

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 134727

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 30-015-39587
4. Property Code 38908	5. Property Name GRANT 2 FEE	6. Well No. 003H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	2	19S	26E	O	150	S	1910	E	EDDY

8. Pool Information

DAYTON;GRAYBURG	15960
-----------------	-------

Additional Well Information

9. Work Type New Well	10. Well Type OIL	11. Cable Rotary	12. Lease Type State	13. Ground Level Elevation 3282
14. Multiple N	15. Proposed Depth 7354	16. Formation Yeso Formation	17. Contractor	18. Spud Date 12/31/2011
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	825	600	0
Int1	8.75	7	26	2273	300	0
Prod	7.875	5.5	17	7354	0	

Casing/Cement Program: Additional Comments

COG proposes to drill a 12 1/4" hole to 825' w/ fresh water, run 9 5/8" 36# J-55 and cement to surface. Drill a 8 1/4" hole to 2273' MD and kick off and drill curve to 3023' MD. Drill a 7 7/8" lateral to new BHL @ 2750' TVD 7354' MD. Run a tapered string with 7" 26# L-80 from surface to 2273' & 5 1/2" 17# L-80 casing to TD with DV/ECP Combo Tool at 2273' and isolation packers in the open hole. Set isolation packers and ECP. Open DV tool and cement from 2273' 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 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: Randy Dade	
	Title: District Supervisor	
	Approved Date: 11/14/2011	Expiration Date: 11/14/2013
	Email Address: dkuykendall@conchoresources.com	
Date: 10/31/2011	Phone: 432-683-7443	Conditions of Approval Attached

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-102
August 1, 2011
Permit 134727

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-39587	2. Pool Code 15960	3. Pool Name DAYTON;GRAYBURG
4. Property Code 38908	5. Property Name GRANT 2 FEE	6. Well No. 003H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3282

10. Surface Location

UL - Lot O	Section 2	Township 19S	Range 26E	Lot Idn	Feet From 150	N/S Line S	Feet From 1910	E/W Line E	County EDDY
---------------	--------------	-----------------	--------------	---------	------------------	---------------	-------------------	---------------	----------------

11. Bottom Hole Location If Different From Surface

11. Bottom Hole Location If Different From Surface									
UL - Lot B	Section 2	Township 19S	Range 26E	Lot Idn 2	Feet From 330	N/S Line N	Feet From 2260	E/W Line E	County EDDY
12. Dedicated Acres 159.52		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;"> <tr><td></td><td></td><td style="background-color: #cccccc; text-align: center;">■</td><td></td></tr> <tr><td></td><td></td><td style="background-color: #cccccc;"></td><td></td></tr> <tr><td></td><td></td><td style="background-color: #cccccc;"></td><td></td></tr> <tr><td></td><td></td><td style="background-color: #cccccc; text-align: center;">●</td><td></td></tr> </table>			■												●		<p style="text-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: 10/31/2011</p> <hr/> <p style="text-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: Gary Eidson Date of Survey: 10/26/2011 Certificate Number: 12641</p>
		■															
		●															

Permit Comments

Operator: COG OPERATING LLC , 229137

Well: GRANT 2 FEE #003H

API: 30-015-39587

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.	7/18/2011
CSHAPARD	Land p/P	11/7/2011

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: GRANT 2 FEE #003H

API: 30-015-39587

OCD Reviewer	Condition
CSHAPARD	Will require administrative order for non-standard location
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