



Amanda Trujillo Davis
Senior Environmental Coordinator

May 27, 2016

Oil Conservation Division
District 2 – Artesia
811 S. First St.
Artesia, NM 88210

Re: Rocket Federal Com #5H
30-015-37778
Sec. 3, T26S-R29E
Eddy County, NM

Ms. Heather Patterson,

COG Operating LLC would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is in response to the C-141 Initial report dated October 28, 2015.

Background

The release was caused when a poly flow line was hit by a vehicle and damaged resulting in the release of 200 barrels of produced water of which zero barrels were recovered. Upon discovery, the line was shut in and vacuum trucks were dispatched but were unable to recover any fluid. The release impacted an approximate area measuring 150' x 225' and is located approximately 0.75 miles northeast of the well pad. The spill area is located at the following GPS coordinates: 32.074709, -103.963601.

Groundwater

Based on the Chevron Trend Maps, the release area would be classified at a site ranking of Zero with depth to groundwater at greater than 100'.

Soil Assessment and Analytical Results

Sample points noted on the attached Site Diagram show chloride delineation for the release area. All sample points at a depth of 1' were tested for BTEX, TPH, and chloride, but proved to be non-detect as described in the attached analytical results, therefore are not summarized in the site diagram.

CORPORATE ADDRESS

One Concho Center | 600 West Illinois Avenue | Midland, Texas 79701
PHONE 432.683.7443 | FAX 432.683.7441

LOCAL ADDRESS

Concho West | 2208 Main Street | Artesia, New Mexico 88210
PHONE 575.748.6940 | FAX 575.746.2096

Work Plan

COG Operating LLC proposes a 4' excavation of the areas labeled S1 and S2 and a 6' excavation of the areas labeled S3 & S4. The backfill will consist of caliche and top soil. The top soil will be brought for the remaining 2' of backfill with the finished grade at approximately 6" above the surrounding landscape. The remediated area will be reseeded in June of 2016 with a BLM #1 seed mixture.

If there are no objections or stipulations, COG Operating LLC will begin the remediation based on approval of this work plan. Please feel free to contact me with any questions or concerns at (432) 818-2369.

Sincerely,



Amanda T. Davis

Senior Environmental Coordinator

Enclosure(s): Site Diagram
Analytical Results

Sec. 3, T26S-R29E

Released: 200 B/PW
Recovered: 0 B/PW

S1	GI-
1'	9860
2'	11900
3'	12000
4'	10800
6'	5730
8'	624
S2	CI-
1'	11300
2'	14100
3'	11600
4'	10700
6'	496
8'	208
S3	CI-
1'	2000
2'	9860
3'	13400
4'	17200
6'	12800
8'	624
S4	CI-
1'	13800
2'	13000
3'	12400
4'	12800
6'	13800
8'	1330
10'	368

Google earth

© 2015 Google

Legend

- Feature 1
- Untitled Polygon





PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

February 23, 2016

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: ROCKET FEDERAL COM #005H

Enclosed are the results of analyses for samples received by the laboratory on 02/17/16 10:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 02/17/2016
Reported: 02/23/2016
Project Name: ROCKET FEDERAL COM #005H
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 02/11/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S1-1' (H600369-01)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/19/2016	ND	2.04	102	2.00	0.658	
Toluene*	<0.050	0.050	02/19/2016	ND	2.01	101	2.00	0.555	
Ethylbenzene*	<0.050	0.050	02/19/2016	ND	1.82	91.1	2.00	0.118	
Total Xylenes*	<0.150	0.150	02/19/2016	ND	5.64	94.0	6.00	0.224	
Total BTEX	<0.300	0.300	02/19/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 107 % 73 6-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9860	16.0	02/19/2016	ND	384	96.0	400	11.8	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/19/2016	ND	198	99.1	200	5.85	
DRO >C10-C28	<10.0	10.0	02/19/2016	ND	216	108	200	12.2	

Surrogate: 1-Chlorooctane 94.7 % 35-147

Surrogate: 1-Chlorooctadecane 105 % 28-171

Sample ID: S1-2' (H600369-02)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11900	16.0	02/19/2016	ND	384	96.0	400	11.8	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, 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 by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:	02/17/2016	Sampling Date:	02/11/2016
Reported:	02/23/2016	Sampling Type:	Soil
Project Name:	ROCKET FEDERAL COM #005H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S1-3' (H600369-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	12000	16.0	02/19/2016	ND	384	96.0	400	11.8		

Sample ID: S1-4' (H600369-04)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10800	16.0	02/19/2016	ND	384	96.0	400	11.8	

Sample ID: S1-6' (H600369-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5730	16.0	02/19/2016	ND	384	96.0	400	11.8	

Sample ID: S1-8' (H600369-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	02/19/2016	ND	384	96.0	400	11.8	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, 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 by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 02/17/2016
Reported: 02/23/2016
Project Name: ROCKET FEDERAL COM #005H
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 02/11/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S2-1' (H600369-07)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/19/2016	ND	2.04	102	2.00	0.658	
Toluene*	<0.050	0.050	02/19/2016	ND	2.01	101	2.00	0.555	
Ethylbenzene*	<0.050	0.050	02/19/2016	ND	1.82	91.1	2.00	0.118	
Total Xylenes*	<0.150	0.150	02/19/2016	ND	5.64	94.0	6.00	0.224	
Total BTEX	<0.300	0.300	02/19/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11300	16.0	02/19/2016	ND	384	96.0	400	11.8	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/19/2016	ND	198	99.1	200	5.85	
DRO >C10-C28	<10.0	10.0	02/19/2016	ND	216	108	200	12.2	

Surrogate: 1-Chlorooctane 97.8 % 35-147

Surrogate: 1-Chlorooctadecane 106 % 28-171

Sample ID: S2-2' (H600369-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14100	16.0	02/19/2016	ND	384	96.0	400	11.8	

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, 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 by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 02/17/2016
 Reported: 02/23/2016
 Project Name: ROCKET FEDERAL COM #005H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 02/11/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S2-3' (H600369-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11600	16.0	02/19/2016	ND	384	96.0	400	11.8	

Sample ID: S2-4' (H600369-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10700	16.0	02/19/2016	ND	384	96.0	400	11.8	

Sample ID: S2-6' (H600369-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	02/19/2016	ND	384	96.0	400	11.8	

Sample ID: S2-8' (H600369-12)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	02/19/2016	ND	384	96.0	400	11.8	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, 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 by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 02/17/2016
Reported: 02/23/2016
Project Name: ROCKET FEDERAL COM #005H
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 02/11/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S3-1' (H600369-13)

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/19/2016	ND	2.04	102	2.00	0.658		
Toluene*	<0.050	0.050	02/19/2016	ND	2.01	101	2.00	0.555		
Ethylbenzene*	<0.050	0.050	02/19/2016	ND	1.82	91.1	2.00	0.118		
Total Xylenes*	<0.150	0.150	02/19/2016	ND	5.64	94.0	6.00	0.224		
Total BTEX	<0.300	0.300	02/19/2016	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 107 % 73.6-140

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2000	16.0	02/19/2016	ND	384	96.0	400	11.8		

TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	02/19/2016	ND	198	99.1	200	5.85		
DRO >C10-C28	<10.0	10.0	02/19/2016	ND	216	108	200	12.2		

Surrogate: 1-Chlorooctane 100 % 35-147

Surrogate: 1-Chlorooctadecane 109 % 28-171

Sample ID: S3-2' (H600369-14)

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9860	16.0	02/19/2016	ND	384	96.0	400	11.8		

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, 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 by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 02/17/2016
Reported: 02/23/2016
Project Name: ROCKET FEDERAL COM #005H
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 02/11/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S3-3' (H600369-15)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13400	16.0	02/19/2016	ND	384	96.0	400	11.8	

Sample ID: S3-4' (H600369-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17200	16.0	02/19/2016	ND	384	96.0	400	11.8	

Sample ID: S3-6' (H600369-17)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12800	16.0	02/19/2016	ND	384	96.0	400	11.8	

Sample ID: S3-8' (H600369-18)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	02/19/2016	ND	384	96.0	400	11.8	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, 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 by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 02/17/2016
Reported: 02/23/2016
Project Name: ROCKET FEDERAL COM #005H
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 02/11/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S4-1' (H600369-19)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/19/2016	ND	2.04	102	2.00	0.658	
Toluene*	<0.050	0.050	02/19/2016	ND	2.01	101	2.00	0.555	
Ethylbenzene*	<0.050	0.050	02/19/2016	ND	1.82	91.1	2.00	0.118	
Total Xylenes*	<0.150	0.150	02/19/2016	ND	5.64	94.0	6.00	0.224	
Total BTEX	<0.300	0.300	02/19/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 73 6-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13800	16.0	02/19/2016	ND	384	96.0	400	11.8	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/19/2016	ND	198	99.1	200	5.85	
DRO >C10-C28	<10.0	10.0	02/19/2016	ND	216	108	200	12.2	

Surrogate: 1-Chlorooctane 99.2 % 35-147

Surrogate: 1-Chlorooctadecane 109 % 28-171

Sample ID: S4-2' (H600369-20)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13000	16.0	02/19/2016	ND	384	96.0	400	11.8	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, 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 by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 02/17/2016
Reported: 02/23/2016
Project Name: ROCKET FEDERAL COM #005H
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 02/11/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S4-3' (H600369-21)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12400	16.0	02/19/2016	ND	400	100	400	3.92	

Sample ID: S4-4' (H600369-22)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12800	16.0	02/19/2016	ND	400	100	400	3.92	

Sample ID: S4-6' (H600369-23)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13800	16.0	02/19/2016	ND	400	100	400	3.92	

Sample ID: S4-8' (H600369-24)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1330	16.0	02/19/2016	ND	400	100	400	3.92	

Sample ID: S4-10' (H600369-25)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	02/19/2016	ND	400	100	400	3.92		

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, 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 by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, 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 by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: COG Operating LLC

Project Manager: Dakota Neel

Address: 2208 West Main

City: Artesia

Phone #: (575) 748-6930

Project #:

Project Name: ROCKET FEDERAL COM #005H

Project Location:

Sampler Name: Dakota Neel

P.O. #:

Company: COG Operating LLC

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0385

Fax #:

BILL TO

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H00369

7 S2-1'
8 S2-2'
9 S2-3'
10 S2-4'
11 S2-6'
12 S2-8'

(G)RAB OR (C)OMP

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER

ACID/BASE

ICE / COOL

OTHER

DATE TIME

BTEX

TPH

Chloride

MATRIX

PRESERV

SAMPLING

PLEASE NOTE: Laboratory and client's exclusive remedy for any claims arising under this contract shall be limited to the amount paid by the client for this analysis. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. In no event shall Cardinal be liable for incidental or consequential damages, including indirect, special, punitive, or exemplary damages, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated remedies or otherwise.

Relinquished By: DAKOTA NEEL

Date: 2/17/2016

Received By: Brittany Feller

Phone Result: ☐ Yes ☐ No Add'l Phone #:

Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:

dneel2@concho.com

lcarrasco@concho.com

atrullillo@concho.com

Relinquished By:

Date:

Received By:

Delivered By: (Circle One)

Sampled By: R. Bys - Other:

4.2c

Sample Condition

CHECKED BY:

atrullillo@concho.com

X

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:

Fax Result:

REMARKS:

Yes

No

Add'l Phone #:

Add'l Fax #:

Phone Result:



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: COG Operating LLC

Project Manager: Dakota Neel

Address: 2208 West Main

City: Artesia

Phone #: (575) 748-8930

Project #:

Project Name: ROCKET FEDERAL COM #005H

Project Location:

Sampler Name: Dakota Neel

FOR LAB USE ONLY

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax #:

BILL TO

ANALYSIS REQUEST

Address: 2208 West Main		City: Artesia		State: NM		Zip: 88210		Company: COG Operating LLC		P.O. #:	
Phone #: (575) 748-8930		Fax #:		Attn: Robert McNeill		Address: 600 W Illinois		City: Midland			
Project #:		Project Owner:		State: TX		Zip: 79701		Phone #: (432) 221-0398			
Project Location:		Sampler Name: Dakota Neal		Fax #:							
FOR LAB USE ONLY											
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP		MATRIX		PRESERV		SAMPLING	
				# CONTAINERS		GROUNDWATER		WASTEWATER			
				SOIL		OIL		SLUDGE		OTHER :	
				ACID/BASE:		ICE / COOL		OTHER :			
				DATE		TIME					
13		S3-1'		2/11/16		10:00 AM		BTX		X	
14		S3-2'		2/11/16		10:00 AM		TPH		X	
15		S3-3'		2/11/16		10:00 AM		Chloride		X	
16		S3-4'		2/11/16		10:00 AM				X	
17		S3-6'		2/11/16		10:00 AM				X	
18		S3-8'		2/11/16		10:00 AM				X	

PLEASE NOTE: Liability and Damages. Customer's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause shall be barred.

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claims arising from this report shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal or its affiliates or successors.

Relinquished By: DAKOTA NEEL

Date: 2/17/2016

Relinquished By:

Received By: Brittany Fuller

Date:

Delivered By: (Circle One)

Sampled By: R Bys - Other:

Sample Condition

Cool

Intact

Yes

No

CHECKED BY:

(Initials)

atrujillo@concho.com

Phone Result: ☐ Yes ☐ No

Fax Result: ☐ Yes ☐ No

REMARKS:

dnest2@concho.com

lcarrasco@concho.com

atrujillo@concho.com

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

#41



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC
Project Manager: Dakota Neel

Address: 2208 West Main

City: Artesia State: NM Zip: 88210

Phone #: (575) 748-6930 Fax #:

Project #:

Project Name: ROCKET FEDERAL COM #005H

Project Location:

Sampler Name: Dakota Neel

FOR LAB USE ONLY

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeil

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax #:

BILL TO

ANALYSIS REQUEST

Lab I.D. Sample I.D.

A
10
21
22
23
24
25

S4-1'
S4-2'
S4-3'
S4-4'
S4-6'
S4-8'
S4-10'

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

BTEX

TPH

Chloride

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's obligations remain for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the service. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of data, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated warranties or otherwise.

Relinquished By: DAKOTA NEEL

Date: 2/17/2016

Received By: Bictany Allen

Phone Result: ☐ Yes ☐ No Add'l Phone #:

Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:

dneel2@concho.com

lcarrasco@concho.com

alrujillo@concho.com

Bictany Allen

Received By:

Date:

Time:

Delivered By: (Circle One)

Sampled By: R. Elys - Other:

4.22c

Sample Condition
Cool / Intact
Yes ☒ No ☐

CHECKED BY: [Signature]

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

#CLL