

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 143259

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 30-015-39860
4. Property Code 38721	5. Property Name RAPTOR 12 STATE COM	6. Well No. 002H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	12	16S	28E	I	1980	S	330	E	EDDY

8. Pool Information

CROW FLATS; ABO	97691
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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 3589
14. Multiple N	15. Proposed Depth 11136	16. Formation Abo	17. Contractor	18. Spud Date 3/31/2012
Depth to Ground water 58	Distance from nearest fresh water well		Distance to nearest surface water	

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	275	300	0
Int1	8.75	7	26	5960	1000	0
Prod	6.125	4.5	11.6	11136	0	0

Casing/Cement Program: Additional Comments

COG Proposes to drill a 17-1/2" hole to 275' w/fr wtr mud system, wt 8.5, vis 28, set 13-3/8" csg & cmt to surface. Drill 8-3/4" hole to 5960' w/cr br mud sytsem, wt 8.7, vis 29-32. Set 7" prod csg @ +/- 5960' & cmt to surface. Drill 6-1/8" pilot hole thru Top Basal Abo to +/- 6950', run OH logs. Spot +/- 250 sx C kick-off plug from +/- 5960' to +/- 6950'. Drill 6-1/8" hole & kick off @ +/- 6293', building curve over +/- 470' of horizontal section in a Westerly direction for +/- 4569' of lateral to TD @ +/- 11136' MD & 6640' TVD. Run 4-1/5" prod liner in open hole lateral & set isonlation packers & top liner packer @ +/- 5860' MD. 4-1/2" prod liner will NOT be cemented. Request permission for 100' liner overlap.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	5000	2000	Cameron Type-U
Annular	5000	2000	Hydril

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 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	
Printed Name: Electronically filed by Diane Kuykendall	Title: District Supervisor	
Title: Production Reporting Mgr	Approved Date: 1/31/2012	Expiration Date: 1/31/2014
Email Address: dkuykendall@conchoresources.com		
Date: 1/26/2012	Phone: 432-683-7443	Conditions of Approval Attached

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Santa Fe, NM 87505

Form C-102
 August 1, 2011
 Permit 143259

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-39860	2. Pool Code 97691	3. Pool Name CROW FLATS; ABO
4. Property Code 38721	5. Property Name RAPTOR 12 STATE COM	6. Well No. 002H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3589

10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	12	16S	28E		1980	S	330	E	EDDY

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
L	12	16S	28E	L	1980	S	330	W	EDDY
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

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	■			●													
<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: 1/3/2012 Certificate Number: 3239</p>																	

Permit Comments

Operator: COG OPERATING LLC , 229137

Well: RAPTOR 12 STATE COM #002H

API: 30-015-39860

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.	1/18/2012
CSHAPARD	Land s/S	1/27/2012

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: RAPTOR 12 STATE COM #002H

API: 30-015-39860

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