

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 166491

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 40131		3. API Number 30-015-41668
5. Property Name HOUMA PAWNEE STATE COM		6. Well No. 002H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
H	16	17S	30E	H	2054	N	247	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
E	16	17S	30E	E	1980	N	330	W	Eddy

9. Pool Information

LOCO HILLS; GLORIETA-YESO	96718
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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 3688
16. Multiple N	17. Proposed Depth 5527	18. Formation Yeso Formation	19. Contractor	20. Spud Date 11/30/2013
Depth to Ground water 110		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000

☒ 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	0
Int1	12.25	9.625	36	1350	600	0
Int2	8.75	7	26	0	900	0
Prod	7.875	5.5	17	5527	800	0

Casing/Cement Program: Additional Comments

COG proposes to drill a 17 1/2" hole to 350' with a 8.5 ppg, 28 viscosity fresh water mud system. Set 13 3/8" casing and cement to surface. Drill a 12 1/4" hole to 1350' with a 10 ppg, 30 viscosity brine water mud system. Set 9 5/8" casing and cement to surface. Drill an 8 1/2" hole to 3823' MD and kick off and drill an 8 3/4" curve to 4581' MD. Drill a 7 7/8" lateral to new BHL at 5527' TVD 10085' MD. Run a tapered string with 7" 26# L-80 from surface to 5200' & 5 1/2" 17# L-80 casing to TD. Cement from TD 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 ☒ and/or 19.15.14.9 (B) NMAC ☒ , if applicable. Signature:	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by Diane Kuykendall Title: Production Reporting Mgr Email Address: dkuykendall@conchoresources.com Date: 9/16/2013	Approved By: Randy Dade Title: District Supervisor Approved Date: 9/18/2013 Expiration Date: 9/18/2015 Conditions of Approval Attached

Surveyed By: Robert Howett
Date of Survey: 3/13/2013
Certificate Number: 19680

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Form APD Comments

 Permit 166491

PERMIT COMMENTS

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-015-41668
		Well: HOUMA PAWNEE STATE COM #002H

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.	5/1/2013
kholly1	COG Operating LLC respectfully requests permission to drill this well with a closed loop system.	9/12/2013

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Form APD Conditions
Permit 166491

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701	API Number: 30-015-41668
	Well: HOUMA PAWNEE STATE COM #002H
OCD Reviewer	Condition