

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
4. Property Code 36785		3. API Number 30-015-35863
5. Property Name RAVEN 12 STATE		6. Well No. 001H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
P	12	16S	28E	P	430	S	330	E	EDDY

8. Pool Information

WILDCAT; WOLFCAMP GAS	97489
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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 3587
14. Multiple N	15. Proposed Depth 7000	16. Formation Wolfcamp	17. Contractor	18. Spud Date 11/15/2007
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"/> 20 miles thick Clay <input type="checkbox"/> Pit Volume: 25000 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	275	300	0
Int1	12.25	9.625	40	2300	950	0
Prod	7.875	5.5	17	11500	100	6500
Int2	8.75	5.5	17	7000	400	6500

Casing/Cement Program: Additional Comments

COG proposes to dr 17-1/2 hole to 275' w/water mud sys, MW 8.5, Vis 28. Run 13-3/8" set @ 275' & cmt to surf. Dr 12-1/4 hole to 2300' w/brine mud sys, MW 10.0, Vis 29. Run 9-5/8" csg set @ 2300' & cmt to surf. Dr 8-3/4" pilot hole thru Wolfcamp to 7000' w/cut brine mud sys, MW 9.1, Vis 29. Run open hole logs. Spot 150 sx H KO plug from 6700' to 6300'. Time dr & KO 7-7/8" hole @ +/- 6300', building curve over +/- 475' to horizontal 6770' TVD, 11,500' MD.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	1250	
DoubleRam	3000	3000	
Annular	3000	1500	

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 ☒ a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Printed Name: Electronically filed by Diane Kuykendall

Title: Regulatory Analyst

Email Address: dkuykendall@conchoresources.com

Date: 10/9/2007

Phone: 432-685-4372

OIL CONSERVATION DIVISION

Approved By: Bryan Arrant

Title: Geologist

Approved Date: 10/15/2007

Expiration Date: 10/15/2008

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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Santa Fe, NM 87505

Form C-102
Permit 62060

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-35863	2. Pool Code 97489	3. Pool Name WILDCAT; WOLFCAMP GAS
4. Property Code 36785	5. Property Name RAVEN 12 STATE	6. Well No. 001H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3587

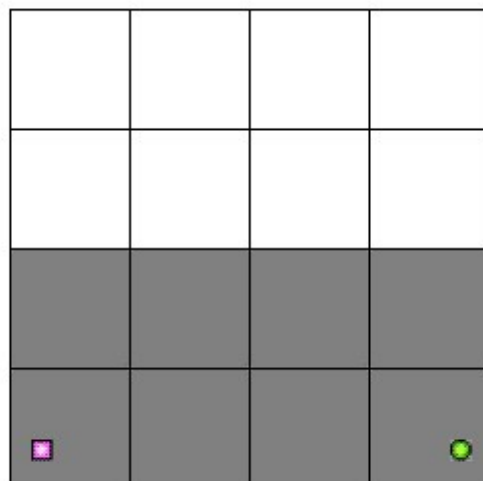
10. Surface Location

UL - Lot P	Section 12	Township 16S	Range 28E	Lot Idn	Feet From 430	N/S Line S	Feet From 330	E/W Line E	County EDDY
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11. Bottom Hole Location If Different From Surface

UL - Lot M	Section 12	Township 16S	Range 28E	Lot Idn M	Feet From 430	N/S Line S	Feet From 330	E/W Line W	County EDDY
12. Dedicated Acres 320.00		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: 10/9/2007

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: 10/5/2007

Certificate Number: 7977

Permit Comments

Operator: COG OPERATING LLC , 229137

Well: RAVEN 12 STATE #001H

API: 30-015-35863

Created By	Comment	Comment Date
PEDWARDS	H2S concentrations of wells in this are from surface to TD are low enough that a contingency plan is not required.	10/8/2007
PEDWARDS	Directional plan and original plat will be submitted by mail.	10/9/2007

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: RAVEN 12 STATE #001H

API: 30-015-35863

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	Will require a directional survey with the C-104
BArrant	Operator to set surface casing above the Salado. Please refer to offset geology for more information.
BArrant	As noted, operator to drill surface hole w/fresh water mud.
BArrant	Operator to submit a directional drill plan prior to spudding well.