STATE OF COLORADO

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

Pueblo Cement Plant and Limestone Quarry M-2002-004 Groundwater Discharge Exceedance Notice Response

Amy Rodrigues <aveek@gcc.com> Fri, Jul 26, 2024 at 3:35 PM
To: "Carter - DNR, Jocelyn" <jocelyn.carter@state.co.us>
Cc: Amy Eschberger - DNR <amy.eschberger@state.co.us>, "Lennberg - DNR, Patrick" <patrick.lennberg@state.co.us>, landon beck <lbeck@slrconsulting.com>, Vance Sarah <svance@gcc.com>

Hi Jocelyn,

Please see attached response to the 2Q groundwater exceedances.

Thanks,

Amy

GCC

Amy Rodrigues

Environmental Manager – North Region

O: 719-647-6861

C: 928-308-8838

GCC.com

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SLR Letter - GCC Pueblo DRMS Response 2024Q2 Exceedances 26JUL2024.pdf
619K

SLR International Corporation
Durango, CO

July 26, 2024

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

RE: Notice of Groundwater Discharge Exceedance Quarter 2, 2024, Pueblo Cement and Limestone, Permit #M-2002-004

Dear Ms. Rodrigues,

This letter addresses comments from the Division of Reclamation, Mining and Safety (Division/DRMS) from Ms. Jocelyn Carter, Environmental Protection Specialist, dated July 22, 2024. For ease of review, each Division comment has been copied here in italics immediately followed by the corresponding response.

Fluoride Exceedance
The exceedances of fluoride were detected in wells MW-20 and MW-24 at 2,2300 µg/L and 2,060 µg/L, respectfully. These monitoring wells were recently installed in May of 2024 and do not have historical data to compare the reported lab results with. According to the monitoring well specifications for these wells in TR-12, approved on November 3, 2023, the wells are screening the Codell Sandstone. In the 2023 Annual Hydrology Report the Operator states that fluoride concentrations increase in groundwater where calcium concentrations are low. The report also describes a correlation to increased fluoride concentrations in groundwater with increases in bicarbonate and carbonate alkalinity in MW-14, also screening in the Codell Sandstone. Please submit the complete lab results for the samples collected on June 10, 2024, for MW-20 and MW-24 for Division review and include a narrative explaining the cause for the exceedances detected.

The lab report for the 2024Q2 monitoring results for MW-20 and MW-24 (ACZ L88256) is attached to this response. As required, all lab reports for 2024Q2 will be provided in the forthcoming 2024Q2 Quarterly Report, due to DRMS on August 1, 2024.

The nature and extent of fluoride in groundwater at the site is naturally occurring and variable in concentration. There are no known Facility operational processes that would have an effect on measured concentrations of fluoride in groundwater. Concentrations of fluoride in groundwater from two recently installed monitoring wells in the Codell Sandstone (MW-20 and MW-24) exceeded the reference standard in the initial samples collected during the 2024 second quarter monitoring period. The observed exceedances of fluoride at both locations were just above the reference standard of 2,000 µg/L (2,230 µg/L in MW-20 and 2,060 in MW-24) and will continue to be monitored in subsequent sampling events.

An initial review of fluoride and other constituent concentrations at MW-20, such as calcium, alkalinity, and TDS, appear to be similar to the overall groundwater quality observed in MW-12. As noted in the 2023 Annual Groundwater Report, concentrations of fluoride at MW-12 have stabilized below the reference standard since the second half of 2022. Because of the similar composition of groundwater at MW-20 to MW-12, it is anticipated that fluoride may decrease and or stabilize at or below the reference standard.

Groundwater quality observed in the initial sample collected from MW-24 is of similar groundwater type (sodium dominant) as MW-12 and MW-20, however, carbonate (versus bicarbonate) is the dominant form of alkalinity at MW-24. Additional sampling and analysis in future monitoring events will assist in determining the geochemical conditions affecting the solubility of fluoride in groundwater at this location.

pH Exceedance

The exceedances of pH were detected in wells MW-22 and MW-24 at 9.1 and 9.34, respectfully. According to the 2023 Annual Hydrology Report, there is no historical occurrence of pH exceedances for the Pueblo Cement Plant and Limestone Quarry since the installation and implementation of the groundwater monitoring system. Please provide an explanation of the exceedances in pH for MW-24 on June 10, 2024, and MW-22 on June 22, 2024.

The elevated pH values at MW-22 and MW-24 were recognized at the time of sampling and potential multi-meter instrument malfunction or calibration issue was considered, although the instrument made reasonable pH measurements at other adjacent monitoring events. The instrument was sent to the manufacturer for scheduled annual maintenance following completion of 2024Q2 monitoring, and no pH sensor issues were documented.

As noted in the DRMS comment above, there have not been pH exceedances documented at wells completed prior to the TR-12 monitoring well installation program. All of these prior-installed wells MW-6 through MW-14 were drilled by air rotary with no water injection. All of these boreholes were dry during drilling and upon completion, therefore all bentonite annual seal materials were placed in dry boreholes and hydrated with minimal potable water poured from surface in small batch quantities. The bentonite then cured prior to these wells becoming wetted with groundwater; the wetting at all wells was estimated to take approximately one week. Therefore, there was minimal, if any, direct groundwater contact with curing bentonite in either pellet, chip or grout form. In contrast, the TR-12 monitoring well installation program utilized sonic core drilling method with water injection. In particular, MW-24 and MW-22 were the deepest wells and were drilled 1st and 3rd in the program and as the driller was getting his familiarity with both that particular drill rig and the site subsurface conditions, he used excessive amounts of potable water injection. Given this, the boreholes were filled with water for days as the drilling advanced leading up to well construction. When annular bentonite materials were placed to construct these wells, which have relatively long annual seal lengths through the Fort Hayes limestone, they were cured in water-saturated conditions allowing increased mobility of bentonite in the short-term. As is often observed when bentonite materials are placed in contact with wetted carbonate rocks or sediments, there is cation exchange of the Ca^{2+} for Na^{+}, whereby hydrolysis of Ca^{2} results in an increase in pH. A suggested reference on this effect is: Kaufhold, S., Dohrmann, R., Koch, D. *et al.* The pH of aqueous bentonite suspensions. *Clays Clay Miner.* 56, 338–343 (2008).

Monitoring well installation and monitoring experience from similar fractured limestone and other calcareous formation aquifer sites has found that this is a temporary condition as the new well(s) establish and find equilibrium within the groundwater flow regime over months, especially in such a low-yield groundwater-bearing interval as the Codell sandstone. It is therefore expected that the pH at these wells will fall into the representative range observed at other like Codell sandstone monitoring wells in the coming monitoring events. The 2024Q3 compliance groundwater monitoring will occur in August, which will generate additional data to further evaluate this condition.

Regards,

SLR International Corporation

Landon Beck
Principal Hydrogeologist
lbeck@slrconsulting.com

Attachments: ACZ lab report L88256

CC: None

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

Analytical Report

July 09, 2024

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

cc: Landon Beck

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

Project ID:
ACZ Project ID: L88256

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 11, 2024. This project has been assigned to ACZ's project number, L88256. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L88256. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

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

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

Sue Webber has reviewed and approved this report.

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

ACZ Sample ID: ***L88256-01***
Date Sampled: *06/10/24 10:56*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Metals Analysis

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

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

ACZ Sample ID: ***L88256-01***
Date Sampled: *06/10/24 10:56*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	833			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	833		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			07/09/24 0:00	calc
Sum of Anions			45			meq/L			07/09/24 0:00	calc
Sum of Cations			42			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	146		*	mg/L	5	10	06/13/24 11:18	jqr
Fluoride	SM 4500-F C-2011	1	1.47			mg/L	0.15	0.35	06/27/24 23:57	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		68			mg/L	0.5	10	07/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	U		mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	06/12/24 0:34	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	06/12/24 0:34	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2520			mg/L	40	80	06/14/24 14:17	ptw
Sulfate	ASTM D516-07/-11/-16	50	1130		*	mg/L	50	250	06/14/24 9:51	jqr
TDS (calculated)	Calculation		2720			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.93						07/09/24 0:00	calc

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

ACZ Sample ID: ***L88256-02***
Date Sampled: *06/10/24 12:21*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Metals Analysis

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

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

ACZ Sample ID: ***L88256-02***
Date Sampled: *06/10/24 12:21*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	261			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	261		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.6			%			07/09/24 0:00	calc
Sum of Anions			9.3			meq/L			07/09/24 0:00	calc
Sum of Cations			9			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	1	26.7		*	mg/L	1	2	06/13/24 11:29	jqr
Fluoride	SM 4500-F C-2011	1	0.95			mg/L	0.15	0.35	06/28/24 0:12	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		81			mg/L	0.2	5	07/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		0.709			mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.753			mg/L	0.02	0.1	06/12/24 0:37	pjb
Nitrite as N	EPA 353.2	1	0.044	B	*	mg/L	0.01	0.05	06/12/24 0:37	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	534			mg/L	20	40	06/14/24 14:21	ptw
Sulfate	ASTM D516-07/-11/-16	5	158		*	mg/L	5	25	06/14/24 9:35	jqr
TDS (calculated)	Calculation		541			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						07/09/24 0:00	calc

GCC Rio Grande
Project ID:
Sample ID: MW-24

ACZ Sample ID: ***L88256-03***
Date Sampled: *06/10/24 13:02*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Metals Analysis

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

GCC Rio Grande
Project ID:
Sample ID: MW-24

ACZ Sample ID: ***L88256-03***
Date Sampled: *06/10/24 13:02*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO3		1	208			mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO3		1	12.9	B		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	221		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.0			%			07/09/24 0:00	calc
Sum of Anions			9.0			meq/L			07/09/24 0:00	calc
Sum of Cations			8.3			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	49.7		*	mg/L	5	10	06/13/24 11:19	jqr
Fluoride	SM 4500-F C-2011	1	2.06			mg/L	0.15	0.35	06/28/24 0:16	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		17			mg/L	0.2	5	07/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		0.033	B		mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.360			mg/L	0.02	0.1	06/12/24 0:39	pjb
Nitrite as N	EPA 353.2	1	0.327		*	mg/L	0.01	0.05	06/12/24 0:39	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	704			mg/L	40	80	06/14/24 14:25	ptw
Sulfate	ASTM D516-07/-11/-16	5	147		*	mg/L	5	25	06/14/24 9:35	jqr
TDS (calculated)	Calculation		514			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.37						07/09/24 0:00	calc

GCC Rio Grande
Project ID:
Sample ID: MW-3B

ACZ Sample ID: ***L88256-04***
Date Sampled: *06/10/24 12:00*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Metals Analysis

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

GCC Rio Grande
Project ID:
Sample ID: MW-3B

ACZ Sample ID: ***L88256-04***
Date Sampled: *06/10/24 12:00*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	838			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	838		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.3			%			07/09/24 0:00	calc
Sum of Anions			44			meq/L			07/09/24 0:00	calc
Sum of Cations			42			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	146		*	mg/L	5	10	06/13/24 11:19	jqr
Fluoride	SM 4500-F C-2011	1	1.38			mg/L	0.15	0.35	06/28/24 0:19	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		65			mg/L	0.5	10	07/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		0.039	B		mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.039	B		mg/L	0.02	0.1	06/12/24 0:40	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	06/12/24 0:40	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2480			mg/L	40	80	06/14/24 14:29	ptw
Sulfate	ASTM D516-07/-11/-16	50	1120		*	mg/L	50	250	06/14/24 9:52	jqr
TDS (calculated)	Calculation		2720			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.91						07/09/24 0:00	calc

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

ACZ Sample ID: ***L88256-05***
Date Sampled: *06/10/24 15:23*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Metals Analysis

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

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

ACZ Sample ID: ***L88256-05***
Date Sampled: *06/10/24 15:23*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	535			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	535		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/09/24 0:00	calc
Sum of Anions			23			meq/L			07/09/24 0:00	calc
Sum of Cations			23			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	123		*	mg/L	5	10	06/13/24 11:20	jqr
Fluoride	SM 4500-F C-2011	1	1.40			mg/L	0.15	0.35	06/28/24 0:23	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		55			mg/L	0.2	5	07/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		<0.02	U		mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	06/12/24 0:42	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	06/12/24 0:42	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	1290			mg/L	20	40	06/14/24 14:33	ptw
Sulfate	ASTM D516-07/-11/-16	25	393		*	mg/L	25	125	06/14/24 9:52	jqr
TDS (calculated)	Calculation		1360			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.95						07/09/24 0:00	calc

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

ACZ Sample ID: ***L88256-06***
Date Sampled: *06/10/24 16:12*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Metals Analysis

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

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

ACZ Sample ID: ***L88256-06***
Date Sampled: *06/10/24 16:12*
Date Received: *06/11/24*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM 2320 B-2011									
Bicarbonate as CaCO3		1	546			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	546		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.7			%			07/09/24 0:00	calc
Sum of Anions			36			meq/L			07/09/24 0:00	calc
Sum of Cations			38			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	20	848		*	mg/L	20	40	06/13/24 11:30	jqr
Fluoride	SM 4500-F C-2011	1	2.23			mg/L	0.15	0.35	06/28/24 0:27	jck
Hardness as CaCO3 (dissolved)	Calculation (SM 2340 B-2011)		54			mg/L	0.5	10	07/09/24 0:00	calc
Nitrate as N	Calculation (NO3NO2-NO2)		0.363			mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.380			mg/L	0.02	0.1	06/12/24 0:47	pjb
Nitrite as N	EPA 353.2	1	0.017	B	*	mg/L	0.01	0.05	06/12/24 0:47	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2230			mg/L	40	80	06/14/24 14:37	ptw
Sulfate	ASTM D516-07/-11/-16	5	77.6		*	mg/L	5	25	06/14/24 9:36	jqr
TDS (calculated)	Calculation		2120			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.05						07/09/24 0:00	calc

Report Header Explanations

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: ***L88256***

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

Alkalinity as CaCO3 SM2320B - Titration

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

Aluminum, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2		2.013	mg/L	101	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.15	0.15			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.25025		.249	mg/L	100	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	200.75025		205.4	mg/L	102	1	200			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	1.001		1.062	mg/L	106	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1		1.002	mg/L	100	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.15	0.15			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1		.985	mg/L	99	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.15	0.15			
L88256-02AS	AS	06/28/24 0:19	II240617-1	1.001	U	1.088	mg/L	109	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	1.001	U	1.092	mg/L	109	85	115	0	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1		.979	mg/L	98	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.15	0.15			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		2.06	mg/L	103	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.15	0.15			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.25025		.225	mg/L	90	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	200.75025		201	mg/L	100	1	200			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	1.001		1.04	mg/L	104	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		1.01	mg/L	101	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.15	0.15			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.03	mg/L	103	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.15	0.15			
L88288-03AS	AS	06/29/24 2:00	II240617-1	1.001	.3	1.49	mg/L	119	85	115			M1
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	1.001	.3	1.47	mg/L	117	85	115	1	20	M1
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.948	mg/L	95	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L88256***

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

Arsenic, dissolved EPA 200.8

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

Beryllium, dissolved EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		2.03	mg/L	102	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.03	0.03			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.0501		.046	mg/L	92	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	.1002		.118	mg/L	118	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	.501		.525	mg/L	105	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		1.01	mg/L	101	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.03	0.03			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.03	mg/L	103	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.03	0.03			
L88288-03AS	AS	06/29/24 2:00	II240617-1	.501	U	.47	mg/L	94	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	.501	U	.48	mg/L	96	85	115	2	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.949	mg/L	95	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.03	0.03			
WG592450													
WG592450ICV	ICV	07/08/24 21:19	II240627-5	2		1.944	mg/L	97	95	105			
WG592450ICB	ICB	07/08/24 21:25				U	mg/L		-0.03	0.03			
WG592450PQV	PQV	07/08/24 21:28	II240624-6	.0501		.052	mg/L	104	70	130			
WG592450SIC	SIC	07/08/24 21:31	11240624-2	.1002		.1	mg/L	100	80	120			
WG592450LFB	LFB	07/08/24 21:37	II240702-3	.501		.517	mg/L	103	85	115			
WG592450CCV1	CCV	07/08/24 22:07	II240628-2	1		.955	mg/L	96	90	110			
WG592450CCB1	CCB	07/08/24 22:10				U	mg/L		-0.03	0.03			
L88170-11AS	AS	07/08/24 22:26	II240702-3	.501	U	.427	mg/L	85	85	115			
L88170-11ASD	ASD	07/08/24 22:29	II240702-3	.501	U	.502	mg/L	100	85	115	16	20	
WG592450CCV2	CCV	07/08/24 22:44	II240628-2	1		.954	mg/L	95	90	110			
WG592450CCB2	CCB	07/08/24 22:47				U	mg/L		-0.03	0.03			
WG592450CCV3	CCV	07/08/24 23:05	II240628-2	1		.954	mg/L	95	90	110			
WG592450CCB3	CCB	07/08/24 23:08				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L88256***

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

Boron, dissolved EPA 200.7

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

Cadmium, dissolved EPA 200.8

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

GCC

ACZ Project ID: ***L88256***

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

Calcium, dissolved EPA 200.7

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

GCC

ACZ Project ID: ***L88256***

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

Chloride SM 4500-Cl E-2011

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

GCC

ACZ Project ID: ***L88256***

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

Chromium, dissolved EPA 200.7

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

Cobalt, dissolved EPA 200.8

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

GCC

ACZ Project ID: ***L88256***

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

Copper, dissolved EPA 200.7

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

Fluoride SM 4500-F C-2011

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

GCC

ACZ Project ID: ***L88256***

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

Iron, dissolved EPA 200.7

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

Lead, dissolved EPA 200.8

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

GCC

ACZ Project ID: ***L88256***

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

Lithium, dissolved EPA 200.7

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

GCC

ACZ Project ID: ***L88256***

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

Magnesium, dissolved EPA 200.7

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

GCC

ACZ Project ID: ***L88256***

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

Manganese, dissolved EPA 200.7

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

Mercury, dissolved EPA 245.1

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

GCC

ACZ Project ID: ***L88256***

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

Nickel, dissolved EPA 200.7

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

Nitrate/Nitrite as N EPA 353.2

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

GCC

ACZ Project ID: ***L88256***

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

Nitrite as N EPA 353.2

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

Potassium, dissolved EPA 200.7

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

GCC

ACZ Project ID: ***L88256***

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

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

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

Selenium, dissolved EPA 200.8

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

GCC

ACZ Project ID: ***L88256***

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

Sodium, dissolved EPA 200.7

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

GCC

ACZ Project ID: ***L88256***

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

Sulfate ASTM D516-07/-11/-16

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

GCC

ACZ Project ID: ***L88256***

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

Vanadium, dissolved EPA 200.7

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

GCC

ACZ Project ID: ***L88256***

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

Zinc, dissolved EPA 200.7

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

GCC Rio Grande ACZ Project ID: ***L88256***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88256-01	WG591032	Chloride	SM 4500-Cl E-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG590907	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG591139	Selenium, dissolved	EPA 200.8	DB	Sample required dilution due to low bias result.
	WG591108	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L88256-02	WG591032	Chloride	SM 4500-Cl E-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG590907	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG591108	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L88256-03	WG591032	Chloride	SM 4500-Cl E-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG590907	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG591108	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591371	Total Alkalinity	SM 2320 B-2011	B4	Target analyte detected in blank at or above the acceptance criteria.
L88256-04	WG592136	Aluminum, dissolved	EPA 200.7	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591032	Chloride	SM 4500-Cl E-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG590907	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG591139	Selenium, dissolved	EPA 200.8	DB	Sample required dilution due to low bias result.
	WG591108	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.

GCC Rio Grande ACZ Project ID: ***L88256***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88256-05	WG592136	Aluminum, dissolved	EPA 200.7	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591032	Chloride	SM 4500-Cl E-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG590907	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG591139	Selenium, dissolved	EPA 200.8	DB	Sample required dilution due to low bias result.
	WG591108	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L88256-06	WG592136	Aluminum, dissolved	EPA 200.7	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591032	Chloride	SM 4500-Cl E-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG590907	Nitrite as N	EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG591139	Selenium, dissolved	EPA 200.8	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG591108	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L88256***

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: L88256
Date Received: 06/11/2024 11:14
Received By:
Date Printed: 6/12/2024

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			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?
5067	0.5	<=6.0	15	Yes

Was ice present in the shipment container(s)?

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

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

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

Sample Receipt

GCC Rio Grande

ACZ Project ID:	L88256
Date Received:	06/11/2024 11:14
Received By:	
Date Printed:	6/12/2024

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

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487 (970) 879-6590 | L88256

CHAIN of CUSTODY

Report to:

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

Copy of Report to:

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

Invoice to:

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

Copy of Invoice to:

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

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

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

Are samples for SDWA Compliance Monitoring? Yes No ✓

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

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

*Sampler's Signature: Amy Rodrigues

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

PROJECT INFORMATION

Quote #: GW-COMPLIANCE

PO#: 258478

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COmpliance
MW-21	6/10/2024 10:56	GW	3	✓
MW-23	6/10/2024 12:21	GW	3	✓
MW-24	6/10/2024 13:02	GW	3	✓
MW-3B	6/10/2024 12:00	GW	3	✓
MW-19	6/10/2024 15:23	GW	3	✓
MW-20	6/10/2024 16:12	GW	3	✓

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

REMARKS

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

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Amy Rodrigues	6/10/2024 4:40 pm		6/11/24 1114

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

L88256 Chain of Custod