

Silver Creek  
Soda St.  
Rico Well



75 Suttle Street  
Durango, CO 81303  
970.247.4220 Phone  
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www.greenanalytical.com

31 December 2013

Mike England  
Town Of Rico  
PO Box 9  
Rico, CO 81332  
RE: Comp. Corrosivity

Enclosed are the results of analyses for samples received by the laboratory on 12/17/13 11:35.  
If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Debbie Zufelt". The signature is written in a cursive, flowing style.

Debbie Zufelt  
Reports 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. Our NELAP accreditation can be viewed at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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.

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.



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Town Of Rico	Project: Comp. Corrosivity	
PO Box 9	Project Name / Number: [none]	Reported:
Rico CO, 81332	Project Manager: Mike England	12/31/13 12:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
8 Est Soda St.	1312128-01	Water	12/17/13 08:30	12/17/13 11:35
Silver Creek Plant	1312128-02	Water	12/17/13 09:00	12/17/13 11:35
Rico Well #1	1312128-03	Water	12/17/13 09:05	12/17/13 11:35

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*Debbie Zufelt*

Debbie Zufelt, Reports Manager

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Town Of Rico PO Box 9 Rico CO, 81332	Project: Comp. Corrosivity Project Name / Number: [none] Project Manager: Mike England	Reported: 12/31/13 12:33
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8 Est Soda St.

1312128-01 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
<b>General Chemistry</b>									
Alkalinity, Total*	268	10.0		mg/L	2	12/27/13	2320 B		ABP
Langlier Index	0.630			[blank]	1	12/31/13	Calc		DJZ
pH*	7.66			pH Units	1	12/18/13	EPA 150.1		MJV
TDS*	270	10.0		mg/L	1	12/20/13	EPA 160.1		JAW
Temperature	20.0			°C	1	12/31/13	Calc		DJZ
<b>Total Recoverable Metals by ICP (E200.7)</b>									
Calcium*	91.2	1.00	0.004	mg/L	1	12/19/13	EPA 200.7		JGS

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Town Of Rico PO Box 9 Rico CO, 81332	Project: Comp. Corrosivity Project Name / Number: [none] Project Manager: Mike England	Reported: 12/31/13 12:33
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**Silver Creek Plant**

**1312128-02 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
<b>General Chemistry</b>									
Alkalinity, Total*	123	10.0		mg/L	1	12/27/13	2320 B		ABP
Langlier Index	0.470			[blank]	1	12/31/13	Calc		DJZ
pH*	8.14			pH Units	1	12/18/13	EPA150.1		MJV
TDS*	90.0	10.0		mg/L	1	12/20/13	EPA160.1		JAW
Temperature	20.0			°C	1	12/31/13	Calc		DJZ
<b>Total Recoverable Metals by ICP (E200.7)</b>									
Calcium*	39.2	1.00	0.004	mg/L	1	12/19/13	EPA200.7		JGS

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Town Of Rico	Project: Comp. Corrosivity	Reported:
PO Box 9	Project Name / Number: [none]	12/31/13 12:33
Rico CO, 81332	Project Manager: Mike England	

**Rico Well #1**

**1312128-03 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
<b>General Chemistry</b>									
Alkalinity, Total*	302	10.0		mg/L	2	12/27/13	2320 B		ABP
Langlier Index	0.420			[blank]	1	12/31/13	Calc		DJZ
pH*	7.36			pH Units	1	12/18/13	EPA 150.1		MJV
TDS*	327	10.0		mg/L	1	12/20/13	EPA 160.1		JAW
Temperature	20.0			°C	1	12/31/13	Calc		DJZ
<b>Total Recoverable Metals by ICP (E200.7)</b>									
Calcium*	105	1.00	0.004	mg/L	1	12/19/13	EPA200.7		JGS

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Town Of Rico PO Box 9 Rico CO, 81332	Project: Comp. Corrosivity Project Name / Number: [none] Project Manager: Mike England	Reported: 12/31/13 12:33
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**General Chemistry - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B312198 - General Prep - Wet Chem</b>										
<b>Blank (B312198-BLK1)</b> Prepared: 12/19/13 Analyzed: 12/20/13										
TDS	ND	10.0	mg/L							
<b>Duplicate (B312198-DUP1)</b> Source: 1312122-01 Prepared: 12/19/13 Analyzed: 12/20/13										
TDS	290000	10.0	mg/L		291000			0.654	20	
<b>Reference (B312198-SRMI)</b> Prepared: 12/19/13 Analyzed: 12/20/13										
TDS	1120	10.0	mg/L	1090		102	85-115			
<b>Batch B312222 - General Prep - Wet Chem</b>										
<b>Duplicate (B312222-DUP1)</b> Source: 1312120-01 Prepared & Analyzed: 12/18/13										
pH	8.36		pH Units		8.37			0.120	20	
<b>Reference (B312222-SRMI)</b> Prepared & Analyzed: 12/18/13										
pH	8.65		pH Units	8.93		96.9	90-110			
<b>Batch B312242 - General Prep - Wet Chem</b>										
<b>Blank (B312242-BLK1)</b> Prepared & Analyzed: 12/27/13										
Alkalinity, Total	ND	10.0	mg/L							
<b>LCS (B312242-BS1)</b> Prepared & Analyzed: 12/27/13										
Alkalinity, Total	103	10.0	mg/L	100		103	85-115			
<b>LCS Dup (B312242-BSD1)</b> Prepared & Analyzed: 12/27/13										
Alkalinity, Total	102	10.0	mg/L	100		102	85-115	0.976	20	

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Town Of Rico	Project: Comp Corrosivity	
PO Box 9	Project Name / Number: [none]	Reported:
Rico CO, 81332	Project Manager: Mike England	12/31/13 12:33

**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
<b>Batch B312185 - Total Recoverable, Direct Analysis E200.7/E200.8</b>										
<b>Blank (B312185-BLK1)</b>				Prepared & Analyzed: 12/19/13						
Calcium	ND	1.00	mg/L							
<b>LCS (B312185-BS1)</b>				Prepared & Analyzed: 12/19/13						
Calcium	4.52	1.00	mg/L	5.00		90.4	85-115			
<b>LCS Dup (B312185-BSD1)</b>				Prepared & Analyzed: 12/19/13						
Calcium	4.60	1.00	mg/L	5.00		92.0	85-115	1.70	20	

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Rico CO, 81332	Project Manager: Mike England	12/31/13 12:33

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

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**CHAIN OF CUSTODY RECORD**

NOTES:

- 1) Ensure proper container packaging.
- 2) Ship samples promptly following collection.
- 3) Designate Sample Reject Disposition.

PO#

Project Name: Corrosivity Analysis

Samplers Signature: Michael Deschivo

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water  
 3 = Soil/Sediment, 4 = Prod. W., 5 = Oil  
 6 = Waste, 7 = Other (Specify) \_\_\_\_\_

FOR GAL USE ONLY  
 GAL JOB #  
1312-128

Client: Tech Office  
 Contact: Mike England  
 Address: Po Box 9  
Rico, CO 80522  
 Phone Number: 970-947-2943  
 Email: techmanager@colorado.gov

Lab Name: Green Analytical Laboratories (970) 247-4220 FAX (970) 247-4227  
 Address: 75 Suttle Street, Durango, CO 81303 www.greenanalytical.com

Sample ID	Date	Time	Collected by: (Init.)	Matrix Type From Table 1	No. of Containers	Sample Filtered? Y/N	Unpreserved (Ice Only)	Preservative(s)					Analytes Required	Comments				
								HNO3	HCL	H2SO4	NAOH	Other (Specify)						
01 1. 8 East 50th St.	12-11-13	8:30am	ME	1	2	Y	<input checked="" type="checkbox"/>											
02 2. Silver Creek Rd	12-11-13	9:00am	ME	1	2	Y	<input checked="" type="checkbox"/>											9°C #18 in ice
03 3. Rico Well #1	12-11-13	9:55am	ME	1	2	Y	<input checked="" type="checkbox"/>											
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		
Relinquished by: <u>Mike England</u>			Date: <u>12-11-13</u>	Time: _____	Received by: <u>Michael Deschivo</u>			Date: <u>12-11-13</u>	Time: <u>1:35pm</u>	Relinquished by: <u>John Swank</u>			Date: <u>12/12/13</u>	Time: <u>1:35</u>				

\* Sample Reject: [ ] Return [ ] Dispose [ ] Store (30 Days)