

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

Form C-101
August 1, 2011
Permit 258468

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address COG OPERATING LLC 550 W Texas Midland , TX 79701		2. OGRID Number 229137
4. Property Code 322718		3. API Number 30-025-45256
5. Property Name LYCHEE STATE COM		6. Well No. 003H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
N	22	21S	34E	N	210	S	1980	W	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	15	21S	34E	C	50	N	1980	W	Lea

9. Pool Information

BERRY;BONE SPRING, SOUTH	96660
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3709
16. Multiple N	17. Proposed Depth 19152	18. Formation Bone Spring	19. Contractor	20. Spud Date 10/19/2018
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1800	1200	0
Int1	12.25	9.625	40	5600	2100	0
Prod	8.75	5.5	17	19152	2350	0

Casing/Cement Program: Additional Comments

Drill 17-1/2" hole to ~1,800' w/ fresh water spud mud. Run 13-3/8" 54.5# J-55 BTC casing to TD and cement to surface in one stage. Drill 12-1/4" hole to ~5,600' with saturated brine. Run 9-5/8 40# J-55 BTC to 3500' and 9-5/8 40# L-80 BTC casing from 3500' to ~5,600' and cement to surface in two stages with DV/ECP 100' above reef. Drill 8-3/4" vertical hole, curve & lateral to 19,152 with cut brine. Run 5-1/2" 17# HCP110 BTC casing from TD to surface and cement to surface in one stage.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. Signature: Printed Name: Electronically filed by Diane Kuykendall Title: Production Reporting Mgr Email Address: dkuykendall@concho.com Date: 10/12/2018	<div style="text-align: center;">OIL CONSERVATION DIVISION</div> Approved By: Paul F Kautz Title: Geologist Approved Date: 10/12/2018 Expiration Date: 10/12/2020 Conditions of Approval Attached
Phone: 432-683-7443	

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Form C-102
 August 1, 2011
 Permit 258468

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-45256	2. Pool Code 96660	3. Pool Name BERRY;BONE SPRING, SOUTH
4. Property Code 322718	5. Property Name LYCHEE STATE COM	6. Well No. 003H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3709

10. Surface Location

UL - Lot N	Section 22	Township 21S	Range 34E	Lot Idn N	Feet From 210	N/S Line S	Feet From 1980	E/W Line W	County Lea
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11. Bottom Hole Location If Different From Surface

UL - Lot C	Section 15	Township 21S	Range 34E	Lot Idn C	Feet From 50	N/S Line N	Feet From 1980	E/W Line W	County Lea
12. Dedicated Acres 320.00	13. Joint or Infill		14. Consolidation Code				15. Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p style="text-align: center;">OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>E-Signed By: Diane Kuykendall Title: Production Reporting Mgr Date: 10/12/2018</p>
	<p style="text-align: center;">SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>Surveyed By: Chad Harcrow Date of Survey: 9/11/2018 Certificate Number: 17777</p>

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Santa Fe, NM 87505

Form APD Comments

Permit 258468

PERMIT COMMENTS

Operator Name and Address:		API Number:	
COG OPERATING LLC [229137]		30-025-45256	
550 W Texas		Well:	
Midland , TX 79701		LYCHEE STATE COM #003H	

Created By	Comment	Comment Date
mreyes3	OIL: COG Operating has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore we do not believe that an H2S Contingency Plan would be necessary.	10/12/2018

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Form APD Conditions

Permit 258468

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: COG OPERATING LLC [229137] 550 W Texas Midland , TX 79701	API Number: 30-025-45256
	Well: LYCHEE STATE COM #003H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104
pkautz	It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD.
pkautz	Stage Tool - 1) Must notify OCD Hobbs Office prior to running Stage Tool at 575-370-3186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.
pkautz	Horizontal Spacing Unit HZSU – Must submit new HZSU on C-102 if lateral fails to penetrate any individual spacing blocks.