

Page 1 of 21  
Received by OCD: 11/10/2022 12:15:43 PM  
Released to Imaging: 11/10/2022 12:19:02 PM

District I  
625 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  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

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.	432-683-7443
Facility Name:	GC Federal #011Battery	Facility Type:	Tank Battery

Surface Owner:	Federal	Mineral Owner:		API No.	30-025-38994
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	19	17S	32E	1550	South	660	East	Lea

Latitude 32.8171158 Longitude 103.7993851

NATURE OF RELEASE

Type of Release:	Oil & Produced Water	Volume of Release:	2bbls Oil & 4bbls PW	Volume Recovered:	1bbls Oil & 2bbls PW
Source of Release:	FWKO	Date and Hour of Occurrence:	December 13, 2016 11:30 am	Date and Hour of Discovery:	December 13, 2016 11:30 am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour:				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

Gasket on FWKO failed. The gasket was repaired.

Describe Area Affected and Cleanup Action Taken.\*

The release occurred within the lined facility with an overspray affecting the adjacent pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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 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 laws and/or regulations.

Signature:	<i>Rebecca Haskell</i>	OIL CONSERVATION DIVISION	
Printed Name:	Rebecca Haskell	Approved by Environmental Specialist:	<i>[Signature]</i>
Title:	Senior HSE Coordinator	Approval Date:	2/7/2017
E-mail Address:	<a href="mailto:rhaskell@concho.com">rhaskell@concho.com</a>	Expiration Date:	
Date:	12/15/16	Phone:	432-683-7443
Attach Additional Sheets If Necessary		Conditions of Approval:	Attached <input checked="" type="checkbox"/>
		see attached directive	

1RP-4585

nOY1703847407

pOY1703849700

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 12/15/2016 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number \_\_1R-4585\_\_ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

*The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]*

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District \_1\_ office in \_\_Hobbs\_\_ on or before \_3/7/2017\_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

**Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.**

**Jim Griswold**

OCD Environmental Bureau Chief  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
505-476-3465  
jim.griswold@state.nm.us

**From:** [Price, Henryetta](#)  
**To:** [Sheldon Hitchcock](#)  
**Cc:** [Yu, Olivia, EMNRD](#); [Rebecca Haskell](#); [Robert McNeill](#); [Dakota Neel](#); [Aaron Lieb](#)  
**Subject:** Re: (Closure Request) GC Federal #011 12-13-2016 |30-025-38994 | 1RP-4531|  
**Date:** Thursday, October 26, 2017 4:49:14 PM

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Closure report received and approved.

Thank you.

## Henryetta Price

Environmental Protection Specialist  
Bureau Of Land Management  
[Hprice@blm.gov](mailto:Hprice@blm.gov)  
Phone 575-234-5951  
Cell 575-706-2780  
Fax 575-234-5927

On Thu, Oct 26, 2017 at 4:12 PM, Sheldon Hitchcock <[SLHitchcock@concho.com](mailto:SLHitchcock@concho.com)> wrote:

Ms. Yu/Ms. Price,

Please find the attached Closure Request Letter for your consideration. This is for a release that occurred on December 13, 2016 at the GC Federal #011 Tank Battery. If you have any questions or concerns please contact me.

Thank you,

Sheldon L. Hitchcock

HSE Coordinator

COG Operating LLC

2407 Pecos Avenue | Artesia, NM 88210  
Cell: 575-703-6475 | Office: 575-746-2010

[slhitchcock@concho.com](mailto:slhitchcock@concho.com)



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[Sheldon L. Hitchcock]  
[HSE Coordinator]

October 26, 2017

Olivia Yu  
Oil Conservation Division, District 1  
1625 N. French Dr.  
Hobbs, NM 88240

Henryetta Price  
Bureau of Land Management  
620 E. Green St.  
Carlsbad, NM 88220

Re: Closure Letter  
GC Federal #011 (1RP-4531)  
API #: 30-025-38994  
Unit Letter I Section 19, Township 17S, Range 32E  
Lea County, NM

Ms. Yu/Ms. Price,

COG Operating, LLC (COG) is pleased to submit for your consideration the following closure request for the GC Federal #011. This release occurred on December 13, 2016 and impacted the location. All work has been completed in accordance with the work plan submitted to and approved by the New Mexico Oil Conservation Division (NMOCD) and Bureau of Land Management (BLM).

## BACKGROUND

On December 13, 2016, a gasket on a free water knockout failed resulting in the release of approximately 2bbls of oil and 4bbls of produced water. A vacuum truck was utilized to recover freestanding fluids. Approximately 1bbl of oil and 2bbls of produced water were recovered.

On January 10, 2017, COG personnel conducted soil sampling within the impacted area in preparation for the development of a remediation work plan (laboratory results are summarized in the table below).

On May 25, 2017, BLM issued approval of the remediation work plan. On May 26, 2017, NMOCD also approved the remediation work plan.

## GROUNDWATER AND SITE RANKING

Based on the 2005 Chevron Texaco groundwater trend map, groundwater in the project vicinity is greater than 200-feet below ground surface (BGS). Therefore the site ranking for this release is zero (0) based on the following:

Depth to ground water	>100-feet
Distance to surface water body	>1000-feet
Wellhead Protection Area	>1000-feet

## LABORATORY RESULTS

Sample ID	Depth (feet)	Benzene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
T-1	1	<0.050	<0.300	8400	<10.0	58.4
T-1	2	<0.050	<0.300	96	<10.0	<10.0
T-1	3	<0.050	<0.300	16	<10.0	<10.0
T-1	4	<0.050	<0.300	48	<10.0	<10.0
T-1	5	<0.050	<0.300	32	<10.0	<10.0
T-1	6	<0.050	<0.300	<16.0	<10.0	<10.0
T-1	8	--	--	<16.0	--	--

## REMEDIAL ACTIONS

- The impacted area outside of the lined facility was excavated to the depth of 1-foot BGS.
- All of the excavated material was hauled to an NMOCD approved solid waste disposal facility.
- The excavation was backfilled and contoured to match the surrounding terrain.

October 26, 2017

**CLOSURE REQUEST**

COG Operating, LLC respectfully requests that the New Mexico Oil Conservation Division and Bureau of Land Management grant closure approval for the GC Federal #11 incident that occurred on December 13, 2016.

Should you have any questions or concerns please do not hesitate to contact me.

Sincerely,

  
Sheldon L. Hitchcock  
HSE Coordinator  
[slhitchcock@concho.com](mailto:slhitchcock@concho.com)

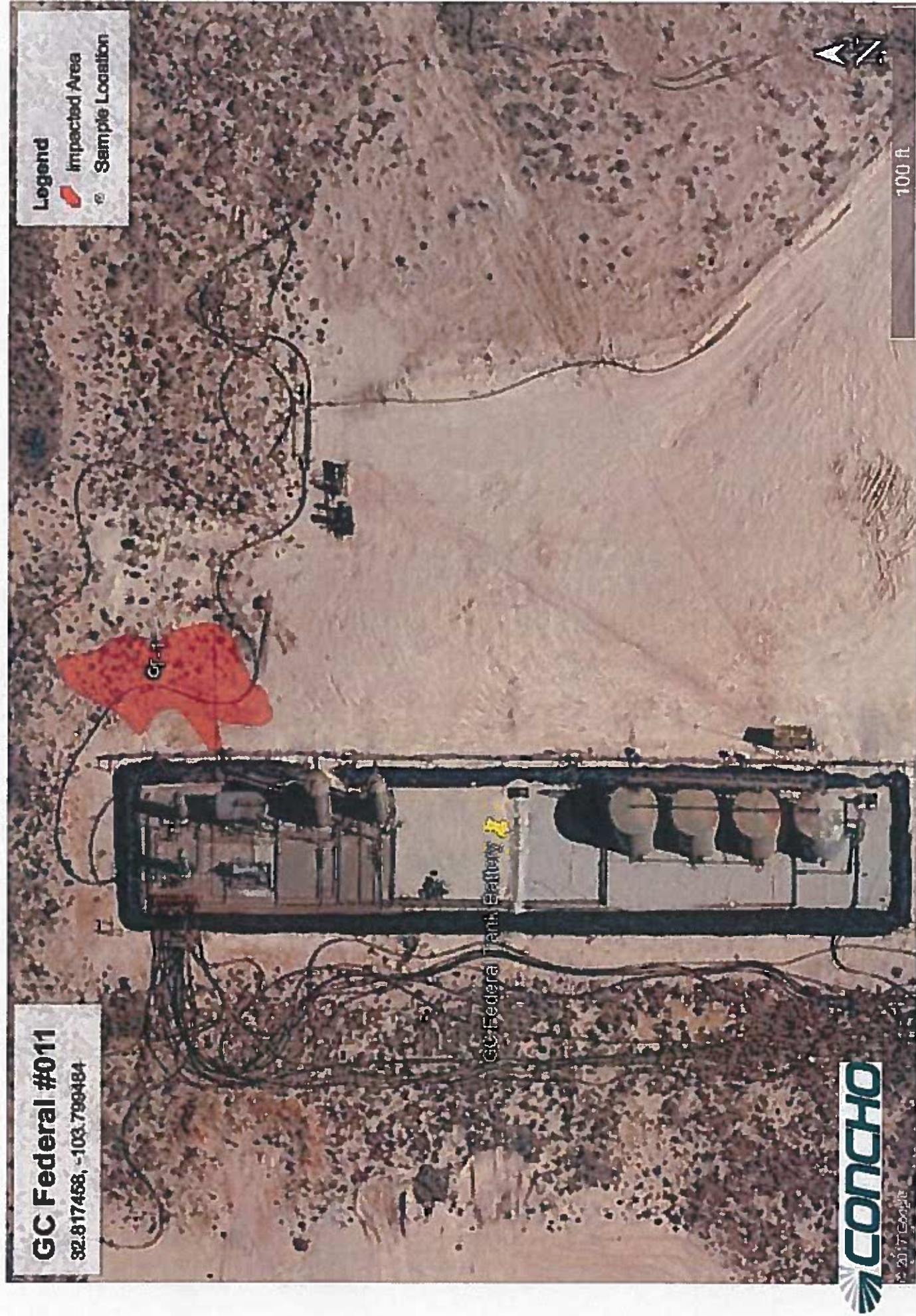
Enclosed:

- (1) Site Diagram
- (2) Laboratory Analytical Reports and Chain-of-Custody Forms
- (3) Initial C-141
- (4) Final C-141



October 26, 2017

# GC Federal #011



**GC Federal #011**

32.817458, -103.799484

**Legend**



Impacted Area



Sample Location



2017 Concho

100 ft



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

January 24, 2017

AARON LIEB

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: GC FEDERAL #11 TB

Enclosed are the results of analyses for samples received by the laboratory on 01/19/17 10:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/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".

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

COG OPERATING  
AARON LIEB  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 1' (H700130-01)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2017	ND	1.99	99.4	2.00	1.78	
Toluene*	<0.050	0.050	01/20/2017	ND	1.97	98.3	2.00	1.96	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.98	98.9	2.00	1.18	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.62	93.7	6.00	1.28	
Total BTEX	<0.300	0.300	01/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8400	16.0	01/20/2017	ND	416	104	400	3.77	

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	01/19/2017	ND	190	95.1	200	0.847	
DRO >C10-C28	58.4	10.0	01/19/2017	ND	197	98.5	200	2.76	QM-07

Surrogate: 1-Chlorooctane 90.3 % 35-147

Surrogate: 1-Chlorooctadecane 89.6 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

COG OPERATING  
AARON LIEB  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 2' (H700130-02)**

BTX 80218			mg/kg							
			Analyzed By: CK							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/20/2017	ND	1.99	99.4	2.00	1.78		
Toluene*	<0.050	0.050	01/20/2017	ND	1.97	98.3	2.00	1.96		
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.98	98.9	2.00	1.18		
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.62	93.7	6.00	1.28		
Total BTX	<0.300	0.300	01/20/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 73.6-140

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	01/20/2017	ND	416	104	400	3.77		

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	01/19/2017	ND	190	95.1	200	0.847		
DRO >C10-C28	<10.0	10.0	01/19/2017	ND	197	98.5	200	2.76		

Surrogate: 1-Chlorooctane 84.4 % 35-147

Surrogate: 1-Chlorooctadecane 94.0 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

COG OPERATING  
AARON LIEB  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 3' (H700130-03)**

BTX 8021B			mg/kg							
			Analyzed By: CK							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878		
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639		
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11		
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11		
Total BTX	<0.300	0.300	01/20/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 100 % 73.6-140

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	01/20/2017	ND	416	104	400	3.77		

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	01/19/2017	ND	190	95.1	200	0.847		
DRO >C10-C28	<10.0	10.0	01/19/2017	ND	197	98.5	200	2.76		

Surrogate: 1-Chlorooctane 87.4 % 35-147

Surrogate: 1-Chlorooctadecane 101 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

COG OPERATING  
AARON LIEB  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 4' (H700130-04)**

BTEX 8021B			mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878		
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639		
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11		
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11		
Total BTEX	<0.300	0.300	01/20/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 73.6-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	01/20/2017	ND	416	104	400	3.77		

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	01/19/2017	ND	190	95.1	200	0.847		
DRO >C10-C28	<10.0	10.0	01/19/2017	ND	197	98.5	200	2.76		

Surrogate: 1-Chlorooctane 83.9 % 35-147

Surrogate: 1-Chlorooctadecane 94.7 % 28-171

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

COG OPERATING  
AARON LIEB  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 5' (H700130-05)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878	
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11	
Total BTEX	<0.300	0.300	01/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 73 6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/20/2017	ND	416	104	400	3.77	

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	01/19/2017	ND	190	95.1	200	0.847	
DRO >C10-C28	<10.0	10.0	01/19/2017	ND	197	98.5	200	2.76	

Surrogate: 1-Chlorooctane 84.5 % 35-147

Surrogate: 1-Chlorooctadecane 95.3 % 28-171

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

COG OPERATING  
AARON LIEB  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 6' (H700130-06)**

BTEX 80218		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878	
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11	
Total BTEX	<0.300	0.300	01/20/2017	ND					

Surrogate 4-Bromofluorobenzene (PIC) 101 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/20/2017	ND	416	104	400	3.77	

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	01/19/2017	ND	190	95.1	200	0.847	
DRO >C10-C28	<10.0	10.0	01/19/2017	ND	197	98.5	200	2.76	

Surrogate 1-Chlorooctane 75.5 % 35-147

Surrogate 1-Chlorooctadecane 91.8 % 28-171

**Sample ID: T1 - 8' (H700130-07)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/20/2017	ND	416	104	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager





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### Notes and Definitions

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 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

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Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC		P.O. #:		BILL TO										ANALYSIS REQUEST																															
Project Manager: Aaron Lieb		Company: COG Operating LLC																																											
Address: 2407 Pecos Avenue		Attn: Robert McNeill																																											
City: Artesia		Address: 600 W Illinois																																											
Phone #: 575-748-1553		City: Midland																																											
Fax #: Project Owner:		State: TX Zip: 79701																																											
Project Name: GC Federal # 11 TB		Phone #: (432) 221-0388																																											
Project Location:		Fax #:																																											
Sampler Name: Aaron Lieb		PRESERV		SAMPLING																																									
FOR LAB USE ONLY																																													
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		BTX		TPH		Chloride											
H100130		T1-1'																								1/10/17		2:30 PM		X		X		X											
		T1-2'																								1/10/17		2:30 PM		X		X		X											
		T1-3'																								1/10/17		2:30 PM		X		X		X											
		T1-4'																								1/10/17		2:30 PM		X		X		X											
		T1-5'																								1/10/17		2:30 PM		X		X		X											
		T1-6'																								1/10/17		2:30 PM		X		X		X											
		T1-8'																																											

District I  
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 **NM OIL CONSERVATION**  
Energy Minerals and Natural Resources ARTESIA DISTRICT

Form C-141  
Revised August 8, 2011

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

DECEMBER 2016  
Submit to appropriate District Office in  
accordance with 19.15.29 NMAC.

RECEIVED

**Release Notification and Corrective Action**

*NAB11635642799*

<b>OPERATOR</b>		<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
Name of Company:	COG Operating LLC <i>229137</i>	Contact:	Robert McNeill
Address:	600 West Illinois Avenue, Midland TX 79701	Telephone No.	432-683-7443
Facility Name:	GC Federal #011 Battery	Facility Type:	Tank Battery
Surface Owner:	Federal	Mineral Owner:	API No. 30-025-38994

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	19	17S	32E	1550	South	660	East	Lea

Latitude 32.8171158 Longitude 103.7993851

**NATURE OF RELEASE**

Type of Release:	Oil & Produced Water	Volume of Release:	2bbbls Oil & 4bbbls PW	Volume Recovered:	1bbbls Oil & 2bbbls PW
Source of Release:	FWKO	Date and Hour of Occurrence:	December 13, 2016 11:30 am	Date and Hour of Discovery:	December 13, 2016 11:30 am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour:				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			
If a Watercourse was Impacted, Describe Fully.*					
Describe Cause of Problem and Remedial Action Taken.*					
Gasket on FWKO failed. The gasket was repaired.					
Describe Area Affected and Cleanup Action Taken.*					
The release occurred within the lined facility with an overspray affecting the adjacent pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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 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 laws and/or regulations.					
Signature:	<i>Rebecca Haskell</i>				
Printed Name:	Rebecca Haskell				
Title:	Senior HSE Coordinator	Approved by Environmental Specialist:	<i>Haskell</i>		
E-mail Address:	rhaskell@concho.com	Approval Date:	12/20/16	Expiration Date:	N/A
Date:	12/15/16	Phone:	432-683-7443	Conditions of Approval:	Attached <input checked="" type="checkbox"/>
				<i>See attached</i>	

\* Attach Additional Sheets If Necessary

*IRP 4531*

District I  
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

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

Form C-141  
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: <b>COG Operating, LLC (OGRID# 229137)</b>	Contact: <b>Robert McNeill</b>
Address: <b>600 West Illinois Avenue, Midland TX 79701</b>	Telephone No.: <b>432-683-7443</b>
Facility Name: <b>GC Federal #11 Battery</b>	Facility Type: <b>Tank Battery</b>

Surface Owner: <b>BLM</b>	Mineral Owner: <b>Federal</b>	API No.: <b>30-025-38994</b>
---------------------------	-------------------------------	------------------------------

LOCATION OF RELEASE

Unit Letter <b>I</b>	Section <b>19</b>	Township <b>17S</b>	Range <b>32E</b>	Feet from the <b>1550</b>	North/South Line <b>South</b>	Feet from the <b>660</b>	East/West Line <b>East</b>	County <b>Lea</b>
-------------------------	----------------------	------------------------	---------------------	------------------------------	----------------------------------	-----------------------------	-------------------------------	----------------------

Latitude: 32.8171158 Longitude: -103.7993851 NAD83

NATURE OF RELEASE

Type of Release: <b>Oil &amp; Produced Water</b>	Volume of Release: <b>2bbls Oil &amp; 4bbls PW</b>	Volume Recovered: <b>1bbl Oil &amp; 2bbls PW</b>
Source of Release: <b>FWKO</b>	Date and Hour of Occurrence: <b>December 13, 2016 11:30am</b>	Date and Hour of Discovery: <b>December 13, 2016 11:30am</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

A gasket on the FWKO failed resulting in the release of approximately 2bbls of oil and 4bbls of produced water. The gasket was repaired.

Describe Area Affected and Cleanup Action Taken.\*

The release occurred within the lined facility with an overspray affecting the adjacent location. A vacuum truck was dispatched to remove all freestanding fluids. COG personnel collected soil samples within the impacted area and developed a remediation work plan which was subsequently approved by NMOCD and BLM. The remediation of the impacted area was carried out in accordance with the approved work plan.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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 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 laws and/or regulations.

Signature: <i>Sheldon Hitchcock</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Sheldon L. Hitchcock</b>		Approved by Environmental Specialist: <i>Ashley Maxwell</i>	
Title: <b>HSE Coordinator</b>		Approval Date: <b>11/10/2022</b>	Expiration Date:
E-mail Address: <b>slhitchcock@concho.com</b>		Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>10/26/2016</b> Phone: <b>575-746-2010</b>			

Attach Additional Sheets If Necessary



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 157720

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 157720
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	11/10/2022