

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 30-015-37638
4. Property Code 302587	5. Property Name WILLOW STATE	6. Well No. 016

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
P	16	17S	31E	P	990	S	1165	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 3842
14. Multiple N	15. Proposed Depth 6700	16. Formation Yeso Formation	17. Contractor	18. Spud Date 4/30/2010
Depth to Ground water 110		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 checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input 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	11	8.625	32	1900	550	0
Prod	7.875	5.5	17	6700	900	0

Casing/Cement Program: Additional Comments

COG proposes to drill a 17-1/2" hole to 450' w/fr wtr mud system, wt 8.5, vis 28, set 13-3/8" casing & cement to surface. Drill an 11" hole to 1900' w/fr mud system, wt 10, vis 30. Set 8-5/8" casing & cement to surface. Drill 7-7/8" hole to 6700' w/cut brine mud system, wt 9.1, vis 29-32. Test Yeso formation. Run 5-1/2" casing & cement to surface. Note: On production string, a caliper will be run, 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 NMOCD guidelines <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .	OIL CONSERVATION DIVISION Approved By: Jacqueta Reeves Title: District Geologist Approved Date: 3/10/2010 Expiration Date: 3/10/2012
Printed Name: Electronically filed by Diane Kuykendall	
Title: Regulatory Analyst	
Email Address: dkuykendall@conchoresources.com	
Date: 3/1/2010 Phone: 432-683-7443	

District I
 1625 N. French Dr., Hobbs, NM 88240
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District III
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District IV
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 Phone:(505) 476-3470 Fax:(505) 476-3462

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Form C-102
 Permit 106553

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-37638	2. Pool Code 26770	3. Pool Name FREN; GLORIETA-YESO
4. Property Code 302587	5. Property Name WILLOW STATE	6. Well No. 016
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3842

10. Surface Location

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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>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: Regulatory Analyst Date: 3/1/2010	
	SURVEYOR CERTIFICATION	
<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: 2/15/2010 Certificate Number: 3239		

Permit Comments

Operator: COG OPERATING LLC , 229137

Well: WILLOW STATE #016

API: 30-015-37638

Created By	Comment	Comment Date
rodan	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	12/10/2009