

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

**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
		3. API Number 30-015-35876
4. Property Code 302471	5. Property Name CHOCTAW STATE	6. Well No. 002

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	16	17S	31E	A	330	N	990	E	EDDY

**8. Pool Information**

FREN; GLORIETA-YESO	26770
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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 3868
14. Multiple N	15. Proposed Depth 6600	16. Formation Yeso Formation	17. Contractor	18. Spud Date
Depth to Ground water 115		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 _____ mils thick Clay <input type="checkbox"/> Pit Volume: 5000 _____ bbls Drilling Method: Closed Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input checked="" type="checkbox"/>				

**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	450	500	0
Int1	12.25	8.625	32	1620	800	0
Prod	7.875	5.5	17	6600	1200	0

**Casing/Cement Program: Additional Comments**

COG Operating proposes to drill a 17 1/2 hole to 450 w/fr wtr mud system, wt 8.5, vis 28.Run 13 3/8 casing and cement. Drill a 12 1/4 hole to 1620 w/brine mud system, wt10, vis 30.Run 8 5/8 casing and cement. Drill a 7 7/8 hole to 6600 w/cut brine mud system, wt 9.1, vis 29-32.Test Yeso formation, run 5 1/2 casing and cement. Note: On production string, a caliper will be run and COG will attempt to circulate cement.

**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 NMOC guidelines <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .	<b>OIL CONSERVATION DIVISION</b>	
	Approved By: Bryan Arrant	
	Title: Geologist	
	Approved Date: 10/22/2007	Expiration Date: 10/22/2008
	Email Address: dkuykendall@conchoresources.com	
Date: 10/22/2007	Phone: 432-685-4372	Conditions of Approval Attached

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(505) 393-6161 Fax:(505) 393-0720

**District II**  
 1301 W. Grand Ave., Artesia, NM 88210  
 Phone:(505) 748-1283 Fax:(505) 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

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Form C-102  
 Permit 63061

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-015-35876	2. Pool Code 26770	3. Pool Name FREN; GLORIETA-YESO
4. Property Code 302471	5. Property Name CHOCTAW STATE	6. Well No. 002
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3868


**10. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
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**11. Bottom Hole Location If Different From Surface**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 40.00		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**

**OPERATOR CERTIFICATION**

*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.*

E-Signed By: Diane Kuykendall  
 Title: Regulatory Analyst  
 Date: 10/22/2007

**SURVEYOR CERTIFICATION**

*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.*

Surveyed By: Gary Jones  
 Date of Survey: 10/10/2007  
 Certificate Number: 7977

## Permit Comments

Operator: COG OPERATING LLC , 229137

Well: CHOCTAW STATE #002

API: 30-015-35876

Created By	Comment	Comment Date
kcarrillo	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	10/22/2007

# Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: CHOCTAW STATE #002

API: 30-015-35876

OCD Reviewer	Condition
BArrant	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines
BArrant	Operator to set surface casing in the anhydrite section of the Rustler formation. Please refer to offset geology for more information.
BArrant	As noted, operator to drill surface hole w/fresh water mud.