

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-8161 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) 334-8178 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 227422

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

1. Operator Name and Address COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701		2. OGRID Number 217955
4. Property Code 316960		3. API Number 30-015-43924
5. Property Name Copperhead 31 Fee		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
A	30	26S	29E	a	349	N	773	E	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
H	31	26S	29E	7	891	S	660	E	Eddy

9. Pool Information

WC-015 G-04 S262931H;UPR WOLFCAMP	98190
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 2941
16. Multiple N	17. Proposed Depth 16855	18. Formation Wolfcamp	19. Contractor	20. Spud Date 10/18/2016
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	13.5	10.75	45.5	900	400	
Int1	9.875	7.625	29.7	10000	1400	
Prod	6.75	5.5	20	16855	1200	9000

Casing/Cement Program: Additional Comments

Drill 13-1/2" hole to ~900' w/ fresh water spud mud. Run casing to TD and cement to surface in one stage. Drill 9-7/8" hole to 10,000' with diesel / brine emulsion fluid. Run casing to TD and cement to surface in one stage. Drill 6-3/4" vertical hole, curve & lateral to 16,855' with diesel/brine and OBM. Run 5-1/2" 20# P110 LTC casing to TD and cement.
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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	5000	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 Manager Email Address: dkuykendall@concho.com Date: 10/14/2016	<div style="text-align: center;">OIL CONSERVATION DIVISION</div> Approved By: Paul Kautz Title: Geologist Approved Date: 10/14/2016 Expiration Date: 10/14/2018 Conditions of Approval Attached
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Form C-102
August 1, 2011
Permit 227422

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-43924	2. Pool Code 98190	3. Pool Name WC-015 G-04 S262931H;UPR WOLFCAMP
4. Property Code 316960	5. Property Name Copperhead 31 Fee	6. Well No. 003H
7. OGRID No. 217955	8. Operator Name COG PRODUCTION, LLC	9. Elevation 2941

10. Surface Location

UL - Lot A	Section 30	Township 26S	Range 29E	Lot Idn a	Feet From 349	N/S Line N	Feet From 773	E/W Line E	County Eddy
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11. Bottom Hole Location If Different From Surface

UL - Lot H	Section 30	Township 26S	Range 29E	Lot Idn 7	Feet From 891	N/S Line S	Feet From 660	E/W Line E	County Eddy
12. Dedicated Acres 200.00	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 Manager Date: 10/14/2016</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: 8/3/2016 Certificate Number: 17777</p>

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Form APD Comments

Permit 227422

PERMIT COMMENTS

Operator Name and Address: COG PRODUCTION, LLC [217955] 600 W. Illinois Ave Midland, TX 79701		API Number: 30-015-43924
		Well: Copperhead 31 Fee #003H
Created By	Comment	Comment Date
matyereyes	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.	10/14/2016

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Form APD Conditions

Permit 227422

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: COG PRODUCTION, LLC [217955] 600 W. Illinois Ave Midland, TX 79701		API Number: 30-015-43924
		Well: Copperhead 31 Fee #003H
OCD Reviewer	Condition	
ksharp	Will require a directional survey with the C-104	
ksharp	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	
ksharp	Submit Gas Capture Form	
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	
pkautz	If using a pit for drilling and completion operations, must have an approved pit from prior to spudding the well.	
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	Must notify OCD Hobbs Office of any water flows in the Castile Formation at 575-738-1283. Report depth and flow rate	