

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 159823

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address COG OPERATING LLC One Concho Center Midland, TX 79701		2. OGRID Number 229137
4. Property Code 39603		3. API Number 30-015-40924
5. Property Name CADILLAC 15 STATE		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
F	15	17S	29E	F	2460	N	2310	W	EDDY

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	15	17S	29E	N	330	S	2310	W	Eddy

9. Pool Information

EMPIRE; GLORIETA-YESO, EAST	96610
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3577
16. Multiple N	17. Proposed Depth 6990	18. Formation Yeso Formation	19. Contractor	20. Spud Date 2/28/2013
Depth to Ground water 110		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000

21. 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	350	400	0
Int1	12.25	9.625	40	850	500	0
Int2	8.75	7	26	4375	800	0
Prod	6.125	4.5	11.6	6990	0	0
Prod	6.125	4.5	11.6	6577	0	0

Casing/Cement Program: Additional Comments

COG proposes to drill a 17-1/2" hole to 350' with a 8.5 ppg, 28 viscosity fresh water mud system. Set 13 3/8" casing and cement to surface. Drill a 12 1/4" hole to 850' with a 10 ppg, 30 viscosity brine water mud system. Set 9 5/8" casing and cement to surface. Drill an 8 3/4" hole to 4600'. Run open hole logs and evaluate hole. Set 7" casing and cement to surface. Drill a 6 1/8" hole to +/- 4723' and kick off and drill a 6 1/8" hole, building curve over +/- 470' of horizontal section in a southerly direction to +/- 5481' MD. Drill a 6 1/2" lateral to BHL at 5164' TVD +/- 7490' MD. Run 4 1/2" production liner in uncemented open hole lateral to +/- 4500' MD, utilizing open hole packers and liner top packer for isolation. Liner overlap only 125' to facilitate pumping. Set retrievable bridge plug at +/- 4400' MD. Set hydraulic actuated whipstock at +/- 4200' MD. Mill window and drill to +/- 4219' MD.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	2000	2000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. Signature: _____ Printed Name: Electronically filed by Diane Kuykendall Title: Production Reporting Mgr Email Address: dkuykendall@conchoresources.com Date: 12/21/2012 Phone: 432-683-7443	OIL CONSERVATION DIVISION Approved By: Randy Dade Title: District Supervisor Approved Date: 12/21/2012 Expiration Date: 12/21/2014 Conditions of Approval Attached
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Form C-102
August 1, 2011
Permit 159823

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-40924	2. Pool Code 96610	3. Pool Name EMPIRE; GLORIETA-YESO, EAST
4. Property Code 39603	5. Property Name CADILLAC 15 STATE	6. Well No. 002H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3577

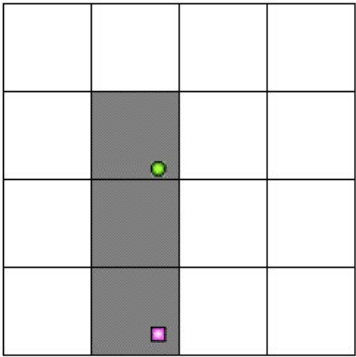
10. Surface Location

UL - Lot F	Section 15	Township 17S	Range 29E	Lot Idn N	Feet From 2460	N/S Line N	Feet From 2310	E/W Line W	County EDDY
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11. Bottom Hole Location If Different From Surface

UL - Lot N	Section 15	Township 17S	Range 29E	Lot Idn N	Feet From 330	N/S Line S	Feet From 2310	E/W Line W	County EDDY
12. Dedicated Acres 120.00		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

	<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: 12/21/2012</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: Ronald Eidson Date of Survey: 8/15/2012 Certificate Number: 3239</p>
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Permit Comments

Operator: COG OPERATING LLC , 229137

Well: CADILLAC 15 STATE #002H

API: 30-015-40924

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.	12/21/2012
kholly1	CONTINUED ADDITIONAL INFORMATION ON THE PROPOSED CASING/CEMENT PROGRAM: Drill 6 1/8" hole building curve over +/- 470' of horizontal section in a southerly direction to +/- 4981' MD. Drill a 6 1/8" lateral to BHL at 4685' TVD +/- 6990' MD. Run 4 1/2" production liner to uncemented open hole lateral to +/- 6990' MD, utilizing open hole packers. J off of liner and leave top of liner at +/- 4250' MD (+/- 30' outside of casing window.)	12/21/2012
CSHAPARD	Land s/S	12/21/2012

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: CADILLAC 15 STATE #002H

API: 30-015-40924

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