

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 149258

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 308178		3. API Number 30-015-40412
5. Property Name GRAVE DIGGER STATE COM		6. Well No. 005H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	2	20S	25E	4	205	N	990	W	EDDY

8. Pool Information

N. SEVEN RIVERS; GLORIETA-YESO	97565
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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 3473
14. Multiple N	15. Proposed Depth 7438	16. Formation Yeso Formation	17. Contractor	18. Spud Date 8/31/2012
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	12.25	9.625	36	1200	600	0
Int1	8.75	7	26	0	0	0
Prod	7.875	5.5	17	7438	300	0

Casing/Cement Program: Additional Comments

COG proposes to drill a 12 1/4" hole to 1200' w/ fresh water, run 9 5/8" 36# J-55 and cement to surface. Drill a 8 1/4" hole to 2458' MD and kick off and drill curve to 3213' MD. Drill a 7 7/8" lateral to new BHL @ 2899' TVD 7438' MD. Run a tapered string with 7" 26# L-80 from surface to 2458' & 5 1/2" 17# L-80 casing to TD with DV/ECP Combo Tool at 2458' and isolation packers in the open hole. Set isolation packers and ECP. Open DV tool and cement from 2458' 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 NMOC guidelines <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .	OIL CONSERVATION DIVISION	
Printed Name: Electronically filed by Diane Kuykendall	Approved By: Randy Dade	
Title: Production Reporting Mgr	Title: District Supervisor	
Email Address: dkuykendall@conchoresources.com	Approved Date: 6/21/2012	Expiration Date: 6/21/2014
Date: 6/20/2012	Phone: 432-683-7443	Conditions of Approval Attached

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Form C-102
August 1, 2011
Permit 149258

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-40412	2. Pool Code 97565	3. Pool Name N. SEVEN RIVERS; GLORIETA-YESO
4. Property Code 308178	5. Property Name GRAVE DIGGER STATE COM	6. Well No. 005H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3473

10. Surface Location

UL - Lot D	Section 2	Township 20S	Range 25E	Lot Idn	Feet From 205	N/S Line N	Feet From 990	E/W Line W	County EDDY
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11. Bottom Hole Location If Different From Surface

11. Bottom Hole Location If Different From Surface									
UL - Lot M	Section 2	Township 20S	Range 25E	Lot Idn M	Feet From 330	N/S Line S	Feet From 990	E/W Line W	County EDDY
12. Dedicated Acres 160.46		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 align="center">OPERATOR CERTIFICATION</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: 6/20/2012</p>		
	<p align="center">SURVEYOR CERTIFICATION</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: Ronald Eidson Date of Survey: 5/3/2012 Certificate Number: 3239</p>		

Permit Comments

Operator: COG OPERATING LLC , 229137

Well: GRAVE DIGGER STATE COM #005H

API: 30-015-40412

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.	5/23/2012
CSHAPARD	Land f/S	6/21/2012

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: GRAVE DIGGER STATE COM #005H

API: 30-015-40412

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