



75 Suttle Street  
Durango, CO 81303  
970.247.4220 Phone  
970.247.4227 Fax  
[www.greenanalytical.com](http://www.greenanalytical.com)

28 August 2020

Michael Hannigan  
Kinder Morgan  
17801 Hwy 491  
Cortez, CO 81321  
RE: EC/pH/SAR

Enclosed are the results of analyses for samples received by the laboratory on 08/26/20 14:45.  
If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink, reading 'Jeremy D. Allen', is written in a cursive style.

Jeremy D Allen For 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. 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.

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.



Kinder Morgan  
17801 Hwy 491  
Cortez CO, 81321

Project: EC/pH/SAR  
Project Name / Number: Drilling Pit Soil Samples GP-11 Surface  
Project Manager: Michael Hannigan

**Reported:**  
08/28/20 16:48

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
GP-11-SB-4	2008320-01	Solid	08/26/20 07:50	08/26/20 14:45	
GP-11-SB-5	2008320-02	Solid	08/26/20 07:55	08/26/20 14:45	
GP-11-SB-6	2008320-03	Solid	08/26/20 08:00	08/26/20 14:45	
GP-11-SB-7	2008320-04	Solid	08/26/20 08:05	08/26/20 14:45	
GP-11-SB-8	2008320-05	Solid	08/26/20 08:10	08/26/20 14:45	

Green Analytical Laboratories

Jeremy D Allen For Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Kinder Morgan  
17801 Hwy 491  
Cortez CO, 81321

Project: EC/pH/SAR  
Project Name / Number: Drilling Pit Soil Samples GP-11 Surface  
Project Manager: Michael Hannigan

Reported:  
08/28/20 16:48

**GP-11-SB-4****2008320-01 (Solid)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

**Saturated Paste Extraction**

Calcium	272	0.200	0.033	mg/L	2	08/28/20 14:12	EPA200.7		AES
Conductivity	1720			umho/cm @ 25.0°C	1	08/28/20 11:15	ASA#9 10-3.3		VJW
Magnesium	86.8	0.200	0.047	mg/L	2	08/28/20 14:12	EPA200.7		AES
pH	7.60			pH Units	1	08/28/20 07:49	ASA#9 10-3.2		VJW
SAR	0.67			No Unit	1	08/28/20 14:12	Calculation		AES
Sodium	49.7	2.00	0.201	mg/L	2	08/28/20 14:12	EPA200.7		AES

Green Analytical Laboratories

Jeremy D Allen For Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Kinder Morgan  
17801 Hwy 491  
Cortez CO, 81321

Project: EC/pH/SAR  
Project Name / Number: Drilling Pit Soil Samples GP-11 Surface  
Project Manager: Michael Hannigan

Reported:  
08/28/20 16:48

**GP-11-SB-5****2008320-02 (Solid)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

**Saturated Paste Extraction**

Calcium	492	0.500	0.083	mg/L	5	08/28/20 14:16	EPA200.7		AES
Conductivity	2570			umho/cm @ 25.0°C	1	08/28/20 11:15	ASA#9 10-3.3		VJW
Magnesium	155	0.500	0.117	mg/L	5	08/28/20 14:16	EPA200.7		AES
pH	7.54			pH Units	1	08/28/20 07:49	ASA#9 10-3.2		VJW
SAR	0.57			No Unit	1	08/28/20 14:16	Calculation		AES
Sodium	56.2	5.00	0.503	mg/L	5	08/28/20 14:16	EPA200.7		AES

Green Analytical Laboratories

Jeremy D Allen For Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Kinder Morgan  
17801 Hwy 491  
Cortez CO, 81321

Project: EC/pH/SAR  
Project Name / Number: Drilling Pit Soil Samples GP-11 Surface  
Project Manager: Michael Hannigan

Reported:  
08/28/20 16:48

**GP-11-SB-6****2008320-03 (Solid)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

**Saturated Paste Extraction**

Calcium	467	0.500	0.083	mg/L	5	08/28/20 14:23	EPA200.7		AES
Conductivity	2680			umho/cm @ 25.0°C	1	08/28/20 11:15	ASA#9 10-3.3		VJW
Magnesium	198	0.500	0.117	mg/L	5	08/28/20 14:23	EPA200.7		AES
pH	7.72			pH Units	1	08/28/20 07:49	ASA#9 10-3.2		VJW
SAR	0.50			No Unit	1	08/28/20 14:23	Calculation		AES
Sodium	51.0	5.00	0.503	mg/L	5	08/28/20 14:23	EPA200.7		AES

Green Analytical Laboratories

Jeremy D Allen For Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Kinder Morgan  
17801 Hwy 491  
Cortez CO, 81321

Project: EC/pH/SAR  
Project Name / Number: Drilling Pit Soil Samples GP-11 Surface  
Project Manager: Michael Hannigan

Reported:  
08/28/20 16:48

**GP-11-SB-7****2008320-04 (Solid)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

**Saturated Paste Extraction**

Calcium	105	0.100	0.017	mg/L	1	08/28/20 14:27	EPA200.7		AES
Conductivity	777			umho/cm @ 25.0°C	1	08/28/20 11:15	ASA#9 10-3.3		VJW
Magnesium	39.2	0.100	0.023	mg/L	1	08/28/20 14:27	EPA200.7		AES
pH	7.72			pH Units	1	08/28/20 07:49	ASA#9 10-3.2		VJW
SAR	0.33			No Unit	1	08/28/20 14:27	Calculation		AES
Sodium	15.7	1.00	0.101	mg/L	1	08/28/20 14:27	EPA200.7		AES

Green Analytical Laboratories

Jeremy D Allen For Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Kinder Morgan  
17801 Hwy 491  
Cortez CO, 81321

Project: EC/pH/SAR  
Project Name / Number: Drilling Pit Soil Samples GP-11 Surface  
Project Manager: Michael Hannigan

Reported:  
08/28/20 16:48

**GP-11-SB-8****2008320-05 (Solid)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

**Saturated Paste Extraction**

Calcium	126	0.100	0.017	mg/L	1	08/28/20 14:31	EPA200.7		AES
Conductivity	821			umho/cm @ 25.0°C	1	08/28/20 11:15	ASA#9 10-3.3		VJW
Magnesium	34.7	0.100	0.023	mg/L	1	08/28/20 14:31	EPA200.7		AES
pH	7.54			pH Units	1	08/28/20 07:49	ASA#9 10-3.2		VJW
SAR	0.28			No Unit	1	08/28/20 14:31	Calculation		AES
Sodium	13.6	1.00	0.101	mg/L	1	08/28/20 14:31	EPA200.7		AES

Green Analytical Laboratories

Jeremy D Allen For Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Kinder Morgan  
17801 Hwy 491  
Cortez CO, 81321

Project: EC/pH/SAR  
Project Name / Number: Drilling Pit Soil Samples GP-11 Surface  
Project Manager: Michael Hannigan

Reported:  
08/28/20 16:48

### Saturated Paste Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

#### Batch B201717 - Paste Extract

Duplicate (B201717-DUP1) Source: 2008317-01 Prepared: 08/27/20 Analyzed: 08/28/20

pH	7.54		pH Units		7.46			1.07	20	
----	------	--	----------	--	------	--	--	------	----	--

Duplicate (B201717-DUP2) Source: 2008320-05 Prepared: 08/27/20 Analyzed: 08/28/20

pH	7.54		pH Units		7.54			0.00	20	
----	------	--	----------	--	------	--	--	------	----	--

Duplicate (B201717-DUP3) Source: 2008326-02 Prepared: 08/27/20 Analyzed: 08/28/20

pH	9.18		pH Units		9.14			0.437	20	
----	------	--	----------	--	------	--	--	-------	----	--

Reference (B201717-SRM1) Prepared: 08/27/20 Analyzed: 08/28/20

pH	7.19		pH Units	6.98		103	95-105			
----	------	--	----------	------	--	-----	--------	--	--	--

Reference (B201717-SRM2) Prepared: 08/27/20 Analyzed: 08/28/20

pH	7.20		pH Units	6.98		103	95-105			
----	------	--	----------	------	--	-----	--------	--	--	--

#### Batch B201718 - Paste Extract

Duplicate (B201718-DUP1) Source: 2008317-01 Prepared: 08/27/20 Analyzed: 08/28/20

Conductivity	1910		umho/cm @ 25.0°C		1940			1.19	20	
--------------	------	--	------------------	--	------	--	--	------	----	--

Duplicate (B201718-DUP2) Source: 2008320-05 Prepared: 08/27/20 Analyzed: 08/28/20

Conductivity	882		umho/cm @ 25.0°C		821			7.16	20	
--------------	-----	--	------------------	--	-----	--	--	------	----	--

Duplicate (B201718-DUP3) Source: 2008326-02 Prepared: 08/27/20 Analyzed: 08/28/20

Conductivity	2180		umho/cm @ 25.0°C		2300			5.36	20	
--------------	------	--	------------------	--	------	--	--	------	----	--

Reference (B201718-SRM1) Prepared: 08/27/20 Analyzed: 08/28/20

Conductivity	2990		umho/cm @ 25.0°C	2930		102	90-110			
--------------	------	--	------------------	------	--	-----	--------	--	--	--

Reference (B201718-SRM2) Prepared: 08/27/20 Analyzed: 08/28/20

Conductivity	2690		umho/cm @ 25.0°C	2930		91.8	90-110			
--------------	------	--	------------------	------	--	------	--------	--	--	--

#### Batch B201719 - Paste Extract

Blank (B201719-BLK1) Prepared: 08/27/20 Analyzed: 08/28/20

Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
SAR	0.00		No Unit							
Sodium	ND	1.00	mg/L							

Green Analytical Laboratories

Jeremy D Allen For Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.





Kinder Morgan  
17801 Hwy 491  
Cortez CO, 81321

Project: EC/pH/SAR  
Project Name / Number: Drilling Pit Soil Samples GP-11 Surface  
Project Manager: Michael Hannigan

Reported:  
08/28/20 16:48

**Saturated Paste Extraction - Quality Control  
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

**Batch B201719 - Paste Extract (Continued)**

**Duplicate (B201719-DUP1)** Source: 2008317-01 Prepared: 08/27/20 Analyzed: 08/28/20

Calcium	396	0.200	mg/L		407		2.60	20	
Magnesium	94.6	0.200	mg/L		97.1		2.66	20	
SAR	0.28		No Unit		0.29		3.51	20	
Sodium	24.1	2.00	mg/L		24.7		2.24	20	

**Duplicate (B201719-DUP2)** Source: 2008320-05 Prepared: 08/27/20 Analyzed: 08/28/20

Calcium	136	0.100	mg/L		126		7.88	20	
Magnesium	38.0	0.100	mg/L		34.7		9.09	20	
SAR	0.27		No Unit		0.28		3.64	20	
Sodium	14.0	1.00	mg/L		13.6		3.06	20	

**Duplicate (B201719-DUP3)** Source: 2008326-02 Prepared: 08/27/20 Analyzed: 08/28/20

Calcium	ND	0.100	mg/L		475			20	
Magnesium	ND	0.100	mg/L		18.7			20	
SAR	1.88		No Unit		1.90		1.06	20	
Sodium	ND	1.00	mg/L		155			20	

**Reference (B201719-SRM1)** Prepared: 08/27/20 Analyzed: 08/28/20

SAR	5.63		No Unit	5.79	97.2	90-110			
-----	------	--	---------	------	------	--------	--	--	--

**Reference (B201719-SRM2)** Prepared: 08/27/20 Analyzed: 08/28/20

SAR	5.64		No Unit	5.79	97.4	90-110			
-----	------	--	---------	------	------	--------	--	--	--

Green Analytical Laboratories

Jeremy D Allen For Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Kinder Morgan  
17801 Hwy 491  
Cortez CO, 81321

Project: EC/pH/SAR  
Project Name / Number: Drilling Pit Soil Samples GP-11 Surface  
Project Manager: Michael Hannigan

**Reported:**  
08/28/20 16:48

### 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

Jeremy D Allen For Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

FORM-006

COC - Revision 5.0

(970) 247-4220  
Fax: (970) 247-4227

service@greenanalytical.com or dzufell@greenanalytical.com  
75 Suttle St Durango, CO 81303

Company or Client: Kinder Morgan CO2 Company, L.P.

Address: 17801 U.S. Highway 491

City: Cortez State: CO Zip: 81321

Phone #: (970) 882-5532

Contact Person: Michael Hannigan

Email Report to: michael\_hannigan@kindermorgan.com

Project Name (optional): DRILLING PIT SOIL SAMPLES GP-11 SURFACE

Sample Name (Print): Michael Hannigan

Bill to (if different):

Matrix (check one)

# of containers

For Lab Use

Sample Name or Location

Collected

Date

Time

GROUNDWATER

SURFACEWATER

WASTEWATER

PRODUCEDWATER

SOIL

DRINKING WATER

OTHER :

No preservation (general)

HNO<sub>3</sub>

HCl

H<sub>2</sub>SO<sub>4</sub>

Other:

Other:

EC/SAR/PH

2008-320-01

GP-11-SB-4

GP-11-SB-5

GP-11-SB-6

GP-11-SB-7

GP-11-SB-8

Date: 8/26/20

Time: 11:30

Date: 8/26/20

Time: 1445

Date: 8/26/20

Time: 1445

Date: 8/26/20

Time: 1445

Received By:

Received By:

Received By:

Received By:

Received By:

Received By:

Received By:

Received By:

ADDITIONAL REMARKS:

RUSH ASAP

Report to State? (Circle)

Yes

No

27.1/27.22

CHK

checked on ice

ANALYSIS REQUEST

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