

**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) 749-1283 Fax:(575) 749-9720  
**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 197515

**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 313320		3. API Number 30-015-42884
5. Property Name BOSE IKARD 4 STATE COM		6. Well No. 016H

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
L	4	17S	29E		1730	S	330	W	Eddy

**8. Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	4	17S	29E	I	1650	S	330	E	Eddy

**9. Pool Information**

EMPIRE; GLORIETA-YESO, EAST	96610
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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 3597
16. Multiple N	17. Proposed Depth 8473	18. Formation Yeso Formation	19. Contractor	20. Spud Date 7/31/2015
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	0
Int1	12.25	9.625	40	900	400	0
Prod	7.875	5.5	17	8473	1400	0
Int2	8.75	5.5	17	4406	0	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 3579' MD and kick off and drill an 8 3/4" curve to 4406' MD. Drill a 7 7/8" lateral to new BHL at 4029' TVD, 8473' 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: Production Reporting Mgr Email Address: production@concho.com Date: 12/30/2014	<b>OIL CONSERVATION DIVISION</b>  Approved By: Randy Dade Title: District Supervisor Approved Date: 1/6/2015 Expiration Date: 1/6/2017 Conditions of Approval Attached
Phone: 432-683-7443	

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Form C-102  
August 1, 2011  
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**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-015-42884	2. Pool Code 96610	3. Pool Name EMPIRE; GLORIETA-YESO, EAST
4. Property Code 313320	5. Property Name BOSE IKARD 4 STATE COM	6. Well No. 016H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3597

**10. Surface Location**

UL - Lot L	Section 4	Township 17S	Range 29E	Lot Idn	Feet From 1730	N/S Line S	Feet From 330	E/W Line W	County Eddy
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**11. Bottom Hole Location If Different From Surface**

UL - Lot I	Section 4	Township 17S	Range 29E	Lot Idn	Feet From 1650	N/S Line S	Feet From 330	E/W Line E	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%; height: 150px; 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;"><b>OPERATOR CERTIFICATION</b></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: 12/30/2014</p> <hr/> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></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: 2/27/2014 Certificate Number: 19680</p>

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Form APD Comments

Permit 197515

**PERMIT COMMENTS**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-015-42884
		Well: BOSE IKARD 4 STATE COM #016H
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.	12/30/2014

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Form APD Conditions

Permit 197515

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701	API Number: 30-015-42884
	Well: BOSE IKARD 4 STATE COM #016H
OCD Reviewer	
Condition	