

July 22, 2016

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

Re: Louise Fee #1

30-015-32988

Sec. 10, T22S-R27E Eddy County, NM

Mr. 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 February 24, 2016.

# **Background**

The release was caused by a failure in the well packing and a clogged back pressure regulator resulting in the release of 20 barrels of oil and 40 barrels of produced water. Upon discovery of the release, a vacuum truck was dispatched to recover any standing fluid of which 18 barrels of oil and 27 barrels of produced water were recovered. The release remained on the pad impacting an area of approximately 3,700 square feet to the north and east of the well head. The impacted area was excavated to a depth of 4-6" with all excavated material hauled for disposal at an NMOCD approved facility.

### Groundwater

Based on the Chevron Trend Maps, the release area would be classified at a site ranking of **Twenty** with depth to groundwater less than 50'. The location is situated on the side of a hill at approximately 0.25 miles north of the Pecos River. The only information for water wells found in that section show to be about 0.5 miles south of the release area and 0.25 miles south of the river.

# Soil Assessment and Analytical Results

Sample points noted on the attached Site Diagram show chloride delineation for the release area. S1 results show elevated chloride levels at a depth of 1' with all other sample point as non-detect or within tolerable limits. All sample points at a depth of 1'

NMOCD July 22, 2016 Page 2

and 2' were tested for BTEX and TPH, but proved to be non-detect as described in the attached analytical results.

### Work Plan

COG Operating LLC proposes a 1' excavation for the area labeled as S1. The area had initially been excavated to a depth of 4-6" which would leave the total excavation depth for S1 at 1.5'. S2 and S3 would not be excavated further due to BTEX and TPH levels results showing non-detect and chloride levels within tolerable limits for S2. The excavated areas will be backfilled with caliche in order to bring the location back to its original grade.

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,

**Robert Grubbs** 

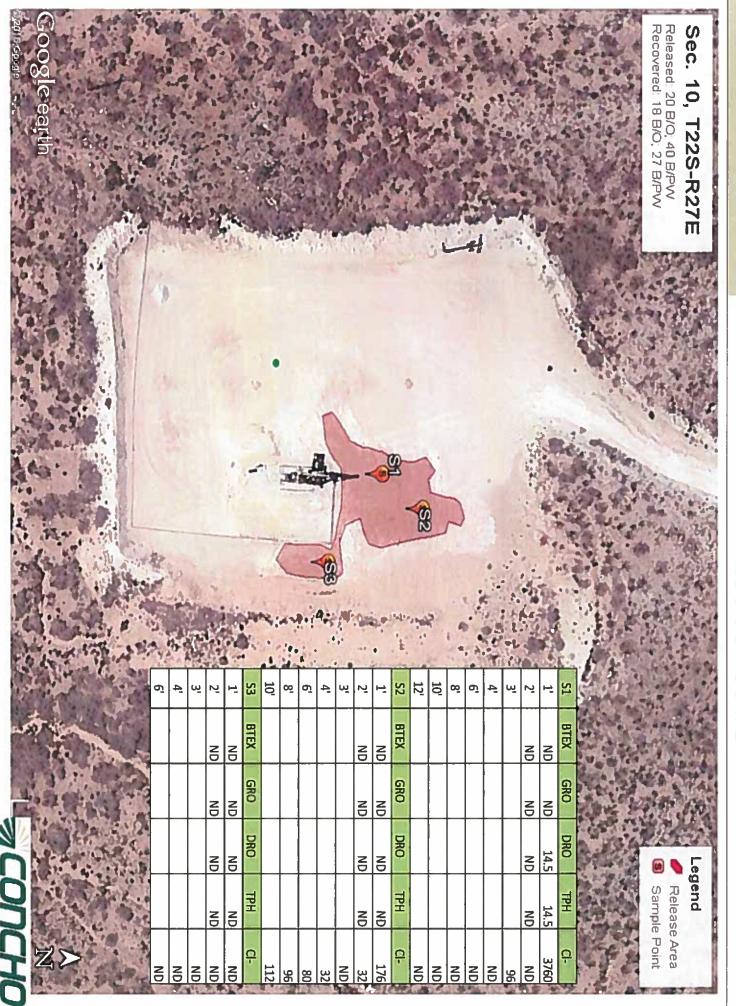
That the f

Senior Environmental Coordinator

Enclosure(s): Site Diagram

Analytical Results C-141 Initial (Copy)

# Louise Fee #1





March 31, 2016

**LUPE CARRASCO** 

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: LOUISE FEE #1

Enclosed are the results of analyses for samples received by the laboratory on 03/23/16 10:30.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred certif.html.

Cardinal Laboratories is accreditated 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.

Celeg D. Keene

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,

Celey D. Keene

Lab Director/Quality Manager



COG OPERATING LUPE CARRASCO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/23/2016

Reported:

03/31/2016 LOUISE FEE #1

Project Name: Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/22/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

# Sample ID: S1 - 1' (H600631-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2016	ND	2.07	104	2.00	5.25	
Toluene*	<0.050	0.050	03/29/2016	ND	1.96	97.8	2.00	7.05	
Ethylbenzene*	<0.050	0.050	03/29/2016	ND	1.72	85.9	2.00	8.63	
Total Xylenes*	<0.150	0.150	03/29/2016	ND	5.28	87.9	6.00	8.62	
Total BTEX	<0.300	0,300	03/29/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	99.3	% 73.6-14	o						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3760	16.0	03/28/2016	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/25/2016	ND	196	97.9	200	3.19	
DRO >C10-C28	14.5	10.0	03/25/2016	ND	200	99.8	200	7.50	
Surrogate: 1-Chlorooctane	83.0	% 35-147	•						
Surrogate: 1-Chlorooctadecane	95.0	% 28-171							

# Cardinal Laboratories \*=Accredited Analyte

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COG OPERATING LUPE CARRASCO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/23/2016

Reported:

03/31/2016

Project Name: Project Number:

LOUISE FEE #1
NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/22/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

### Sample ID: S1 - 2' (H600631-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2016	ND	2.07	104	2.00	5.25	
Toluene*	<0.050	0.050	03/29/2016	ND	1.96	97.8	2.00	7.05	
Ethylbenzene*	<0.050	0.050	03/29/2016	ND	1.72	85.9	2.00	8.63	
Total Xylenes*	<0.150	0.150	03/29/2016	ND	5.28	87.9	6.00	8.62	
Total BTEX	<0.300	0.300	03/29/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	99.6	% 73.6-140	9						
Chioride, SM4500CI-B	mg/	kg	Analyze	d By: AP			****		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/28/2016	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/25/2016	ND	196	97.9	200	3.19	
DRO >C10-C28	<10.0	10.0	03/25/2016	ND	200	99.8	200	7.50	
Surrogate 1-Chlorooctane	83.7	% 35-147							

### Sample ID: S1 - 3' (H600631-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/28/2016	ND	400	100	400	0.00	

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\*=Accredited Analyte

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COG OPERATING **LUPE CARRASCO** P. O. BOX 1630 ARTESIA NM, 88210 NONE Fax To:

Received: Reported: 03/23/2016

03/31/2016

Project Name: Project Number: **LOUISE FEE #1** NONE GIVEN

**Project Location:** 

**NOT GIVEN** 

Sampling Date:

03/22/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S1 - 4' (H600631-04)

Chloride, SM4500Cl-B

Chloride

Chloride

Chloride

mg/kg

Analyzed By: AP

Analyzed

03/28/2016

Analyte

Result

<16.0

Result

<16.0

16.0 03/28/2016

Reporting Limit

Reporting Limit

16.0

Reporting Limit

16.0

Method Blank

ND

ND

400

% Recovery

100

100

100

BS

True Value QC

400

RPD 0.00 Qualifier

Sample ID: S1 - 6' (H600631-05)

Chloride, SM4500Ci-B

Analyte

mg/kg

Analyzed By: AP

Analyzed Method Blank BS % Recovery True Value QC

400

400

RPD

Qualifier

Sample ID: S1 - 8' (H600631-06)

Chloride, SM4500Ci-B

mg/kg

Analyzed By: AP

Analyte Result <16.0

Analyzed 03/28/2016 Method Blank

ND

BS 400

400

% Recovery True Value QC RPD

0.00

0.00

Qualifier

Sample ID: S1 - 10' (H600631-07)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

% Recovery

True Value QC RPD Qualifier

Chloride

Chloride

Result <16.0

Result

<16.0

16.0

Reporting Limit

Reporting Limit

16.0

Analyzed 03/28/2016

03/28/2016

ND

B\$ 400

400

100

100

400

Sample ID: S1 - 12' (H600631-08)

Analyte

Analyte

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyzed

Method Blank ND

BS % Recovery True Value QC

400

RPD 0.00

0.00

Qualifier

Cardinal Laboratories

\*=Accredited Analyte

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Carley Throng



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Received:

03/23/2016

Reported:

03/31/2016 LOUISE FEE #1

Project Name: Project Number:

NONE GIVEN

Project Location:

**NOT GIVEN** 

Sampling Date:

03/22/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S2 - 1' (H600631-09)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2016	ND	2.07	104	2.00	5.25	
Toluene*	<0.050	0.050	03/29/2016	ND	1.96	97.8	2.00	7.05	
Ethylbenzene*	<0.050	0.050	03/29/2016	ND	1.72	85.9	2.00	8.63	
Total Xylenes*	<0.150	0.150	03/29/2016	ND	5.28	87.9	6.00	8.62	
Total BTEX	<0.300	0.300	03/29/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIC	101 9	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	03/28/2016	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Алајуге	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/25/2016	ND	196	97.9	200	3.19	
DRO >C10-C28	<10.0	10.0	03/25/2016	ND	200	99.8	200	7.50	
Surrogate: 1-Chlorooctane	89.7	% 35-147	r.						
Surrogate 1-Chlorooctadecane	98.1	% 28-171							

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Carry Latrana



COG OPERATING LUPE CARRASCO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/23/2016

Reported:

03/31/2016 LOUISE FEE #1

Project Name: Project Number:

NONE GIVEN

... - 41. -

Project Location:

**NOT GIVEN** 

Sampling Date:

03/22/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

## Sample ID: S2 - 2' (H600631-10)

	True Value QC
2.00 5.25	
	2.00
2.00 7.05	2.00
2.00 8.63	2.00
5,00 8.62	6.00
Value QC RPD Qualifie	True Value QC
400 0.00	400
Value QC RPD Qualifie	True Value QC
200 3.87	200
200 4.90	200
1	True

### Sample ID: S2 - 3' (H600631-11)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/28/2016	ND	400	100	400	0.00	

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Calley Thiere-



COG OPERATING **LUPE CARRASCO** P. O. BOX 1630 ARTESIA NM. 88210 NONE Fax To:

Received:

03/23/2016

Reported:

03/31/2016

Project Name: Project Number: **LOUISE FEE #1** NONE GIVEN

Project Location:

**NOT GIVEN** 

Sampling Date:

03/22/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Jodi Henson

Sample ID: S2 - 4' (H600631-12)

Chloride, SM4500CI-B

Chloride

Chloride

Chloride

Chloride

mg/kg

Analyzed By: AP

Analyte

Result

32.0

80.0

Reporting Limit 16.0

Analyzed 03/28/2016 Method Blank ND

BS 400 % Recovery 100

True Value QC 400

RPD 0.00 Qualifier

Sample ID: S2 - 6' (H600631-13)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte

Result Reporting Limit

16.0

Reporting Limit

16.0

Analyzed 03/28/2016 Method Blank ND

BS 400 % Recovery 100

True Value QC

400

RPD 0.00 Qualifier

Sample ID: S2 - 8' (H600631-14)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte

Analyte

Result 96.0

Result

112

Reporting Limit Analyzed 16.0 03/28/2016

Method Blank

BS

400

% Recovery 100

True Value QC 400

RPD 0.00 Qualifier

Sample ID: S2 - 10' (H600631-15)

Chloride, SM4500CI-B

mg/kg

Analyzed

03/28/2016

Analyzed By: AP

Method Blank ND

ND

BS 400 % Recovery 100

True Value QC 400

RPD 0.00 Qualifier

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\*=Accredited Analyte

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COG OPERATING LUPE CARRASCO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/23/2016

Reported:

03/31/2016

Project Name: Project Number:

LOUISE FEE #1 NONE GIVEN

Project Location:

**NOT GIVEN** 

Sampling Date:

03/22/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S3 - 1' (H600631-16)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2016	ND	2.07	104	2.00	5.25	
Toluene*	<0.050	0.050	03/29/2016	ND	1.96	97.8	2.00	7.05	
Ethylbenzene*	<0.050	0.050	03/29/2016	ND	1.72	85.9	2.00	8.63	
Total Xylenes*	<0.150	0.150	03/29/2016	ND	5.28	87.9	6.00	8.62	
Total BTEX	<0.300	0.300	03/29/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	100 9	6 73.6-14	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/28/2016	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/28/2016	ND	179	89.3	200	3.87	
DRO >C10-C28	<10.0	10.0	03/28/2016	ND	160	79.9	200	4.90	
Surrogate: 1-Chlorooctane	91.3	% 35-147							
Surrogate 1-Chlorooctadecane	95.1	26 28-171							

# Cardinal Laboratories

\*=Accredited Analyte

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COG OPERATING LUPE CARRASCO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/23/2016

Reported:

03/31/2016

Project Name: Project Number: LOUISE FEE #1 NONE GIVEN

Project Location:

**NOT GIVEN** 

Sampling Date:

03/22/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Jodi Henson

Sample ID: S3 - 2' (H600631-17)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	03/29/2016	ND	2.07	104	2.00	5.25	
Toluene*	<0.050	0.050	03/29/2016	ND	1.96	97.8	2.00	7.05	
Ethylbenzene*	<0.050	0.050	03/29/2016	ND	1.72	85.9	2.00	8.63	
Total Xylenes*	<0.150	0.150	03/29/2016	ND	5.28	87.9	6.00	8.62	
Total BTEX	<0.300	0.300	03/29/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	99.6 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/28/2016	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/28/2016	ND	179	89.3	200	3.87	
DRO >C10-C28	<10.0	10.0	03/28/2016	ND	160	79.9	200	4.90	
Surrogate: 1-Chlorooctane	80.8 9	% 35-147	•						
Surrogate 1-Chlorooctadecane	82,09	6 28-171							

### Sample ID: S3 - 3' (H600631-18)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/28/2016	ND	400	100	400	0.00	

### Cardinal Laboratories

\*=Accredited Analyte

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COG OPERATING LUPE CARRASCO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

03/23/2016

Reported:

03/31/2016

Project Name:

LOUISE FEE #1
NONE GIVEN

Project Number: Project Location:

NOT GIVEN

Sampling Date:

03/22/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S3 - 4' (H600631-19)

Chloride, SM4500CI-B

Chloride

Chloride

mg/kg

Analyzed By: AP

Analyte

Result <16.0

Result

<16.0

Reporting Limit 16.0

16.0

Analyzed 03/28/2016

Method Blank ND BS 400 % Recovery

True Value QC 400 RPD

0.00

Qualifier

Sample ID: S3 - 6' (H600631-20)

Chloride, SM4500CI-B

Analyte

mg/kg

Analyzed By: AP

Reporting Limit

Analyzed 03/28/2016

Method Blank ND BS 400 % Recovery Tru

True Value QC

400

Qualifier

0.00

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liabelty and Damages. Cardnal's liabelty 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 whistoever shall be deemed waved unless made in writing and received by Cardnal within thirty (30) days after completion of the applicable service. In no event shall Cardnal be liable for incidental or consequential damages, including, without invision, 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 hiereunder by Cardnal, regardless of whether such claims 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 writter approval of Cardnal Laboratories.

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### **Notes and Definitions**

QR-03 The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch

accepted based on LCS and/or LCSD recovery and/or RPD values.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

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 SM4500CI-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 clusies whistoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liabile for incidental or consequential damages, michaling, without limitation, tusiness interruptional, 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 claims is based upon any of the above stated reasons or otherwise. Results related only to the samples identified above. This report shall not be reproduced except in full with writer approval of Cardinal Liaborationes.

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

	(5/5) 393-2326 FAX (5/5) 393-2476	2476				100
Company Name:			Services of the services of th	AN	ANALYSIS REQUEST	
Project Manager:	: Lupe Carrasco		P.O. #:			
Address: 2208	2208 West Main		Company: COG Operating LLC			
City: Artesia	State: NM	Zip 88210				
Phone #:	(575) 748-6940 Fax #:		Address: 600 W Illinois			
Project #:	Project Owner:	7.				
Project Name: L	Louise Fee #1		:: TX Zip		\(\frac{1}{2}\)	
Project Location:			2			
Sampler Name:	Lupe Carrasco		THE STATE OF THE S			Al Vo
FOR LAB USE ONLY		MATRIX	PRESERV. SAMPLING			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL		TPH Chlaride		
	S1-T: S1-2'		gultak	× × × ×		
ντ (	\$1-4					
- (S	S1-6'			× >		
36 36	S1-8			×		
,,,,,	\$1-10			×		
	1			×		
PLEASE NOTE: Lability and Damu	PLEASE MOTE: Labify and Damages Curdnafs labify and client's exclusive remety for an embyses All claims including those for regisjence and any other cause whatoever shall be o	we ramady for any claim arang whather bealed in contract or fort, shall be limited to the Boewer shall be deemed watwed unfest made in verting and received by Cardinal within	PLEASE MOTE: Lability and Danages. Cardnut's hability and client's exclusive remedy for any client around whether besid in contract or fort, shall be imited to the amount ped by the client for the arrange what has deared unless made in writing and received by Cardinal edgin 30 days after considering in the considerance of the available of the arrange of the considerance of the available of the arrange of the			
Ringuished Ru	any out of or releted to the performance of services hereunder by C	arthrail requestless of whether such class	e of services hereunder by Cardinal regardless of whether such claims, loss of use, or loss of profes incurred by claim, as subsidiaries are of services hereunder by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.			
Relinquished By:	Date: 25/6	ved By	10)	O No	Add'l Phone #: Add'l Fax #: COM	
	Time:					
Delivered By: (Circle One)			tion CHECKED BY:			
Sampler - UPS - Bus - Other: FORM-006 R 2 0	Bus - Other: 4.42	Cool Intact	as (Indiana)			



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

582

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

Company Name:	COG Operating LLC		1			1000		18/	3/14/37O					₽	ANALYSIS	REQUEST	JEST		
Project Manager:						~ E	P.O. #:	ğ		COOCOCOCOCOC		_	$\dashv$	$\dashv$		$\dashv$	$\dashv$		
Address: 2208	2208 West Main					$\overline{}$	Company:		COG Operating LLC	ng LLC									
City: Artesia	(n	State: NM	Zip	ō	88210		Attn:		Robert McNeill	=				-33		_	-		
Phone #:	(575) 748-6940 Fa	Fax#:				_	Address:	S	600 W Illinois	NO IS				100			_		
Project #:	Pr	Project Owner:	.:			_	City:		Midland										
ame:	Louise Fee #1					(0	State: TX		Zip: 79701							_			
Project Location:						_	hone	#: (432	Phone #: (432) 221-0388										
Sampler Name:	Lupe Carrasco						Fax #:						_	-					
FOR LAB USE DALY			MP.	₹	MATRIX	×	מי	PRESERV.	SAMPLING	G									
Lab I.D.	Sample I.D.		(G)RAB OR (C)OF	GROUNDWATER	WASTEWATER SOIL OIL	SLUDGE	OTHER : ACID/BASE	ICE / COOL OTHER	DATE	TIME	ВТЕХ	ТРН	Chloride						
ر ا	S2-1'		_				_		91/12/5		×	×	×						
70	S2-2'					11 8			-		×	×	××						
1 <mark>7</mark> S2-4'	S2-4' S2-6'												××						
Δ±	S2-10'			100001 0					1				××						
PLEASE HOTE: LebMy and Damages analyses All cleans including trave for service. In no event shall Cardres to be to	PLEASE HOTE: Labley and Damages. Cardena's labley and clant's aucknew remark for any clare away for any clare away in contract or byt, shall be lanted to the amount paid by the dwell for the ambyes. All claims including those for negligenice and any other cause wheticoever shall be deemed waked unless made in writing and received by Cardenal within 30 days after completion of the applicable service in no event shall Cardenal be table for inclants or consequential demages, including without landston, business interruptions, loss of use, or loss of profits incurred by client, its subsidiances.	acture remedy for an whatsoever shalf be o	bearing and	Auton, b	Ow based in o	orbact or larg and re	Connect by	be lanted to Certanal we or loss of pro	the amount paid by her 30 days after on his mounted by clien	if pad by the chard he the s after completion of the a d by clark, its subsidients	ppicable					7,1			
Relinquished By:	AL DO OF MANIES OF DESIGNATION OF	Date 3/5%	R. R.	Received By:	Received By: Hensen	to	X	benson		Phone Result: Fax Result: REMARKS: 90 atrujillo@conc.	sult: : gc; : conch	O Yes	□ Yes □ No Add'l Phone □ Yes □ No Add'l Fax #: carrasco@concho.com ho com	Ad Ad	Add'l Phone # Add'l Fax #: COM				
Delivered By: (Circle One)	(Circle One)		1110		Sample Condition	ondition	S S	CHECK	ISCKED BY:										
Sampler - UPS - Bus - Other:	- Bus - Other:	2	7.2.2		- Yes	1 165		2											

FORM-006 R 2.0



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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Page 14 of 14

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476	5/5) 393-24/6	
Company Name: COG Operating LLC	BILL	ANALYSIS REQUEST
Project Manager: Lupe Carrasco	P.O. #:	
Address: 2208 West Main	Company: COG	COG Operating LLC
rtesia	State: NM Zip 88210 Attn: Rob	Robert McNeill
Phone #: (575) 748-6940 Fa	Fax #: Address: 6	600 W Illimois
	Project Owner: City:	Midland
Project Name: Louise Fee #1	State: TX Zip:	Zip: 79701
Project Location:	Phone #: (432) 221-0388	1-0388
Sampler Name: Lupe Carrasco	Fax#:	
Lab I.D. Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER ACID/BASE ICE / COOL OTHER	DATE TIME BTEX TPH Chloride
S3-1'	10.100 miles	× × × × × × ×
15 sa.a.		××
10 S3-6		* ×
72 S3-10		*
PLEAGE WOTE: Lability and Demoges: Cardinal is lability and client is of analyses. All cleams including stose for negligence and any other cause service. In no event shall Cardinal be liable for incidental or consequent	3 3 31	rount past by the claim to the definition of the applicable days after completion of the applicable formed by claim. It is substained.  The definition of other completions of the applicable defined exemption of other completions.
Relinquished By:	Time Received By:	Phone Result:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: FORM-006 R 2.0	Y, 40 Sample Condition CHECKBD BY:	BY:

District 1 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico **Energy Minerals and Natural Resources**

Submit 1 Copy to appropriate District Office in accordance with 19,15,29 NMAC,

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

**Release Notification and Corrective Action** 

						OPERATOR			☐ Initial Report ☐ Final Report				
Name of Company: COG Operating LLC						Contact: Robert McNeill							
Address: 600 West Illinois Avenue, Midland TX 79701						Telephone No. 432-230-0077							
Facility Nan	ne: LOUI	Facility Type: Wellhead											
Surface Owner: Fee Mineral Owner:						Fee	API No. 30-015-32988						
				LOCA'	TIOI	N OF REI	LEASE						
1 1 1 1 2 1 1									West Line County				
D	10	North 990' West			Eddy								
Latitude 32.4118195 Longitude -104.1830292  NATURE OF RELEASE													
Type of Release:						Volume of Release: Volume Recovered:							
Oil & Produced Water										I; 27 bbls PW			
Source of Release: Stuffing box leak						Date and Hour of Occurrence: Date and Hour 2/11/2016 10:15 am 2/11/2016 10:1					ir of Discovery:		
Was Immediate Notice Given?						If YES, To Whom?							
☐ Yes ☐ No ☐ Not Required						Mike Bratcher - NMOCD							
By Whom? Robert Grubbs Jr.						Date and Hour: Friday, February 12, 2016 8:19 AM							
Was a Watercourse Reached?  ☐ Yes ☒ No						If YES, Volume Impacting the Watercourse.							
If a Watercourse was Impacted, Describe Fully.*													
Describe Cause of Broblem and Remedial Action Taken *													
Describe Cause of Problem and Remedial Action Taken.*  The release was caused by a well packing and a clogged back pressure regulator. A vacuum truck was dispatched to recover standing fluid.													
1													
Describe Are	Describe Area Affected and Cleanup Action Taken.*												
This release r	emained or	the pad area :	around the	wellhead. Concho	will b	ave the spill s	site sampled to de	lineate a	nv possible	e contamina	tion fro	m the	
				lan to the NMOCE									
				is true and comple									
				d/or file certain rel									
should their o	public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health												
or the enviror	or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other												
federal, state,	or local la	ws and/or regu	lations.				OIL COM	י זי מיכונים	ATTON	DRAICIC	NAT.		
Signature: Zet Lef						OIL CONSERVATION DIVISION							
						Approved by Environmental Specialist:							
													Printed Name
Title: Senior	Title: Senior Environmental Coordinator						Approval Date: Expiration			Date:			
E-mail Address: rgrubbs@concho.com						Conditions of Approval:				Attached			
Data: Fahrur 24 2016 Bb 422 220 0077										Attached L			
	Date: February 24, 2016 Phone: 432-230-0077 Attach Additional Sheets If Necessary												