

**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 147397

**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 15		3. API Number 30-015-40442
5. Property Name HOGAN 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
I	2	17S	29E	I	1700	S	330	E	EDDY

**8. Pool Information**

EMPIRE; GLORIETA-YESO	96210
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**Additional Well Information**

9. Work Type New Well	10. Well Type OIL	11. Cable/Rotary	12. Lease Type State	13. Ground Level Elevation 3665
14. Multiple N	15. Proposed Depth 9229	16. Formation Yeso Formation	17. Contractor	18. Spud Date 9/30/2012
Depth to Ground water 110		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000

**19. Proposed Casing and Cement Program**

Type	Hole Size	Casing Type	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	9229	0	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 1/4" hole to 4322' MD and kick off and drill an 8 1/4" curve to 5080' MD. Drill a 7 7/8" lateral to new BHL at 4727' TVD 9229' MD. Run a tapered string with 7" 26# L-80 from surface to 4322' & 5 1/2" 17# L-80 casing to TD with DV/ECP Combo Tool at 4322' and isolation packers in the open hole. Set isolation packers and ECP. Open DV tool and cement from 4322' to surface.

**Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	2000	2000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OGD-approved plan <input type="checkbox"/> .	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Electronically filed by Diane Kuykendall Title: Production Reporting Mgr Email Address: dkuykendall@conchoresources.com Date: 7/6/2012	Approved By: Randy Dade Title: District Supervisor Approved Date: 7/9/2012   Expiration Date: 7/9/2014 Conditions of Approval Attached	
Phone: 432-683-7443		

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Form C-102  
August 1, 2011  
Permit 147397

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-015-40442	2. Pool Code 96210	3. Pool Name EMPIRE; GLORIETA-YESO
4. Property Code 15	5. Property Name HOGAN STATE COM	6. Well No. 002H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3665

**10. Surface Location**

UL - Lot I	Section 2	Township 17S	Range 29E	Lot Idn	Feet From 1700	N/S Line S	Feet From 330	E/W Line E	County EDDY
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**11. Bottom Hole Location If Different From Surface**

11. Bottom Hole Location If Different From Surface									
UL - Lot L	Section 2	Township 17S	Range 29E	Lot Idn L	Feet From 1650	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**

	<b>OPERATOR CERTIFICATION</b>  <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>  E-Signed By: Diane Kuykendall Title: Production Reporting Mgr Date: 7/6/2012	
	<b>SURVEYOR CERTIFICATION</b>  <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>  Surveyed By: Ronald Eidson Date of Survey: 6/4/2012 Certificate Number: 3239	

## Permit Comments

**Operator:** COG OPERATING LLC , 229137

**Well:** HOGAN STATE COM #002H

**API:** 30-015-40442

Created By	Comment	Comment Date
konnally	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	4/17/2012
CSHAPARD	Land s/S	7/9/2012



# Permit Conditions of Approval

**Operator:** COG OPERATING LLC , 229137

**Well:** HOGAN STATE COM #002H

**API:** 30-015-40442

OCD Reviewer	Condition
CSHAPARD	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