

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) 334-8170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3482

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 200718

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

1. Operator Name and Address COG OPERATING LLC One Concho Center Midland, TX 79701		2. OGRID Number 229137
4. Property Code 313860		3. API Number 30-015-42967
5. Property Name Halberd 27 State Com		6. Well No. 001H

7. Surface Location

UL - Lot	M	Section	26	Township	17S	Range	28E	Lot Idn	Feet From	1003	N/S Line	S	Feet From	65	E/W Line	W	County	Eddy
----------	---	---------	----	----------	-----	-------	-----	---------	-----------	------	----------	---	-----------	----	----------	---	--------	------

8. Proposed Bottom Hole Location

UL - Lot	M	Section	27	Township	17S	Range	28E	Lot Idn	M	Feet From	976	N/S Line	S	Feet From	330	E/W Line	W	County	Eddy
----------	---	---------	----	----------	-----	-------	-----	---------	---	-----------	-----	----------	---	-----------	-----	----------	---	--------	------

9. Pool Information

RED LAKE; GLORIETA-YESO, NORTHEAST	96836
------------------------------------	-------

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3680
16. Multiple N	17. Proposed Depth 8670	18. Formation Yeso Formation	19. Contractor	20. Spud Date 5/1/2015
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	48	350	400	
Int1	12.25	9.625	40	900	400	0
Prod	7.875	5.5	17	8670	1400	
Int2	8.75	5.5	17	4223	0	

Casing/Cement Program: Additional Comments

COG proposes to drill an 17 1/2" hole to 350' with 8.5ppg, 28 viscosity fresh water system. Set 13 3/8" casing and cement to surface. Drill a 12 1/4" hole to 900' with a 10 ppg, 30 viscosity brine water mud system. Set 9 5/8" casing and cement to surface. Drill an 8 3/4" hole to 3400' MD and kick off and drill an 8 3/4" curve to 4223' MD. Drill a 7 7/8" lateral to new BHL @ 3882' TVD 8670' MD. Run a 5 1/2" 17# L-80 casing to TD cement to surface.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	2000	2000	

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: Regulatory Analyst Email Address: dkuykendall@conchoresources.com Date: 3/4/2015	<p style="text-align: center;">OIL CONSERVATION DIVISION</p> Approved By: Randy Dade Title: District Supervisor Approved Date: 3/5/2015 Expiration Date: 3/5/2017 Conditions of Approval Attached
---	--

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) 334-8170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3482

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

Form C-102
August 1, 2011
Permit 200718

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-42967	2. Pool Code 96836	3. Pool Name RED LAKE; GLORIETA-YESO, NORTHEAST
4. Property Code 313860	5. Property Name Halberd 27 State Com	6. Well No. 001H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3680

10. Surface Location

UL - Lot M	Section 26	Township 17S	Range 28E	Lot Idn	Feet From 1003	N/S Line S	Feet From 65	E/W Line W	County Eddy
---------------	---------------	-----------------	--------------	---------	-------------------	---------------	-----------------	---------------	----------------

11. Bottom Hole Location If Different From Surface

UL - Lot M	Section 27	Township 17S	Range 28E	Lot Idn	Feet From 976	N/S Line S	Feet From 330	E/W Line W	County Eddy
12. Dedicated Acres 160.00	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

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> </table>																	<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: Regulatory Analyst Date: 3/4/2015</p> <hr/> <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: Robert Howett Date of Survey: 10/14/2014 Certificate Number: 19680</p>

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) 749-1283 Fax:(575) 749-9720
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 APD Comments

 Permit 200718

PERMIT COMMENTS

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-015-42967
		Well: Halberd 27 State Com #001H
Created By	Comment	Comment Date
kholly1	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	3/4/2015

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 APD Conditions

Permit 200718

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701	API Number: 30-015-42967
	Well: Halberd 27 State Com #001H

OCD Reviewer	Condition
--------------	-----------