

**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 167556

**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  3. API Number 30-025-41200
4. Property Code 39914	5. Property Name BOONE 16 STATE	6. Well No. 001H

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
P	16	21S	33E	P	190	S	330	E	LEA

**8. Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	16	21S	33E	A	330	N	380	E	Lea

**9. Pool Information**

WC-025 G-08 S213304D BONE SPRING	97895
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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 3756
16. Multiple N	17. Proposed Depth 16291	18. Formation Bone Spring	19. Contractor	20. Spud Date
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

**21. 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	54.5	1800	1215	
Int1	12.25	9.625	36	5360	1600	
Prod	7.875	5.5	17	16291	1780	5060

**Casing/Cement Program: Additional Comments**

Drill 17-1/2" hole to ~1800' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1" tubing and Class C w/ 2% CaCl2 to cement to surface, if necessary. Drill 12-1/4" hole to ~5360' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36# J55 & 40# N80 BTC casing to TD with a DV tool placed ~100' above the Reef. Plan to circulate cement on both stages. Drill 7-7/8" vertical hole, curve and lateral to 16291' with cut brine. Run 5-1/2" 17# P110 LTC casing to TD and cement to 5060' (300' overlap) in one stage.

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	3000	3000	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 Mgr Email Address: dkuykendall@conchoresources.com Date: 5/21/2013	<b>OIL CONSERVATION DIVISION</b> Approved By: ELIDIO GONZALES Title: HOBBS STAFF MANAGER Approved Date: 6/4/2013   Expiration Date: 6/4/2015 Conditions of Approval Attached
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August 1, 2011  
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**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-41200	2. Pool Code 97895	3. Pool Name WC-025 G-08 S213304D;BONE SPRING
4. Property Code 39914	5. Property Name BOONE 16 STATE	6. Well No. 001H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3756

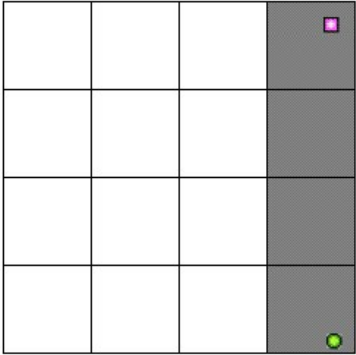
**10. Surface Location**

UL - Lot P	Section 16	Township 21S	Range 33E	Lot Idn A	Feet From 190	N/S Line S	Feet From 330	E/W Line E	County LEA
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**11. Bottom Hole Location If Different From Surface**

UL - Lot A	Section 16	Township 21S	Range 33E	Lot Idn A	Feet From 330	N/S Line N	Feet From 380	E/W Line E	County LEA
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**

	<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: 5/21/2013</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: Chad Harcrow Date of Survey: 2/5/2013 Certificate Number: 17777</p>
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## Permit Comments

**Operator:** COG OPERATING LLC , 229137

**Well:** BOONE 16 STATE #001H

**API:** 30-025-41200

Created By	Comment	Comment Date
mreyes1	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.	5/21/2013
CHERRERA	SENT POTASH LETTER TO BLM AND SLO.	5/21/2013
CHERRERA	OCD RECEIVED FORM C144 CLEZ. OCD PERMIT # P1-06259	5/22/2013
pkautz	Land p/S	5/22/2013

## Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: BOONE 16 STATE #001H

API: 30-025-41200

OCD Reviewer	Condition
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	In order to seal off protectable water surface casing must be set 25' below the Rustler Anhydrite.
pkautz	Cement on 9 5/8 must circulate to surface. Cement on 5.5 must tie back into 9 5/8 casing.