

September 7, 2021

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

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

Re: Closure Request Report

Federal BA 001 (1.8.21) Tracking # nAPP2102141155 GPS: 32.428955, -103.76284

Unit Letter O Section 34, Township 21 South, Range 31 East

Eddy County, New Mexico

To Whom it May Concern,

COG Operating, LLC (COG) is pleased to submit the following closure report in response to a release that occurred at the Federal BA 001 located in Unit Letter O Section 34, Township 21 South, Range 31 East in Eddy County, New Mexico. The spill site coordinates are 32.428955, -103.76284.

BACKGROUND

The release was discovered on January 8, 2021 and a C-141 initial report was submitted and approved by the New Mexico Oil Conservation Division (NMOCD). The release was caused by internal corrosion on a circulating line inside the tank battery firewalls. The release was all contained inside the facility firewalls. A vacuum truck was dispatched to remove all freestanding fluids. Approximately ten (10) barrels of Crude oil was released and eight (8) barrels of fluid were recovered. The initial C-141 is shown in Appendix A.

GROUNDWATER AND REGULATORY

According to the New Mexico Office of State Engineer (NMOSE) the estimated depth to water in this area is greater than one hundred (100) feet bgs. A well is not located within a half mile of the release.

A borehole was drilled within a ½ mile of the release to a depth of one hundred and five (105) feet below surface and open for 72 hrs. After 72 hours, the borehole was gauged for presence of groundwater and no water was present. (Drilling log and map of location in Appendix B).

An evaluation and site determinations were performed in accordance to the New Mexico Oil Conservation Division (NMOCD) Rule (Title 19 Chapter 15 Part 29) for releases on oil and gas development and production facilities in New Mexico (effective August 14, 2018). According to the site character evaluation, the release area is located in low karst. No other receptors (water wells, playas, water course, lake beds or ordinance boundaries) were located within each specific boundaries or distance from the site.

The groundwater data and the site characterization evaluation data are summarized in Appendix B. The delineation and closure criteria are listed below:

General Site Characterization and Groundwater:

Site Characterization	Average Groundwater Depth (ft.)
Low Karst	>100 ft

One Concho Center | 600 West Illinois Avenue | Midland, Texas 79701 | P 432.683.7443 | F 432.683.7441

Delineation and Closure Criteria:

Remedial Action Levels (RALs)					
Chlorides	20,000 mg/kg				
TPH (GRO and DRO and MRO)	2,500mg/kg				
Benzene	10 mg/kg				
Total BTEX	50 mg/kg				

INITIAL ASSESMENT

• The remediation was done at risk. Excavation was guided by field screens.

REMEDIAL ACTIONS

- The impacted area was excavated to a depth of two (2) to two feet bgs. A composite sample (BH-1) and two sidewall samples (SW-1, SW-2) were taken on March 17, 2021. The results showed elevated DRO. The sidewalls results were below NMOCD closure criteria. An additional half (0.5) ft bgs was excavated and an additional confirmation sample was taken. The results indicated NMOCD closure criteria was met due to the Depth to water being greater than 100 ft.
- Table 1 shows the sample depths and analytical results.
- All the excavated material was hauled to an NMOCD approved solid waste disposal facility.
- Confirmation soil samples were taken from bottom and sidewalls of the excavation per NMAC 19.15.29.
- The analytical data shown in Table 1 show that the release area meets NMOCD closure criteria (NMAC 19.15.29.12(E) Table I).

SAMPLING AND BACKFILLING

Once excavated, soil samples were collected from the sidewalls to confirm the removal of impacted soil greater than 600 mg/kg of chlorides. Composite bottom and sidewall samples were collected every 200 square feet, to be representative of the release area. The confirmation sample (CS-1) and sidewall samples (SW-1 & SW-2) results meet NMOCD closure criteria.

Once completed, the excavated area was backfilled with non-contaminated material with concentrations below 600 mg/kg of chlorides.

REQUEST FOR CLOSURE

COG Operating, LLC respectfully requests that the New Mexico Oil Conservation Division and the Bureau of Land Management grant closure approval for the Federal BA 001 release that occurred on January 8, 20201 (Tracking # NAPP2102141155).

Should you have any questions or concerns on the closure report, please do not hesitate to contact me.

Sincerely,

Jacqui Harris

Jacqui Thoris

Environmental Coordinator

Jacqui.Harris@conocophillips.com

Maps



Table of Analytical Data

Table 1
COG Operating LLC.
Federal BA 001 (1.8.21) -Analytical Data
Lea County, New Mexico

Sample ID	Sample Date	Soil S	Status			1	TPH (mg/kg	g)			Benzene	Total BTEX	Chloride
Sample 1D	Sample Date	In-Situ	Removed	GRO	DRO	MRO	Total	GRO	DRO	Total	(mg/kg)	(mg/kg)	(mg/kg)
Average Depth to Gre	Average Depth to Groundwater (ft) - >100' Low Karst												
NMOCD RAL Limits (mg/l	kg)			-	-	-	2,500	-	-	1,000	10	50	20,000
BH 1	3.17.21		-	<49.8	167	<49.8	167.0	167.0	<49.8	167.0	<0.00198	<0.00198	432.0
CS-1	3.31.21			<49.8	149.0	1/0/00	149.0	<49.8	149.0	149.0	<0.00198	<0.00198	271.0
SW-1	3.17.21	-		<49.9	<49.9	<49.9	0.0	<49.9	<49.9	0.0	<0.00198	<0.00198	36.4
SW-2	3.17.21	-		<50.0	<50.0	<50.0	0.0	<50.0	<50.0	0.0	<0.00202	<0.00198	219.0

Photos



Appendix A

C-141

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

Responsible Party

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

OGRID

Contact Name					Contact Telephone			
Contact emai	il				Incident # (assigned by OCD)			
Contact mailing address					I			
			Location	of R	Release So	ource		
Latitude			(NAD 83 in de	ecimal de	Longitude _ grees to 5 decim	nal places)		
Site Name					Site Type			
Date Release	Discovered				API# (if app	licable)		
Unit Letter	Section	Township	Range		Coun	ty		
Crude Oil	Material	Federal Tr	Nature and	d Vo	lume of I			ow)
Produced	Water	Volume Release	d (bbls)			Volume Recovered (bbls)		
		produced water		chloride	e in the	☐ Yes ☐ No		
Condensa		Volume Release				Volume Recov		
Natural G		Volume Release				Volume Recovered (Mcf)		
Other (describe) Volume/Weight Released (provide units))	Volume/Weig	ht Recovered (pro	vide units)		
Cause of Rele	ease							

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A1'		

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the r	esponsible party consider this a major release?
If YES, was immediate no	otice given to the OCD? By whom?	To whom? When and by what means (phone, email, etc)?
	Initia	l Response
The responsible	party must undertake the following actions imm	ediately unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.	
☐ The impacted area ha	s been secured to protect human health	and the environment.
Released materials ha	we been contained via the use of berm	s or dikes, absorbent pads, or other containment devices.
☐ All free liquids and re	ecoverable materials have been remove	ed and managed appropriately.
has begun, please attach	a narrative of actions to date. If reme	nce remediation immediately after discovery of a release. If remediation dial efforts have been successfully completed or if the release occurred C), please attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain releas ment. The acceptance of a C-141 report by ate and remediate contamination that pose	to the best of my knowledge and understand that pursuant to OCD rules and e notifications and perform corrective actions for releases which may endanger the OCD does not relieve the operator of liability should their operations have a threat to groundwater, surface water, human health or the environment. In or of responsibility for compliance with any other federal, state, or local laws
Printed Name		Title:
Signature:	tanegoparge	Date:
email:		Telephone:
OCD Only		
Received by:		Date:

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)			
Did this release impact groundwater or surface water?	☐ Yes ☐ No			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No			
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No			
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No			
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No			
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No			
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No			
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No			
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No			
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No			
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No			
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☐ No			
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.				
Characterization Report Checklist: Each of the following items must be included in the report.				
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps Laboratory data including chain of custody				

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release no public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a threaddition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	tifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have reat to groundwater, surface water, human health or the environment. In
Printed Name:	Title:
Signature: Jacqui Theris	Date:
email:	Telephone:
OCD Only	
Received by:	Date:

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Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

☐ A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)
☐ Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in
Printed Name:	
Signature: Jacqui Theris	Date:
email:	Telephone:
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

Appendix B

Site Assessment Data



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) (R=POD has been replaced, O=orphaned, C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters) (In feet)

,	/	` '					·			`	·
	POD										
	Sub-	Q	QQ							Depth	Depth Water
POD Number	Code basin C	ounty 64	116 4	Sec	Tws	Rng	Х	Y	Distance	Well	Water Column
C 02949 EXPL	CUB	ED 1	1 4	34	21S	31E	616140	3589231* 🌍	599	970	
C 02744	CUB	ED 3	2 1	11	22S	31E	617374	3586631*	2287	4911	
C 02727	CUB	ED 3	1 1	33	21S	31E	613716	3589809*	2840	913	

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

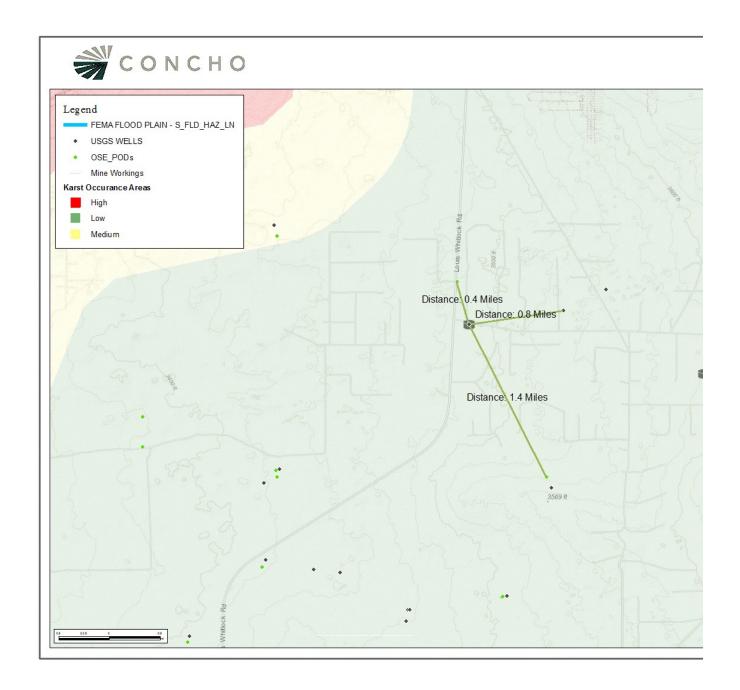
Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 616312.93 Northing (Y): 3588657.19 Radius: 3200

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.







Project Name : Conoco Fed BA #001

214306 Project No. :

Location : **Eddy Co, New Mexico**

Coordinates : 32.428622, -103.762219

Elevation : 3,497' Date : Wednesday, June 16, 2021

Sampler : **Clint Merritt**

Driller: Scarborough Drilling

Method: Air Rotary

Depth (ft.) WL	Soil Description	Lithology	Depth (ft.) W	/L Soil Description	Lithology
	(0') - Light brown med. Loose sand (SP). Dry		50 🛨	(50') - Light brown fine, med. dense sandy clay (SC). Dry	/////
5 —	(5') - Light brown med. Loose sand (SP). Dry		55 -		
10	(10') - Light brown med. Loose sand (SP). Dry		60	(60') - Light brown fine, med. dense sandy clay (SC). Dry	
15			65		
20	(20') - Light brown fine, med. dense sandy clay (SC). Dry		70	(70') - Light brown fine, med. dense sandy clay (SC). Dry	
30	(30') - Light brown fine, med. dense sandy clay (SC). Dry		80	(80') - Light brown fine, very dense sandy clay (SC). Dry	
40	(40') - Light brown fine, med. dense sandy clay (SC). Dry		90	(90') - Light brwon med. stiff clay w/50% fine loose sand (ML). Dry	
45			100		

Comments:

Total Depth 105' bgs Drilling Terminated @ 12:00 CT No groundwater present On 6/21/2021 No groundwater present

Appendix C

Analytical Reports



ANALYTICAL REPORT

Job Number: 890-389-1

SDG Number: Eddy Co NM

Job Description: Federal BA #001

For:

ConocoPhillips Co. 1401 Commerce Drive Carlsbad, NM 882200

Attention: Jacqui Harris

Approved for releas Jessica Kramer Project Manager 3/22/2021 2:34 PM

Jessica Kramer, Project Manager 1211 W. Florida Ave, Midland, TX, 79701 jessica.kramer@eurofinset.com 03/22/2021

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

ELTY ACCREONE TNI LyBORATORY

Client Sample Result Summary

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Job ID: 890-389-1

Client: ConocoPhillips Co. Project/Site: Federal BA #001

 Lab Sample ID:
 890-389-1
 890-389-2
 890-389-3

 Client Sample ID:
 BH1 @ 4'
 SW1
 SW2

 Matrix:
 Solid
 Solid
 Solid

 Date Collected:
 03/17/2021 00:00
 03/17/2021 00:00
 03/17/2021 00:00

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	03/20/2021 11	:30	03/20/2021 11:30		03/20/2021 11:30	
	Analyzed:	03/21/2021 21:39		03/21/2021 22:00		03/21/2021 23:15	
Analyte	Unit/RL:	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00202 U	0.00202
Ethylbenzene		<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00202 U	0.00202
Toluene		<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00202 U	0.00202
Total BTEX		<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00202 U	0.00202
Xylenes, Total		<0.00396 U	0.00396	<0.00396 U	0.00396	<0.00403 U	0.00403
m-Xylene & p-Xylene		<0.00396 U	0.00396	<0.00396 U	0.00396	<0.00403 U	0.00403
o-Xvlene		<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00202 U	0.00202

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

	Prepared:	03/19/2021 1	4:08	03/19/2021 1	4:08	03/19/2021 14	1:08
	Analyzed:	03/20/2021 0	2:49	03/20/2021 03:52		03/20/2021 04:13	
Analyte	Unit/RL:	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organio (GRO)-C6-C10	cs	<49.8 U	49.8	<49.9 U	49.9	<50.0 U	50.0
Total TPH		167	49.8	<49.9 U	49.9	<50.0 U	50.0
Diesel Range Organics C10-C28)	(Over	167	49.8	<49.9 U	49.9	<50.0 U	50.0
Oll Range Organics (Ov C28-C36)	rer	<49.8 U	49.8	<49.9 U	49.9	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:

	Analyzed:	03/19/2021 18:25		03/19/2021	18:30	03/21/2021 18:48		
Analyte	Unit/RL:	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	
Chloride		432	4 97	36.4	4 95	219	4 99	

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☐ Laboratory analyses of final sampling (Note: appropriate ODG	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certai may endanger public health or the environment. The acceptance of	ntions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in
Printed Name:	Title:
Signature:	Date:
email:	Telephone:
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by: Robert Hamlet	Date:
Printed Name:	Title:

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

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 50502

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave Midland, TX 79701	Action Number: 50502
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created	By Condition	Condition Date
rhaml	We have received your closure report and final C-141 for Incident #NAPP2102141155 FEDERAL BA 001, thank you. This closure is approved.	2/4/2022