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25 June 2024

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302

RE: GCU #170

Enclosed are the results of analyses for samples received by the laboratory on 06/13/24 09:20. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

Veronica Wells
Project Manager

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C24-00019

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: TX-C24-00112

Table of Contents

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2A	2406169-01	Water	06/12/24 11:55	06/13/24 09:20	
MW #3A	2406169-02	Water	06/12/24 12:05	06/13/24 09:20	
MW #4A	2406169-03	Water	06/12/24 12:55	06/13/24 09:20	
MW #5	2406169-04	Water	06/12/24 11:00	06/13/24 09:20	
MW #6	2406169-05	Water	06/12/24 12:15	06/13/24 09:20	
MW #7	2406169-06	Water	06/12/24 11:25	06/13/24 09:20	
MW #8	2406169-07	Water	06/12/24 11:10	06/13/24 09:20	
MW #9	2406169-08	Water	06/12/24 11:35	06/13/24 09:20	

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Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

MW #2A

2406169-01 (Ground Water)
Sampled Date: 06/12/24 11:55

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**560**	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**560**	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Bromide	**1.92**	0.100	0.0274	mg/L	1	06/17/24 21:45	EPA300.0		AWG
Chloride*	**150**	1.00	0.0555	mg/L	1	06/17/24 21:45	EPA300.0		AWG
Conductivity*	**3730**	1.00		umho/cm@25 C	1	06/14/24 10:40	2510 B		AES
Fluoride*	**0.951**	0.100	0.00971	mg/L	1	06/17/24 21:45	EPA300.0		AWG
Nitrate as N*	**0.031**	0.020	0.008	mg/L	1	06/13/24 17:12	EPA300.0		AWG
Nitrate+Nitrite as N by IC	<0.0400	0.0400	0.0104	mg/L	1	06/13/24 17:12	EPA300.0		AWG
Nitrite as N*	<0.020	0.020	0.003	mg/L	1	06/13/24 17:12	EPA300.0	M5	AWG
Ortho-Phosphate as P*	<0.0500	0.0500	0.0291	mg/L	1	06/13/24 17:12	EPA300.0		AWG
pH*	**6.97**			pH Units	1	06/14/24 10:40	EPA150.1		AES
pH Temperature, degrees C	**19.9**			pH Units	1	06/14/24 10:40	EPA150.1		AES
Sulfate*	**1580**	20.0	2.48	mg/L	20	06/20/24 05:22	EPA300.0		AWG
Total Dissolved Solids*	**3090**	10.0		mg/L	1	06/18/24 16:11	EPA160.1		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**320**	0.200	0.115	mg/L	1	06/20/24 14:52	EPA200.7		AWG
Magnesium*	**99.3**	0.100	0.038	mg/L	1	06/20/24 14:52	EPA200.7		AWG
Potassium*	**3.09**	1.00	0.106	mg/L	1	06/20/24 14:52	EPA200.7		AWG
Sodium*	**567**	5.00	1.27	mg/L	5	06/21/24 12:18	EPA200.7		AWG

Green Analytical Laboratories

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

MW #3A

2406169-02 (Ground Water)
Sampled Date: 06/12/24 12:05

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**335**	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**335**	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Bromide	**0.492**	0.200	0.0548	mg/L	2	06/19/24 13:06	EPA300.0		AWG
Chloride*	**34.5**	2.00	0.111	mg/L	2	06/19/24 13:06	EPA300.0		AWG
Conductivity*	**1890**	1.00		umho/cm@25 C	1	06/14/24 10:40	2510 B		AES
Fluoride*	**0.772**	0.200	0.0194	mg/L	2	06/19/24 13:06	EPA300.0		AWG
Nitrate as N*	**6.18**	0.200	0.077	mg/L	10	06/14/24 11:12	EPA300.0		AWG
Nitrate+Nitrite as N by IC	**6.18**	0.220	0.0797	mg/L	10	06/14/24 11:12	EPA300.0		AWG
Nitrite as N*	<0.020	0.020	0.003	mg/L	1	06/13/24 18:09	EPA300.0		AWG
Ortho-Phosphate as P*	<0.0500	0.0500	0.0291	mg/L	1	06/13/24 18:09	EPA300.0		AWG
pH*	**7.16**			pH Units	1	06/14/24 10:40	EPA150.1		AES
pH Temperature, degrees C	**19.9**			pH Units	1	06/14/24 10:40	EPA150.1		AES
Sulfate*	**791**	10.0	1.24	mg/L	10	06/20/24 10:38	EPA300.0		AWG
Total Dissolved Solids*	**1610**	10.0		mg/L	1	06/18/24 16:13	EPA160.1		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**293**	0.200	0.115	mg/L	1	06/20/24 14:56	EPA200.7		AWG
Magnesium*	**37.3**	0.100	0.038	mg/L	1	06/20/24 14:56	EPA200.7		AWG
Potassium*	**5.05**	1.00	0.106	mg/L	1	06/20/24 14:56	EPA200.7		AWG
Sodium*	**107**	1.00	0.254	mg/L	1	06/20/24 14:56	EPA200.7		AWG

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Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

MW #4A

2406169-03 (Ground Water)
Sampled Date: 06/12/24 12:55

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**455**	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**455**	10.0	8.00	mg/L	5	06/25/24 12:30	2320 B		HIC
Bromide	**0.506**	0.200	0.0548	mg/L	2	06/19/24 13:46	EPA300.0		AWG
Chloride*	**36.0**	2.00	0.111	mg/L	2	06/19/24 13:46	EPA300.0		AWG
Conductivity*	**1640**	1.00		umho/cm@25 C	1	06/14/24 10:40	2510 B		AES
Fluoride*	**0.906**	0.200	0.0194	mg/L	2	06/19/24 13:46	EPA300.0		AWG
Nitrate as N*	**0.109**	0.020	0.008	mg/L	1	06/13/24 19:05	EPA300.0		AWG
Nitrate+Nitrite as N by IC	**0.109**	0.0400	0.0104	mg/L	1	06/13/24 19:05	EPA300.0		AWG
Nitrite as N*	<0.020	0.020	0.003	mg/L	1	06/13/24 19:05	EPA300.0		AWG
Ortho-Phosphate as P*	<0.0500	0.0500	0.0291	mg/L	1	06/13/24 19:05	EPA300.0		AWG
pH*	**7.12**			pH Units	1	06/14/24 10:40	EPA150.1		AES
pH Temperature, degrees C	**19.7**			pH Units	1	06/14/24 10:40	EPA150.1		AES
Sulfate*	**1180**	10.0	1.24	mg/L	10	06/20/24 05:42	EPA300.0		staff
Total Dissolved Solids*	**2200**	10.0		mg/L	1	06/18/24 16:15	EPA160.1		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**337**	0.200	0.115	mg/L	1	06/20/24 14:59	EPA200.7		AWG
Magnesium*	**61.0**	0.100	0.038	mg/L	1	06/20/24 15:00	EPA200.7		AWG
Potassium*	**11.1**	1.00	0.106	mg/L	1	06/20/24 15:00	EPA200.7		AWG
Sodium*	**171**	1.00	0.254	mg/L	1	06/20/24 14:59	EPA200.7		AWG

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Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

MW #5

2406169-04 (Ground Water)
Sampled Date: 06/12/24 11:00

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**335**	10.0	8.00	mg/L	1	06/24/24 15:45	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	1	06/24/24 15:45	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	1	06/24/24 15:45	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**335**	10.0	8.00	mg/L	1	06/24/24 15:45	2320 B		HIC
Bromide	<0.200	0.200	0.0548	mg/L	2	06/19/24 14:26	EPA300.0		AWG
Chloride*	**17.3**	2.00	0.111	mg/L	2	06/19/24 14:26	EPA300.0		AWG
Conductivity*	**1760**	1.00		umho/cm@25 C	1	06/14/24 10:40	2510 B		AES
Fluoride*	**0.440**	0.200	0.0194	mg/L	2	06/19/24 14:26	EPA300.0		AWG
Nitrate as N*	**5.24**	0.200	0.077	mg/L	10	06/14/24 09:38	EPA300.0		AWG
Nitrate+Nitrite as N by IC	**5.24**	0.220	0.0797	mg/L	10	06/14/24 09:38	EPA300.0		AWG
Nitrite as N*	<0.020	0.020	0.003	mg/L	1	06/13/24 19:24	EPA300.0		AWG
Ortho-Phosphate as P*	<0.0500	0.0500	0.0291	mg/L	1	06/13/24 19:24	EPA300.0		AWG
pH*	**7.21**			pH Units	1	06/14/24 10:40	EPA150.1		AES
pH Temperature, degrees C	**19.7**			pH Units	1	06/14/24 10:40	EPA150.1		AES
Sulfate*	**822**	5.00	0.620	mg/L	5	06/19/24 15:26	EPA300.0		AWG
Total Dissolved Solids*	**1540**	10.0		mg/L	1	06/18/24 16:17	EPA160.1		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**316**	0.200	0.115	mg/L	1	06/20/24 15:03	EPA200.7		AWG
Magnesium*	**38.4**	0.100	0.038	mg/L	1	06/20/24 15:03	EPA200.7		AWG
Potassium*	**17.9**	1.00	0.106	mg/L	1	06/20/24 15:03	EPA200.7		AWG
Sodium*	**86.8**	1.00	0.254	mg/L	1	06/20/24 15:03	EPA200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

MW #6

2406169-05 (Ground Water)
Sampled Date: 06/12/24 12:15

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**465**	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**465**	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Bromide	<0.100	0.100	0.0274	mg/L	1	06/19/24 15:45	EPA300.0		AWG
Chloride*	**8.38**	1.00	0.0555	mg/L	1	06/19/24 15:45	EPA300.0		AWG
Conductivity*	**934**	1.00		umho/cm@25 C	1	06/14/24 10:40	2510 B		AES
Fluoride*	**0.562**	0.100	0.00971	mg/L	1	06/19/24 15:45	EPA300.0		AWG
Nitrate as N*	**0.205**	0.020	0.008	mg/L	1	06/13/24 19:43	EPA300.0		AWG
Nitrate+Nitrite as N by IC	**0.205**	0.0400	0.0104	mg/L	1	06/13/24 19:43	EPA300.0		AWG
Nitrite as N*	<0.020	0.020	0.003	mg/L	1	06/13/24 19:43	EPA300.0		AWG
Ortho-Phosphate as P*	<0.0500	0.0500	0.0291	mg/L	1	06/13/24 19:43	EPA300.0		AWG
pH*	**7.11**			pH Units	1	06/14/24 10:40	EPA150.1		AES
pH Temperature, degrees C	**19.9**			pH Units	1	06/14/24 10:40	EPA150.1		AES
Sulfate*	**121**	1.00	0.124	mg/L	1	06/19/24 15:45	EPA300.0		AWG
Total Dissolved Solids*	**635**	10.0		mg/L	1	06/18/24 16:19	EPA160.1		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**157**	0.200	0.115	mg/L	1	06/20/24 15:07	EPA200.7		AWG
Magnesium*	**17.0**	0.100	0.038	mg/L	1	06/20/24 15:07	EPA200.7		AWG
Potassium*	**2.39**	1.00	0.106	mg/L	1	06/20/24 15:07	EPA200.7		AWG
Sodium*	**39.0**	1.00	0.254	mg/L	1	06/20/24 15:07	EPA200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

MW #7

2406169-06 (Ground Water)
Sampled Date: 06/12/24 11:25

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**380**	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**380**	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Bromide	**0.324**	0.200	0.0548	mg/L	2	06/19/24 16:05	EPA300.0		AWG
Chloride*	**18.0**	2.00	0.111	mg/L	2	06/19/24 16:05	EPA300.0		AWG
Conductivity*	**1300**	1.00		umho/cm@25 C	1	06/14/24 10:40	2510 B		AES
Fluoride*	**0.660**	0.200	0.0194	mg/L	2	06/19/24 16:05	EPA300.0		AWG
Nitrate as N*	**0.362**	0.020	0.008	mg/L	1	06/13/24 20:02	EPA300.0		AWG
Nitrate+Nitrite as N by IC	**0.362**	0.0400	0.0104	mg/L	1	06/13/24 20:02	EPA300.0		AWG
Nitrite as N*	<0.020	0.020	0.003	mg/L	1	06/13/24 20:02	EPA300.0		AWG
Ortho-Phosphate as P*	<0.0500	0.0500	0.0291	mg/L	1	06/13/24 20:02	EPA300.0		AWG
pH*	**7.14**			pH Units	1	06/14/24 10:40	EPA150.1		AES
pH Temperature, degrees C	**19.8**			pH Units	1	06/14/24 10:40	EPA150.1		AES
Sulfate*	**421**	10.0	1.24	mg/L	10	06/20/24 10:57	EPA300.0		AWG
Total Dissolved Solids*	**1010**	10.0		mg/L	1	06/18/24 16:21	EPA160.1		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**223**	0.200	0.115	mg/L	1	06/20/24 15:09	EPA200.7		AWG
Magnesium*	**26.4**	0.100	0.038	mg/L	1	06/20/24 15:09	EPA200.7		AWG
Potassium*	**3.02**	1.00	0.106	mg/L	1	06/20/24 15:09	EPA200.7		AWG
Sodium*	**86.6**	1.00	0.254	mg/L	1	06/20/24 15:09	EPA200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

MW #8

2406169-07 (Ground Water)
Sampled Date: 06/12/24 11:10

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**230**	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**230**	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Bromide	<0.200	0.200	0.0548	mg/L	2	06/19/24 16:25	EPA300.0		AWG
Chloride*	**8.38**	2.00	0.111	mg/L	2	06/19/24 16:25	EPA300.0		AWG
Conductivity*	**1980**	1.00		umho/cm@25 C	1	06/14/24 10:40	2510 B		AES
Fluoride*	**0.658**	0.200	0.0194	mg/L	2	06/19/24 16:25	EPA300.0		AWG
Nitrate as N*	**2.28**	0.200	0.077	mg/L	10	06/14/24 09:57	EPA300.0		AWG
Nitrate+Nitrite as N by IC	**2.28**	0.220	0.0797	mg/L	10	06/14/24 09:57	EPA300.0		AWG
Nitrite as N*	<0.020	0.020	0.003	mg/L	1	06/13/24 20:21	EPA300.0		AWG
Ortho-Phosphate as P*	<0.0500	0.0500	0.0291	mg/L	1	06/13/24 20:21	EPA300.0		AWG
pH*	**7.16**			pH Units	1	06/14/24 10:40	EPA150.1		AES
pH Temperature, degrees C	**20.5**			pH Units	1	06/14/24 10:40	EPA150.1		AES
Sulfate*	**1030**	10.0	1.24	mg/L	10	06/20/24 11:17	EPA300.0		AWG
Total Dissolved Solids*	**1740**	10.0		mg/L	1	06/18/24 16:23	EPA160.1		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**371**	0.200	0.115	mg/L	1	06/20/24 15:13	EPA200.7		AWG
Magnesium*	**34.7**	0.100	0.038	mg/L	1	06/20/24 15:13	EPA200.7		AWG
Potassium*	**6.36**	1.00	0.106	mg/L	1	06/20/24 15:13	EPA200.7		AWG
Sodium*	**102**	1.00	0.254	mg/L	1	06/20/24 15:13	EPA200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

MW #9

2406169-08 (Ground Water)
Sampled Date: 06/12/24 11:35

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**410**	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**410**	10.0	8.00	mg/L	5	06/24/24 15:45	2320 B		HIC
Bromide	<0.200	0.200	0.0548	mg/L	2	06/19/24 17:05	EPA300.0		AWG
Chloride*	**16.3**	2.00	0.111	mg/L	2	06/19/24 17:05	EPA300.0		AWG
Conductivity*	**1110**	1.00		umho/cm@25 C	1	06/14/24 10:40	2510 B		AES
Fluoride*	**0.512**	0.200	0.0194	mg/L	2	06/19/24 17:05	EPA300.0		AWG
Nitrate as N*	**0.263**	0.020	0.008	mg/L	1	06/13/24 20:40	EPA300.0		AWG
Nitrate+Nitrite as N by IC	**0.262**	0.0400	0.0104	mg/L	1	06/13/24 20:40	EPA300.0		AWG
Nitrite as N*	<0.020	0.020	0.003	mg/L	1	06/13/24 20:40	EPA300.0		AWG
Ortho-Phosphate as P*	<0.0500	0.0500	0.0291	mg/L	1	06/13/24 20:40	EPA300.0		AWG
pH*	**7.31**			pH Units	1	06/14/24 10:40	EPA150.1		AES
pH Temperature, degrees C	**20.9**			pH Units	1	06/14/24 10:40	EPA150.1		AES
Sulfate*	**248**	2.00	0.248	mg/L	2	06/19/24 17:05	EPA300.0		AWG
Total Dissolved Solids*	**785**	10.0		mg/L	1	06/18/24 16:25	EPA160.1		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**171**	0.200	0.115	mg/L	1	06/20/24 15:17	EPA200.7		AWG
Magnesium*	**21.6**	0.100	0.038	mg/L	1	06/20/24 15:17	EPA200.7		AWG
Potassium*	**5.32**	1.00	0.106	mg/L	1	06/20/24 15:17	EPA200.7		AWG
Sodium*	**74.9**	1.00	0.254	mg/L	1	06/20/24 15:17	EPA200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Green Analytical Laboratories

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B241638 - IC- Ion Chromatograph										
Blank (B241638-BLK1)			Prepared & Analyzed: 06/13/24							
Nitrate as N	ND	0.020	mg/L							
Nitrite as N	ND	0.020	mg/L							
Ortho-Phosphate as P	ND	0.0500	mg/L							
LCS (B241638-BS1)			Prepared & Analyzed: 06/13/24							
Nitrate as N	1.01	0.020	mg/L	1.00		101	90-110			
Nitrite as N	0.952	0.020	mg/L	1.00		95.2	90-110			
Ortho-Phosphate as P	0.988	0.0500	mg/L	1.00		98.8	90-110			
LCS Dup (B241638-BSD1)			Prepared & Analyzed: 06/13/24							
Nitrate as N	1.01	0.020	mg/L	1.00		101	90-110	0.743	20	
Nitrite as N	0.947	0.020	mg/L	1.00		94.7	90-110	0.474	20	
Ortho-Phosphate as P	0.989	0.0500	mg/L	1.00		98.9	90-110	0.111	20	
Batch B241658 - IC- Ion Chromatograph										
Blank (B241658-BLK1)			Prepared & Analyzed: 06/17/24							
Bromide	ND	0.100	mg/L							
Chloride	ND	1.00	mg/L							
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							
LCS (B241658-BS1)			Prepared & Analyzed: 06/17/24							
Bromide	2.47	0.100	mg/L	2.50		99.0	90-110			
Chloride	25.2	1.00	mg/L	25.0		101	90-110			
Fluoride	2.61	0.100	mg/L	2.50		104	90-110			
Sulfate	25.1	1.00	mg/L	25.0		100	90-110			
LCS Dup (B241658-BSD1)			Prepared & Analyzed: 06/17/24							
Bromide	2.46	0.100	mg/L	2.50		98.3	90-110	0.649	20	
Chloride	25.0	1.00	mg/L	25.0		100	90-110	0.638	20	
Fluoride	2.59	0.100	mg/L	2.50		103	90-110	0.809	20	
Sulfate	24.8	1.00	mg/L	25.0		99.2	90-110	1.03	20	
Batch B241670 - General Prep - Wet Chem										
Reference (B241670-SRM1)			Prepared & Analyzed: 06/14/24							
pH	7.00		pH Units	7.00		100	98.57-101.42			
Batch B241673 - General Prep - Wet Chem										

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

General Chemistry - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Reference (B241673-SRM1)			Prepared & Analyzed: 06/17/24							
Conductivity	943	1.00	umho/cm@25C	1000		94.3	90-110			
Batch B241689 - General Prep - Wet Chem										
Blank (B241689-BLK1)			Prepared: 06/17/24 Analyzed: 06/18/24							
Total Dissolved Solids	ND	10.0	mg/L							
Reference (B241689-SRM1)			Prepared: 06/17/24 Analyzed: 06/18/24							
Total Dissolved Solids	370	10.0	mg/L	400		92.5	85-115			
Batch B241706 - IC- Ion Chromatograph										
Blank (B241706-BLK1)			Prepared: 06/18/24 Analyzed: 06/19/24							
Bromide	ND	0.100	mg/L							
Chloride	ND	1.00	mg/L							
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							
LCS (B241706-BS1)			Prepared: 06/18/24 Analyzed: 06/19/24							
Bromide	2.39	0.100	mg/L	2.50		95.5	90-110			
Chloride	24.8	1.00	mg/L	25.0		99.2	90-110			
Fluoride	2.56	0.100	mg/L	2.50		102	90-110			
Sulfate	24.6	1.00	mg/L	25.0		98.5	90-110			
LCS Dup (B241706-BSD1)			Prepared: 06/18/24 Analyzed: 06/19/24							
Bromide	2.40	0.100	mg/L	2.50		95.9	90-110	0.376	20	
Chloride	24.8	1.00	mg/L	25.0		99.1	90-110	0.161	20	
Fluoride	2.56	0.100	mg/L	2.50		102	90-110	0.0391	20	
Sulfate	24.6	1.00	mg/L	25.0		98.4	90-110	0.134	20	
Batch B241775 - General Prep - Wet Chem										
Blank (B241775-BLK1)			Prepared & Analyzed: 06/24/24							
Alkalinity, Bicarbonate as CaCO3	ND	10.0	mg/L							
Alkalinity, Carbonate as CaCO3	ND	10.0	mg/L							
Alkalinity, Hydroxide as CaCO3	ND	10.0	mg/L							
Alkalinity, Total as CaCO3	ND	10.0	mg/L							
LCS (B241775-BS1)			Prepared & Analyzed: 06/24/24							
Alkalinity, Total as CaCO3	106	10.0	mg/L	100		106	85-115			
LCS Dup (B241775-BSD1)			Prepared & Analyzed: 06/24/24							
Alkalinity, Total as CaCO3	106	10.0	mg/L	100		106	85-115	0.00	20	

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

General Chemistry - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B241775 - General Prep - Wet Chem (Continued)										
Reference (B241775-SRM1)				Prepared & Analyzed: 06/24/24						
Alkalinity, Total as CaCO3	103	10.0	mg/L	100		103	85-115			
Batch B241776 - General Prep - Wet Chem										
Blank (B241776-BLK1)				Prepared: 06/24/24 Analyzed: 06/25/24						
Alkalinity, Bicarbonate as CaCO3	ND	10.0	mg/L							
Alkalinity, Carbonate as CaCO3	ND	10.0	mg/L							
Alkalinity, Hydroxide as CaCO3	ND	10.0	mg/L							
Alkalinity, Total as CaCO3	ND	10.0	mg/L							
LCS (B241776-BS1)				Prepared: 06/24/24 Analyzed: 06/25/24						
Alkalinity, Total as CaCO3	103	10.0	mg/L	100		103	85-115			
LCS Dup (B241776-BSD1)				Prepared: 06/24/24 Analyzed: 06/25/24						
Alkalinity, Total as CaCO3	106	10.0	mg/L	100		106	85-115	2.87	20	
Reference (B241776-SRM1)				Prepared: 06/24/24 Analyzed: 06/25/24						
Alkalinity, Total as CaCO3	109	10.0	mg/L	100		109	85-115			

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/25/24 16:51

Total Recoverable Metals by ICP (E200.7) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B241663 - Total Recoverable by ICP										
Blank (B241663-BLK1)				Prepared: 06/17/24 Analyzed: 06/20/24						
Calcium	ND	0.200	mg/L							
Magnesium	ND	0.100	mg/L							
Potassium	ND	1.00	mg/L							
Sodium	ND	1.00	mg/L							
LCS (B241663-BS1)				Prepared: 06/17/24 Analyzed: 06/20/24						
Calcium	1.94	0.200	mg/L	2.00		97.1	85-115			
Magnesium	10.0	0.100	mg/L	10.0		100	85-115			
Potassium	4.09	1.00	mg/L	4.00		102	85-115			
Sodium	1.51	1.00	mg/L	1.62		93.1	85-115			
LCS Dup (B241663-BSD1)				Prepared: 06/17/24 Analyzed: 06/20/24						
Calcium	1.98	0.200	mg/L	2.00		98.8	85-115	1.68	20	
Magnesium	10.2	0.100	mg/L	10.0		102	85-115	1.42	20	
Potassium	4.11	1.00	mg/L	4.00		103	85-115	0.594	20	
Sodium	1.53	1.00	mg/L	1.62		94.2	85-115	1.20	20	

Notes and Definitions

M5	Sample was chosen for matrix spike. Spike recovery did not meet laboratory acceptance criteria, possible matrix interference in sample.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
	*Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project:	Anions, ICP Metals,Wet Chem
PO Box 1653	Project Name / Number:	GCU #170
Durango CO, 81302	Project Manager:	Kyle Siesser

Reported:
06/25/24 16:51

Qualifier Summary

LabNumber	Analysis	Analyte	Qualifier	TextBody
2406169-01	Nitrite [IC]	Nitrite as N	M5	Sample was chosen for matrix spike. Spike recovery did not meet laboratory acceptance criteria, possible matrix interference in sample.

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

GREEN Analytical Laboratories
75 Suttle Street
Durango, CO 81303
(970) 247-4220

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

FORM-006, R 8.0

Note: Wite-Out™ or similar products cannot be used on the Chain of Custody

Company or Client: Cottonwood Consulting LLC

Address: PO Box 1653

City: Durango **State:** CO **Zip:** 81302

Phone #: 970-764-7356

Contact Person: Kyle Siesser

Email Report to: ksiesser@cottonwoodconsulting.com

Project Name(optional): GCU #170

Sampler Name (Print): Kelsey O'Brien

Bill to (if different):

P.O. #:

Rush? Y ☐ N ☐ TAT Needed?

ANALYSIS REQUEST

Lab I.D. (Lab Use Only)	Sample Name or Location	Collected Date	Collected Time	Matrix: GROUNDWATER	SURFACE WATER	WASTEWATER	PRODUCED WATER	DRINKING WATER	SOIL	OTHER:	# of containers: No preservation	Nitric Acid	Hydrochloric Acid	Sulfuric Acid	Sodium Hydroxide	OTHER:	See Attached List
2406-169																	
01	1) MW #2A	6/12/24	1155	X							2	1					✓
02	2) MW #3A	6/12/24	1205	X							2	1					|
03	3) MW #4A	6/12/24	1255	X							2	1					|
04	4) MW #5	6/12/24	1100	X							2	1					|
05	5) MW #6	6/12/24	1215	X							2	1					|
06	6) MW #7	6/12/24	1125	X							2	1					|
07	7) MW #8	6/12/24	1110	X							2	1					|
08	8) MW #9	6/12/24	1135	X							2	1					✓
	9)																
	10)																

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
[signature]	6/12/24	1700	[signature]		
[signature]	6/12/24	0915	[signature]	6.13.24	0920
			[signature]		

ADDITIONAL REMARKS:

Temperature at receipt:	Checked by:	On Ice?	Therm. used:
4.9 °C	MRW	(Y) N	Laser 2

† GAL cannot accept verbal changes. Please email changes to receiving@greenanalytical.com

* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.

Page 1 of 1

Project Information

Cottonwood Consulting
PO Box 1653
Durango, CO 81302
Laboratory PM: Veronica Wells

od Consulting
Phone: (970) 946-3761
Fax: -

Project Name: Anions, ICP Metals,Wet Chem
Project Number:
Client PM: Kyle Siesser
Comments:

Analysis	Comment
200.2 Metals Digest	
Alkalinity, Total	
Bromide [IC]	
Calcium 200.2 by ICP	
Chloride [IC]	
Conductivity	
Fluoride [IC]	
Magnesium 200.2 by ICP	
Nitrate/Nitrite by IC Package	
Orthophosphate [IC]	
pH	
Potassium 200.2 by ICP	
Sodium 200.2 by ICP	
Sulfate [IC]	
Total Dissolved Solids [TDS]	

Nitrate/Nitrite by IC Package subanalyses:

Nitrate [IC]
Nitrite [IC]

GAL Analytical Laboratories

SAMPLE CONDITION RECEIPT FORM

Client Name: Cottonwood Consulting **Work Order #** 2406-169

Courier: ☐Fed Ex ☐UPS ☐USPS ☑Client ☐ Kangaroo ☐ Third Party ☐Other

Custody Seals on Box/Cooler Present: ☐ Yes ☑ No Seals Intact: ☐ Yes ☐ No

Thermometer Used: #2 Samples on ice, cooling process has begun: ☑ Yes ☐ No

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: Observed Temp: 4.9 °C Correction Factor: 0 °C Final Temp: 4.9 °C

* *Temp should be above freezing to 6°C*

Date/Initials of person examining contents: 6.13.24 CDW

Labeled by initials: _____
(if different than above)

Chain of Custody Present:	☑Yes ☐No	1.
Chain of Custody Filled Out:	☑Yes ☐No	2.
Chain of Custody Relinquished:	☑Yes ☐No	3.
Sampler Name and Signature on COC:	☑Yes ☐No	4.
Samples arrived within hold time:	☑Yes ☐No	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No	6. pH, NOX, OPO4
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume:	☑Yes ☐No	8.
Correct Containers Used:	☑Yes ☐No	9.
Containers Intact:	☑Yes ☐No	10.
Dissolved Testing Needed: Field Filtered: ☐Yes ☐No	☐Yes ☑No	11.
Sample Labels match COC: -Includes Date/Time/ID	☑Yes ☐No	12.
Matrix:	WT SL OT	
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present:	☐Yes ☐No ☑N/A	

Client Notification/Resolution:

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
jeremy.allen@greenanalytical.com

27 December 2024

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302

RE: GCU #170

Enclosed are the results of analyses for samples received by the laboratory on 12/10/24 16:55. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

Veronica Wells
Project Manager

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C24-00019

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: TX-C24-00112

Table of Contents

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2A	2412100-01	Water	12/10/24 12:00	12/10/24 16:55	
MW #3A	2412100-02	Water	12/10/24 12:15	12/10/24 16:55	
MW #4A	2412100-03	Water	12/10/24 11:50	12/10/24 16:55	
MW #5	2412100-04	Water	12/10/24 12:20	12/10/24 16:55	
MW #6	2412100-05	Water	12/10/24 11:45	12/10/24 16:55	
MW #7	2412100-06	Water	12/10/24 12:05	12/10/24 16:55	
MW #8	2412100-07	Water	12/10/24 12:25	12/10/24 16:55	
MW #9	2412100-08	Water	12/10/24 12:10	12/10/24 16:55	

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Green Analytical Laboratories

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

MW #2A

2412100-01 (Ground Water)
Sampled Date: 12/10/24 12:00
Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**575**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**575**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Bromide	**1.00**	0.200	0.0548	mg/L	2	12/17/24 18:00	EPA 300.0		AWG
Chloride*	**76.5**	2.00	0.994	mg/L	2	12/17/24 18:00	EPA 300.0		AWG
Conductivity*	**2920**	1.00		umho/cm@25 C	1	12/11/24 09:25	2510 B		HIC
Fluoride*	**0.764**	0.200	0.0673	mg/L	2	12/17/24 18:00	EPA 300.0		AWG
Nitrate as N*	**1.85**	0.100	0.039	mg/L	5	12/11/24 12:35	EPA 300.0		AWG
Nitrate+Nitrite as N by IC	**1.85**	0.200	0.0519	mg/L	5	12/11/24 12:35	EPA 300.0		AWG
Nitrite as N*	<0.100	0.100	0.013	mg/L	5	12/11/24 12:35	EPA 300.0		AWG
Ortho-Phosphate as P*	<0.250	0.250	0.146	mg/L	5	12/11/24 12:35	EPA 300.0		AWG
pH*	**6.93**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
pH Temperature, degrees C	**18.1**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
Sulfate*	**1150**	10.0	5.63	mg/L	10	12/18/24 14:24	EPA 300.0		AWG
Total Dissolved Solids*	**2300**	10.0		mg/L	1	12/16/24 14:55	EPA 160.1/SM 2540C		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**361**	1.00	0.575	mg/L	5	12/18/24 16:02	EPA 200.7		AWG
Magnesium*	**71.8**	0.500	0.192	mg/L	5	12/18/24 16:02	EPA 200.7		AWG
Potassium*	<5.00	5.00	0.530	mg/L	5	12/18/24 16:02	EPA 200.7		AWG
Sodium*	**344**	5.00	1.27	mg/L	5	12/18/24 16:02	EPA 200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Green Analytical Laboratories

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

MW #3A

2412100-02 (Ground Water)
Sampled Date: 12/10/24 12:15
Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**350**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**350**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Bromide	**0.734**	0.200	0.0548	mg/L	2	12/17/24 19:22	EPA 300.0		AWG
Chloride*	**51.2**	2.00	0.994	mg/L	2	12/17/24 19:22	EPA 300.0		AWG
Conductivity*	**2320**	1.00		umho/cm@25 C	1	12/11/24 09:25	2510 B		HIC
Fluoride*	**0.858**	0.200	0.0673	mg/L	2	12/17/24 19:22	EPA 300.0		AWG
Nitrate as N*	**7.48**	0.100	0.039	mg/L	5	12/11/24 12:54	EPA 300.0		AWG
Nitrate+Nitrite as N by IC	**7.48**	0.200	0.0519	mg/L	5	12/11/24 12:54	EPA 300.0		AWG
Nitrite as N*	<0.100	0.100	0.013	mg/L	5	12/11/24 12:54	EPA 300.0		AWG
Ortho-Phosphate as P*	<0.250	0.250	0.146	mg/L	5	12/11/24 12:54	EPA 300.0		AWG
pH*	**7.05**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
pH Temperature, degrees C	**17.4**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
Sulfate*	**984**	10.0	5.63	mg/L	10	12/18/24 14:45	EPA 300.0		AWG
Total Dissolved Solids*	**1870**	10.0		mg/L	1	12/16/24 14:57	EPA 160.1/SM 2540C		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**364**	1.00	0.575	mg/L	5	12/18/24 16:11	EPA 200.7		AWG
Magnesium*	**49.9**	0.500	0.192	mg/L	5	12/18/24 16:11	EPA 200.7		AWG
Potassium*	<5.00	5.00	0.530	mg/L	5	12/18/24 16:11	EPA 200.7		AWG
Sodium*	**183**	5.00	1.27	mg/L	5	12/18/24 16:11	EPA 200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Green Analytical Laboratories

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

MW #4A

2412100-03 (Ground Water)
Sampled Date: 12/10/24 11:50
Sampled By:

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**655**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**655**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Bromide	**2.70**	0.500	0.137	mg/L	5	12/17/24 20:03	EPA 300.0		AWG
Chloride*	**213**	5.00	2.49	mg/L	5	12/17/24 20:03	EPA 300.0		AWG
Conductivity*	**4550**	1.00		umho/cm@25 C	1	12/11/24 09:25	2510 B		HIC
Fluoride*	**1.50**	0.500	0.168	mg/L	5	12/17/24 20:03	EPA 300.0		AWG
Nitrate as N*	**0.795**	0.100	0.039	mg/L	5	12/11/24 13:13	EPA 300.0		AWG
Nitrate+Nitrite as N by IC	**0.795**	0.200	0.0519	mg/L	5	12/11/24 13:13	EPA 300.0		AWG
Nitrite as N*	<0.100	0.100	0.013	mg/L	5	12/11/24 13:13	EPA 300.0		AWG
Ortho-Phosphate as P*	<0.250	0.250	0.146	mg/L	5	12/11/24 13:13	EPA 300.0		AWG
pH*	**7.13**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
pH Temperature, degrees C	**17.4**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
Sulfate*	**1620**	20.0	11.3	mg/L	20	12/17/24 20:23	EPA 300.0		AWG
Total Dissolved Solids*	**3270**	10.0		mg/L	1	12/16/24 14:59	EPA 160.1/SM 2540C		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**613**	1.00	0.575	mg/L	5	12/18/24 16:24	EPA 200.7		AWG
Magnesium*	**184**	1.00	0.383	mg/L	10	12/20/24 11:34	EPA 200.7		AWG
Potassium*	**19.3**	5.00	0.530	mg/L	5	12/18/24 16:24	EPA 200.7		AWG
Sodium*	**693**	5.00	1.27	mg/L	5	12/18/24 16:24	EPA 200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Green Analytical Laboratories

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

MW #5

2412100-04 (Ground Water)
Sampled Date: 12/10/24 12:20
Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**460**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**460**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Bromide	**0.282**	0.200	0.0548	mg/L	2	12/17/24 20:44	EPA 300.0		AWG
Chloride*	**19.1**	2.00	0.994	mg/L	2	12/17/24 20:44	EPA 300.0		AWG
Conductivity*	**2230**	1.00		umho/cm@25 C	1	12/11/24 09:25	2510 B		HIC
Fluoride*	**0.482**	0.200	0.0673	mg/L	2	12/17/24 20:44	EPA 300.0		AWG
Nitrate as N*	**2.90**	0.100	0.039	mg/L	5	12/11/24 13:32	EPA 300.0		AWG
Nitrate+Nitrite as N by IC	**2.90**	0.200	0.0519	mg/L	5	12/11/24 13:32	EPA 300.0		AWG
Nitrite as N*	<0.100	0.100	0.013	mg/L	5	12/11/24 13:32	EPA 300.0		AWG
Ortho-Phosphate as P*	<0.250	0.250	0.146	mg/L	5	12/11/24 13:32	EPA 300.0		AWG
pH*	**6.94**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
pH Temperature, degrees C	**17.9**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
Sulfate*	**1070**	10.0	5.63	mg/L	10	12/18/24 15:05	EPA 300.0		AWG
Total Dissolved Solids*	**2070**	10.0		mg/L	1	12/16/24 15:01	EPA 160.1/SM 2540C		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**387**	1.00	0.575	mg/L	5	12/18/24 16:28	EPA 200.7		AWG
Magnesium*	**96.9**	1.00	0.383	mg/L	10	12/20/24 11:38	EPA 200.7		AWG
Potassium*	**18.6**	5.00	0.530	mg/L	5	12/18/24 16:28	EPA 200.7		AWG
Sodium*	**233**	5.00	1.27	mg/L	5	12/18/24 16:28	EPA 200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

MW #6

2412100-05 (Ground Water)
Sampled Date: 12/10/24 11:45
Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**690**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**690**	10.0	8.00	mg/L	5	12/13/24 12:00	2320 B		HIC
Bromide	<0.200	0.200	0.0548	mg/L	2	12/17/24 21:24	EPA 300.0		AWG
Chloride*	**6.12**	2.00	0.994	mg/L	2	12/17/24 21:24	EPA 300.0		AWG
Conductivity*	**1310**	1.00		umho/cm@25 C	1	12/11/24 09:25	2510 B		HIC
Fluoride*	**0.538**	0.200	0.0673	mg/L	2	12/17/24 21:24	EPA 300.0		AWG
Nitrate as N*	<0.020	0.020	0.008	mg/L	1	12/11/24 13:51	EPA 300.0		AWG
Nitrate+Nitrite as N by IC	<0.0400	0.0400	0.0104	mg/L	1	12/11/24 13:51	EPA 300.0		AWG
Nitrite as N*	<0.020	0.020	0.003	mg/L	1	12/11/24 13:51	EPA 300.0		AWG
Ortho-Phosphate as P*	<0.0500	0.0500	0.0291	mg/L	1	12/11/24 13:51	EPA 300.0		AWG
pH*	**6.97**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
pH Temperature, degrees C	**17.3**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
Sulfate*	**142**	2.00	1.13	mg/L	2	12/17/24 21:24	EPA 300.0		AWG
Total Dissolved Solids*	**875**	10.0		mg/L	1	12/16/24 15:03	EPA 160.1/SM 2540C		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**280**	0.200	0.115	mg/L	1	12/18/24 16:32	EPA 200.7		AWG
Magnesium*	**66.6**	0.500	0.192	mg/L	5	12/20/24 11:46	EPA 200.7		AWG
Potassium*	**7.38**	1.00	0.106	mg/L	1	12/18/24 16:32	EPA 200.7		AWG
Sodium*	**46.3**	1.00	0.254	mg/L	1	12/18/24 16:32	EPA 200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Green Analytical Laboratories

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

MW #7

2412100-06 (Ground Water)
Sampled Date: 12/10/24 12:05
Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**355**	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**355**	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Bromide	**1.04**	0.500	0.137	mg/L	5	12/17/24 22:05	EPA 300.0		AWG
Chloride*	**63.8**	5.00	2.49	mg/L	5	12/17/24 22:05	EPA 300.0		AWG
Conductivity*	**2250**	1.00		umho/cm@25 C	1	12/11/24 09:25	2510 B		HIC
Fluoride*	**0.810**	0.500	0.168	mg/L	5	12/17/24 22:05	EPA 300.0		AWG
Nitrate as N*	**5.16**	0.100	0.039	mg/L	5	12/11/24 15:25	EPA 300.0		AWG
Nitrate+Nitrite as N by IC	**5.16**	0.200	0.0519	mg/L	5	12/11/24 15:25	EPA 300.0		AWG
Nitrite as N*	<0.100	0.100	0.013	mg/L	5	12/11/24 15:25	EPA 300.0		AWG
Ortho-Phosphate as P*	<0.250	0.250	0.146	mg/L	5	12/11/24 15:25	EPA 300.0		AWG
pH*	**7.01**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
pH Temperature, degrees C	**17.6**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
Sulfate*	**993**	5.00	2.81	mg/L	5	12/17/24 22:05	EPA 300.0		AWG
Total Dissolved Solids*	**1850**	10.0		mg/L	1	12/16/24 15:05	EPA 160.1/SM 2540C		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**381**	1.00	0.575	mg/L	5	12/18/24 16:34	EPA 200.7		AWG
Magnesium*	**51.5**	1.00	0.383	mg/L	10	12/20/24 11:48	EPA 200.7		AWG
Potassium*	<5.00	5.00	0.530	mg/L	5	12/18/24 16:34	EPA 200.7		AWG
Sodium*	**165**	5.00	1.27	mg/L	5	12/18/24 16:34	EPA 200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Green Analytical Laboratories

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

MW #8

2412100-07 (Ground Water)
Sampled Date: 12/10/24 12:25
Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**265**	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**265**	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Bromide	<0.200	0.200	0.0548	mg/L	2	12/17/24 23:07	EPA 300.0		AWG
Chloride*	**9.82**	2.00	0.994	mg/L	2	12/17/24 23:07	EPA 300.0		AWG
Conductivity*	**1890**	1.00		umho/cm@25 C	1	12/11/24 09:25	2510 B		HIC
Fluoride*	**0.652**	0.200	0.0673	mg/L	2	12/17/24 23:07	EPA 300.0		AWG
Nitrate as N*	**13.4**	0.200	0.077	mg/L	10	12/11/24 17:19	EPA 300.0		AWG
Nitrate+Nitrite as N by IC	**13.4**	0.300	0.0904	mg/L	10	12/11/24 17:19	EPA 300.0		AWG
Nitrite as N*	<0.100	0.100	0.013	mg/L	5	12/11/24 15:44	EPA 300.0		AWG
Ortho-Phosphate as P*	<0.250	0.250	0.146	mg/L	5	12/11/24 15:44	EPA 300.0		AWG
pH*	**7.09**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
pH Temperature, degrees C	**17.9**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
Sulfate*	**898**	5.00	2.81	mg/L	5	12/17/24 23:27	EPA 300.0		AWG
Total Dissolved Solids*	**1600**	10.0		mg/L	1	12/16/24 15:07	EPA 160.1/SM 2540C		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**354**	1.00	0.575	mg/L	5	12/18/24 16:38	EPA 200.7		AWG
Magnesium*	**34.3**	1.00	0.383	mg/L	10	12/20/24 11:50	EPA 200.7		AWG
Potassium*	<5.00	5.00	0.530	mg/L	5	12/18/24 16:38	EPA 200.7		AWG
Sodium*	**97.4**	5.00	1.27	mg/L	5	12/18/24 16:38	EPA 200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Green Analytical Laboratories

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

MW #9

2412100-08 (Ground Water)
Sampled Date: 12/10/24 12:10
Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Total as CaCO3*	**520**	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Alkalinity, Bicarbonate as CaCO3*	**520**	10.0	8.00	mg/L	5	12/16/24 14:00	2320 B		HIC
Bromide	**1.61**	0.500	0.137	mg/L	5	12/17/24 23:47	EPA 300.0		AWG
Chloride*	**881**	5.00	2.49	mg/L	5	12/17/24 23:47	EPA 300.0		AWG
Conductivity*	**4750**	1.00		umho/cm@25 C	1	12/11/24 09:25	2510 B		HIC
Fluoride*	**0.525**	0.500	0.168	mg/L	5	12/17/24 23:47	EPA 300.0		AWG
Nitrate as N*	**1.05**	0.200	0.077	mg/L	10	12/11/24 16:03	EPA 300.0		AWG
Nitrate+Nitrite as N by IC	**1.04**	0.400	0.104	mg/L	10	12/11/24 16:03	EPA 300.0		AWG
Nitrite as N*	<0.200	0.200	0.027	mg/L	10	12/11/24 16:03	EPA 300.0		AWG
Ortho-Phosphate as P*	<0.500	0.500	0.291	mg/L	10	12/11/24 16:03	EPA 300.0		AWG
pH*	**6.91**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
pH Temperature, degrees C	**18.4**			pH Units	1	12/11/24 09:25	EPA 150.1		HIC
Sulfate*	**982**	5.00	2.81	mg/L	5	12/17/24 23:47	EPA 300.0		AWG
Total Dissolved Solids*	**3370**	10.0		mg/L	1	12/16/24 15:09	EPA 160.1/SM 2540C		HIC
Total Recoverable Metals by ICP (E200.7)									
Calcium*	**411**	1.00	0.575	mg/L	5	12/18/24 16:42	EPA 200.7		AWG
Magnesium*	**43.1**	1.00	0.383	mg/L	10	12/20/24 11:51	EPA 200.7		AWG
Potassium*	<5.00	5.00	0.530	mg/L	5	12/18/24 16:42	EPA 200.7		AWG
Sodium*	**706**	5.00	1.27	mg/L	5	12/18/24 16:42	EPA 200.7		AWG

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B243636 - IC- Ion Chromatograph										
Blank (B243636-BLK1)			Prepared & Analyzed: 12/11/24							
Nitrate as N	ND	0.020	mg/L							
Nitrite as N	ND	0.020	mg/L							
Ortho-Phosphate as P	ND	0.0500	mg/L							
LCS (B243636-BS1)			Prepared & Analyzed: 12/11/24							
Nitrate as N	0.953	0.020	mg/L	1.00		95.3	90-110			
Nitrite as N	0.942	0.020	mg/L	1.00		94.2	90-110			
Ortho-Phosphate as P	0.909	0.0500	mg/L	1.00		90.9	90-110			
LCS Dup (B243636-BSD1)			Prepared & Analyzed: 12/11/24							
Nitrate as N	0.971	0.020	mg/L	1.00		97.1	90-110	1.92	20	
Nitrite as N	0.971	0.020	mg/L	1.00		97.1	90-110	3.06	20	
Ortho-Phosphate as P	0.949	0.0500	mg/L	1.00		94.9	90-110	4.34	20	
Batch B243657 - General Prep - Wet Chem										
Reference (B243657-SRM1)			Prepared & Analyzed: 12/11/24							
pH	6.94		pH Units	7.00		99.1	98.57-101.42			
Batch B243658 - General Prep - Wet Chem										
Reference (B243658-SRM1)			Prepared & Analyzed: 12/11/24							
Conductivity	978	1.00	umho/cm@25C	1000		97.8	90-110			
Batch B243665 - General Prep - Wet Chem										
Blank (B243665-BLK1)			Prepared & Analyzed: 12/13/24							
Alkalinity, Bicarbonate as CaCO3	ND	10.0	mg/L							
Alkalinity, Carbonate as CaCO3	ND	10.0	mg/L							
Alkalinity, Hydroxide as CaCO3	ND	10.0	mg/L							
Alkalinity, Total as CaCO3	ND	10.0	mg/L							
LCS (B243665-BS1)			Prepared & Analyzed: 12/13/24							
Alkalinity, Total as CaCO3	107	10.0	mg/L	100		107	85-115			
LCS Dup (B243665-BSD1)			Prepared & Analyzed: 12/13/24							
Alkalinity, Total as CaCO3	107	10.0	mg/L	100		107	85-115	0.00	20	
Reference (B243665-SRM1)			Prepared & Analyzed: 12/13/24							

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

General Chemistry - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B243665 - General Prep - Wet Chem (Continued)										
Reference (B243665-SRM1) (Continued)			Prepared & Analyzed: 12/13/24							
Alkalinity, Total as CaCO3	104	10.0	mg/L	100		104	85-115			
Batch B243666 - General Prep - Wet Chem										
Blank (B243666-BLK1)			Prepared: 12/13/24 Analyzed: 12/16/24							
Alkalinity, Bicarbonate as CaCO3	ND	10.0	mg/L							
Alkalinity, Carbonate as CaCO3	ND	10.0	mg/L							
Alkalinity, Hydroxide as CaCO3	ND	10.0	mg/L							
Alkalinity, Total as CaCO3	ND	10.0	mg/L							
LCS (B243666-BS1)			Prepared: 12/13/24 Analyzed: 12/16/24							
Alkalinity, Total as CaCO3	109	10.0	mg/L	100		109	85-115			
LCS Dup (B243666-BSD1)			Prepared: 12/13/24 Analyzed: 12/16/24							
Alkalinity, Total as CaCO3	106	10.0	mg/L	100		106	85-115	2.79	20	
Reference (B243666-SRM1)			Prepared: 12/13/24 Analyzed: 12/16/24							
Alkalinity, Total as CaCO3	107	10.0	mg/L	100		107	85-115			
Batch B243667 - General Prep - Wet Chem										
Blank (B243667-BLK1)			Prepared & Analyzed: 12/16/24							
Total Dissolved Solids	ND	10.0	mg/L							
Reference (B243667-SRM1)			Prepared & Analyzed: 12/16/24							
Total Dissolved Solids	375	10.0	mg/L	400		93.7	85-115			
Batch B243690 - IC- Ion Chromatograph										
Blank (B243690-BLK1)			Prepared: 12/16/24 Analyzed: 12/17/24							
Bromide	ND	0.100	mg/L							
Chloride	ND	1.00	mg/L							
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							
LCS (B243690-BS1)			Prepared: 12/16/24 Analyzed: 12/17/24							
Bromide	2.40	0.100	mg/L	2.50		95.8	90-110			
Chloride	24.0	1.00	mg/L	25.0		96.2	90-110			
Fluoride	2.50	0.100	mg/L	2.50		100	90-110			
Sulfate	23.8	1.00	mg/L	25.0		95.1	90-110			
LCS Dup (B243690-BSD1)			Prepared: 12/16/24 Analyzed: 12/17/24							
Bromide	2.45	0.100	mg/L	2.50		98.1	90-110	2.31	20	

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project: Anions, ICP Metals,Wet Chem	
PO Box 1653	Project Name / Number: GCU #170	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	12/27/24 09:12

General Chemistry - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B243690 - IC- Ion Chromatograph (Continued)										
LCS Dup (B243690-BSD1) (Continued)				Prepared: 12/16/24 Analyzed: 12/17/24						
Chloride	24.6	1.00	mg/L	25.0		98.5	90-110	2.42	20	
Fluoride	2.56	0.100	mg/L	2.50		102	90-110	2.13	20	
Sulfate	24.3	1.00	mg/L	25.0		97.4	90-110	2.38	20	

Total Recoverable Metals by ICP (E200.7) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B243701 - Total Recoverable by ICP										
Blank (B243701-BLK1)				Prepared: 12/17/24 Analyzed: 12/18/24						
Calcium	ND	0.200	mg/L							
Magnesium	ND	0.100	mg/L							
Potassium	ND	1.00	mg/L							
Sodium	ND	1.00	mg/L							
LCS (B243701-BS1)				Prepared: 12/17/24 Analyzed: 12/18/24						
Calcium	2.16	0.200	mg/L	2.00		108	85-115			
Magnesium	11.0	0.100	mg/L	10.0		110	85-115			
Potassium	4.23	1.00	mg/L	4.00		106	85-115			
Sodium	1.73	1.00	mg/L	1.62		107	85-115			
LCS Dup (B243701-BSD1)				Prepared: 12/17/24 Analyzed: 12/18/24						
Calcium	2.11	0.200	mg/L	2.00		105	85-115	2.33	20	
Magnesium	10.8	0.100	mg/L	10.0		108	85-115	1.62	20	
Potassium	4.20	1.00	mg/L	4.00		105	85-115	0.676	20	
Sodium	1.67	1.00	mg/L	1.62		103	85-115	3.82	20	

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Veronica J Wells

Veronica Wells, Project Manager

Cottonwood Consulting	Project:	Anions, ICP Metals,Wet Chem
PO Box 1653	Project Name / Number:	GCU #170
Durango CO, 81302	Project Manager:	Kyle Siesser
		Reported: 12/27/24 09:12

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
	*Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

GAL Analytical Laboratories
75 Suttle Street
Durango, CO 81303
(970) 247-4220

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

FORM-006, R 8.0

Note: Wite-Out™ or similar products cannot be used on the Chain of Custody

Company or Client: Cottonwood Consulting LLC

Address: PO Box 1653

City: Durango **State:** CO **Zip:** 81302

Phone #: 970-764-7356

Contact Person: Kyle Siesser

Email Report to: ksiesser@cottonwoodconsulting.com

Project Name(optional): GCU #170

Sampler Name (Print): Kelsey O'Brien / Dylan Songer

Bill to (if different):

P.O. #:

Rush? Y ☐ N ☐ TAT Needed?

ANALYSIS REQUEST

Lab I.D. (Lab Use Only)	Sample Name or Location	Collected Date	Collected Time	Matrix: GROUNDWATER	SURFACE WATER	WASTEWATER	PRODUCED WATER	DRINKING WATER	SOIL	OTHER:	# of containers: No preservation	Nitric Acid	Hydrochloric Acid	Sulfuric Acid	Sodium Hydroxide	OTHER:	See Attached List
01	1) MW #2A	12/10/24	1200	✓							2	1					✓
02	2) MW #3A		1215	✓							2	1					✓
03	3) MW #4A		1150	✓							2	1					✓
04	4) MW #5		1220	✓							2	1					✓
05	5) MW #6		1145	✓							2	1					✓
06	6) MW #7		1205	✓							2	1					✓
07	7) MW #8		1225	✓							2	1					✓
08	8) MW #9		1210	✓							2	1					✓
	9)																
	10)																

Relinquished By:	Date: 12/10/24 Time: 1650	**Received By:**	Date: 12.10.24 Time: 16:55	ADDITIONAL REMARKS:	
Relinquished By:	Date: Time:	**Received By:**	Date: Time:		
Relinquished By:	Date: Time:	**Received By:**	Date: Time:	Temperature at receipt: 10.3 °C	Checked by: Checked by: On Ice? Y N Therm. used:

† GAL cannot accept verbal changes. Please email changes to receiving@greenanalytical.com

* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.

EPA METHOD 300.0: ANIONS

- Fluoride
- Chloride
- Nitrogen, Nitrite (As N)
- Bromide
- Nitrogen, Nitrate (As N)
- Phosphorus, Orthophosphate (As P)
- Sulfate

EPA METHOD 200.7: METALS

- Calcium
- Magnesium
- Potassium
- Sodium

SM2510B: SPECIFIC CONDUCTANCE

- Conductivity

SM4500-H+B / 9040C: PH

- pH

SM2320B: ALKALINITY

- Bicarbonate (As CaCO3)
- Carbonate (As CaCO3)
- Total Alkalinity (as CaCO3)

SM2540C MOD: TOTAL DISSOLVED SOLIDS

- Total Dissolved Solids

Project Information

Cottonwood Consulting
PO Box 1653
Durango, CO 81302
Laboratory PM: Veronica Wells

od Consulting
Phone: (970) 946-3761
Fax: -

Project Name: Anions, ICP Metals,Wet Chem
Project Number:
Client PM: Kyle Siesser
Comments:

Analysis	Comment
200.2 Metals Digest	
Alkalinity, Total	
Bromide [IC]	
Calcium 200.2 by ICP	
Chloride [IC]	
Conductivity	
Fluoride [IC]	
Magnesium 200.2 by ICP	
Nitrate/Nitrite by IC Package	
Orthophosphate [IC]	
pH	
Potassium 200.2 by ICP	
Sodium 200.2 by ICP	
Sulfate [IC]	
Total Dissolved Solids [TDS]	

Nitrate/Nitrite by IC Package subanalyses:
Nitrate [IC]
Nitrite [IC]

Analytical Laboratories

Date/Initials of person examining contents: 12.11.24 CDV

Labeled by initials: _____
(if different than above)

SAMPLE CONDITION RECEIPT FORM

Client Name: Ed Howard Consulting

Work Order # 2412-100

Courier: ☐Fed Ex ☐UPS ☐USPS ☑Client ☐ Kangaroo ☐ Third Party ☐Other

Custody Seals on Box/Cooler Present: ☐ Yes ☑ No Seals Intact: ☐ Yes ☐ No GAL Cooler #: _____

Thermometer Used: #2 Samples on ice, cooling process has begun: ☑Yes ☐ No

Type of Ice: ☑ Wet ☐ Blue ☐ None Cooler Temp: Observed Temp: 10.3 °C Correction Factor: 0 °C Final Temp: 10.3 °C

Compliance: ☐ Yes ☑ No

*Temp should be above freezing 6°C

Chain of Custody Filled Out:	☑Yes ☐No	1.
COC Signed when Relinquished and Received:	☑Yes ☐No	2.
Sampler Name and Signature on COC: *Required for compliance	☑Yes ☐No	3.
Samples arrived within hold time:	☑Yes ☐No	4.
Correct Containers Used & Intact:	☑Yes ☐No	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No	6. pH, NOx, OPO4
Rush Turn Around Time Requested: *3 day TAT or less requires supervisor approval	☐Yes ☑No	7. Approved By:
Sufficient Volume:	☑Yes ☐No	8.
pH's acceptable upon receipt, where applicable: *Not including metals bottles	☐Yes ☐No ☑N/A	9.
Dissolved Testing Needed: Field Filtered: ☐Yes ☐No	☐Yes ☑No	10.
Sample Labels match COC: -Includes Date/Time/ID	☑Yes ☐No	11.
Matrix:	WS SL OT	
Trip Blank Present:	☐Yes ☐No ☑N/A	12.
Trip Blank Custody Seals Present:	☐Yes ☐No ☑N/A	
VOA's meet headspace requirement (<6mm bubbles)	☐Yes ☐No ☑N/A	
Non-Conformance(s):	☐Yes ☑No	13.

Client Notification/Resolution:

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Cottonwood Consulting, LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : SIMCOE LLC

GCU # 170
UNIT K, SEC. 35, T29N, R12W

LABORATORY (S) USED : GAL

Date : 12/10/24

DEVELOPER / SAMPLER : DS/KO

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
2A	99.57	7.16	7.64	14.80	1200	8.09	3.38	9.6	3.51
3A	97.46	8.78	7.10	15.88	1215	8.13	2.65	10.9	4.30
4A	99.08	8.19	7.79	15.98	1150	8.01	4.97	9.6	4.01
5	96.05	11.61	7.69	19.30	1220	7.89	2.55	10.4	5.69
6	101.53	7.29	8.69	15.98	1145	8.63	1.65	8.4	3.57
7	99.97	10.43	8.35	18.78	1205	8.22	2.58	9.6	5.11
8	97.69	9.98	8.10	18.08	1225	8.00	2.18	9.6	4.89
9	100.28	7.9	10.53	18.43	1210	7.85	5.34	10.1	3.87

NOTES : Volume of water purged from well prior to sampling: V = pi x r^2 x h x 7.48 gal./ft^3) x 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)
Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2".

MW #2A, #3A, #4A, #5, & #6 casing tops completed with locking caps & flush mount well covers.
MW #7, #8, & #9 casing tops completed with slip caps & above-grade well protectors with padlocked lids.

Cottonwood Consulting, LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **SIMCOE LLC**

GCU # 170
UNIT K, SEC. 35, T29N, R12W

LABORATORY (S) USED : GAL

Date : 6/12/24

DEVELOPER / SAMPLER : KW IDS

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
2A	99.57	6.67	8.13	14.80	1155	7.22	4000	16.3	3.26
3A	97.46	8.40	7.48	15.88	1205	7.33	2110	18.2	4.11
4A	99.08	7.66	8.32	15.98	1225	7.41	1695	19.4	3.75
5	96.05	12.27	7.03	19.30	1100	7.16	1889	21.7	6.01
6	101.53	6.73	9.25	15.98	1215	7.50	978	20.8	3.29
7	99.97	10.02	8.76	18.78	1125	7.24	1518	16.4	4.90
8	97.69	9.74	8.34	18.08	1110	7.38	2070	16.5	4.77
9	100.28	7.49	10.14	18.43	1135	7.34	1226	16.3	3.67

NOTES : Volume of water purged from well prior to sampling: V = pi x r^2 x h x 7.48 gal./ft^3) x 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2".

MW #2A, #3A, #4A, #5, & #6 casing tops completed with locking caps & flush mount well covers.
MW #7, #8, & #9 casing tops completed with slip caps & above-grade well protectors with padlocked lids.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 415773
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
jburdine	Accepted for the record, GCU #170 Biannual Groundwater Monitoring Lab Results, includes analysis for monitoring wells: MW-2A, MW-3A, MW-4A, MW-5 through MW-9	6/27/2025