc
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/05/24 20:18	wtc

GCC Rio Grande
Project ID:
Sample ID: MW-21

ACZ Sample ID: ***L91579-03***
Date Sampled: ***11/18/24 13:08***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	935			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	935			mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-5.0			%			12/09/24 0:00	calc
Sum of Anions			42			meq/L			12/09/24 0:00	calc
Sum of Cations			38			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	160		*	mg/L	5	10	11/21/24 11:33	jqr
Fluoride	SM 4500-F C-2011	1	1.40			mg/L	0.15	0.35	12/06/24 11:43	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		41			mg/L	0.5	10	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		0.044	B		mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.044	B		mg/L	0.02	0.1	11/20/24 1:22	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	11/20/24 1:22	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2520			mg/L	40	80	11/20/24 16:09	jck
Sulfate	ASTM D516-07/-11/-16	50	875		*	mg/L	50	250	11/20/24 15:47	jqr
TDS (calculated)	Calculation		2460			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						12/09/24 0:00	calc

GCC Rio Grande
Project ID:
Sample ID: MW-23

ACZ Sample ID: ***L91579-04***
Date Sampled: ***11/18/24 14:43***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.07	U		mg/L	0.07	0.25	12/05/24 20:22	wtc
Arsenic, dissolved	EPA 200.8	1	0.00126			mg/L	0.0002	0.001	11/22/24 16:56	aps
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	12/05/24 20:22	wtc
Boron, dissolved	EPA 200.7	1	0.240			mg/L	0.03	0.1	12/05/24 20:22	wtc
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	11/22/24 16:56	aps
Calcium, dissolved	EPA 200.7	1	20.3			mg/L	0.1	0.5	12/05/24 20:22	wtc
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	12/05/24 20:22	wtc
Cobalt, dissolved	EPA 200.8	1	0.000374			mg/L	0.00005	0.00025	11/22/24 16:56	aps
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	12/05/24 20:22	wtc
Iron, dissolved	EPA 200.7	1	0.388			mg/L	0.06	0.15	12/05/24 20:22	wtc
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	11/22/24 16:56	aps
Lithium, dissolved	EPA 200.7	1	0.105			mg/L	0.008	0.04	12/05/24 20:22	wtc
Magnesium, dissolved	EPA 200.7	1	8.41			mg/L	0.2	1	12/05/24 20:22	wtc
Manganese, dissolved	EPA 200.7	1	0.023	B		mg/L	0.01	0.05	12/05/24 20:22	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	11/30/24 13:47	rjw
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	12/05/24 20:22	wtc
Potassium, dissolved	EPA 200.7	1	3.87			mg/L	0.5	1	12/05/24 20:22	wtc
Selenium, dissolved	EPA 200.8	1	0.00139			mg/L	0.0001	0.00025	11/25/24 15:11	aps
Sodium, dissolved	EPA 200.7	1	395		*	mg/L	0.2	1	12/05/24 20:22	wtc
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	12/05/24 20:22	wtc
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	12/05/24 20:22	wtc

GCC Rio Grande
Project ID:
Sample ID: MW-23

ACZ Sample ID: ***L91579-04***
Date Sampled: ***11/18/24 14:43***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	717			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	717			mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-5.0			%			12/09/24 0:00	calc
Sum of Anions			21.0			meq/L			12/09/24 0:00	calc
Sum of Cations			19			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	70.5		*	mg/L	5	10	11/21/24 11:12	jqr
Fluoride	SM 4500-F C-2011	1	0.70			mg/L	0.15	0.35	12/06/24 11:58	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		85			mg/L	0.2	5	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		1.26			mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	1.34			mg/L	0.02	0.1	11/20/24 1:23	pjb
Nitrite as N	EPA 353.2	1	0.083		*	mg/L	0.01	0.05	11/20/24 1:23	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	1110			mg/L	20	40	11/23/24 14:43	cob
Sulfate	ASTM D516-07/-11/-16	25	217		*	mg/L	25	125	11/20/24 15:47	jqr
TDS (calculated)	Calculation		1150			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						12/09/24 0:00	calc

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

ACZ Sample ID: ***L91579-05***
Date Sampled: ***11/18/24 12:00***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.07	U		mg/L	0.07	0.25	12/05/24 20:31	wtc
Arsenic, dissolved	EPA 200.8	1	0.00122			mg/L	0.0002	0.001	11/22/24 16:58	aps
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	12/05/24 20:31	wtc
Boron, dissolved	EPA 200.7	1	0.238			mg/L	0.03	0.1	12/05/24 20:31	wtc
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	11/22/24 16:58	aps
Calcium, dissolved	EPA 200.7	1	20.4			mg/L	0.1	0.5	12/05/24 20:31	wtc
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	12/05/24 20:31	wtc
Cobalt, dissolved	EPA 200.8	1	0.000372			mg/L	0.00005	0.00025	11/22/24 16:58	aps
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	12/05/24 20:31	wtc
Iron, dissolved	EPA 200.7	1	0.395			mg/L	0.06	0.15	12/05/24 20:31	wtc
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	11/22/24 16:58	aps
Lithium, dissolved	EPA 200.7	1	0.104			mg/L	0.008	0.04	12/05/24 20:31	wtc
Magnesium, dissolved	EPA 200.7	1	8.45			mg/L	0.2	1	12/05/24 20:31	wtc
Manganese, dissolved	EPA 200.7	1	0.023	B		mg/L	0.01	0.05	12/05/24 20:31	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	11/30/24 13:48	rjw
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	12/05/24 20:31	wtc
Potassium, dissolved	EPA 200.7	1	3.81			mg/L	0.5	1	12/05/24 20:31	wtc
Selenium, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.00025	11/25/24 15:16	aps
Sodium, dissolved	EPA 200.7	1	389		*	mg/L	0.2	1	12/05/24 20:31	wtc
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	12/05/24 20:31	wtc
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	12/05/24 20:31	wtc

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

ACZ Sample ID: ***L91579-05***
Date Sampled: ***11/18/24 12:00***
Date Received: ***11/19/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	702			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	702			mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.6			%			12/09/24 0:00	calc
Sum of Anions			20			meq/L			12/09/24 0:00	calc
Sum of Cations			19.0			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	68.7		*	mg/L	5	10	11/21/24 11:15	jqr
Fluoride	SM 4500-F C-2011	1	0.72			mg/L	0.15	0.35	12/06/24 12:01	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		86			mg/L	0.2	5	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		1.46			mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	1.55			mg/L	0.02	0.1	11/20/24 1:25	pjb
Nitrite as N	EPA 353.2	1	0.091		*	mg/L	0.01	0.05	11/20/24 1:25	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	1130	H	*	mg/L	20	40	11/27/24 19:35	jck
Sulfate	ASTM D516-07/-11/-16	25	190		*	mg/L	25	125	11/20/24 15:48	jqr
TDS (calculated)	Calculation		1110			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						12/09/24 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: ***L91579***

NOTE: If the Rec% column is null, the high/low 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
WG602016													
WG602016PBW1	PBW	11/26/24 14:57				U	mg/L		-20	20			
WG602016LCSW1	LCSW	11/26/24 15:02	WC241101-1	820.0001		876.2	mg/L	107	90	110			
WG602016LCSW2	LCSW	11/26/24 16:48	WC241101-1	820.0001		863.3	mg/L	105	90	110			
WG602016PBW2	PBW	11/26/24 16:57				5.8	mg/L		-20	20			
WG602016LCSW3	LCSW	11/26/24 18:43	WC241101-1	820.0001		859.7	mg/L	105	90	110			
WG602016PBW3	PBW	11/26/24 18:52				5	mg/L		-20	20			
L91587-06DUP	DUP	11/26/24 21:17			281	271.5	mg/L				3	20	
WG602016LCSW4	LCSW	11/26/24 21:23	WC241101-1	820.0001		864.8	mg/L	105	90	110			
WG602016PBW4	PBW	11/26/24 21:33				5.4	mg/L		-20	20			
WG602016LCSW5	LCSW	11/26/24 23:55	WC241101-1	820.0001		866.8	mg/L	106	90	110			
WG602016PBW5	PBW	11/27/24 0:05				5.3	mg/L		-20	20			
WG602016LCSW6	LCSW	11/27/24 2:06	WC241101-1	820.0001		873	mg/L	106	90	110			

Aluminum, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		1.912	mg/L	96	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.15	0.15			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.250625		.233	mg/L	93	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	200.750625		202.8	mg/L	101	1	200			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	1.0025		.969	mg/L	97	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		.948	mg/L	95	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.15	0.15			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		.951	mg/L	95	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.15	0.15			
L91579-05AS	AS	12/05/24 20:34	II241114-5	1.0025	U	.966	mg/L	96	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	1.0025	U	.964	mg/L	96	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		.964	mg/L	96	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.15	0.15			

Arsenic, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601814													
WG601814ICV	ICV	11/22/24 16:43	MS241016-2	.05		.04921	mg/L	98	90	110			
WG601814ICB	ICB	11/22/24 16:45				U	mg/L		-0.00044	0.00044			
WG601814LFB	LFB	11/22/24 16:47	MS241106-3	.0501		.0578	mg/L	115	85	115			
L91579-05AS	AS	11/22/24 17:00	MS241106-3	.0501	.00122	.06382	mg/L	125	70	130			
L91579-05ASD	ASD	11/22/24 17:02	MS241106-3	.0501	.00122	.0638	mg/L	125	70	130	0	20	
WG601814CCV1	CCV	11/22/24 17:05	MS241104-4	.1002		.10145	mg/L	101	90	110			
WG601814CCB1	CCB	11/22/24 17:07				U	mg/L		-0.0006	0.0006			
WG601814CCV2	CCV	11/22/24 17:27	MS241104-4	.1002		.09884	mg/L	99	90	110			
WG601814CCB2	CCB	11/22/24 17:29				U	mg/L		-0.0006	0.0006			
WG601814CCV3	CCV	11/22/24 17:40	MS241104-4	.1002		.10319	mg/L	103	90	110			
WG601814CCB3	CCB	11/22/24 17:42				U	mg/L		-0.0006	0.0006			

GCC

ACZ Project ID: ***L91579***

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

Beryllium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		1.975	mg/L	99	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.03	0.03			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.05005		.05	mg/L	100	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	.1001		.099	mg/L	99	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	.5005		.509	mg/L	102	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		1	mg/L	100	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.03	0.03			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		1.006	mg/L	101	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.03	0.03			
L91579-05AS	AS	12/05/24 20:34	II241114-5	.5005	U	.501	mg/L	100	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	.5005	U	.501	mg/L	100	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		1.014	mg/L	101	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.03	0.03			

Boron, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		1.996	mg/L	100	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.09	0.09			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.1001		.099	mg/L	99	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	.1001		.09	mg/L	90	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	.5005		.493	mg/L	99	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		1.009	mg/L	101	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.09	0.09			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		1.006	mg/L	101	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.09	0.09			
L91579-05AS	AS	12/05/24 20:34	II241114-5	.5005	.238	.72	mg/L	96	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	.5005	.238	.716	mg/L	96	85	115	1	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		1.01	mg/L	101	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.09	0.09			

Cadmium, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601814													
WG601814ICV	ICV	11/22/24 16:43	MS241016-2	.05		.048636	mg/L	97	90	110			
WG601814ICB	ICB	11/22/24 16:45				U	mg/L		-0.00011	0.00011			
WG601814LFB	LFB	11/22/24 16:47	MS241106-3	.05005		.055154	mg/L	110	85	115			
L91579-05AS	AS	11/22/24 17:00	MS241106-3	.05005	U	.053631	mg/L	107	70	130			
L91579-05ASD	ASD	11/22/24 17:02	MS241106-3	.05005	U	.052922	mg/L	106	70	130	1	20	
WG601814CCV1	CCV	11/22/24 17:05	MS241104-4	.1001		.097893	mg/L	98	90	110			
WG601814CCB1	CCB	11/22/24 17:07				U	mg/L		-0.00015	0.00015			
WG601814CCV2	CCV	11/22/24 17:27	MS241104-4	.1001		.097009	mg/L	97	90	110			
WG601814CCB2	CCB	11/22/24 17:29				U	mg/L		-0.00015	0.00015			
WG601814CCV3	CCV	11/22/24 17:40	MS241104-4	.1001		.097203	mg/L	97	90	110			
WG601814CCB3	CCB	11/22/24 17:42				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L91579***

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

Calcium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	100		95.29	mg/L	95	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.3	0.3			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.5025		.51	mg/L	101	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	201.5025		192.7	mg/L	96	1	200			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	67.963		65.79	mg/L	97	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	50		47.63	mg/L	95	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.3	0.3			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	50		47.91	mg/L	96	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.3	0.3			
L91579-05AS	AS	12/05/24 20:34	II241114-5	67.963	20.4	85.37	mg/L	96	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	67.963	20.4	85.17	mg/L	95	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	50		48.57	mg/L	97	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.3	0.3			

Chloride SM 4500-Cl E-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601710													
WG601710ICV	ICV	11/21/24 9:51	WI231211-1	39.96		40.09	mg/L	100	90	110			
WG601710ICB	ICB	11/21/24 9:51				U	mg/L						
WG601710CCV1	CCV	11/21/24 10:50	WI241113-1	25		24.57	mg/L	98	90	110			
WG601710CCB1	CCB	11/21/24 10:50				U	mg/L						
WG601710PQV	PQV	11/21/24 10:50	WI240904-2	2		2.05	mg/L	103	50	150			
WG601710LFB	LFB	11/21/24 10:51	WI240820-1	20		20.93	mg/L	105	90	110			
WG601710CCV2	CCV	11/21/24 10:53	WI241113-1	25		24.97	mg/L	100	90	110			
WG601710CCB2	CCB	11/21/24 10:54				U	mg/L						
WG601710CCV3	CCV	11/21/24 11:01	WI241113-1	25		25.04	mg/L	100	90	110			
WG601710CCB3	CCB	11/21/24 11:01				U	mg/L						
WG601710CCV4	CCV	11/21/24 11:08	WI241113-1	25		24.61	mg/L	98	90	110			
WG601710CCB4	CCB	11/21/24 11:08				U	mg/L						
WG601710CCV5	CCV	11/21/24 11:11	WI241113-1	25		24.57	mg/L	98	90	110			
WG601710CCB5	CCB	11/21/24 11:11				U	mg/L						
L91590-04AS	AS	11/21/24 11:18	5XCL GAL	20	95.5	111.84	mg/L	82	90	110			M3
L91590-04ASD	ASD	11/21/24 11:19	5XCL GAL	20	95.5	111.84	mg/L	82	90	110	0	20	M3
WG601710CCV6	CCV	11/21/24 11:19	WI241113-1	25		25.05	mg/L	100	90	110			
WG601710CCB6	CCB	11/21/24 11:19				U	mg/L						
WG601710CCV7	CCV	11/21/24 11:31	WI241113-1	25		24.82	mg/L	99	90	110			
WG601710CCB7	CCB	11/21/24 11:31				U	mg/L						
WG601710CCV8	CCV	11/21/24 11:33	WI241113-1	25		25.12	mg/L	100	90	110			
WG601710CCB8	CCB	11/21/24 11:33				U	mg/L						

GCC

ACZ Project ID: ***L91579***

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

Chromium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		1.93	mg/L	97	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.06	0.06			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.05005		.046	mg/L	92	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	.1001		.09	mg/L	90	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	.5005		.49	mg/L	98	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		.981	mg/L	98	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.06	0.06			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		.98	mg/L	98	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.06	0.06			
L91579-05AS	AS	12/05/24 20:34	II241114-5	.5005	U	.484	mg/L	97	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	.5005	U	.482	mg/L	96	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		.99	mg/L	99	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.06	0.06			

Cobalt, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601814													
WG601814ICV	ICV	11/22/24 16:43	MS241016-2	.05		.049119	mg/L	98	90	110			
WG601814ICB	ICB	11/22/24 16:45				U	mg/L		-0.00011	0.00011			
WG601814LFB	LFB	11/22/24 16:47	MS241106-3	.05005		.051035	mg/L	102	85	115			
L91579-05AS	AS	11/22/24 17:00	MS241106-3	.05005	.000372	.050454	mg/L	100	70	130			
L91579-05ASD	ASD	11/22/24 17:02	MS241106-3	.05005	.000372	.049915	mg/L	99	70	130	1	20	
WG601814CCV1	CCV	11/22/24 17:05	MS241104-4	.1001		.100486	mg/L	100	90	110			
WG601814CCB1	CCB	11/22/24 17:07				U	mg/L		-0.00015	0.00015			
WG601814CCV2	CCV	11/22/24 17:27	MS241104-4	.1001		.097535	mg/L	97	90	110			
WG601814CCB2	CCB	11/22/24 17:29				U	mg/L		-0.00015	0.00015			
WG601814CCV3	CCV	11/22/24 17:40	MS241104-4	.1001		.099335	mg/L	99	90	110			
WG601814CCB3	CCB	11/22/24 17:42				U	mg/L		-0.00015	0.00015			

Copper, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		1.951	mg/L	98	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.03	0.03			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.05005		.05	mg/L	100	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	.1001		.101	mg/L	101	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	.5005		.5	mg/L	100	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		.995	mg/L	100	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.03	0.03			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		.999	mg/L	100	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.03	0.03			
L91579-05AS	AS	12/05/24 20:34	II241114-5	.5005	U	.499	mg/L	100	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	.5005	U	.501	mg/L	100	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		1.005	mg/L	101	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L91579***

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

Fluoride SM 4500-F C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602472													
WG602472ICV	ICV	12/06/24 10:43	WC241204-1	2		2.04	mg/L	102	90	110			
WG602472ICB	ICB	12/06/24 10:51				U	mg/L		-0.3	0.3			
WG602472PQV	PQV	12/06/24 10:54	WC241125-8	.35		.32	mg/L	91	50	150			
WG602472LFB1	LFB	12/06/24 10:59	WC241104-8	5		4.61	mg/L	92	90	110			
L91575-03AS	AS	12/06/24 11:08	WC241104-8	5	U	4.65	mg/L	93	90	110			
L91575-03ASD	ASD	12/06/24 11:12	WC241104-8	5	U	4.72	mg/L	94	90	110	1	20	
WG602472CCV1	CCV	12/06/24 11:46	WC241204-1	2		2.036	mg/L	102	90	110			
WG602472CCB1	CCB	12/06/24 11:54				U	mg/L		-0.3	0.3			
WG602472CCV2	CCV	12/06/24 12:46	WC241204-1	2		2.106	mg/L	105	90	110			
WG602472CCB2	CCB	12/06/24 12:54				U	mg/L		-0.3	0.3			
WG602472LFB2	LFB	12/06/24 13:25	WC241104-8	5		5.05	mg/L	101	90	110			
WG602472CCV3	CCV	12/06/24 13:53	WC241204-1	2		2.116	mg/L	106	90	110			
WG602472CCB3	CCB	12/06/24 14:01				U	mg/L		-0.3	0.3			
WG602472CCV4	CCV	12/06/24 14:54	WC241204-1	2		2.085	mg/L	104	90	110			
WG602472CCB4	CCB	12/06/24 15:02				U	mg/L		-0.3	0.3			
WG602472CCV5	CCV	12/06/24 15:45	WC241204-1	2		1.969	mg/L	98	90	110			
WG602472CCB5	CCB	12/06/24 15:53				U	mg/L		-0.3	0.3			

Iron, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		1.894	mg/L	95	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.18	0.18			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.15045		.144	mg/L	96	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	200.75045		188.6	mg/L	94	1	200			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	1.003		.97	mg/L	97	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		.947	mg/L	95	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.18	0.18			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		.961	mg/L	96	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.18	0.18			
L91579-05AS	AS	12/05/24 20:34	II241114-5	1.003	.395	1.346	mg/L	95	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	1.003	.395	1.343	mg/L	95	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		.972	mg/L	97	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.18	0.18			

GCC

ACZ Project ID: ***L91579***

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

Lead, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601814													
WG601814ICV	ICV	11/22/24 16:43	MS241016-2	.05		.0484	mg/L	97	90	110			
WG601814ICB	ICB	11/22/24 16:45				U	mg/L		-0.00022	0.00022			
WG601814LFB	LFB	11/22/24 16:47	MS241106-3	.05005		.0517	mg/L	103	85	115			
L91579-05AS	AS	11/22/24 17:00	MS241106-3	.05005	U	.04725	mg/L	94	70	130			
L91579-05ASD	ASD	11/22/24 17:02	MS241106-3	.05005	U	.04632	mg/L	93	70	130	2	20	
WG601814CCV1	CCV	11/22/24 17:05	MS241104-4	.25025		.25994	mg/L	104	90	110			
WG601814CCB1	CCB	11/22/24 17:07				U	mg/L		-0.0003	0.0003			
WG601814CCV2	CCV	11/22/24 17:27	MS241104-4	.25025		.25542	mg/L	102	90	110			
WG601814CCB2	CCB	11/22/24 17:29				U	mg/L		-0.0003	0.0003			
WG601814CCV3	CCV	11/22/24 17:40	MS241104-4	.25025		.25965	mg/L	104	90	110			
WG601814CCB3	CCB	11/22/24 17:42				U	mg/L		-0.0003	0.0003			

Lithium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		1.9315	mg/L	97	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.024	0.024			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.04004		.0398	mg/L	99	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	.1001		.0984	mg/L	98	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	1.001		.9523	mg/L	95	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		.964	mg/L	96	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.024	0.024			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		.9664	mg/L	97	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.024	0.024			
L91579-05AS	AS	12/05/24 20:34	II241114-5	1.001	.104	1.044	mg/L	94	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	1.001	.104	1.042	mg/L	94	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		.9759	mg/L	98	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.024	0.024			

Magnesium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	100		95.04	mg/L	95	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.6	0.6			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	1.0087		.98	mg/L	97	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	202.7487		200.7	mg/L	99	1	200			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	49.9596		47.57	mg/L	95	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	50		47.18	mg/L	94	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.6	0.6			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	50		47.49	mg/L	95	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.6	0.6			
L91579-05AS	AS	12/05/24 20:34	II241114-5	49.9596	8.45	55.44	mg/L	94	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	49.9596	8.45	55.2	mg/L	94	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	50		47.98	mg/L	96	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L91579***

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

Manganese, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		1.972	mg/L	99	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.03	0.03			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.0498		.048	mg/L	96	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	50.4498		49.74	mg/L	99	1	200			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	.504		.5	mg/L	99	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		.996	mg/L	100	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.03	0.03			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		1.001	mg/L	100	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.03	0.03			
L91579-05AS	AS	12/05/24 20:34	II241114-5	.504	.023	.523	mg/L	99	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	.504	.023	.523	mg/L	99	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		1.013	mg/L	101	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.03	0.03			

Mercury, dissolved EPA 245.1

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602070													
WG602070ICV	ICV	11/30/24 12:19	HG241017-3	.00501		.00506	mg/L	101	95	105			
WG602070ICB	ICB	11/30/24 12:20				U	mg/L		-0.0002	0.0002			
WG602101													
WG602101CCV1	CCV	11/30/24 13:33	HG241017-3	.00501		.0047	mg/L	94	90	110			
WG602101CCB1	CCB	11/30/24 13:34				U	mg/L		-0.0002	0.0002			
WG602101PQV	PQV	11/30/24 13:35	HG241118-2	.001001		.00107	mg/L	107	70	130			
WG602101LRB	LRB	11/30/24 13:36				U	mg/L		-0.00044	0.00044			
WG602101LFB	LFB	11/30/24 13:37	HG241118-3	.002002		.00196	mg/L	98	85	115			
L91579-01LFM	LFM	11/30/24 13:42	HG241118-3	.002002	U	.00105	mg/L	52	85	115			M2
L91579-01LFMD	LFMD	11/30/24 13:43	HG241118-3	.002002	U	.00096	mg/L	48	85	115	9	20	M2
WG602101CCV2	CCV	11/30/24 13:45	HG241017-3	.00501		.00484	mg/L	97	90	110			
WG602101CCB2	CCB	11/30/24 13:46				U	mg/L		-0.0002	0.0002			
WG602101CCV3	CCV	11/30/24 13:56	HG241017-3	.00501		.00471	mg/L	94	90	110			
WG602101CCB3	CCB	11/30/24 13:57				U	mg/L		-0.0002	0.0002			
WG602101CCV4	CCV	11/30/24 14:04	HG241017-3	.00501		.00474	mg/L	95	90	110			
WG602101CCB4	CCB	11/30/24 14:05				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L91579***

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

Nickel, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2.004		1.9368	mg/L	97	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.024	0.024			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.04004		.0415	mg/L	104	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	.1001		.0913	mg/L	91	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	.5005		.4871	mg/L	97	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1.002		.9756	mg/L	97	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.024	0.024			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1.002		.9817	mg/L	98	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.024	0.024			
L91579-05AS	AS	12/05/24 20:34	II241114-5	.5005	U	.4836	mg/L	97	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	.5005	U	.4827	mg/L	96	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1.002		.9913	mg/L	99	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601591													
WG601591ICV	ICV	11/20/24 0:41	WI241025-1	2.416		2.48	mg/L	103	90	110			
WG601591ICB	ICB	11/20/24 0:42				U	mg/L		-0.02	0.02			
WG601591PQV	PQV	11/20/24 0:46	WI240828-4	.1		.111	mg/L	111	70	130			
WG601591LFB	LFB	11/20/24 0:47	WI240828-3	2		1.963	mg/L	98	90	110			
WG601591CCV1	CCV	11/20/24 0:56	WI241119-5	2		1.985	mg/L	99	90	110			
WG601591CCB1	CCB	11/20/24 0:59				U	mg/L		-0.02	0.02			
WG601591CCV2	CCV	11/20/24 1:13	WI241119-5	2		1.982	mg/L	99	90	110			
WG601591CCB2	CCB	11/20/24 1:16				U	mg/L		-0.02	0.02			
WG601591CCV3	CCV	11/20/24 1:30	WI241119-5	2		1.987	mg/L	99	90	110			
WG601591CCB3	CCB	11/20/24 1:33				U	mg/L		-0.02	0.02			
L91574-04AS	AS	11/20/24 1:41	WI240828-3	50	34.6	83.678	mg/L	98	90	110			
L91574-05DUP	DUP	11/20/24 1:44			28	27.96	mg/L				0	20	
WG601591CCV4	CCV	11/20/24 1:47	WI241119-5	2		1.986	mg/L	99	90	110			
WG601591CCB4	CCB	11/20/24 1:50				U	mg/L		-0.02	0.02			
WG601591CCV5	CCV	11/20/24 1:55	WI241119-5	2		1.993	mg/L	100	90	110			
WG601591CCB5	CCB	11/20/24 1:58				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L91579***

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

Nitrite as N EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601591													
WG601591ICV	ICV	11/20/24 0:41	WI241025-1	.608		.604	mg/L	99	90	110			
WG601591ICB	ICB	11/20/24 0:42				U	mg/L		-0.01	0.01			
WG601591PQV	PQV	11/20/24 0:46	WI240828-4	.05		.049	mg/L	98	70	130			
WG601591LFB	LFB	11/20/24 0:47	WI240828-3	1		.993	mg/L	99	90	110			
WG601591CCV1	CCV	11/20/24 0:56	WI241119-5	1		1.012	mg/L	101	90	110			
WG601591CCB1	CCB	11/20/24 0:59				U	mg/L		-0.01	0.01			
L91574-04AS	AS	11/20/24 1:09	WI240828-3	1	U	1.001	mg/L	100	90	110			
L91574-05DUP	DUP	11/20/24 1:12			.016	.015	mg/L				6	20	RA
WG601591CCV2	CCV	11/20/24 1:13	WI241119-5	1		1.004	mg/L	100	90	110			
WG601591CCB2	CCB	11/20/24 1:16				U	mg/L		-0.01	0.01			
WG601591CCV3	CCV	11/20/24 1:30	WI241119-5	1		1	mg/L	100	90	110			
WG601591CCB3	CCB	11/20/24 1:33				U	mg/L		-0.01	0.01			
WG601591CCV4	CCV	11/20/24 1:47	WI241119-5	1		1.003	mg/L	100	90	110			
WG601591CCB4	CCB	11/20/24 1:50				U	mg/L		-0.01	0.01			
WG601591CCV5	CCV	11/20/24 1:55	WI241119-5	1		1.003	mg/L	100	90	110			
WG601591CCB5	CCB	11/20/24 1:58				U	mg/L		-0.01	0.01			

Potassium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	20		19.05	mg/L	95	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-1.5	1.5			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	1.002		1.06	mg/L	106	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	1.002		1.07	mg/L	107	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	100.0859		96.32	mg/L	96	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	10		9.58	mg/L	96	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-1.5	1.5			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	10		9.62	mg/L	96	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-1.5	1.5			
L91579-05AS	AS	12/05/24 20:34	II241114-5	100.0859	3.81	99.94	mg/L	96	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	100.0859	3.81	99.96	mg/L	96	85	115	0	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	10		9.75	mg/L	98	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-1.5	1.5			

GCC

ACZ Project ID: ***L91579***

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

Residue, Filterable (TDS) @180C SM 2540 C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601677													
WG601677PBW	PBW	11/20/24 15:25				U	mg/L		-20	20			
WG601677LCSW	LCSW	11/20/24 15:27	PCN627538	1000		1010	mg/L	101	80	120			
WG601677PQV	PQV	11/20/24 15:30	WC240717-4	40		36	mg/L	90	50	150			
L91581-05DUP	DUP	11/20/24 16:25			2700	2704	mg/L				0	10	
WG601848													
WG601848PBW	PBW	11/23/24 14:15				U	mg/L		-20	20			
WG601848LCSW	LCSW	11/23/24 14:17	PCN627539	1000		976	mg/L	98	80	120			
L91579-04DUP	DUP	11/23/24 14:46			1110	1114	mg/L				0	10	
WG602092													
WG602092PBW	PBW	11/27/24 19:30				U	mg/L		-20	20			
WG602092LCSW	LCSW	11/27/24 19:32	PCN627523	1000		1000	mg/L	100	80	120			
L91602-02DUP	DUP	11/27/24 19:50			3830	3884	mg/L				1	10	

Selenium, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601898													
WG601898ICV	ICV	11/25/24 14:51	MS241016-2	.05		.05079	mg/L	102	90	110			
WG601898ICB	ICB	11/25/24 14:53				U	mg/L		-0.00022	0.00022			
WG601898LFB	LFB	11/25/24 14:54	MS241106-3	.05005		.05264	mg/L	105	85	115			
L91574-07AS	AS	11/25/24 15:02	MS241106-3	.05005	.016	.0725	mg/L	113	70	130			
L91574-07ASD	ASD	11/25/24 15:03	MS241106-3	.05005	.016	.07159	mg/L	111	70	130	1	20	
WG601898CCV1	CCV	11/25/24 15:13	MS241104-4	.1001		.10006	mg/L	100	90	110			
WG601898CCB1	CCB	11/25/24 15:14				U	mg/L		-0.0003	0.0003			
WG601898CCV2	CCV	11/25/24 15:34	MS241104-4	.1001		.10407	mg/L	104	90	110			
WG601898CCB2	CCB	11/25/24 15:36				U	mg/L		-0.0003	0.0003			
WG601898CCV3	CCV	11/25/24 15:47	MS241104-4	.1001		.1031	mg/L	103	90	110			
WG601898CCB3	CCB	11/25/24 15:49				U	mg/L		-0.0003	0.0003			

Sodium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	100		97.23	mg/L	97	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.6	0.6			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	1.005		1.03	mg/L	102	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	1.005		1.07	mg/L	106	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	100.0817		97.6	mg/L	98	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	50		49.08	mg/L	98	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.6	0.6			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	50		49.31	mg/L	99	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.6	0.6			
L91579-05AS	AS	12/05/24 20:34	II241114-5	100.0817	389	471.3	mg/L	82	85	115			M3
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	100.0817	389	471.6	mg/L	83	85	115	0	20	M3
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	50		49.78	mg/L	100	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L91579***

NOTE: If the Rec% column is null, the high/low 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
WG601667													
WG601667ICV	ICV	11/20/24 10:34	WI241112-3	20.02		20.6	mg/L	103	85	115			
WG601667ICB	ICB	11/20/24 10:34				U	mg/L		-2.5	2.5			
WG601667CCV1	CCV	11/20/24 15:02	WI241120-1	25		28.5	mg/L	114	85	115			
WG601667CCB1	CCB	11/20/24 15:02				U	mg/L		-2.5	2.5			
WG601667LFB	LFB	11/20/24 15:02	WI241001-1	10		10.6	mg/L	106	85	115			
WG601667CCV2	CCV	11/20/24 15:05	WI241120-1	25		26.6	mg/L	106	85	115			
WG601667CCB2	CCB	11/20/24 15:06				U	mg/L		-2.5	2.5			
WG601667CCV3	CCV	11/20/24 15:09	WI241120-1	25		26	mg/L	104	85	115			
WG601667CCB3	CCB	11/20/24 15:09				U	mg/L		-2.5	2.5			
WG601667CCV4	CCV	11/20/24 15:13	WI241120-1	25		26.4	mg/L	106	85	115			
WG601667CCB4	CCB	11/20/24 15:14				U	mg/L		-2.5	2.5			
WG601667CCV5	CCV	11/20/24 15:18	WI241120-1	25		26.1	mg/L	104	85	115			
WG601667CCB5	CCB	11/20/24 15:23				U	mg/L		-2.5	2.5			
WG601667CCV8	CCV	11/20/24 15:41	WI241120-1	25		27.5	mg/L	110	85	115			
WG601667CCB8	CCB	11/20/24 15:41				U	mg/L		-2.5	2.5			
WG601667CCV9	CCV	11/20/24 15:45	WI241120-1	25		25.8	mg/L	103	85	115			
WG601667CCB9	CCB	11/20/24 15:46				U	mg/L		-2.5	2.5			
L91579-05AS	AS	11/20/24 15:48	SO4TURB25X	10	190	198.3	mg/L	83	85	115			M3
L91579-05ASD	ASD	11/20/24 15:48	SO4TURB25X	10	190	200.7	mg/L	107	85	115	1	20	
WG601667CCV10	CCV	11/20/24 15:49	WI241120-1	25		26.2	mg/L	105	85	115			
WG601667CCB10	CCB	11/20/24 15:49				U	mg/L		-2.5	2.5			

Vanadium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		1.941	mg/L	97	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.015	0.015			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.025025		.022	mg/L	88	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	.1001		.09	mg/L	90	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	.5005		.4869	mg/L	97	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		.975	mg/L	98	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.03	0.03			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		.984	mg/L	98	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.03	0.03			
L91579-05AS	AS	12/05/24 20:34	II241114-5	.5005	U	.4862	mg/L	97	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	.5005	U	.489	mg/L	98	85	115	1	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		.994	mg/L	99	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L91579***

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

Zinc, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602465													
WG602465ICV	ICV	12/05/24 18:55	II241125-1	2		2.003	mg/L	100	95	105			
WG602465ICB	ICB	12/05/24 19:01				U	mg/L		-0.06	0.06			
WG602465PQV	PQV	12/05/24 19:05	II241030-5	.0502		.049	mg/L	98	70	130			
WG602465SIC	SIC	12/05/24 19:08	II241119-2	.1004		.102	mg/L	102	80	120			
WG602465LFB	LFB	12/05/24 19:14	II241114-5	.50045		.514	mg/L	103	85	115			
WG602465CCV1	CCV	12/05/24 19:46	II241204-2	1		1.016	mg/L	102	90	110			
WG602465CCB1	CCB	12/05/24 19:49				U	mg/L		-0.06	0.06			
WG602465CCV2	CCV	12/05/24 20:25	II241204-2	1		1.015	mg/L	102	90	110			
WG602465CCB2	CCB	12/05/24 20:28				U	mg/L		-0.06	0.06			
L91579-05AS	AS	12/05/24 20:34	II241114-5	.50045	U	.521	mg/L	104	85	115			
L91579-05ASD	ASD	12/05/24 20:38	II241114-5	.50045	U	.517	mg/L	103	85	115	1	20	
WG602465CCV3	CCV	12/05/24 20:47	II241204-2	1		1.026	mg/L	103	90	110			
WG602465CCB3	CCB	12/05/24 20:50				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L91579***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L91579-01	WG601814	Arsenic, dissolved	EPA 200.8	DD	Sample required dilution due to matrix color or odor.
		Cadmium, dissolved	EPA 200.8	DD	Sample required dilution due to matrix color or odor.
	WG601710	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601814	Cobalt, dissolved	EPA 200.8	DD	Sample required dilution due to matrix color or odor.
		Lead, dissolved	EPA 200.8	DD	Sample required dilution due to matrix color or odor.
	WG602101	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601591	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG602465	Sodium, dissolved	EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601667	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.
L91579-02	WG601710	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602101	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601591	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG602465	Sodium, dissolved	EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601667	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.
L91579-03	WG601710	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602101	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601591	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG602465	Sodium, dissolved	EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601667	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: ***L91579***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L91579-04	WG601710	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602101	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601591	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG602465	Sodium, dissolved	EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601667	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.
L91579-05	WG601710	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602101	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601591	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG602092	Residue, Filterable (TDS) @180C	SM 2540 C-2011	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
	WG602465	Sodium, dissolved	EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601667	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.

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: L91579
Date Received: 11/19/2024 12:35
Received By:
Date Printed: 11/20/2024

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?
NA43520	3	<=6.0	15	N/A

Was ice present in the shipment container(s)?

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

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

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

Sample Receipt

GCC Rio Grande

ACZ Project ID:	L91579
Date Received:	11/19/2024 12:35
Received By:	
Date Printed:	11/20/2024

[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 | L91579

CHAIN of CUSTODY

Report to:

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

Copy of Report to:

Name: Landon Beck	E-mail: lbeck@slrconsulting.com
Company: SLR Consulting	Telephone: (970) 459-4865

Invoice to:

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

Copy of Invoice to:

Name: Amy Veek	Address:
Company: GCC Rio Grande Inc	
E-mail: aveek@gcc.com	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: Meghan Way Sampler's Site Information State CO Zip code 81004 Time Zone MST

*Sampler's Signature: [signature]

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

PROJECT INFORMATION — ANALYSES REQUESTED (attach list or use quote number)

Quote #: GW-COMPLIANCE

PO#: 258478

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COmpliance							
MW-14	11/18/2024 10:45	GW	3	✓							
MW-13	11/18/2024 12:11	GW	3	✓							
MW-21	11/18/2024 13:08	GW	3	✓							
MW-23	11/18/2024 14:43	GW	3	✓							
MW-28	11/18/2024 12:00	GW	3	✓							

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

REMARKS

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

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature]	11/18/24 16:3	[signature]	11/19/24 12:3

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

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

Analytical Report

December 09, 2024

Report to:
Meghan Way
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Meghan Way
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID:
ACZ Project ID: L91595

Meghan Way:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on November 20, 2024. This project has been assigned to ACZ's project number, L91595. 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 L91595. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after December 09, 2025. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

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

Sue Webber has reviewed and approved this report.

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

ACZ Sample ID: ***L91595-01***
Date Sampled: ***11/19/24 09:48***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.35	U		mg/L	0.35	1.25	12/04/24 20:02	msp
Arsenic, dissolved	EPA 200.8	1	0.00275			mg/L	0.0002	0.001	11/22/24 17:36	aps
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	12/04/24 20:02	msp
Boron, dissolved	EPA 200.7	5	0.334	B		mg/L	0.15	0.5	12/04/24 20:02	msp
Cadmium, dissolved	EPA 200.8	1	0.000051	B		mg/L	0.00005	0.00025	11/22/24 17:36	aps
Calcium, dissolved	EPA 200.7	5	354			mg/L	0.5	2.5	12/04/24 20:02	msp
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	12/04/24 20:02	msp
Cobalt, dissolved	EPA 200.8	1	0.0238			mg/L	0.00005	0.00025	11/22/24 17:36	aps
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	12/04/24 20:02	msp
Iron, dissolved	EPA 200.7	5	1.49			mg/L	0.3	0.75	12/04/24 20:02	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	11/22/24 17:36	aps
Lithium, dissolved	EPA 200.7	5	0.383			mg/L	0.04	0.2	12/04/24 20:02	msp
Magnesium, dissolved	EPA 200.7	5	337			mg/L	1	5	12/04/24 20:02	msp
Manganese, dissolved	EPA 200.7	5	0.450			mg/L	0.05	0.25	12/04/24 20:02	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	11/30/24 12:27	rjw
Nickel, dissolved	EPA 200.7	5	0.0515	B		mg/L	0.04	0.2	12/04/24 20:02	msp
Potassium, dissolved	EPA 200.7	5	9.15			mg/L	2.5	5	12/04/24 20:02	msp
Selenium, dissolved	EPA 200.8	1	0.00021	B		mg/L	0.0001	0.00025	11/25/24 16:13	aps
Sodium, dissolved	EPA 200.7	5	639			mg/L	1	5	12/04/24 20:02	msp
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	12/04/24 20:02	msp
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	12/04/24 20:02	msp

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

ACZ Sample ID: ***L91595-01***
Date Sampled: ***11/19/24 09:48***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	535			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	535			mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-8.1			%			12/09/24 0:00	calc
Sum of Anions			87			meq/L			12/09/24 0:00	calc
Sum of Cations			74			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	93.5			mg/L	5	10	11/21/24 15:35	jqr
Fluoride	SM 4500-F C-2011	1	0.50		*	mg/L	0.15	0.35	12/06/24 14:47	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		2270			mg/L	1	30	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	UH		mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	UH	*	mg/L	0.02	0.1	11/21/24 1:29	pjb
Nitrite as N	EPA 353.2	1	<0.01	UH	*	mg/L	0.01	0.05	11/21/24 1:29	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	5090			mg/L	40	80	11/25/24 9:52	lgh
Sulfate	ASTM D516-07/-11/-16	100	3500		*	mg/L	100	500	11/21/24 14:05	jqr
TDS (calculated)	Calculation		5260			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						12/09/24 0:00	calc

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

Inorganic Analytical Results

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

ACZ Sample ID: ***L91595-02***
Date Sampled: ***11/19/24 10:21***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.35	U		mg/L	0.35	1.25	12/04/24 20:11	msp
Arsenic, dissolved	EPA 200.8	1	0.00040	B		mg/L	0.0002	0.001	11/22/24 17:38	aps
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	12/04/24 20:11	msp
Boron, dissolved	EPA 200.7	5	0.362	B		mg/L	0.15	0.5	12/04/24 20:11	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	11/22/24 17:38	aps
Calcium, dissolved	EPA 200.7	5	364			mg/L	0.5	2.5	12/04/24 20:11	msp
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	12/04/24 20:11	msp
Cobalt, dissolved	EPA 200.8	1	0.00220			mg/L	0.00005	0.00025	11/22/24 17:38	aps
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	12/04/24 20:11	msp
Iron, dissolved	EPA 200.7	5	0.549	B		mg/L	0.3	0.75	12/04/24 20:11	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	11/22/24 17:38	aps
Lithium, dissolved	EPA 200.7	5	0.480			mg/L	0.04	0.2	12/04/24 20:11	msp
Magnesium, dissolved	EPA 200.7	5	349			mg/L	1	5	12/04/24 20:11	msp
Manganese, dissolved	EPA 200.7	5	0.065	B		mg/L	0.05	0.25	12/04/24 20:11	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	11/30/24 12:32	rjw
Nickel, dissolved	EPA 200.7	5	<0.04	U		mg/L	0.04	0.2	12/04/24 20:11	msp
Potassium, dissolved	EPA 200.7	5	9.67			mg/L	2.5	5	12/04/24 20:11	msp
Selenium, dissolved	EPA 200.8	1	0.00375			mg/L	0.0001	0.00025	11/25/24 16:14	aps
Sodium, dissolved	EPA 200.7	5	718			mg/L	1	5	12/04/24 20:11	msp
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	12/04/24 20:11	msp
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	12/04/24 20:11	msp

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

ACZ Sample ID: ***L91595-02***
Date Sampled: ***11/19/24 10:21***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	548			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	548		*	mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.8			%			12/09/24 0:00	calc
Sum of Anions			87			meq/L			12/09/24 0:00	calc
Sum of Cations			79			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	114			mg/L	5	10	11/21/24 15:40	jqr
Fluoride	SM 4500-F C-2011	1	0.54		*	mg/L	0.15	0.35	12/06/24 15:10	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		2350			mg/L	1	30	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		0.230	H		mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.230	H	*	mg/L	0.02	0.1	11/21/24 1:30	pjb
Nitrite as N	EPA 353.2	1	<0.01	UH	*	mg/L	0.01	0.05	11/21/24 1:30	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	5450			mg/L	40	80	11/25/24 9:55	lgh
Sulfate	ASTM D516-07/-11/-16	100	3450		*	mg/L	100	500	11/21/24 14:06	jqr
TDS (calculated)	Calculation		5340			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						12/09/24 0:00	calc

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

ACZ Sample ID: ***L91595-03***
Date Sampled: ***11/19/24 12:16***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U		mg/L	0.14	0.5	12/04/24 20:15	msp
Arsenic, dissolved	EPA 200.8	1	0.00034	B		mg/L	0.0002	0.001	11/25/24 16:16	aps
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/04/24 20:15	msp
Boron, dissolved	EPA 200.7	2	0.873			mg/L	0.06	0.2	12/04/24 20:15	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	11/25/24 16:16	aps
Calcium, dissolved	EPA 200.7	2	48.7			mg/L	0.2	1	12/04/24 20:15	msp
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/04/24 20:15	msp
Cobalt, dissolved	EPA 200.8	1	0.000225	B		mg/L	0.00005	0.00025	11/25/24 16:16	aps
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/04/24 20:15	msp
Iron, dissolved	EPA 200.7	2	0.340			mg/L	0.12	0.3	12/04/24 20:15	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	11/25/24 16:16	aps
Lithium, dissolved	EPA 200.7	2	0.324			mg/L	0.016	0.08	12/04/24 20:15	msp
Magnesium, dissolved	EPA 200.7	2	22.2			mg/L	0.4	2	12/04/24 20:15	msp
Manganese, dissolved	EPA 200.7	2	0.131			mg/L	0.02	0.1	12/04/24 20:15	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	11/30/24 12:33	rjw
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	12/04/24 20:15	msp
Potassium, dissolved	EPA 200.7	2	5.12			mg/L	1	2	12/04/24 20:15	msp
Selenium, dissolved	EPA 200.8	1	0.00294			mg/L	0.0001	0.00025	11/25/24 16:16	aps
Sodium, dissolved	EPA 200.7	2	1130			mg/L	0.4	2	12/04/24 20:15	msp
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	12/04/24 20:15	msp
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/04/24 20:15	msp

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

ACZ Sample ID: ***L91595-03***
Date Sampled: ***11/19/24 12:16***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	1330			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	1330		*	mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-5.3			%			12/09/24 0:00	calc
Sum of Anions			60			meq/L			12/09/24 0:00	calc
Sum of Cations			54			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	25	342			mg/L	25	50	11/21/24 15:53	jqr
Fluoride	SM 4500-F C-2011	1	0.94		*	mg/L	0.15	0.35	12/06/24 15:13	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		213			mg/L	0.5	10	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		0.026	BH		mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.026	BH	*	mg/L	0.02	0.1	11/21/24 1:31	pjb
Nitrite as N	EPA 353.2	1	<0.01	UH	*	mg/L	0.01	0.05	11/21/24 1:31	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	5	3570			mg/L	100	200	11/25/24 9:57	lgh
Sulfate	ASTM D516-07/-11/-16	50	1150		*	mg/L	50	250	11/21/24 14:59	jqr
TDS (calculated)	Calculation		3510			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						12/09/24 0:00	calc

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

ACZ Sample ID: ***L91595-04***
Date Sampled: ***11/19/24 15:42***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U		mg/L	0.14	0.5	12/04/24 20:18	msp
Arsenic, dissolved	EPA 200.8	1	0.00257			mg/L	0.0002	0.001	11/25/24 16:18	aps
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/04/24 20:18	msp
Boron, dissolved	EPA 200.7	2	0.898			mg/L	0.06	0.2	12/04/24 20:18	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	11/25/24 16:18	aps
Calcium, dissolved	EPA 200.7	2	21.1			mg/L	0.2	1	12/04/24 20:18	msp
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/04/24 20:18	msp
Cobalt, dissolved	EPA 200.8	1	0.000421			mg/L	0.00005	0.00025	11/25/24 16:18	aps
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/04/24 20:18	msp
Iron, dissolved	EPA 200.7	2	<0.12	U		mg/L	0.12	0.3	12/04/24 20:18	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	11/25/24 16:18	aps
Lithium, dissolved	EPA 200.7	2	0.214			mg/L	0.016	0.08	12/04/24 20:18	msp
Magnesium, dissolved	EPA 200.7	2	8.86			mg/L	0.4	2	12/04/24 20:18	msp
Manganese, dissolved	EPA 200.7	2	0.041	B		mg/L	0.02	0.1	12/04/24 20:18	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	11/30/24 12:34	rjw
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	12/04/24 20:18	msp
Potassium, dissolved	EPA 200.7	2	3.90			mg/L	1	2	12/04/24 20:18	msp
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	12/02/24 14:45	aps
Sodium, dissolved	EPA 200.7	2	950			mg/L	0.4	2	12/04/24 20:18	msp
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	12/04/24 20:18	msp
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/04/24 20:18	msp

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

ACZ Sample ID: ***L91595-04***
Date Sampled: ***11/19/24 15:42***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	684			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	684		*	mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-6.4			%			12/09/24 0:00	calc
Sum of Anions			50			meq/L			12/09/24 0:00	calc
Sum of Cations			44			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	50	1060			mg/L	50	100	11/21/24 15:54	jqr
Fluoride	SM 4500-F C-2011	1	1.74		*	mg/L	0.15	0.35	12/06/24 15:17	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		89			mg/L	0.5	10	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	UH		mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	UH	*	mg/L	0.02	0.1	11/21/24 1:32	pjb
Nitrite as N	EPA 353.2	1	<0.01	UH	*	mg/L	0.01	0.05	11/21/24 1:32	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	2670			mg/L	20	40	11/25/24 10:00	lgh
Sulfate	ASTM D516-07/-11/-16	25	299		*	mg/L	25	125	11/21/24 15:00	jqr
TDS (calculated)	Calculation		2760			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						12/09/24 0:00	calc

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

ACZ Sample ID: ***L91595-05***
Date Sampled: ***11/19/24 16:24***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U		mg/L	0.14	0.5	12/04/24 20:21	msp
Arsenic, dissolved	EPA 200.8	5	<0.001	U	*	mg/L	0.001	0.005	11/25/24 16:20	aps
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/04/24 20:21	msp
Boron, dissolved	EPA 200.7	2	0.465			mg/L	0.06	0.2	12/04/24 20:21	msp
Cadmium, dissolved	EPA 200.8	5	<0.00025	U	*	mg/L	0.00025	0.00125	11/25/24 16:20	aps
Calcium, dissolved	EPA 200.7	2	54.2			mg/L	0.2	1	12/04/24 20:21	msp
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/04/24 20:21	msp
Cobalt, dissolved	EPA 200.8	5	<0.00025	U	*	mg/L	0.00025	0.00125	11/25/24 16:20	aps
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/04/24 20:21	msp
Iron, dissolved	EPA 200.7	2	<0.12	U		mg/L	0.12	0.3	12/04/24 20:21	msp
Lead, dissolved	EPA 200.8	5	<0.0005	U	*	mg/L	0.0005	0.0025	11/25/24 16:20	aps
Lithium, dissolved	EPA 200.7	2	0.191			mg/L	0.016	0.08	12/04/24 20:21	msp
Magnesium, dissolved	EPA 200.7	2	35.7			mg/L	0.4	2	12/04/24 20:21	msp
Manganese, dissolved	EPA 200.7	2	<0.02	U	*	mg/L	0.02	0.1	12/04/24 20:21	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	11/30/24 12:35	rjw
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	12/04/24 20:21	msp
Potassium, dissolved	EPA 200.7	2	3.89			mg/L	1	2	12/04/24 20:21	msp
Selenium, dissolved	EPA 200.8	5	0.123			mg/L	0.0005	0.00125	11/25/24 16:20	aps
Sodium, dissolved	EPA 200.7	2	606			mg/L	0.4	2	12/04/24 20:21	msp
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	12/04/24 20:21	msp
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/04/24 20:21	msp

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

ACZ Sample ID: ***L91595-05***
Date Sampled: ***11/19/24 16:24***
Date Received: ***11/20/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	841			mg/L	2	20	11/26/24 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/26/24 0:00	emk
Total Alkalinity		1	841		*	mg/L	2	20	11/26/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-7.2			%			12/09/24 0:00	calc
Sum of Anions			37			meq/L			12/09/24 0:00	calc
Sum of Cations			32			meq/L			12/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	149			mg/L	5	10	11/21/24 15:41	jqr
Fluoride	SM 4500-F C-2011	1	0.79		*	mg/L	0.15	0.35	12/06/24 15:20	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		282			mg/L	0.5	10	12/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		0.027	BH		mg/L	0.02	0.1	12/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.027	BH	*	mg/L	0.02	0.1	11/21/24 1:58	pjb
Nitrite as N	EPA 353.2	1	<0.01	UH	*	mg/L	0.01	0.05	11/21/24 1:35	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	2060			mg/L	20	40	11/25/24 10:03	lgh
Sulfate	ASTM D516-07/-11/-16	50	737		*	mg/L	50	250	11/21/24 15:00	jqr
TDS (calculated)	Calculation		2100			mg/L			12/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.98						12/09/24 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: ***L91595***

NOTE: If the Rec% column is null, the high/low 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
WG602016													
WG602016PBW1	PBW	11/26/24 14:57				U	mg/L		-20	20			
WG602016LCSW1	LCSW	11/26/24 15:02	WC241101-1	820.0001		876.2	mg/L	107	90	110			
WG602016LCSW2	LCSW	11/26/24 16:48	WC241101-1	820.0001		863.3	mg/L	105	90	110			
WG602016PBW2	PBW	11/26/24 16:57				5.8	mg/L		-20	20			
WG602016LCSW3	LCSW	11/26/24 18:43	WC241101-1	820.0001		859.7	mg/L	105	90	110			
WG602016PBW3	PBW	11/26/24 18:52				5	mg/L		-20	20			
WG602016LCSW4	LCSW	11/26/24 21:23	WC241101-1	820.0001		864.8	mg/L	105	90	110			
WG602016PBW4	PBW	11/26/24 21:33				5.4	mg/L		-20	20			
L91595-01DUP	DUP	11/26/24 22:38			535	533.6	mg/L				0	20	
L91599-01DUP	DUP	11/26/24 23:51			2.8	U	mg/L				200	20	RA
WG602016LCSW5	LCSW	11/26/24 23:55	WC241101-1	820.0001		866.8	mg/L	106	90	110			
WG602016PBW5	PBW	11/27/24 0:05				5.3	mg/L		-20	20			
WG602016LCSW6	LCSW	11/27/24 2:06	WC241101-1	820.0001		873	mg/L	106	90	110			

Aluminum, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.953	mg/L	98	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.15	0.15			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.250625		.23	mg/L	92	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	200.750625		205.4	mg/L	102	1	200			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	1.0025		.98	mg/L	98	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	1.0025	U	1.024	mg/L	102	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	1.0025	U	1.016	mg/L	101	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.933	mg/L	93	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.15	0.15			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.939	mg/L	94	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.15	0.15			
L91608-07AS	AS	12/04/24 20:51	II241114-5	1.0025	U	.976	mg/L	97	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	1.0025	U	.975	mg/L	97	85	115	0	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.931	mg/L	93	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L91595***

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

Arsenic, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601814													
WG601814ICV	ICV	11/22/24 16:43	MS241016-2	.05		.04921	mg/L	98	90	110			
WG601814ICB	ICB	11/22/24 16:45				U	mg/L		-0.00044	0.00044			
WG601814LFB	LFB	11/22/24 16:47	MS241106-3	.0501		.0578	mg/L	115	85	115			
WG601814CCV1	CCV	11/22/24 17:05	MS241104-4	.1002		.10145	mg/L	101	90	110			
WG601814CCB1	CCB	11/22/24 17:07				U	mg/L		-0.0006	0.0006			
WG601814CCV2	CCV	11/22/24 17:27	MS241104-4	.1002		.09884	mg/L	99	90	110			
WG601814CCB2	CCB	11/22/24 17:29				U	mg/L		-0.0006	0.0006			
L91590-03AS	AS	11/22/24 17:31	MS241106-3	.0501	.0011	.06328	mg/L	124	70	130			
L91590-03ASD	ASD	11/22/24 17:32	MS241106-3	.0501	.0011	.06332	mg/L	124	70	130	0	20	
WG601814CCV3	CCV	11/22/24 17:40	MS241104-4	.1002		.10319	mg/L	103	90	110			
WG601814CCB3	CCB	11/22/24 17:42				U	mg/L		-0.0006	0.0006			
WG601899													
WG601899ICV	ICV	11/25/24 16:07	MS241016-2	.05		.04657	mg/L	93	90	110			
WG601899ICB	ICB	11/25/24 16:09				U	mg/L		-0.00044	0.00044			
WG601899LFB	LFB	11/25/24 16:11	MS241106-3	.0501		.04891	mg/L	98	85	115			
WG601899CCV1	CCV	11/25/24 16:29	MS241104-4	.1002		.09749	mg/L	97	90	110			
WG601899CCB1	CCB	11/25/24 16:31				U	mg/L		-0.0006	0.0006			
L91599-02AS	AS	11/25/24 16:33	MS241106-3	.0501	.00186	.05351	mg/L	103	70	130			
L91599-02ASD	ASD	11/25/24 16:35	MS241106-3	.0501	.00186	.05265	mg/L	101	70	130	2	20	
WG601899CCV2	CCV	11/25/24 16:51	MS241104-4	.1002		.09998	mg/L	100	90	110			
WG601899CCB2	CCB	11/25/24 16:53				U	mg/L		-0.0006	0.0006			
WG601899CCV3	CCV	11/25/24 17:04	MS241104-4	.1002		.0992	mg/L	99	90	110			
WG601899CCB3	CCB	11/25/24 17:06				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.981	mg/L	99	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.03	0.03			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.05005		.052	mg/L	104	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	.1001		.101	mg/L	101	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	.5005		.505	mg/L	101	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	.5005	U	.505	mg/L	101	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	.5005	U	.501	mg/L	100	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.97	mg/L	97	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.03	0.03			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.971	mg/L	97	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.03	0.03			
L91608-07AS	AS	12/04/24 20:51	II241114-5	.5005	U	.491	mg/L	98	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	.5005	U	.499	mg/L	100	85	115	2	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.965	mg/L	97	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L91595***

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

Boron, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.984	mg/L	99	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.09	0.09			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.1001		.11	mg/L	110	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	.1001		.106	mg/L	106	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	.5005		.49	mg/L	98	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	.5005	.065	.547	mg/L	96	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	.5005	.065	.548	mg/L	97	85	115	0	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.961	mg/L	96	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.09	0.09			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.98	mg/L	98	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.09	0.09			
L91608-07AS	AS	12/04/24 20:51	II241114-5	.5005	U	.506	mg/L	101	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	.5005	U	.511	mg/L	102	85	115	1	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.97	mg/L	97	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.09	0.09			

Cadmium, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601814													
WG601814ICV	ICV	11/22/24 16:43	MS241016-2	.05		.048636	mg/L	97	90	110			
WG601814ICB	ICB	11/22/24 16:45				U	mg/L		-0.00011	0.00011			
WG601814LFB	LFB	11/22/24 16:47	MS241106-3	.05005		.055154	mg/L	110	85	115			
WG601814CCV1	CCV	11/22/24 17:05	MS241104-4	.1001		.097893	mg/L	98	90	110			
WG601814CCB1	CCB	11/22/24 17:07				U	mg/L		-0.00015	0.00015			
WG601814CCV2	CCV	11/22/24 17:27	MS241104-4	.1001		.097009	mg/L	97	90	110			
WG601814CCB2	CCB	11/22/24 17:29				U	mg/L		-0.00015	0.00015			
L91590-03AS	AS	11/22/24 17:31	MS241106-3	.05005	U	.052551	mg/L	105	70	130			
L91590-03ASD	ASD	11/22/24 17:32	MS241106-3	.05005	U	.053494	mg/L	107	70	130	2	20	
WG601814CCV3	CCV	11/22/24 17:40	MS241104-4	.1001		.097203	mg/L	97	90	110			
WG601814CCB3	CCB	11/22/24 17:42				U	mg/L		-0.00015	0.00015			
WG601899													
WG601899ICV	ICV	11/25/24 16:07	MS241016-2	.05		.047212	mg/L	94	90	110			
WG601899ICB	ICB	11/25/24 16:09				U	mg/L		-0.00011	0.00011			
WG601899LFB	LFB	11/25/24 16:11	MS241106-3	.05005		.049223	mg/L	98	85	115			
WG601899CCV1	CCV	11/25/24 16:29	MS241104-4	.1001		.096949	mg/L	97	90	110			
WG601899CCB1	CCB	11/25/24 16:31				U	mg/L		-0.00015	0.00015			
L91599-02AS	AS	11/25/24 16:33	MS241106-3	.05005	.0393	.089939	mg/L	101	70	130			
L91599-02ASD	ASD	11/25/24 16:35	MS241106-3	.05005	.0393	.090179	mg/L	102	70	130	0	20	
WG601899CCV2	CCV	11/25/24 16:51	MS241104-4	.1001		.097478	mg/L	97	90	110			
WG601899CCB2	CCB	11/25/24 16:53				U	mg/L		-0.00015	0.00015			
WG601899CCV3	CCV	11/25/24 17:04	MS241104-4	.1001		.098201	mg/L	98	90	110			
WG601899CCB3	CCB	11/25/24 17:06				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L91595***

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

Calcium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	100		96.75	mg/L	97	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.3	0.3			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.5025		.52	mg/L	103	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	201.5025		197.3	mg/L	98	1	200			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	67.963		67.21	mg/L	99	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	67.963	81.3	148	mg/L	98	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	67.963	81.3	147.4	mg/L	97	85	115	0	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	50		47.63	mg/L	95	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.3	0.3			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	50		47.76	mg/L	96	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.3	0.3			
L91608-07AS	AS	12/04/24 20:51	II241114-5	67.963	87.8	149.1	mg/L	90	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	67.963	87.8	150.7	mg/L	93	85	115	1	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	50		47.56	mg/L	95	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.3	0.3			

Chloride SM 4500-Cl E-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601742													
WG601742ICV	ICV	11/21/24 9:51	WI231211-1	39.96		40.09	mg/L	100	90	110			
WG601742ICB	ICB	11/21/24 9:51				U	mg/L						
WG601742CCV1	CCV	11/21/24 15:21	WI241113-1	25		25.27	mg/L	101	90	110			
WG601742CCB1	CCB	11/21/24 15:22				U	mg/L						
WG601742PQV	PQV	11/21/24 15:22	WI240904-2	2		2.47	mg/L	124	50	150			
WG601742LFB	LFB	11/21/24 15:22	WI240820-1	20		21.87	mg/L	109	90	110			
L91566-01AS	AS	11/21/24 15:23	WI240820-1	20	12.4	32.18	mg/L	99	90	110			
L91566-01ASD	ASD	11/21/24 15:23	WI240820-1	20	12.4	32.21	mg/L	99	90	110	0	20	
WG601742CCV2	CCV	11/21/24 15:25	WI241113-1	25		25.35	mg/L	101	90	110			
WG601742CCB2	CCB	11/21/24 15:25				U	mg/L						
WG601742CCV3	CCV	11/21/24 15:33	WI241113-1	25		25.1	mg/L	100	90	110			
WG601742CCB3	CCB	11/21/24 15:33				U	mg/L						
WG601742CCV4	CCV	11/21/24 15:41	WI241113-1	25		25.17	mg/L	101	90	110			
WG601742CCB4	CCB	11/21/24 15:42				U	mg/L						
WG601742CCV5	CCV	11/21/24 15:42	WI241113-1	25		25.18	mg/L	101	90	110			
WG601742CCB5	CCB	11/21/24 15:43				U	mg/L						
WG601742CCV6	CCV	11/21/24 15:53	WI241113-1	25		24.98	mg/L	100	90	110			
WG601742CCB6	CCB	11/21/24 15:53				U	mg/L						
WG601742CCV7	CCV	11/21/24 15:54	WI241113-1	25		25.13	mg/L	101	90	110			
WG601742CCB7	CCB	11/21/24 15:54				U	mg/L						

GCC

ACZ Project ID: ***L91595***

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

Chromium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.931	mg/L	97	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.06	0.06			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.05005		.059	mg/L	118	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	.1001		.105	mg/L	105	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	.5005		.489	mg/L	98	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	.5005	U	.488	mg/L	98	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	.5005	U	.494	mg/L	99	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.947	mg/L	95	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.06	0.06			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.965	mg/L	97	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.06	0.06			
L91608-07AS	AS	12/04/24 20:51	II241114-5	.5005	U	.489	mg/L	98	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	.5005	U	.49	mg/L	98	85	115	0	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.954	mg/L	95	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.06	0.06			

Cobalt, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601814													
WG601814ICV	ICV	11/22/24 16:43	MS241016-2	.05		.049119	mg/L	98	90	110			
WG601814ICB	ICB	11/22/24 16:45				U	mg/L		-0.00011	0.00011			
WG601814LFB	LFB	11/22/24 16:47	MS241106-3	.05005		.051035	mg/L	102	85	115			
WG601814CCV1	CCV	11/22/24 17:05	MS241104-4	.1001		.100486	mg/L	100	90	110			
WG601814CCB1	CCB	11/22/24 17:07				U	mg/L		-0.00015	0.00015			
WG601814CCV2	CCV	11/22/24 17:27	MS241104-4	.1001		.097535	mg/L	97	90	110			
WG601814CCB2	CCB	11/22/24 17:29				U	mg/L		-0.00015	0.00015			
L91590-03AS	AS	11/22/24 17:31	MS241106-3	.05005	.000615	.04797	mg/L	95	70	130			
L91590-03ASD	ASD	11/22/24 17:32	MS241106-3	.05005	.000615	.048891	mg/L	96	70	130	2	20	
WG601814CCV3	CCV	11/22/24 17:40	MS241104-4	.1001		.099335	mg/L	99	90	110			
WG601814CCB3	CCB	11/22/24 17:42				U	mg/L		-0.00015	0.00015			
WG601899													
WG601899ICV	ICV	11/25/24 16:07	MS241016-2	.05		.047045	mg/L	94	90	110			
WG601899ICB	ICB	11/25/24 16:09				U	mg/L		-0.00011	0.00011			
WG601899LFB	LFB	11/25/24 16:11	MS241106-3	.05005		.049136	mg/L	98	85	115			
WG601899CCV1	CCV	11/25/24 16:29	MS241104-4	.1001		.099268	mg/L	99	90	110			
WG601899CCB1	CCB	11/25/24 16:31				U	mg/L		-0.00015	0.00015			
L91599-02AS	AS	11/25/24 16:33	MS241106-3	.05005	.0206	.075517	mg/L	110	70	130			
L91599-02ASD	ASD	11/25/24 16:35	MS241106-3	.05005	.0206	.077283	mg/L	113	70	130	2	20	
WG601899CCV2	CCV	11/25/24 16:51	MS241104-4	.1001		.098058	mg/L	98	90	110			
WG601899CCB2	CCB	11/25/24 16:53				U	mg/L		-0.00015	0.00015			
WG601899CCV3	CCV	11/25/24 17:04	MS241104-4	.1001		.098095	mg/L	98	90	110			
WG601899CCB3	CCB	11/25/24 17:06				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L91595***

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

Copper, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.991	mg/L	100	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.03	0.03			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.05005		.049	mg/L	98	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	.1001		.099	mg/L	99	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	.5005		.5	mg/L	100	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	.5005	U	.509	mg/L	102	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	.5005	U	.505	mg/L	101	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.97	mg/L	97	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.03	0.03			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.97	mg/L	97	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.03	0.03			
L91608-07AS	AS	12/04/24 20:51	II241114-5	.5005	U	.498	mg/L	100	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	.5005	U	.502	mg/L	100	85	115	1	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.966	mg/L	97	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.03	0.03			

Fluoride SM 4500-F C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602472													
WG602472ICV	ICV	12/06/24 10:43	WC241204-1	2		2.04	mg/L	102	90	110			
WG602472ICB	ICB	12/06/24 10:51				U	mg/L		-0.3	0.3			
WG602472PQV	PQV	12/06/24 10:54	WC241125-8	.35		.32	mg/L	91	50	150			
WG602472LFB1	LFB	12/06/24 10:59	WC241104-8	5		4.61	mg/L	92	90	110			
WG602472CCV1	CCV	12/06/24 11:46	WC241204-1	2		2.036	mg/L	102	90	110			
WG602472CCB1	CCB	12/06/24 11:54				U	mg/L		-0.3	0.3			
WG602472CCV2	CCV	12/06/24 12:46	WC241204-1	2		2.106	mg/L	105	90	110			
WG602472CCB2	CCB	12/06/24 12:54				U	mg/L		-0.3	0.3			
WG602472LFB2	LFB	12/06/24 13:25	WC241104-8	5		5.05	mg/L	101	90	110			
WG602472CCV3	CCV	12/06/24 13:53	WC241204-1	2		2.116	mg/L	106	90	110			
WG602472CCB3	CCB	12/06/24 14:01				U	mg/L		-0.3	0.3			
L91595-01AS	AS	12/06/24 14:51	WC241104-8	5	.5	4.93	mg/L	89	90	110			M2
WG602472CCV4	CCV	12/06/24 14:54	WC241204-1	2		2.085	mg/L	104	90	110			
WG602472CCB4	CCB	12/06/24 15:02				U	mg/L		-0.3	0.3			
L91595-01ASD	ASD	12/06/24 15:06	WC241104-8	5	.5	4.79	mg/L	86	90	110	3	20	M2
WG602472CCV5	CCV	12/06/24 15:45	WC241204-1	2		1.969	mg/L	98	90	110			
WG602472CCB5	CCB	12/06/24 15:53				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L91595***

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

Iron, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.902	mg/L	95	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.18	0.18			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.15045		.144	mg/L	96	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	200.75045		189.6	mg/L	94	1	200			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	1.003		.963	mg/L	96	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	1.003	U	.972	mg/L	97	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	1.003	U	.958	mg/L	96	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.928	mg/L	93	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.18	0.18			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.93	mg/L	93	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.18	0.18			
L91608-07AS	AS	12/04/24 20:51	II241114-5	1.003	.619	1.54	mg/L	92	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	1.003	.619	1.555	mg/L	93	85	115	1	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.92	mg/L	92	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.18	0.18			

Lead, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601814													
WG601814ICV	ICV	11/22/24 16:43	MS241016-2	.05		.0484	mg/L	97	90	110			
WG601814ICB	ICB	11/22/24 16:45				U	mg/L		-0.00022	0.00022			
WG601814LFB	LFB	11/22/24 16:47	MS241106-3	.05005		.0517	mg/L	103	85	115			
WG601814CCV1	CCV	11/22/24 17:05	MS241104-4	.25025		.25994	mg/L	104	90	110			
WG601814CCB1	CCB	11/22/24 17:07				U	mg/L		-0.0003	0.0003			
WG601814CCV2	CCV	11/22/24 17:27	MS241104-4	.25025		.25542	mg/L	102	90	110			
WG601814CCB2	CCB	11/22/24 17:29				U	mg/L		-0.0003	0.0003			
L91590-03AS	AS	11/22/24 17:31	MS241106-3	.05005	U	.04598	mg/L	92	70	130			
L91590-03ASD	ASD	11/22/24 17:32	MS241106-3	.05005	U	.04634	mg/L	93	70	130	1	20	
WG601814CCV3	CCV	11/22/24 17:40	MS241104-4	.25025		.25965	mg/L	104	90	110			
WG601814CCB3	CCB	11/22/24 17:42				U	mg/L		-0.0003	0.0003			
WG601899													
WG601899ICV	ICV	11/25/24 16:07	MS241016-2	.05		.04675	mg/L	94	90	110			
WG601899ICB	ICB	11/25/24 16:09				U	mg/L		-0.00022	0.00022			
WG601899LFB	LFB	11/25/24 16:11	MS241106-3	.05005		.04846	mg/L	97	85	115			
WG601899CCV1	CCV	11/25/24 16:29	MS241104-4	.25025		.24456	mg/L	98	90	110			
WG601899CCB1	CCB	11/25/24 16:31				U	mg/L		-0.0003	0.0003			
L91599-02AS	AS	11/25/24 16:33	MS241106-3	.05005	.00032	.04425	mg/L	88	70	130			
L91599-02ASD	ASD	11/25/24 16:35	MS241106-3	.05005	.00032	.04405	mg/L	87	70	130	0	20	
WG601899CCV2	CCV	11/25/24 16:51	MS241104-4	.25025		.2394	mg/L	96	90	110			
WG601899CCB2	CCB	11/25/24 16:53				U	mg/L		-0.0003	0.0003			
WG601899CCV3	CCV	11/25/24 17:04	MS241104-4	.25025		.24393	mg/L	97	90	110			
WG601899CCB3	CCB	11/25/24 17:06				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L91595***

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

Lithium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.9555	mg/L	98	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.024	0.024			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.04004		.0394	mg/L	98	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	.1001		.1027	mg/L	103	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	1.001		.9559	mg/L	95	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	1.001	.0091	.9827	mg/L	97	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	1.001	.0091	.9721	mg/L	96	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.9373	mg/L	94	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.024	0.024			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.942	mg/L	94	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.024	0.024			
L91608-07AS	AS	12/04/24 20:51	II241114-5	1.001	U	1.093	mg/L	109	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	1.001	U	.9577	mg/L	96	85	115	13	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.9311	mg/L	93	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.024	0.024			

Magnesium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	100		97.09	mg/L	97	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.6	0.6			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	1.0087		.97	mg/L	96	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	202.7487		206.9	mg/L	102	1	200			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	49.9596		48.93	mg/L	98	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	49.9596	18.1	67.96	mg/L	100	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	49.9596	18.1	67.58	mg/L	99	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	50		47.41	mg/L	95	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.6	0.6			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	50		47.52	mg/L	95	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.6	0.6			
L91608-07AS	AS	12/04/24 20:51	II241114-5	49.9596	13.8	61.41	mg/L	95	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	49.9596	13.8	62.06	mg/L	97	85	115	1	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	50		47.34	mg/L	95	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L91595***

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

Manganese, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.987	mg/L	99	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.03	0.03			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.0498		.049	mg/L	98	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	50.4498		49.56	mg/L	98	1	200			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	.504		.507	mg/L	101	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	.504	U	.508	mg/L	101	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	.504	U	.504	mg/L	100	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.979	mg/L	98	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.03	0.03			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.981	mg/L	98	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.03	0.03			
L91608-07AS	AS	12/04/24 20:51	II241114-5	.504	1.66	2.052	mg/L	78	85	115			M3
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	.504	1.66	2.061	mg/L	80	85	115	0	20	M3
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.974	mg/L	97	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.03	0.03			

Mercury, dissolved EPA 245.1

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602070													
WG602070ICV	ICV	11/30/24 12:19	HG241017-3	.00501		.00506	mg/L	101	95	105			
WG602070ICB	ICB	11/30/24 12:20				U	mg/L		-0.0002	0.0002			
WG602070PQV	PQV	11/30/24 12:21	HG241118-2	.001001		.00105	mg/L	105	70	130			
WG602070LRB	LRB	11/30/24 12:22				U	mg/L		-0.00044	0.00044			
WG602070LFB	LFB	11/30/24 12:23	HG241118-3	.002002		.00198	mg/L	99	85	115			
L91595-01LFM	LFM	11/30/24 12:28	HG241118-3	.002002	U	.00193	mg/L	96	85	115			
L91595-01LFMD	LFMD	11/30/24 12:29	HG241118-3	.002002	U	.00179	mg/L	89	85	115	8	20	
WG602070CCV1	CCV	11/30/24 12:30	HG241017-3	.00501		.00483	mg/L	96	90	110			
WG602070CCB1	CCB	11/30/24 12:31				U	mg/L		-0.0002	0.0002			
WG602070CCV2	CCV	11/30/24 12:41	HG241017-3	.00501		.00476	mg/L	95	90	110			
WG602070CCB2	CCB	11/30/24 12:42				U	mg/L		-0.0002	0.0002			
WG602070CCV3	CCV	11/30/24 12:50	HG241017-3	.00501		.00476	mg/L	95	90	110			
WG602070CCB3	CCB	11/30/24 12:51				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L91595***

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

Nickel, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2.004		1.9765	mg/L	99	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.024	0.024			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.04004		.044	mg/L	110	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	.1001		.102	mg/L	102	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	.5005		.4892	mg/L	98	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	.5005	U	.4865	mg/L	97	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	.5005	U	.4911	mg/L	98	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1.002		.9659	mg/L	96	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.024	0.024			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1.002		.9774	mg/L	98	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.024	0.024			
L91608-07AS	AS	12/04/24 20:51	II241114-5	.5005	U	.4874	mg/L	97	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	.5005	U	.4894	mg/L	98	85	115	0	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1.002		.9697	mg/L	97	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601681													
WG601681ICV	ICV	11/21/24 1:05	WI241025-1	2.416		2.464	mg/L	102	90	110			
WG601681ICB	ICB	11/21/24 1:07				U	mg/L		-0.02	0.02			
WG601681PQV	PQV	11/21/24 1:11	WI240828-4	.1		.113	mg/L	113	70	130			
WG601681LFB	LFB	11/21/24 1:12	WI240828-3	2		1.986	mg/L	99	90	110			
L91591-01AS	AS	11/21/24 1:19	WI240828-3	2	U	1.974	mg/L	99	90	110			
WG601681CCV1	CCV	11/21/24 1:21	WI241119-5	2		1.952	mg/L	98	90	110			
WG601681CCB1	CCB	11/21/24 1:24				U	mg/L		-0.02	0.02			
L91592-01DUP	DUP	11/21/24 1:26			.19	.19	mg/L				0	20	RA
L91595-04AS	AS	11/21/24 1:34	WI240828-3	2	U	1.905	mg/L	95	90	110			
WG601681CCV2	CCV	11/21/24 1:37	WI241119-5	2		1.931	mg/L	97	90	110			
WG601681CCB2	CCB	11/21/24 1:40				U	mg/L		-0.02	0.02			
WG601681CCV3	CCV	11/21/24 1:54	WI241119-5	2		1.942	mg/L	97	90	110			
WG601681CCB3	CCB	11/21/24 1:57				U	mg/L		-0.02	0.02			
L91595-05DUP	DUP	11/21/24 2:00			.027	.026	mg/L				4	20	RA
WG601681CCV4	CCV	11/21/24 2:05	WI241119-5	2		1.945	mg/L	97	90	110			
WG601681CCB4	CCB	11/21/24 2:08				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L91595***

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

Nitrite as N EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601681													
WG601681ICV	ICV	11/21/24 1:05	WI241025-1	.608		.616	mg/L	101	90	110			
WG601681ICB	ICB	11/21/24 1:07				U	mg/L		-0.01	0.01			
WG601681PQV	PQV	11/21/24 1:11	WI240828-4	.05		.053	mg/L	106	70	130			
WG601681LFB	LFB	11/21/24 1:12	WI240828-3	1		1.01	mg/L	101	90	110			
L91591-01AS	AS	11/21/24 1:19	WI240828-3	1	U	1.005	mg/L	101	90	110			
WG601681CCV1	CCV	11/21/24 1:21	WI241119-5	1		1.001	mg/L	100	90	110			
WG601681CCB1	CCB	11/21/24 1:24				U	mg/L		-0.01	0.01			
L91592-01DUP	DUP	11/21/24 1:26			U	U	mg/L				0	20	RA
L91595-04AS	AS	11/21/24 1:34	WI240828-3	1	U	.986	mg/L	99	90	110			
L91595-05DUP	DUP	11/21/24 1:36			U	U	mg/L				0	20	RA
WG601681CCV2	CCV	11/21/24 1:37	WI241119-5	1		1.02	mg/L	102	90	110			
WG601681CCB2	CCB	11/21/24 1:40				U	mg/L		-0.01	0.01			
WG601681CCV3	CCV	11/21/24 1:54	WI241119-5	1		1.018	mg/L	102	90	110			
WG601681CCB3	CCB	11/21/24 1:57				U	mg/L		-0.01	0.01			
WG601681CCV4	CCV	11/21/24 2:05	WI241119-5	1		1.011	mg/L	101	90	110			
WG601681CCB4	CCB	11/21/24 2:08				U	mg/L		-0.01	0.01			

Potassium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	20		19.3	mg/L	97	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-1.5	1.5			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	1.002		1.06	mg/L	106	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	1.002		1.04	mg/L	104	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	100.0859		97.39	mg/L	97	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	100.0859	2.17	102.6	mg/L	100	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	100.0859	2.17	101.7	mg/L	99	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	10		9.38	mg/L	94	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-1.5	1.5			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	10		9.4	mg/L	94	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-1.5	1.5			
L91608-07AS	AS	12/04/24 20:51	II241114-5	100.0859	3.33	100.4	mg/L	97	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	100.0859	3.33	100.6	mg/L	97	85	115	0	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	10		9.3	mg/L	93	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-1.5	1.5			

Residue, Filterable (TDS) @180C SM 2540 C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601889													
WG601889PBW	PBW	11/25/24 9:37				U	mg/L		-20	20			
WG601889LCSW	LCSW	11/25/24 9:39	PCN627539	1000		1000	mg/L	100	80	120			
L91597-01DUP	DUP	11/25/24 10:08			1240	1220	mg/L				2	10	

GCC

ACZ Project ID: ***L91595***

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

Selenium, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601899													
WG601899ICV	ICV	11/25/24 16:07	MS241016-2	.05		.04854	mg/L	97	90	110			
WG601899ICB	ICB	11/25/24 16:09				U	mg/L		-0.00022	0.00022			
WG601899LFB	LFB	11/25/24 16:11	MS241106-3	.05005		.05021	mg/L	100	85	115			
WG601899CCV1	CCV	11/25/24 16:29	MS241104-4	.1001		.09787	mg/L	98	90	110			
WG601899CCB1	CCB	11/25/24 16:31				.00019	mg/L		-0.0003	0.0003			
L91599-02AS	AS	11/25/24 16:33	MS241106-3	.05005	.00069	.05665	mg/L	112	70	130			
L91599-02ASD	ASD	11/25/24 16:35	MS241106-3	.05005	.00069	.05591	mg/L	110	70	130	1	20	
WG601899CCV2	CCV	11/25/24 16:51	MS241104-4	.1001		.0994	mg/L	99	90	110			
WG601899CCB2	CCB	11/25/24 16:53				.0001	mg/L		-0.0003	0.0003			
WG601899CCV3	CCV	11/25/24 17:04	MS241104-4	.1001		.09949	mg/L	99	90	110			
WG601899CCB3	CCB	11/25/24 17:06				U	mg/L		-0.0003	0.0003			
WG602150													
WG602150ICV	ICV	12/02/24 14:25	MS241016-2	.05		.04895	mg/L	98	90	110			
WG602150ICB	ICB	12/02/24 14:27				U	mg/L		-0.00022	0.00022			
WG602150LFB	LFB	12/02/24 14:29	MS241106-3	.05005		.0516	mg/L	103	85	115			
L85484-47AS	AS	12/02/24 14:41	MS241106-3	.05005	.0191	.07398	mg/L	110	70	130			
L85484-47ASD	ASD	12/02/24 14:43	MS241106-3	.05005	.0191	.07624	mg/L	114	70	130	3	20	
WG602150CCV1	CCV	12/02/24 14:47	MS241104-4	.1001		.10451	mg/L	104	90	110			
WG602150CCB1	CCB	12/02/24 14:49				U	mg/L		-0.0003	0.0003			
WG602150CCV2	CCV	12/02/24 15:09	MS241104-4	.1001		.10043	mg/L	100	90	110			
WG602150CCB2	CCB	12/02/24 15:10				U	mg/L		-0.0003	0.0003			
WG602150CCV3	CCV	12/02/24 15:21	MS241104-4	.1001		.1005	mg/L	100	90	110			
WG602150CCB3	CCB	12/02/24 15:23				U	mg/L		-0.0003	0.0003			

Sodium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	100		98.29	mg/L	98	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.6	0.6			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	1.005		1.05	mg/L	104	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	1.005		1.08	mg/L	107	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	100.0817		98.44	mg/L	98	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	100.0817	33.4	133.1	mg/L	100	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	100.0817	33.4	131.2	mg/L	98	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	50		47.91	mg/L	96	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.6	0.6			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	50		48	mg/L	96	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.6	0.6			
L91608-07AS	AS	12/04/24 20:51	II241114-5	100.0817	5.05	103.5	mg/L	98	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	100.0817	5.05	104	mg/L	99	85	115	0	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	50		47.66	mg/L	95	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L91595***

NOTE: If the Rec% column is null, the high/low 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
WG601722													
WG601722ICV	ICV	11/21/24 11:47	WI241112-3	20.02		21.2	mg/L	106	85	115			
WG601722ICB	ICB	11/21/24 11:47				U	mg/L		-2.5	2.5			
WG601722CCV1	CCV	11/21/24 13:24	WI241120-1	25		26.8	mg/L	107	85	115			
WG601722CCB1	CCB	11/21/24 13:24				U	mg/L		-2.5	2.5			
WG601722LFB	LFB	11/21/24 13:24	WI241001-1	10		10.6	mg/L	106	85	115			
WG601722CCV2	CCV	11/21/24 13:27	WI241120-1	25		25.8	mg/L	103	85	115			
WG601722CCB2	CCB	11/21/24 13:28				U	mg/L		-2.5	2.5			
WG601722CCV3	CCV	11/21/24 13:31	WI241120-1	25		26.4	mg/L	106	85	115			
WG601722CCB3	CCB	11/21/24 13:31				U	mg/L		-2.5	2.5			
WG601722CCV4	CCV	11/21/24 13:35	WI241120-1	25		25	mg/L	100	85	115			
WG601722CCB4	CCB	11/21/24 13:36				U	mg/L		-2.5	2.5			
WG601722CCV5	CCV	11/21/24 13:41	WI241120-1	25		25.4	mg/L	102	85	115			
WG601722CCB5	CCB	11/21/24 13:41				U	mg/L		-2.5	2.5			
WG601722CCV8	CCV	11/21/24 13:58	WI241120-1	25		26	mg/L	104	85	115			
WG601722CCB8	CCB	11/21/24 13:58				U	mg/L		-2.5	2.5			
WG601722CCV9	CCV	11/21/24 14:03	WI241120-1	25		25	mg/L	100	85	115			
WG601722CCB9	CCB	11/21/24 14:03				U	mg/L		-2.5	2.5			
L91595-02AS	AS	11/21/24 14:06	SO4TURB	10	3450	3632.9	mg/L	1829	85	115			M3
L91595-02ASD	ASD	11/21/24 14:07	SO4TURB	10	3450	3406.7	mg/L	-433	85	115	6	20	M3
WG601722CCV10	CCV	11/21/24 14:07	WI241120-1	25		25.2	mg/L	101	85	115			
WG601722CCB10	CCB	11/21/24 14:07				U	mg/L		-2.5	2.5			
WG601741													
WG601741ICV	ICV	11/21/24 11:47	WI241112-3	20.02		21.2	mg/L	106	85	115			
WG601741ICB	ICB	11/21/24 11:47				U	mg/L		-2.5	2.5			
WG601741CCV1	CCV	11/21/24 14:22	WI241120-1	25		26.6	mg/L	106	85	115			
WG601741CCB1	CCB	11/21/24 14:22				U	mg/L		-2.5	2.5			
WG601741LFB	LFB	11/21/24 14:22	WI241001-1	10		10.7	mg/L	107	85	115			
WG601741CCV2	CCV	11/21/24 14:26	WI241120-1	25		25.4	mg/L	102	85	115			
WG601741CCB2	CCB	11/21/24 14:26				U	mg/L		-2.5	2.5			
WG601741CCV3	CCV	11/21/24 14:29	WI241120-1	25		24.8	mg/L	99	85	115			
WG601741CCB3	CCB	11/21/24 14:29				U	mg/L		-2.5	2.5			
WG601741CCV4	CCV	11/21/24 14:33	WI241120-1	25		24.8	mg/L	99	85	115			
WG601741CCB4	CCB	11/21/24 14:34				U	mg/L		-2.5	2.5			
WG601741CCV8	CCV	11/21/24 14:56	WI241120-1	25		26.4	mg/L	106	85	115			
WG601741CCB8	CCB	11/21/24 14:56				U	mg/L		-2.5	2.5			
L91590-01AS	AS	11/21/24 14:57	SO4TURB5X	10	198	171.5	mg/L	-265	85	115			M3
L91590-01ASD	ASD	11/21/24 14:57	SO4TURB5X	10	198	194.7	mg/L	-33	85	115	13	20	M3
WG601741CCV9	CCV	11/21/24 15:01	WI241120-1	25		25.4	mg/L	102	85	115			
WG601741CCB9	CCB	11/21/24 15:01				U	mg/L		-2.5	2.5			
WG601741CCV10	CCV	11/21/24 15:06	WI241120-1	25		25	mg/L	100	85	115			
WG601741CCB10	CCB	11/21/24 15:06				U	mg/L		-2.5	2.5			
WG601741CCV11	CCV	11/21/24 15:07	WI241120-1	25		25.6	mg/L	102	85	115			
WG601741CCB11	CCB	11/21/24 15:08				U	mg/L		-2.5	2.5			

GCC

ACZ Project ID: ***L91595***

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

Vanadium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.958	mg/L	98	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.015	0.015			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.025025		.025	mg/L	100	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	.1001		.083	mg/L	83	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	.5005		.4902	mg/L	98	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	.5005	U	.5097	mg/L	102	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	.5005	U	.507	mg/L	101	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.96	mg/L	96	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.03	0.03			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.958	mg/L	96	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.03	0.03			
L91608-07AS	AS	12/04/24 20:51	II241114-5	.5005	U	.4773	mg/L	95	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	.5005	U	.483	mg/L	97	85	115	1	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.951	mg/L	95	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.03	0.03			

Zinc, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602352													
WG602352ICV	ICV	12/04/24 19:17	II241125-1	2		1.957	mg/L	98	95	105			
WG602352ICB	ICB	12/04/24 19:23				U	mg/L		-0.06	0.06			
WG602352PQV	PQV	12/04/24 19:26	II241030-5	.0502		.061	mg/L	122	70	130			
WG602352SIC	SIC	12/04/24 19:29	II241119-2	.1004		.099	mg/L	99	80	120			
WG602352LFB	LFB	12/04/24 19:35	II241114-5	.50045		.502	mg/L	100	85	115			
L91432-03AS	AS	12/04/24 19:47	II241114-5	.50045	U	.519	mg/L	104	85	115			
L91432-03ASD	ASD	12/04/24 19:50	II241114-5	.50045	U	.524	mg/L	105	85	115	1	20	
WG602352CCV1	CCV	12/04/24 20:05	II241204-2	1		.966	mg/L	97	90	110			
WG602352CCB1	CCB	12/04/24 20:08				U	mg/L		-0.06	0.06			
WG602352CCV2	CCV	12/04/24 20:42	II241204-2	1		.984	mg/L	98	90	110			
WG602352CCB2	CCB	12/04/24 20:45				U	mg/L		-0.06	0.06			
L91608-07AS	AS	12/04/24 20:51	II241114-5	.50045	U	.505	mg/L	101	85	115			
L91608-07ASD	ASD	12/04/24 20:54	II241114-5	.50045	U	.506	mg/L	101	85	115	0	20	
WG602352CCV3	CCV	12/04/24 21:03	II241204-2	1		.976	mg/L	98	90	110			
WG602352CCB3	CCB	12/04/24 21:06				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L91595***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L91595-01	WG602472	Fluoride	SM 4500-F C-2011	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601681	Nitrate/Nitrite as N	EPA 353.2	H3	Sample was received and analyzed past holding time.
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	H3	Sample was received and analyzed past holding time.
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601722	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.
L91595-02	WG602472	Fluoride	SM 4500-F C-2011	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601681	Nitrate/Nitrite as N	EPA 353.2	H3	Sample was received and analyzed past holding time.
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	H3	Sample was received and analyzed past holding time.
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601722	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.
	WG602016	Total Alkalinity	SM 2320 B-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L91595-03	WG602472	Fluoride	SM 4500-F C-2011	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601681	Nitrate/Nitrite as N	EPA 353.2	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601741	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.
	WG602016	Total Alkalinity	SM 2320 B-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

GCC Rio Grande ACZ Project ID: ***L91595***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L91595-04	WG602472	Fluoride	SM 4500-F C-2011	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601681	Nitrate/Nitrite as N	EPA 353.2	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG602150	Selenium, dissolved	EPA 200.8	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG601741	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.
	WG602016	Total Alkalinity	SM 2320 B-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L91595-05	WG601899	Arsenic, dissolved	EPA 200.8	DD	Sample required dilution due to matrix color or odor.
		Cadmium, dissolved	EPA 200.8	DD	Sample required dilution due to matrix color or odor.
		Cobalt, dissolved	EPA 200.8	DD	Sample required dilution due to matrix color or odor.
	WG602472	Fluoride	SM 4500-F C-2011	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601899	Lead, dissolved	EPA 200.8	DD	Sample required dilution due to matrix color or odor.
	WG602352	Manganese, dissolved	EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601681	Nitrate/Nitrite as N	EPA 353.2	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601741	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.
	WG602016	Total Alkalinity	SM 2320 B-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

GCC Rio Grande ACZ Project ID: ***L91595***

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: L91595
Date Received: 11/20/2024 10:51
Received By:
Date Printed: 11/21/2024

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?
6757	0.3	<=6.0	15	Yes

Was ice present in the shipment container(s)?

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

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

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

Sample Receipt

GCC Rio Grande

ACZ Project ID:	L91595
Date Received:	11/20/2024 10:51
Received By:	
Date Printed:	11/21/2024

[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

CHAIN of CUSTODY

Report to:

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

Copy of Report to:

Name: Landon Beck	E-mail: lbeck@slrconsulting.com
Company: SLR Consulting	Telephone: (970) 459-4865

Invoice to:

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

Copy of Invoice to:

Name: Amy Veek	Address:
Company: GCC Rio Grande Inc	
E-mail: aveek@gcc.com	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: Meghan Way **Sampler's Site Information** **State** CO **Zip code** 81004 **Time Zone** MST

***Sampler's Signature:** _____

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

PROJECT INFORMATION

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-6	11/19/2024 09:48	GW	3	✔								
MW-7	11/19/2024 10:21	GW	3	✔								
MW-8	11/19/2024 12:16	GW	3	✔								
MW-12	11/19/2024 15:42	GW	3	✔								
MW-11	11/19/2024 16:24	GW	3	✔								

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

REMARKS

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

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME

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

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

Analytical Report

December 10, 2024

Report to:
Meghan Way
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Meghan Way
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID:
ACZ Project ID: L91640

Meghan Way:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on November 21, 2024. This project has been assigned to ACZ's project number, L91640. 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 L91640. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after December 10, 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-10

ACZ Sample ID: ***L91640-01***
Date Sampled: ***11/20/24 13:28***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U	*	mg/L	0.14	0.5	12/06/24 17:37	wtc
Arsenic, dissolved	EPA 200.8	1	0.00063	B		mg/L	0.0002	0.001	12/02/24 17:09	aps
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/06/24 17:37	wtc
Boron, dissolved	EPA 200.7	2	1.24			mg/L	0.06	0.2	12/06/24 17:37	wtc
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	12/02/24 17:09	aps
Calcium, dissolved	EPA 200.7	2	28.2		*	mg/L	0.2	1	12/06/24 17:37	wtc
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/06/24 17:37	wtc
Cobalt, dissolved	EPA 200.8	1	0.000082	B		mg/L	0.00005	0.00025	12/02/24 17:09	aps
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/06/24 17:37	wtc
Iron, dissolved	EPA 200.7	2	0.254	B	*	mg/L	0.12	0.3	12/09/24 14:46	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	12/02/24 17:09	aps
Lithium, dissolved	EPA 200.7	2	0.246			mg/L	0.016	0.08	12/06/24 17:37	wtc
Magnesium, dissolved	EPA 200.7	2	9.65			mg/L	0.4	2	12/09/24 14:46	msp
Manganese, dissolved	EPA 200.7	2	0.021	B		mg/L	0.02	0.1	12/06/24 17:37	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	12/03/24 14:54	rjw
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	12/06/24 17:37	wtc
Potassium, dissolved	EPA 200.7	2	4.40			mg/L	1	2	12/06/24 17:37	wtc
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	12/06/24 13:59	aps
Sodium, dissolved	EPA 200.7	2	958		*	mg/L	0.4	2	12/06/24 17:37	wtc
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	12/06/24 17:37	wtc
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/06/24 17:37	wtc

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

ACZ Sample ID: ***L91640-01***
Date Sampled: ***11/20/24 13:28***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	759			mg/L	2	20	11/27/24 0:00	rsc
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Total Alkalinity		1	759			mg/L	2	20	11/27/24 0:00	rsc
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.2			%			12/10/24 0:00	calc
Sum of Anions			47			meq/L			12/10/24 0:00	calc
Sum of Cations			45			meq/L			12/10/24 0:00	calc
Chloride	SM 4500-Cl E-2011	25	397		*	mg/L	25	50	11/26/24 14:51	jqr
Fluoride	SM 4500-F C-2011	1	1.38			mg/L	0.15	0.35	12/07/24 17:16	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		110			mg/L	0.5	10	12/10/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	U		mg/L	0.02	0.1	12/10/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U	*	mg/L	0.02	0.1	11/22/24 0:23	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	11/21/24 23:59	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	2790		*	mg/L	20	40	11/25/24 14:10	jck
Sulfate	ASTM D516-07/-11/-16	50	993		*	mg/L	50	250	11/25/24 9:48	jqr
TDS (calculated)	Calculation		2850			mg/L			12/10/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.98						12/10/24 0:00	calc

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

Inorganic Analytical Results

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

ACZ Sample ID: ***L91640-02***
Date Sampled: ***11/20/24 14:00***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.35	U	*	mg/L	0.35	1.25	12/06/24 17:39	wtc
Arsenic, dissolved	EPA 200.8	1	0.00122			mg/L	0.0002	0.001	12/02/24 17:11	aps
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	12/06/24 17:39	wtc
Boron, dissolved	EPA 200.7	5	1.50			mg/L	0.15	0.5	12/06/24 17:39	wtc
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	12/02/24 17:11	aps
Calcium, dissolved	EPA 200.7	5	435		*	mg/L	0.5	2.5	12/06/24 17:39	wtc
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	12/06/24 17:39	wtc
Cobalt, dissolved	EPA 200.8	1	0.00130			mg/L	0.00005	0.00025	12/02/24 17:11	aps
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	12/06/24 17:39	wtc
Iron, dissolved	EPA 200.7	5	2.63		*	mg/L	0.3	0.75	12/09/24 14:56	msp
Lead, dissolved	EPA 200.8	5	<0.0005	U		mg/L	0.0005	0.0025	12/06/24 14:01	aps
Lithium, dissolved	EPA 200.7	5	0.474			mg/L	0.04	0.2	12/06/24 17:39	wtc
Magnesium, dissolved	EPA 200.7	5	179			mg/L	1	5	12/09/24 14:56	msp
Manganese, dissolved	EPA 200.7	5	0.402			mg/L	0.05	0.25	12/06/24 17:39	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	12/03/24 14:55	rjw
Nickel, dissolved	EPA 200.7	5	<0.04	U		mg/L	0.04	0.2	12/06/24 17:39	wtc
Potassium, dissolved	EPA 200.7	5	9.35			mg/L	2.5	5	12/06/24 17:39	wtc
Selenium, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.00025	12/02/24 17:11	aps
Sodium, dissolved	EPA 200.7	5	915		*	mg/L	1	5	12/06/24 17:39	wtc
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	12/06/24 17:39	wtc
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	12/06/24 17:39	wtc

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

ACZ Sample ID: ***L91640-02***
Date Sampled: ***11/20/24 14:00***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	444			mg/L	2	20	11/27/24 0:00	rsc
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Total Alkalinity		1	444			mg/L	2	20	11/27/24 0:00	rsc
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-0.6			%			12/10/24 0:00	calc
Sum of Anions			78			meq/L			12/10/24 0:00	calc
Sum of Cations			77			meq/L			12/10/24 0:00	calc
Chloride	SM 4500-Cl E-2011	1	45.0		*	mg/L	1	2	11/26/24 14:51	jqr
Fluoride	SM 4500-F C-2011	1	0.40			mg/L	0.15	0.35	12/07/24 17:21	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		1820			mg/L	1	30	12/10/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	U		mg/L	0.02	0.1	12/10/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U	*	mg/L	0.02	0.1	11/22/24 0:05	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	11/22/24 0:05	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	4710		*	mg/L	40	80	11/25/24 14:13	jck
Sulfate	ASTM D516-07/-11/-16	100	3240		*	mg/L	100	500	11/25/24 9:48	jqr
TDS (calculated)	Calculation		5100			mg/L			12/10/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.92						12/10/24 0:00	calc

GCC Rio Grande
Project ID:
Sample ID: MW-18

ACZ Sample ID: ***L91640-03***
Date Sampled: ***11/20/24 14:35***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.07	U	*	mg/L	0.07	0.25	12/06/24 17:41	wtc
Arsenic, dissolved	EPA 200.8	1	0.00448			mg/L	0.0002	0.001	12/02/24 17:12	aps
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	12/06/24 17:41	wtc
Boron, dissolved	EPA 200.7	1	0.724			mg/L	0.03	0.1	12/06/24 17:41	wtc
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	12/02/24 17:12	aps
Calcium, dissolved	EPA 200.7	1	30.1		*	mg/L	0.1	0.5	12/06/24 17:41	wtc
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	12/06/24 17:41	wtc
Cobalt, dissolved	EPA 200.8	1	0.000208	B		mg/L	0.00005	0.00025	12/02/24 17:12	aps
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	12/06/24 17:41	wtc
Iron, dissolved	EPA 200.7	1	0.108	B	*	mg/L	0.06	0.15	12/09/24 14:59	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	12/02/24 17:12	aps
Lithium, dissolved	EPA 200.7	1	0.130			mg/L	0.008	0.04	12/06/24 17:41	wtc
Magnesium, dissolved	EPA 200.7	1	8.23			mg/L	0.2	1	12/09/24 14:59	msp
Manganese, dissolved	EPA 200.7	1	0.081			mg/L	0.01	0.05	12/06/24 17:41	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	12/03/24 14:56	rjw
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	12/06/24 17:41	wtc
Potassium, dissolved	EPA 200.7	1	2.73			mg/L	0.5	1	12/06/24 17:41	wtc
Selenium, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.00025	12/02/24 17:12	aps
Sodium, dissolved	EPA 200.7	1	276		*	mg/L	0.2	1	12/06/24 17:41	wtc
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	12/06/24 17:41	wtc
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	12/06/24 17:41	wtc

GCC Rio Grande
Project ID:
Sample ID: MW-18

ACZ Sample ID: ***L91640-03***
Date Sampled: ***11/20/24 14:35***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	407			mg/L	2	20	11/27/24 0:00	rsc
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Total Alkalinity		1	407			mg/L	2	20	11/27/24 0:00	rsc
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			12/10/24 0:00	calc
Sum of Anions			15			meq/L			12/10/24 0:00	calc
Sum of Cations			14			meq/L			12/10/24 0:00	calc
Chloride	SM 4500-Cl E-2011	1	28.6		*	mg/L	1	2	11/26/24 13:58	jqr
Fluoride	SM 4500-F C-2011	1	1.36			mg/L	0.15	0.35	12/07/24 17:24	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		109			mg/L	0.2	5	12/10/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	U		mg/L	0.02	0.1	12/10/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U	*	mg/L	0.02	0.1	11/22/24 0:06	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	11/22/24 0:06	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	900		*	mg/L	20	40	11/25/24 14:15	jck
Sulfate	ASTM D516-07/-11/-16	25	304		*	mg/L	25	125	11/25/24 9:35	jqr
TDS (calculated)	Calculation		899			mg/L			12/10/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						12/10/24 0:00	calc

GCC Rio Grande
Project ID:
Sample ID: MW-20

ACZ Sample ID: ***L91640-04***
Date Sampled: ***11/20/24 15:57***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U		mg/L	0.14	0.5	12/06/24 20:28	msp
Arsenic, dissolved	EPA 200.8	1	0.00335			mg/L	0.0002	0.001	12/02/24 17:18	aps
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/06/24 20:28	msp
Boron, dissolved	EPA 200.7	2	0.796			mg/L	0.06	0.2	12/06/24 20:28	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	12/02/24 17:18	aps
Calcium, dissolved	EPA 200.7	2	9.30			mg/L	0.2	1	12/06/24 20:28	msp
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/06/24 20:28	msp
Cobalt, dissolved	EPA 200.8	1	0.000123	B		mg/L	0.00005	0.00025	12/02/24 17:18	aps
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	12/06/24 20:28	msp
Iron, dissolved	EPA 200.7	2	<0.12	U		mg/L	0.12	0.3	12/06/24 20:28	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	12/02/24 17:18	aps
Lithium, dissolved	EPA 200.7	2	0.188			mg/L	0.016	0.08	12/06/24 20:28	msp
Magnesium, dissolved	EPA 200.7	2	3.44			mg/L	0.4	2	12/06/24 20:28	msp
Manganese, dissolved	EPA 200.7	2	0.023	B		mg/L	0.02	0.1	12/06/24 20:28	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	12/03/24 14:57	rjw
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	12/06/24 20:28	msp
Potassium, dissolved	EPA 200.7	2	3.69			mg/L	1	2	12/06/24 20:28	msp
Selenium, dissolved	EPA 200.8	5	<0.0005	U		mg/L	0.0005	0.00125	12/06/24 14:29	aps
Sodium, dissolved	EPA 200.7	2	850			mg/L	0.4	2	12/06/24 20:28	msp
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	12/06/24 20:28	msp
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	12/06/24 20:28	msp

GCC Rio Grande
Project ID:
Sample ID: MW-20

ACZ Sample ID: ***L91640-04***
Date Sampled: ***11/20/24 15:57***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	640			mg/L	2	20	11/27/24 0:00	rsc
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Total Alkalinity		1	640			mg/L	2	20	11/27/24 0:00	rsc
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-5.0			%			12/10/24 0:00	calc
Sum of Anions			42			meq/L			12/10/24 0:00	calc
Sum of Cations			38			meq/L			12/10/24 0:00	calc
Chloride	SM 4500-Cl E-2011	100	998		*	mg/L	100	200	11/26/24 14:52	jqr
Fluoride	SM 4500-F C-2011	1	2.41			mg/L	0.15	0.35	12/07/24 17:28	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		37			mg/L	0.5	10	12/10/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	U		mg/L	0.02	0.1	12/10/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U	*	mg/L	0.02	0.1	11/22/24 0:07	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	11/22/24 0:07	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2220		*	mg/L	40	80	11/25/24 14:18	jck
Sulfate	ASTM D516-07/-11/-16	5	61.2		*	mg/L	5	25	11/25/24 9:20	jqr
TDS (calculated)	Calculation		2320			mg/L			12/10/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.96						12/10/24 0:00	calc

GCC Rio Grande
Project ID:
Sample ID: MW-19

ACZ Sample ID: ***L91640-05***
Date Sampled: ***11/20/24 16:26***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.07	U		mg/L	0.07	0.25	12/06/24 20:31	msp
Arsenic, dissolved	EPA 200.8	1	<0.0002	U		mg/L	0.0002	0.001	12/02/24 17:23	aps
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	12/06/24 20:31	msp
Boron, dissolved	EPA 200.7	1	0.435			mg/L	0.03	0.1	12/06/24 20:31	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	12/02/24 17:23	aps
Calcium, dissolved	EPA 200.7	1	10.5			mg/L	0.1	0.5	12/06/24 20:31	msp
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	12/06/24 20:31	msp
Cobalt, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	12/02/24 17:23	aps
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	12/06/24 20:31	msp
Iron, dissolved	EPA 200.7	1	<0.06	U		mg/L	0.06	0.15	12/06/24 20:31	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	12/02/24 17:23	aps
Lithium, dissolved	EPA 200.7	1	0.117			mg/L	0.008	0.04	12/06/24 20:31	msp
Magnesium, dissolved	EPA 200.7	1	5.23			mg/L	0.2	1	12/06/24 20:31	msp
Manganese, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	12/06/24 20:31	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U	*	mg/L	0.0002	0.001	12/03/24 15:00	rjw
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	12/06/24 20:31	msp
Potassium, dissolved	EPA 200.7	1	2.52			mg/L	0.5	1	12/06/24 20:31	msp
Selenium, dissolved	EPA 200.8	5	<0.0005	U		mg/L	0.0005	0.00125	12/06/24 14:30	aps
Sodium, dissolved	EPA 200.7	1	469			mg/L	0.2	1	12/06/24 20:31	msp
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	12/06/24 20:31	msp
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	12/06/24 20:31	msp

GCC Rio Grande
Project ID:
Sample ID: MW-19

ACZ Sample ID: ***L91640-05***
Date Sampled: ***11/20/24 16:26***
Date Received: ***11/21/24***
Sample Matrix: ***Groundwater***

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	583			mg/L	2	20	11/27/24 0:00	rsc
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/27/24 0:00	rsc
Total Alkalinity		1	583			mg/L	2	20	11/27/24 0:00	rsc
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-6.4			%			12/10/24 0:00	calc
Sum of Anions			25			meq/L			12/10/24 0:00	calc
Sum of Cations			22			meq/L			12/10/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	122		*	mg/L	5	10	11/26/24 14:09	jqr
Fluoride	SM 4500-F C-2011	1	1.55			mg/L	0.15	0.35	12/07/24 17:38	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		48			mg/L	0.2	5	12/10/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	U		mg/L	0.02	0.1	12/10/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U	*	mg/L	0.02	0.1	11/22/24 0:09	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	11/22/24 0:09	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	1360		*	mg/L	20	40	11/25/24 14:21	jck
Sulfate	ASTM D516-07/-11/-16	25	466		*	mg/L	25	125	11/25/24 9:36	jqr
TDS (calculated)	Calculation		1430			mg/L			12/10/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.95						12/10/24 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: ***L91640***

NOTE: If the Rec% column is null, the high/low 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
WG602072													
WG602072PBW1	PBW	11/27/24 15:52				U	mg/L		-20	20			
WG602072LCSW3	LCSW	11/27/24 16:03	WC241126-1	820.0001		861.8	mg/L	105	90	110			
WG602072PQV2	PQV	11/27/24 16:14	WC240910-1	20		25.7	mg/L	129	50	150			
WG602072LCSW6	LCSW	11/27/24 18:11	WC241126-1	820.0001		867.9	mg/L	106	90	110			
WG602072PBW2	PBW	11/27/24 18:20				5.5	mg/L		-20	20			
WG602072LCSW9	LCSW	11/27/24 20:36	WC241126-1	820.0001		867.2	mg/L	106	90	110			
WG602072PBW3	PBW	11/27/24 20:45				5.7	mg/L		-20	20			
L91669-01DUP	DUP	11/27/24 21:57			54.3	58.9	mg/L				8	20	
WG602072LCSW12	LCSW	11/27/24 23:19	WC241126-1	820.0001		859.9	mg/L	105	90	110			
WG602072PBW4	PBW	11/27/24 23:29				5.7	mg/L		-20	20			

Aluminum, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2		2.03	mg/L	102	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.15	0.15			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.250625		.261	mg/L	104	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	200.750625		200	mg/L	100	1	200			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	1.0025		1.19	mg/L	119	85	115			LA
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1		1.01	mg/L	101	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.15	0.15			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1		1	mg/L	100	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.15	0.15			
L91645-03AS	AS	12/06/24 17:53	II241114-5	1.0025	U	1.07	mg/L	107	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	1.0025	U	1.07	mg/L	107	85	115	0	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1		.981	mg/L	98	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.15	0.15			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		2.005	mg/L	100	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.15	0.15			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.250625		.25	mg/L	100	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	200.750625		207.4	mg/L	103	1	200			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	1.0025		1.021	mg/L	102	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		.993	mg/L	99	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.15	0.15			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		.984	mg/L	98	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.15	0.15			
L91626-05AS	AS	12/06/24 20:22	II241114-5	1.0025	U	1.062	mg/L	106	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	1.0025	U	1.013	mg/L	101	85	115	5	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		.99	mg/L	99	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L91640***

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

Arsenic, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602165													
WG602165ICV	ICV	12/02/24 16:58	MS241016-2	.05		.04597	mg/L	92	90	110			
WG602165ICB	ICB	12/02/24 17:00				U	mg/L		-0.00044	0.00044			
WG602165LFB	LFB	12/02/24 17:01	MS241106-3	.0501		.05015	mg/L	100	85	115			
L91640-03AS	AS	12/02/24 17:14	MS241106-3	.0501	.00448	.06484	mg/L	120	70	130			
L91640-03ASD	ASD	12/02/24 17:16	MS241106-3	.0501	.00448	.06368	mg/L	118	70	130	2	20	
WG602165CCV1	CCV	12/02/24 17:20	MS241104-4	.1002		.10228	mg/L	102	90	110			
WG602165CCB1	CCB	12/02/24 17:21				U	mg/L		-0.0006	0.0006			
WG602165CCV2	CCV	12/02/24 17:42	MS241104-4	.1002		.09726	mg/L	97	90	110			
WG602165CCB2	CCB	12/02/24 17:43				U	mg/L		-0.0006	0.0006			
WG602165CCV3	CCV	12/02/24 17:54	MS241104-4	.1002		.09753	mg/L	97	90	110			
WG602165CCB3	CCB	12/02/24 17:56				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2		1.94	mg/L	97	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.03	0.03			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.05005		.053	mg/L	106	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	.1001		.102	mg/L	102	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	.5005		.52	mg/L	104	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1		.969	mg/L	97	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.03	0.03			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1		.971	mg/L	97	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.03	0.03			
L91645-03AS	AS	12/06/24 17:53	II241114-5	.5005	U	.486	mg/L	97	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	.5005	U	.484	mg/L	97	85	115	0	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1		.968	mg/L	97	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.03	0.03			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		2.011	mg/L	101	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.03	0.03			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.05005		.048	mg/L	96	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	.1001		.096	mg/L	96	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	.5005		.511	mg/L	102	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		1.008	mg/L	101	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.03	0.03			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		.994	mg/L	99	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.03	0.03			
L91626-05AS	AS	12/06/24 20:22	II241114-5	.5005	U	.507	mg/L	101	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	.5005	U	.513	mg/L	102	85	115	1	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		1	mg/L	100	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L91640***

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

Boron, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2		1.98	mg/L	99	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.09	0.09			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.1001		.1	mg/L	100	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	.1001		.097	mg/L	97	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	.5005		.493	mg/L	99	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1		.96	mg/L	96	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.09	0.09			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1		1.03	mg/L	103	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.09	0.09			
L91645-03AS	AS	12/06/24 17:53	II241114-5	.5005	.406	.915	mg/L	102	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	.5005	.406	.912	mg/L	101	85	115	0	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1		1.06	mg/L	106	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.09	0.09			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		2.084	mg/L	104	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.09	0.09			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.1001		.103	mg/L	103	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	.1001		.092	mg/L	92	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	.5005		.512	mg/L	102	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		1.037	mg/L	104	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.09	0.09			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		1.017	mg/L	102	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.09	0.09			
L91626-05AS	AS	12/06/24 20:22	II241114-5	.5005	U	.514	mg/L	103	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	.5005	U	.525	mg/L	105	85	115	2	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		1.032	mg/L	103	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.09	0.09			

Cadmium, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602165													
WG602165ICV	ICV	12/02/24 16:58	MS241016-2	.05		.047369	mg/L	95	90	110			
WG602165ICB	ICB	12/02/24 17:00				U	mg/L		-0.00011	0.00011			
WG602165LFB	LFB	12/02/24 17:01	MS241106-3	.05005		.05108	mg/L	102	85	115			
L91640-03AS	AS	12/02/24 17:14	MS241106-3	.05005	U	.044892	mg/L	90	70	130			
L91640-03ASD	ASD	12/02/24 17:16	MS241106-3	.05005	U	.045318	mg/L	91	70	130	1	20	
WG602165CCV1	CCV	12/02/24 17:20	MS241104-4	.1001		.097141	mg/L	97	90	110			
WG602165CCB1	CCB	12/02/24 17:21				U	mg/L		-0.00015	0.00015			
WG602165CCV2	CCV	12/02/24 17:42	MS241104-4	.1001		.096215	mg/L	96	90	110			
WG602165CCB2	CCB	12/02/24 17:43				U	mg/L		-0.00015	0.00015			
WG602165CCV3	CCV	12/02/24 17:54	MS241104-4	.1001		.095256	mg/L	95	90	110			
WG602165CCB3	CCB	12/02/24 17:56				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L91640***

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

Calcium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	100		96.85	mg/L	97	95	105			
WG602544ICB	ICB	12/06/24 16:57				.19	mg/L		-0.3	0.3			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.5025		.58	mg/L	115	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	201.5025		197	mg/L	98	1	200			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	67.963		70.9	mg/L	104	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	50		48.6	mg/L	97	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.3	0.3			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	50		49.2	mg/L	98	90	110			
WG602544CCB2	CCB	12/06/24 17:51				.37	mg/L		-0.3	0.3			BB
L91645-03AS	AS	12/06/24 17:53	II241114-5	67.963	360	413	mg/L	78	85	115			M3
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	67.963	360	408	mg/L	71	85	115	1	20	M3
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	50		49.4	mg/L	99	90	110			
WG602544CCB3	CCB	12/06/24 18:05				.61	mg/L		-0.3	0.3			BB
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	100		98.97	mg/L	99	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.3	0.3			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.5025		.54	mg/L	107	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	201.5025		196.4	mg/L	97	1	200			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	67.963		68.86	mg/L	101	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	50		49.57	mg/L	99	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.3	0.3			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	50		49.14	mg/L	98	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.3	0.3			
L91626-05AS	AS	12/06/24 20:22	II241114-5	67.963	40	109.4	mg/L	102	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	67.963	40	106.2	mg/L	97	85	115	3	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	50		49.3	mg/L	99	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L91640***

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

Chloride SM 4500-Cl E-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602009													
WG602009ICV	ICV	11/26/24 10:14	WI231211-1	39.96		40.27	mg/L	101	90	110			
WG602009ICB	ICB	11/26/24 10:14				U	mg/L						
WG602009CCV1	CCV	11/26/24 13:48	WI241113-1	25		24.75	mg/L	99	90	110			
WG602009CCB1	CCB	11/26/24 13:48				U	mg/L						
WG602009PQV	PQV	11/26/24 13:49	WI240904-2	2		2.34	mg/L	117	50	150			
WG602009LFB	LFB	11/26/24 13:49	WI240820-1	20		21.08	mg/L	105	90	110			
WG602009CCV2	CCV	11/26/24 13:52	WI241113-1	25		25.04	mg/L	100	90	110			
WG602009CCB2	CCB	11/26/24 13:52				U	mg/L						
WG602009CCV3	CCV	11/26/24 14:00	WI241113-1	25		25.45	mg/L	102	90	110			
WG602009CCB3	CCB	11/26/24 14:00				U	mg/L						
WG602009CCV4	CCV	11/26/24 14:06	WI241113-1	25		25.45	mg/L	102	90	110			
WG602009CCB4	CCB	11/26/24 14:06				U	mg/L						
WG602009CCV5	CCV	11/26/24 14:12	WI241113-1	25		24.37	mg/L	97	90	110			
WG602009CCB5	CCB	11/26/24 14:13				U	mg/L						
WG602009CCV9	CCV	11/26/24 14:50	WI241113-1	25		23.97	mg/L	96	90	110			
WG602009CCB9	CCB	11/26/24 14:50				U	mg/L						
WG602009CCV10	CCV	11/26/24 14:55	WI241113-1	25		23.98	mg/L	96	90	110			
WG602009CCB10	CCB	11/26/24 14:55				U	mg/L						
L91697-01AS	AS	11/26/24 14:59	25XCL GAL	20	306	315.01	mg/L	45	90	110			M3
L91697-01ASD	ASD	11/26/24 15:00	25XCL GAL	20	306	303.84	mg/L	-11	90	110	4	20	M3
WG602009CCV11	CCV	11/26/24 15:00	WI241113-1	25		24.27	mg/L	97	90	110			
WG602009CCB11	CCB	11/26/24 15:00				U	mg/L						

GCC

ACZ Project ID: ***L91640***

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

Chromium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2		1.91	mg/L	96	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.06	0.06			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.05005		.05	mg/L	100	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	.1001		.1	mg/L	100	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	.5005		.496	mg/L	99	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1		.942	mg/L	94	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.06	0.06			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1		1	mg/L	100	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.06	0.06			
L91645-03AS	AS	12/06/24 17:53	II241114-5	.5005	U	.495	mg/L	99	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	.5005	U	.496	mg/L	99	85	115	0	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1		1.03	mg/L	103	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.06	0.06			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		1.973	mg/L	99	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.06	0.06			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.05005		.041	mg/L	82	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	.1001		.08	mg/L	80	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	.5005		.498	mg/L	100	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		.99	mg/L	99	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.06	0.06			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		.982	mg/L	98	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.06	0.06			
L91626-05AS	AS	12/06/24 20:22	II241114-5	.5005	U	.487	mg/L	97	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	.5005	U	.497	mg/L	99	85	115	2	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		.985	mg/L	99	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.06	0.06			

Cobalt, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602165													
WG602165ICV	ICV	12/02/24 16:58	MS241016-2	.05		.047207	mg/L	94	90	110			
WG602165ICB	ICB	12/02/24 17:00				U	mg/L		-0.00011	0.00011			
WG602165LFB	LFB	12/02/24 17:01	MS241106-3	.05005		.050496	mg/L	101	85	115			
L91640-03AS	AS	12/02/24 17:14	MS241106-3	.05005	.000208	.050612	mg/L	101	70	130			
L91640-03ASD	ASD	12/02/24 17:16	MS241106-3	.05005	.000208	.049586	mg/L	99	70	130	2	20	
WG602165CCV1	CCV	12/02/24 17:20	MS241104-4	.1001		.101075	mg/L	101	90	110			
WG602165CCB1	CCB	12/02/24 17:21				U	mg/L		-0.00015	0.00015			
WG602165CCV2	CCV	12/02/24 17:42	MS241104-4	.1001		.098063	mg/L	98	90	110			
WG602165CCB2	CCB	12/02/24 17:43				U	mg/L		-0.00015	0.00015			
WG602165CCV3	CCV	12/02/24 17:54	MS241104-4	.1001		.096617	mg/L	97	90	110			
WG602165CCB3	CCB	12/02/24 17:56				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L91640***

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

Copper, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2		1.89	mg/L	95	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.03	0.03			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.05005		.055	mg/L	110	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	.1001		.094	mg/L	94	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	.5005		.506	mg/L	101	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1		.954	mg/L	95	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.03	0.03			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1		.952	mg/L	95	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.03	0.03			
L91645-03AS	AS	12/06/24 17:53	II241114-5	.5005	U	.498	mg/L	100	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	.5005	U	.498	mg/L	100	85	115	0	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1		.939	mg/L	94	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.03	0.03			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		1.979	mg/L	99	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.03	0.03			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.05005		.042	mg/L	84	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	.1001		.095	mg/L	95	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	.5005		.499	mg/L	100	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		.992	mg/L	99	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.03	0.03			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		.976	mg/L	98	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.03	0.03			
L91626-05AS	AS	12/06/24 20:22	II241114-5	.5005	U	.497	mg/L	99	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	.5005	U	.501	mg/L	100	85	115	1	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		.982	mg/L	98	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L91640***

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

Fluoride SM 4500-F C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602577													
WG602577ICV	ICV	12/07/24 16:06	WC241204-1	2		2.05	mg/L	103	90	110			
WG602577ICB	ICB	12/07/24 16:11				U	mg/L		-0.3	0.3			
WG602577PQV	PQV	12/07/24 16:15	WC241125-8	.35		.36	mg/L	103	50	150			
WG602577LFB1	LFB	12/07/24 16:18	WC241104-8	5		4.72	mg/L	94	90	110			
L91596-01AS	AS	12/07/24 16:34	WC241104-8	5	.42	4.93	mg/L	90	90	110			
L91596-01ASD	ASD	12/07/24 16:38	WC241104-8	5	.42	4.91	mg/L	90	90	110	0	20	
WG602577CCV1	CCV	12/07/24 17:05	WC241204-1	2		2.073	mg/L	104	90	110			
WG602577CCB1	CCB	12/07/24 17:13				U	mg/L		-0.3	0.3			
L91640-04AS	AS	12/07/24 17:31	WC241104-8	5	2.41	7.19	mg/L	96	90	110			
L91640-04ASD	ASD	12/07/24 17:35	WC241104-8	5	2.41	7.06	mg/L	93	90	110	2	20	
WG602577CCV2	CCV	12/07/24 17:52	WC241204-1	2		2.113	mg/L	106	90	110			
WG602577CCB2	CCB	12/07/24 18:00				U	mg/L		-0.3	0.3			
WG602577LFB2	LFB	12/07/24 18:32	WC241104-8	5		4.91	mg/L	98	90	110			
WG602577CCV3	CCV	12/07/24 18:51	WC241204-1	2		2.093	mg/L	105	90	110			
WG602577CCB3	CCB	12/07/24 18:59				U	mg/L		-0.3	0.3			
WG602577CCV4	CCV	12/07/24 19:52	WC241204-1	2		2.093	mg/L	105	90	110			
WG602577CCB4	CCB	12/07/24 20:00				U	mg/L		-0.3	0.3			
WG602577CCV5	CCV	12/07/24 20:54	WC241204-1	2		2.054	mg/L	103	90	110			
WG602577CCB5	CCB	12/07/24 21:02				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L91640***

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

Iron, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		1.981	mg/L	99	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.18	0.18			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.15045		.149	mg/L	99	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	200.75045		198.4	mg/L	99	1	200			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	1.003		1.014	mg/L	101	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		.996	mg/L	100	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.18	0.18			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		.977	mg/L	98	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.18	0.18			
L91626-05AS	AS	12/06/24 20:22	II241114-5	1.003	U	.996	mg/L	99	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	1.003	U	1.008	mg/L	100	85	115	1	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		.981	mg/L	98	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.18	0.18			
WG602641													
WG602641ICV	ICV	12/09/24 13:59	II241125-1	2		1.917	mg/L	96	95	105			
WG602641ICB	ICB	12/09/24 14:05				U	mg/L		-0.18	0.18			
WG602641PQV	PQV	12/09/24 14:08	II241030-5	.15045		.16	mg/L	106	70	130			
WG602641SIC	SIC	12/09/24 14:11	II241119-2	200.75045		187.9	mg/L	94	1	200			
WG602641LFB	LFB	12/09/24 14:18	II241114-5	1.003		.986	mg/L	98	85	115			
L91544-03AS	AS	12/09/24 14:34	II241114-5	1.003	.348	2.463	mg/L	212	85	115			M1
L91544-03ASD	ASD	12/09/24 14:37	II241114-5	1.003	.348	2.565	mg/L	222	85	115	4	20	M1
WG602641CCV1	CCV	12/09/24 14:50	II241204-2	1		.969	mg/L	97	90	110			
WG602641CCB1	CCB	12/09/24 14:53				U	mg/L		-0.18	0.18			
WG602641CCV2	CCV	12/09/24 15:30	II241204-2	1		.966	mg/L	97	90	110			
WG602641CCB2	CCB	12/09/24 15:33				U	mg/L		-0.18	0.18			
WG602641CCV3	CCV	12/09/24 15:52	II241204-2	1		.962	mg/L	96	90	110			
WG602641CCB3	CCB	12/09/24 15:55				U	mg/L		-0.18	0.18			

GCC

ACZ Project ID: ***L91640***

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

Lead, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602165													
WG602165ICV	ICV	12/02/24 16:58	MS241016-2	.05		.04715	mg/L	94	90	110			
WG602165ICB	ICB	12/02/24 17:00				U	mg/L		-0.00022	0.00022			
WG602165LFB	LFB	12/02/24 17:01	MS241106-3	.05005		.05131	mg/L	103	85	115			
L91640-03AS	AS	12/02/24 17:14	MS241106-3	.05005	U	.0418	mg/L	84	70	130			
L91640-03ASD	ASD	12/02/24 17:16	MS241106-3	.05005	U	.04153	mg/L	83	70	130	1	20	
WG602165CCV1	CCV	12/02/24 17:20	MS241104-4	.25025		.23486	mg/L	94	90	110			
WG602165CCB1	CCB	12/02/24 17:21				U	mg/L		-0.0003	0.0003			
WG602165CCV2	CCV	12/02/24 17:42	MS241104-4	.25025		.23178	mg/L	93	90	110			
WG602165CCB2	CCB	12/02/24 17:43				U	mg/L		-0.0003	0.0003			
WG602165CCV3	CCV	12/02/24 17:54	MS241104-4	.25025		.23053	mg/L	92	90	110			
WG602165CCB3	CCB	12/02/24 17:56				U	mg/L		-0.0003	0.0003			
WG602523													
WG602523ICV	ICV	12/06/24 13:07	MS241016-2	.05		.04604	mg/L	92	90	110			
WG602523ICB	ICB	12/06/24 13:09				U	mg/L		-0.00022	0.00022			
WG602523LFB	LFB	12/06/24 13:10	MS241106-3	.05005		.05005	mg/L	100	85	115			
WG602523CCV1	CCV	12/06/24 13:29	MS241104-4	.25025		.25369	mg/L	101	90	110			
WG602523CCB1	CCB	12/06/24 13:30				U	mg/L		-0.0003	0.0003			
WG602523CCV2	CCV	12/06/24 13:50	MS241104-4	.25025		.25769	mg/L	103	90	110			
WG602523CCB2	CCB	12/06/24 13:52				U	mg/L		-0.0003	0.0003			
L91621-03AS	AS	12/06/24 13:54	MS241106-3	.05005	U	.04794	mg/L	96	70	130			
L91621-03ASD	ASD	12/06/24 13:56	MS241106-3	.05005	U	.0472	mg/L	94	70	130	2	20	
WG602523CCV3	CCV	12/06/24 14:03	MS241104-4	.25025		.25702	mg/L	103	90	110			
WG602523CCB3	CCB	12/06/24 14:05				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L91640***

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

Lithium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2		1.96	mg/L	98	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.024	0.024			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.04004		.0445	mg/L	111	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	.1001		.105	mg/L	105	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	1.001		1.01	mg/L	101	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1		.986	mg/L	99	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.024	0.024			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1		.991	mg/L	99	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.024	0.024			
L91645-03AS	AS	12/06/24 17:53	II241114-5	1.001	.131	1.13	mg/L	100	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	1.001	.131	1.13	mg/L	100	85	115	0	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1		.984	mg/L	98	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.024	0.024			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		2.012	mg/L	101	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.024	0.024			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.04004		.0423	mg/L	106	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	.1001		.1019	mg/L	102	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	1.001		.9871	mg/L	99	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		.9951	mg/L	100	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.024	0.024			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		.9837	mg/L	98	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.024	0.024			
L91626-05AS	AS	12/06/24 20:22	II241114-5	1.001	U	.9723	mg/L	97	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	1.001	U	1.001	mg/L	100	85	115	3	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		.991	mg/L	99	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L91640***

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

Magnesium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	100		99.28	mg/L	99	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.6	0.6			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	1.0087		1.04	mg/L	103	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	202.7487		206.2	mg/L	102	1	200			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	49.9596		49.91	mg/L	100	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	50		49.39	mg/L	99	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.6	0.6			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	50		48.73	mg/L	97	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.6	0.6			
L91626-05AS	AS	12/06/24 20:22	II241114-5	49.9596	6.84	58.48	mg/L	103	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	49.9596	6.84	56.02	mg/L	98	85	115	4	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	50		48.89	mg/L	98	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.6	0.6			
WG602641													
WG602641ICV	ICV	12/09/24 13:59	II241125-1	100		99.32	mg/L	99	95	105			
WG602641ICB	ICB	12/09/24 14:05				U	mg/L		-0.6	0.6			
WG602641PQV	PQV	12/09/24 14:08	II241030-5	1.0087		.92	mg/L	91	70	130			
WG602641SIC	SIC	12/09/24 14:11	II241119-2	202.7487		202.1	mg/L	100	1	200			
WG602641LFB	LFB	12/09/24 14:18	II241114-5	49.9596		48.85	mg/L	98	85	115			
L91544-03AS	AS	12/09/24 14:34	II241114-5	49.9596	3	51.47	mg/L	97	85	115			
L91544-03ASD	ASD	12/09/24 14:37	II241114-5	49.9596	3	52.17	mg/L	98	85	115	1	20	
WG602641CCV1	CCV	12/09/24 14:50	II241204-2	50		49.42	mg/L	99	90	110			
WG602641CCB1	CCB	12/09/24 14:53				U	mg/L		-0.6	0.6			
WG602641CCV2	CCV	12/09/24 15:30	II241204-2	50		48.65	mg/L	97	90	110			
WG602641CCB2	CCB	12/09/24 15:33				U	mg/L		-0.6	0.6			
WG602641CCV3	CCV	12/09/24 15:52	II241204-2	50		50.02	mg/L	100	90	110			
WG602641CCB3	CCB	12/09/24 15:55				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L91640***

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

Manganese, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2		1.93	mg/L	97	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.03	0.03			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.0498		.05	mg/L	100	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	50.4498		48.8	mg/L	97	1	200			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	.504		.543	mg/L	108	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1		.952	mg/L	95	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.03	0.03			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1		1.02	mg/L	102	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.03	0.03			
L91645-03AS	AS	12/06/24 17:53	II241114-5	.504	1.08	1.55	mg/L	93	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	.504	1.08	1.55	mg/L	93	85	115	0	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1		1.06	mg/L	106	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.03	0.03			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		1.999	mg/L	100	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.03	0.03			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.0498		.048	mg/L	96	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	50.4498		49.38	mg/L	98	1	200			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	.504		.507	mg/L	101	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		1.006	mg/L	101	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.03	0.03			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		.993	mg/L	99	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.03	0.03			
L91626-05AS	AS	12/06/24 20:22	II241114-5	.504	U	.499	mg/L	99	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	.504	U	.506	mg/L	100	85	115	1	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		.997	mg/L	100	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.03	0.03			

Mercury, dissolved EPA 245.1

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602168													
WG602168ICV1	ICV	12/03/24 9:52	HG241017-3	.00501		.00511	mg/L	102	90	110			
WG602168ICB	ICB	12/03/24 9:53				U	mg/L		-0.0006	0.0006			
WG602171													
WG602171CCV1	CCV	12/03/24 14:49	HG241017-3	.00501		.00506	mg/L	101	90	110			
WG602171CCB1	CCB	12/03/24 14:50				U	mg/L		-0.0002	0.0002			
WG602171PQV	PQV	12/03/24 14:51	HG241118-2	.001001		.00103	mg/L	103	70	130			
WG602171LRB	LRB	12/03/24 14:52				U	mg/L		-0.00044	0.00044			
WG602171LFB	LFB	12/03/24 14:53	HG241118-3	.002002		.00195	mg/L	97	85	115			
L91640-04LFM	LFM	12/03/24 14:58	HG241118-3	.002002	U	.00165	mg/L	82	85	115			M2
L91640-04LFMD	LFMD	12/03/24 14:59	HG241118-3	.002002	U	.00158	mg/L	79	85	115	4	20	M2
WG602171CCV2	CCV	12/03/24 15:00	HG241017-3	.00501		.00502	mg/L	100	90	110			
WG602171CCB2	CCB	12/03/24 15:01				U	mg/L		-0.0002	0.0002			
WG602171CCV3	CCV	12/03/24 15:13	HG241017-3	.00501		.00489	mg/L	98	90	110			
WG602171CCB3	CCB	12/03/24 15:13				U	mg/L		-0.0002	0.0002			
WG602171CCV4	CCV	12/03/24 15:21	HG241017-3	.00501		.00496	mg/L	99	90	110			
WG602171CCB4	CCB	12/03/24 15:22				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L91640***

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

Nickel, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2.004		2	mg/L	100	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.024	0.024			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.04004		.0422	mg/L	105	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	.1001		.0973	mg/L	97	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	.5005		.51	mg/L	102	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1.002		.966	mg/L	96	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.024	0.024			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1.002		1.02	mg/L	102	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.024	0.024			
L91645-03AS	AS	12/06/24 17:53	II241114-5	.5005	U	.496	mg/L	99	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	.5005	U	.499	mg/L	100	85	115	1	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1.002		1.05	mg/L	105	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.024	0.024			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2.004		2.0328	mg/L	101	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.024	0.024			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.04004		.0449	mg/L	112	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	.1001		.0953	mg/L	95	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	.5005		.5086	mg/L	102	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1.002		1.017	mg/L	101	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.024	0.024			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1.002		1.004	mg/L	100	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.024	0.024			
L91626-05AS	AS	12/06/24 20:22	II241114-5	.5005	U	.4994	mg/L	100	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	.5005	U	.5063	mg/L	101	85	115	1	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1.002		1.012	mg/L	101	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601774													
WG601774ICV	ICV	11/21/24 23:46	WI241025-1	2.416		2.381	mg/L	99	90	110			
WG601774ICB	ICB	11/21/24 23:47				U	mg/L		-0.02	0.02			
WG601774LFB	LFB	11/21/24 23:51	WI240828-3	2		2.022	mg/L	101	90	110			
L91611-01AS	AS	11/21/24 23:53	WI240828-3	2	U	2.006	mg/L	100	90	110			
L91611-02DUP	DUP	11/21/24 23:56			U	U	mg/L				0	20	RA
WG601774CCV1	CCV	11/22/24 0:01	WI241119-5	2		1.994	mg/L	100	90	110			
WG601774CCB1	CCB	11/22/24 0:04				U	mg/L		-0.02	0.02			
WG601774CCV2	CCV	11/22/24 0:17	WI241119-5	2		1.994	mg/L	100	90	110			
WG601774CCB2	CCB	11/22/24 0:20				U	mg/L		-0.02	0.02			
WG601774CCV3	CCV	11/22/24 0:28	WI241119-5	2		2	mg/L	100	90	110			
WG601774CCB3	CCB	11/22/24 0:31				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L91640***

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

Nitrite as N EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601774													
WG601774ICV	ICV	11/21/24 23:46	WI241025-1	.608		.613	mg/L	101	90	110			
WG601774ICB	ICB	11/21/24 23:47				U	mg/L		-0.01	0.01			
WG601774LFB	LFB	11/21/24 23:51	WI240828-3	1		1.027	mg/L	103	90	110			
L91611-01AS	AS	11/21/24 23:53	WI240828-3	1	U	1.014	mg/L	101	90	110			
L91611-02DUP	DUP	11/21/24 23:56			U	U	mg/L				0	20	RA
WG601774CCV1	CCV	11/22/24 0:01	WI241119-5	1		1.015	mg/L	102	90	110			
WG601774CCB1	CCB	11/22/24 0:04				U	mg/L		-0.01	0.01			
WG601774CCV2	CCV	11/22/24 0:17	WI241119-5	1		.981	mg/L	98	90	110			
WG601774CCB2	CCB	11/22/24 0:20				U	mg/L		-0.01	0.01			
WG601774CCV3	CCV	11/22/24 0:28	WI241119-5	1		.997	mg/L	100	90	110			
WG601774CCB3	CCB	11/22/24 0:31				U	mg/L		-0.01	0.01			

Potassium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	20		19.6	mg/L	98	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-1.5	1.5			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	1.002		1.01	mg/L	101	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	1.002		1.04	mg/L	104	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	100.0859		102	mg/L	102	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	10		9.75	mg/L	98	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-1.5	1.5			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	10		10.1	mg/L	101	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-1.5	1.5			
L91645-03AS	AS	12/06/24 17:53	II241114-5	100.0859	86.1	185	mg/L	99	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	100.0859	86.1	185	mg/L	99	85	115	0	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	10		10.1	mg/L	101	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-1.5	1.5			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	20		19.71	mg/L	99	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-1.5	1.5			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	1.002		1.18	mg/L	118	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	1.002		1.13	mg/L	113	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	100.0859		98.95	mg/L	99	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	10		9.94	mg/L	99	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-1.5	1.5			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	10		9.73	mg/L	97	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-1.5	1.5			
L91626-05AS	AS	12/06/24 20:22	II241114-5	100.0859	1.09	106.1	mg/L	105	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	100.0859	1.09	100.7	mg/L	100	85	115	5	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	10		9.82	mg/L	98	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-1.5	1.5			

GCC

ACZ Project ID: ***L91640***

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

Residue, Filterable (TDS) @180C SM 2540 C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG601934													
WG601934PBW	PBW	11/25/24 13:55				U	mg/L		-20	20			
WG601934LCSW	LCSW	11/25/24 13:57	PCN627523	1000		1002	mg/L	100	80	120			
L91673-01DUP	DUP	11/25/24 14:26			U	U	mg/L				0	10	RA

Selenium, dissolved EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602165													
WG602165ICV	ICV	12/02/24 16:58	MS241016-2	.05		.04851	mg/L	97	90	110			
WG602165ICB	ICB	12/02/24 17:00				U	mg/L		-0.00022	0.00022			
WG602165LFB	LFB	12/02/24 17:01	MS241106-3	.05005		.05059	mg/L	101	85	115			
L91640-03AS	AS	12/02/24 17:14	MS241106-3	.05005	U	.05569	mg/L	111	70	130			
L91640-03ASD	ASD	12/02/24 17:16	MS241106-3	.05005	U	.05426	mg/L	108	70	130	3	20	
WG602165CCV1	CCV	12/02/24 17:20	MS241104-4	.1001		.10042	mg/L	100	90	110			
WG602165CCB1	CCB	12/02/24 17:21				U	mg/L		-0.0003	0.0003			
WG602165CCV2	CCV	12/02/24 17:42	MS241104-4	.1001		.10159	mg/L	101	90	110			
WG602165CCB2	CCB	12/02/24 17:43				U	mg/L		-0.0003	0.0003			
WG602165CCV3	CCV	12/02/24 17:54	MS241104-4	.1001		.1003	mg/L	100	90	110			
WG602165CCB3	CCB	12/02/24 17:56				U	mg/L		-0.0003	0.0003			
WG602523													
WG602523ICV	ICV	12/06/24 13:07	MS241016-2	.05		.04722	mg/L	94	90	110			
WG602523ICB	ICB	12/06/24 13:09				U	mg/L		-0.00022	0.00022			
WG602523LFB	LFB	12/06/24 13:10	MS241106-3	.05005		.05216	mg/L	104	85	115			
WG602523CCV1	CCV	12/06/24 13:29	MS241104-4	.1001		.10444	mg/L	104	90	110			
WG602523CCB1	CCB	12/06/24 13:30				.00303	mg/L		-0.0003	0.0003			BB BE CB
WG602523CCV2	CCV	12/06/24 13:50	MS241104-4	.1001		.09789	mg/L	98	90	110			
WG602523CCB2	CCB	12/06/24 13:52				.00018	mg/L		-0.0003	0.0003			
L91621-03AS	AS	12/06/24 13:54	MS241106-3	.05005	.00025	.05682	mg/L	113	70	130			
L91621-03ASD	ASD	12/06/24 13:56	MS241106-3	.05005	.00025	.05634	mg/L	112	70	130	1	20	
WG602523CCV3	CCV	12/06/24 14:03	MS241104-4	.1001		.09942	mg/L	99	90	110			
WG602523CCB3	CCB	12/06/24 14:05				.00015	mg/L		-0.0003	0.0003			
WG602524													
WG602524ICV	ICV	12/06/24 14:23	MS241016-2	.05		.04635	mg/L	93	90	110			
WG602524ICB	ICB	12/06/24 14:25				U	mg/L		-0.00022	0.00022			
WG602524LFB	LFB	12/06/24 14:27	MS241106-3	.05005		.05047	mg/L	101	85	115			
WG602524CCV1	CCV	12/06/24 14:45	MS241104-4	.1001		.10226	mg/L	102	90	110			
WG602524CCB1	CCB	12/06/24 14:47				U	mg/L		-0.0003	0.0003			
L91682-03AS	AS	12/06/24 14:49	MS241106-3	.05005	U	.0576	mg/L	115	70	130			
L91682-03ASD	ASD	12/06/24 14:50	MS241106-3	.05005	U	.05642	mg/L	113	70	130	2	20	
WG602524CCV2	CCV	12/06/24 15:07	MS241104-4	.1001		.09965	mg/L	100	90	110			
WG602524CCB2	CCB	12/06/24 15:09				U	mg/L		-0.0003	0.0003			
WG602524CCV3	CCV	12/06/24 15:19	MS241104-4	.1001		.09683	mg/L	97	90	110			
WG602524CCB3	CCB	12/06/24 15:21				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L91640***

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

Sodium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	100		98.9	mg/L	99	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.6	0.6			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	1.005		.98	mg/L	98	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	1.005		.94	mg/L	94	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	100.0817		103	mg/L	103	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	50		50.1	mg/L	100	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.6	0.6			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	50		52.7	mg/L	105	90	110			
WG602544CCB2	CCB	12/06/24 17:51				1.31	mg/L		-0.6	0.6			BB
L91645-03AS	AS	12/06/24 17:53	II241114-5	100.0817	790	861	mg/L	71	85	115			M3
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	100.0817	790	849	mg/L	59	85	115	1	20	M3
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	50		52.7	mg/L	105	90	110			
WG602544CCB3	CCB	12/06/24 18:05				1.39	mg/L		-0.6	0.6			BB
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	100		100.37	mg/L	100	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.6	0.6			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	1.005		.9	mg/L	90	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	1.005		.91	mg/L	91	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	100.0817		100.1	mg/L	100	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	50		49.99	mg/L	100	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.6	0.6			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	50		49.11	mg/L	98	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.6	0.6			
L91626-05AS	AS	12/06/24 20:22	II241114-5	100.0817	6.31	112.1	mg/L	106	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	100.0817	6.31	106.7	mg/L	100	85	115	5	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	50		49.62	mg/L	99	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L91640***

NOTE: If the Rec% column is null, the high/low 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
WG601796													
WG601796ICV	ICV	11/25/24 8:54	WI241112-3	20.02		22.1	mg/L	110	85	115			
WG601796ICB	ICB	11/25/24 8:54				U	mg/L		-2.5	2.5			
WG601796CCV1	CCV	11/25/24 9:05	WI241120-1	25		28.7	mg/L	115	85	115			
WG601796CCB1	CCB	11/25/24 9:05				U	mg/L		-2.5	2.5			
WG601796LFB	LFB	11/25/24 9:05	WI241001-1	10		11.5	mg/L	115	85	115			
WG601796CCV2	CCV	11/25/24 9:08	WI241120-1	25		27.9	mg/L	112	85	115			
WG601796CCB2	CCB	11/25/24 9:08				U	mg/L		-2.5	2.5			
WG601796CCV3	CCV	11/25/24 9:12	WI241120-1	25		28.6	mg/L	114	85	115			
WG601796CCB3	CCB	11/25/24 9:12				U	mg/L		-2.5	2.5			
WG601796CCV5	CCV	11/25/24 9:17	WI241120-1	25		27.6	mg/L	110	85	115			
WG601796CCB5	CCB	11/25/24 9:17				U	mg/L		-2.5	2.5			
WG601796CCV6	CCV	11/25/24 9:18	WI241120-1	25		27.9	mg/L	112	85	115			
WG601796CCB6	CCB	11/25/24 9:18				U	mg/L		-2.5	2.5			
WG601796CCV7	CCV	11/25/24 9:21	WI241120-1	25		27.3	mg/L	109	85	115			
WG601796CCB7	CCB	11/25/24 9:21				U	mg/L		-2.5	2.5			
WG601796CCV9	CCV	11/25/24 9:34	WI241120-1	25		28.6	mg/L	114	85	115			
WG601796CCB9	CCB	11/25/24 9:35				U	mg/L		-2.5	2.5			
WG601796CCV10	CCV	11/25/24 9:36	WI241120-1	25		28.3	mg/L	113	85	115			
WG601796CCB10	CCB	11/25/24 9:36				U	mg/L		-2.5	2.5			
WG601796CCV11	CCV	11/25/24 9:44	WI241120-1	25		28.1	mg/L	112	85	115			
WG601796CCB11	CCB	11/25/24 9:44				U	mg/L		-2.5	2.5			
L91589-05AS	AS	11/25/24 9:46	SO4TURB25X	10	250	265.6	mg/L	156	85	115			M3
L91589-05ASD	ASD	11/25/24 9:47	SO4TURB25X	10	250	263.7	mg/L	137	85	115	1	20	M3
WG601796CCV12	CCV	11/25/24 9:49	WI241120-1	25		27.5	mg/L	110	85	115			
WG601796CCB12	CCB	11/25/24 9:49				U	mg/L		-2.5	2.5			

GCC

ACZ Project ID: ***L91640***

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

Vanadium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2		1.91	mg/L	96	95	105			
WG602544ICB	ICB	12/06/24 16:57				.0064	mg/L		-0.015	0.015			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.025025		.024	mg/L	96	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	.1001		.1	mg/L	100	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	.5005		.5	mg/L	100	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1		.951	mg/L	95	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.03	0.03			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1		.953	mg/L	95	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.03	0.03			
L91645-03AS	AS	12/06/24 17:53	II241114-5	.5005	.014	.497	mg/L	97	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	.5005	.014	.497	mg/L	97	85	115	0	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1		.932	mg/L	93	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.03	0.03			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		1.959	mg/L	98	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.015	0.015			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.025025		.022	mg/L	88	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	.1001		.088	mg/L	88	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	.5005		.4906	mg/L	98	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		.982	mg/L	98	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.03	0.03			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		.97	mg/L	97	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.03	0.03			
L91626-05AS	AS	12/06/24 20:22	II241114-5	.5005	U	.5153	mg/L	103	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	.5005	U	.49	mg/L	98	85	115	5	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		.973	mg/L	97	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L91640***

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

Zinc, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG602544													
WG602544ICV	ICV	12/06/24 16:53	II241125-1	2		1.91	mg/L	96	95	105			
WG602544ICB	ICB	12/06/24 16:57				U	mg/L		-0.06	0.06			
WG602544PQV	PQV	12/06/24 16:59	II241030-5	.0502		.051	mg/L	102	70	130			
WG602544SIC	SIC	12/06/24 17:01	II241119-2	.1004		.1	mg/L	100	80	120			
WG602544LFB	LFB	12/06/24 17:05	II241114-5	.50045		.509	mg/L	102	85	115			
WG602544CCV1	CCV	12/06/24 17:25	II241204-2	1		.937	mg/L	94	90	110			
WG602544CCB1	CCB	12/06/24 17:27				U	mg/L		-0.06	0.06			
WG602544CCV2	CCV	12/06/24 17:49	II241204-2	1		.985	mg/L	99	90	110			
WG602544CCB2	CCB	12/06/24 17:51				U	mg/L		-0.06	0.06			
L91645-03AS	AS	12/06/24 17:53	II241114-5	.50045	U	.499	mg/L	100	85	115			
L91645-03ASD	ASD	12/06/24 17:55	II241114-5	.50045	U	.502	mg/L	100	85	115	1	20	
WG602544CCV3	CCV	12/06/24 18:03	II241204-2	1		1.01	mg/L	101	90	110			
WG602544CCB3	CCB	12/06/24 18:05				U	mg/L		-0.06	0.06			
WG602551													
WG602551ICV	ICV	12/06/24 18:43	II241125-1	2		2.013	mg/L	101	95	105			
WG602551ICB	ICB	12/06/24 18:49				U	mg/L		-0.06	0.06			
WG602551PQV	PQV	12/06/24 18:52	II241030-5	.0502		.049	mg/L	98	70	130			
WG602551SIC	SIC	12/06/24 18:56	II241119-2	.1004		.095	mg/L	95	80	120			
WG602551LFB	LFB	12/06/24 19:02	II241114-5	.50045		.515	mg/L	103	85	115			
WG602551CCV1	CCV	12/06/24 19:34	II241204-2	1		1.015	mg/L	102	90	110			
WG602551CCB1	CCB	12/06/24 19:37				U	mg/L		-0.06	0.06			
WG602551CCV2	CCV	12/06/24 20:12	II241204-2	1		.998	mg/L	100	90	110			
WG602551CCB2	CCB	12/06/24 20:16				U	mg/L		-0.06	0.06			
L91626-05AS	AS	12/06/24 20:22	II241114-5	.50045	U	.549	mg/L	110	85	115			
L91626-05ASD	ASD	12/06/24 20:25	II241114-5	.50045	U	.518	mg/L	104	85	115	6	20	
WG602551CCV3	CCV	12/06/24 20:35	II241204-2	1		1.004	mg/L	100	90	110			
WG602551CCB3	CCB	12/06/24 20:38				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L91640***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L91640-01	WG602544	Aluminum, dissolved	EPA 200.7	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
		Calcium, dissolved	EPA 200.7	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602009	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602641	Iron, dissolved	EPA 200.7	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602171	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601774	Nitrate/Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601934	Residue, Filterable (TDS) @180C	SM 2540 C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG602523	Selenium, dissolved	EPA 200.8	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			EPA 200.8	DB	Sample required dilution due to low bias result.
			EPA 200.8	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG602544	Sodium, dissolved	EPA 200.7	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601796	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: ***L91640***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L91640-02	WG602544	Aluminum, dissolved	EPA 200.7	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
		Calcium, dissolved	EPA 200.7	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602009	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602641	Iron, dissolved	EPA 200.7	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602171	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601774	Nitrate/Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601934	Residue, Filterable (TDS) @180C	SM 2540 C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG602544	Sodium, dissolved	EPA 200.7	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601796	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: ***L91640***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L91640-03	WG602544	Aluminum, dissolved	EPA 200.7	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
		Calcium, dissolved	EPA 200.7	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602009	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602641	Iron, dissolved	EPA 200.7	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602171	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601774	Nitrate/Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601934	Residue, Filterable (TDS) @180C	SM 2540 C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG602544	Sodium, dissolved	EPA 200.7	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			EPA 200.7	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601796	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.
L91640-04	WG602009	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602171	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601774	Nitrate/Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601934	Residue, Filterable (TDS) @180C	SM 2540 C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601796	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.

Inorganic Extended Qualifier Report

GCC Rio Grande ACZ Project ID: ***L91640***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L91640-05	WG602009	Chloride	SM 4500-Cl E-2011	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG602171	Mercury, dissolved	EPA 245.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG601774	Nitrate/Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601934	Residue, Filterable (TDS) @180C	SM 2540 C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG601796	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: ***L91640***

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: L91640
Date Received: 11/21/2024 14:59
Received By:
Date Printed: 11/22/2024

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?
NA43603	1	<=6.0	15	N/A

Was ice present in the shipment container(s)?

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

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

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

Sample Receipt

GCC Rio Grande

ACZ Project ID:	L91640
Date Received:	11/21/2024 14:59
Received By:	
Date Printed:	11/22/2024

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

ACZ LABORATORIES | Accredited Environmental Testing

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

L91640

CHAIN of CUSTODY

Report to:

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

Copy of Report to:

Name: Landon Beck	E-mail: lbeck@slrconsulting.com
Company: SLR Consulting	Telephone: (970) 459-4865

Invoice to:

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

Copy of Invoice to:

Name: Amy Veek	Address:
Company: GCC Rio Grande Inc	
E-mail: aveek@gcc.com	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: Meghan Way Sampler's Site Information State CO Zip code 81004 Time Zone MST

*Sampler's Signature:

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

PROJECT INFORMATION

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-10	11/20/2024 13:28	GW	3	✓							
MW-9	11/20/2024 14:00	GW	3	✓							
MW-18	11/20/2024 14:35	GW	3	✓							
MW-20	11/20/2024 15:57	GW	3	✓							
MW-19	11/20/2024 16:29	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
	11/20/24 17:8		11/21/24
			11:35

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

L91640 Chain of Custod