



April 28, 2023

New Mexico Oil Conservation Division

New Mexico Energy, Minerals, and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Closure Request Addendum
Super Cobra State Com 001H
Incident Number NAPP2211531225
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this *Closure Request Addendum* to provide an update to the depth to groundwater determination activities performed at the Super Cobra State Com 001H (Site), in response to the denial of the original *Closure Request*, dated January 5, 2023. In the denial, the New Mexico Oil Conservation Division (NMOCD) expressed concern that depth to groundwater was not adequately determined. Based on additional investigation of depth to groundwater, COG is requesting closure for Incident Number NAPP2211531225.

Details regarding the release, Site characterization, and remediation activities can be referenced in the original *Closure Request*. NMOCD denied the *Closure Request* on January 31, 2023, for the following reason:

Closure Report Denied. The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. Please also state if the liner was found to be intact. Please resubmit a revised closure report to the OCD portal by March 03, 2023.

DEPTH TO GROUNDWATER DETERMINATION ACTIVITIES

In an effort to confirm the depth to groundwater determination, Ensolum oversaw installation of a soil boring at the Site utilizing a hollow stem auger drilling rig. A soil boring (BH01) was advanced to a depth of 105 feet bgs. An Ensolum geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The borehole lithologic/soil sampling log is included in Appendix A. The location of the borehole is approximately 185 feet southeast of the Site and is depicted on Figure 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 105 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. Based on the confirmed depth to water greater than 100 feet bgs, the Table 1 Closure Criteria identified in the original *Closure Request* are applicable and appropriate for protection of groundwater at this Site.

COG Operating, LLC
Closure Request Addendum
Super Cobra State Com 001H

LINER INSPECTION ACTIVITIES

Documentation of the liner inspection was not included in the original *Closure Request* but is being provided with this *Closure Request Addendum*.

An advance notice of the liner inspection was provided via email on June 13, 2022, to the NMOCD. A liner integrity inspection was conducted by Ensolum personnel on June 14, 2022. Upon inspection, the liner was determined to be sufficient. Photographic documentation was conducted at the Site. A photographic log is included in Appendix B. The NMOCD email notification is provided as Appendix C.

CLOSURE REQUEST

Based on a boring installed within ½-mile of the Site, depth to water has been determined to be greater than 105 feet bgs beneath the Site, and as such, the Site-specific Closure Criteria presented in the original *Closure Request* was correctly applied. Additionally, the liner was found to be intact during inspection activities. Based on this new data, COG respectfully requests closure for Incident Number NAPP2211531225. The Final C-141 is included in Appendix D.

If you have any questions or comments, please contact Ms. Kalei Jennings at (817) 683-2503 or kjennings@ensolum.com.

Sincerely,
Ensolum, LLC



Hadlie Green
Project Geologist



Daniel R. Moir, PG
Senior Managing Geologist

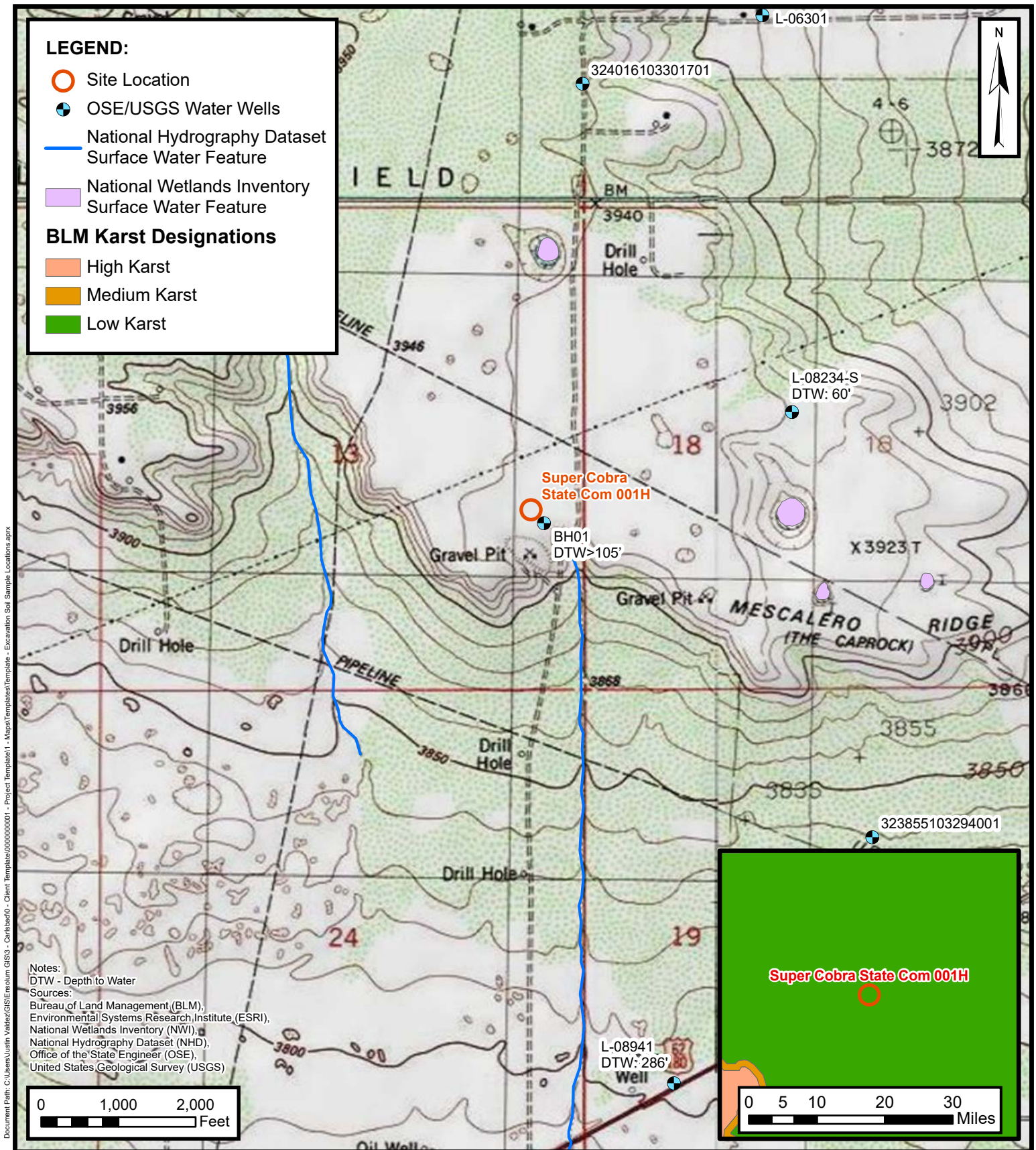
cc: Jacob Laird, COG Operating, LLC
New Mexico State Land Office

Appendices:

Figure 1	Site Receptor Map
Appendix A	Lithologic / Soil Sampling Log
Appendix B	Photographic Log
Appendix C	NMOCD Notifications
Appendix D	Final C-141



FIGURES



Site Receptor Map

COG Operating, LLC
Super Cobra State Com 001H
Incident Number: NAPP2211531225
Unit I, Sec 13, 19S, 34E
Lea County, New Mexico

FIGURE


1

ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants



APPENDIX A

Lithologic Soil Sampling Log

								Sample Name: BH01		Date: 4/11/2023	
								Site Name: Super Cobra State Com 001H			
								Incident Number:			
								Job Number: 03D2024021			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Peter Van Patten		Method: Air Rotary	
Coordinates: 32.6581186, -103.5065913								Hole Diameter:		Total Depth: 105'	
Comments: Soap added at 40' for wellbore stability. SAA: Same as above. No water was observed within the soil boring after at least 72 hours. On 4/17/2023 the boring was plugged and abandoned using hydrated bentonite chips.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
						0					
Dmp	-	-	N	-	-	10	SP-SM	Sand: brown, dark brown, fine-medium grain, poorly graded, some large caliche gravel, slightly damp, no stain, no odor			
Dry	-	-	N	-	-	20	CHHE	Caliche: off white, white, no stain, no odor			
Dry	-	-	N	-	-	30	SP-SM	Sand: light tan, pinkish tan, fine grain, poorly graded, some large caliche gravel, no stain, no odor.			
Dry	-	-	N	-	-	40	SP-SM	Sand: light tan, tan, fine-coarse grain, poorly graded, some small gravel, no stain, no odor			
Wet	-	-	N	-	-	50		Soap added to hole to pack the very dry, loose sand			
Wet	-	-	N	-	-	60		SAA			
Wet	-	-	N	-	-	70		SAA			
Wet	-	-	N	-	-	80		SAA			
Wet	-	-	N	-	-	90		SAA			
Wet	-	-	N	-	-	100		SAA			
								TD at 105' below ground surface			
						110					
						120					



APPENDIX B

Photographic Log



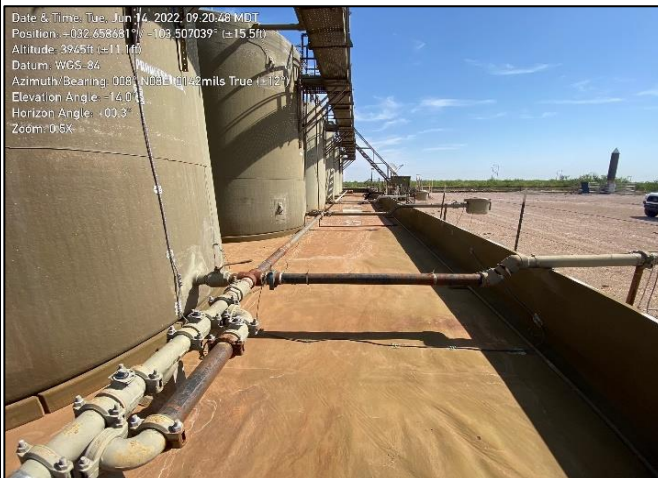
Photographic Log
COG Operating, LLC
Super Cobra State Com 001H
Incident Number NAPP2211531225



Photograph: 1 Date: 6/14/2022
 Description: View of the lined containment deemed to be in good condition.



Photograph: 2 Date: 6/14/2022
 Description: View of the lined containment deemed to be in good condition.



Photograph: 3 Date: 6/14/2022
 Description: View of the lined containment deemed to be in good condition.



Photograph: 4 Date: 6/14/2022
 Description: View of the lined containment deemed to be in good condition.



APPENDIX C

NMOCD Notifications

From: [Nobui, Jennifer, EMNRD](#)
To: [Kalei Jennings](#)
Cc: [Bratcher, Mike, EMNRD](#); [Hamlet, Robert, EMNRD](#); [Harimon, Jocelyn, EMNRD](#)
Subject: FW: [EXTERNAL] Containment Inspection- Super Cobra State Com 001H (Incident Number NAPP2211531225)
Date: Monday, June 13, 2022 11:50:36 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

[**EXTERNAL EMAIL**]

Kalei

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks

Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Sent: Monday, June 13, 2022 10:37 AM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>
Subject: Fw: [EXTERNAL] Containment Inspection- Super Cobra State Com 001H (Incident Number NAPP2211531225)

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Monday, June 13, 2022 10:36 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Subject: [EXTERNAL] Containment Inspection- Super Cobra State Com 001H (Incident Number NAPP2211531225)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To Whom It May Concern,

Below is a 48-hour email notification for liner inspection at ConocoPhillips (COP) Super Cobra State Com 001H (Incident Number NAPP2211531225) / Spill Date 04/11/2022. This is a 48-hour notification that Ensolum is scheduled to inspect this lined containment on behalf of COP on Wednesday June 15, 2022, at 9:30 MST. Please call with any questions or concerns.

GPS: 32.65852, -103.50705

Thank you,



Kalei Jennings

Senior Scientist

817-683-2503

Ensolum, LLC





APPENDIX D

Final 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

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	NAPP2211531225
District RP	
Facility ID	fAPP2204042446
Application ID	

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137
Contact Name	Charles Beauvais	Contact Telephone	(575) 988-2043
Contact email	Charles.R.Beauvais@ConocoPhillips.com	Incident # (assigned by OCD)	NAPP2211531225
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.65852 Longitude -103.50705
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Super Cobra State Com 001H	Site Type	Tank Battery
Date Release Discovered	April 11, 2022	API# (if applicable)	

Unit Letter	Section	Township	Range	County
I	13	19S	34E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 204	Volume Recovered (bbls) 198
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The release was caused by a 1" x 2" swedge on discharge side of water pump due to corrosion.
The release occurred within the lined facility and partially on pad.
Evaluation will be made of the spill area for any possible impact from the release.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2211531225
District RP	
Facility ID	fAPP2204042446
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? The volume released was greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given by Charles Beauvais via e-mail April 11, 2022 at 1:39 pm to ocd.enviro@state.nm.us.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.	
Printed Name: Brittany N. Esparza	Title: Environmental Technician
Signature: 	Date: 4/25/2022
email: Brittany.Esparza@ConocoPhillips.com	Telephone: (432) 221-0398
<u>OCD Only</u>	
Received by: Jocelyn Harimon	Date: 04/25/2022

L48 Spill Volume Estimate Form

NAPP2211531225

Received by OCD: 4/25/2022 8:43:07 AM

Facility Name & Number: Super Cobra St Com #1 Battery

Asset Area: DBE

Release Discovery Date & Time: 4/11/2022, 11:00 am

Release Type: Produced Water

Provide any known details about the event: corroded fitting on disscharge side of pump

Spill Calculation - On Pad Surface Pool Spill

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated <u>Pool</u> Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)
Rectangle A	36.0	183.0	8.00	4	6588.000	0.167	195.444	0.008	197.073
Rectangle B	36.0	99.0	0.50	4	3564.000	0.010	6.608	0.001	6.612
Rectangle C					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Volume Release:									203.684

Released to Imaging: 4/25/2022 10:12:09 AM

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 101115

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 101115
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	4/25/2022

Incident ID	NAPP2211531225
District RP	
Facility ID	fAPP2204042446
Application ID	

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?	<u>>105</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NAPP2211531225
District RP	
Facility ID	fAPP2204042446
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: __Jacob Laird__

Title: __Environmental Engineer__

Signature: Jacob Laird

Date: __4/26/2023__

email: __Jacob.Laird@conocophillips.com__

Telephone: __575-703-5482__

OCD OnlyReceived by: Michael BuchananDate: 05/12/2023

Incident ID	NAPP2211531225
District RP	
Facility ID	fAPP2204042446
Application ID	

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 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of 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 OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: __Jacob Laird__ Title: __Environmental Engineer__

Signature: __*Jacob Laird*__ Date: __4/26/2023__

email: __Jacob.Laird@conocophillips.com__ Telephone: __575-703-5482__

OCD Only

Received by: __*Michael Buchanan*__ Date: __05/12/2023__

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: __*Michael Buchanan*__ Date: __05/12/2023__

Printed Name: __Michael Buchanan__ Title: __Environmental Specialist__

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 212325

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 212325
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	None	5/12/2023