

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 37902		3. API Number 30-015-37765
5. Property Name HATFIELD STATE		6. Well No. 002

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
N	8	17S	29E	N	990	S	2310	W	EDDY

8. Pool Information

EMPIRE; GLORIETA-YESO, EAST	96610
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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 3621
14. Multiple N	15. Proposed Depth 6000	16. Formation Yeso Formation	17. Contractor	18. Spud Date 6/30/2010
Depth to Ground water 110		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000
Pit: Liner: Synthetic ☒ 12 _____ mils thick Clay ☐ Pit Volume: 5000 _____ bbls Drilling Method: Closed Loop System ☐ Fresh Water ☒ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐				

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	350	400	0
Int1	11	8.625	24	850	400	0
Prod	7.875	5.5	17	6000	900	0

Casing/Cement Program: Additional Comments

COG proposes to drill a 17-1/2" hole to 350' w/fr wtr mud system, wt 8.5, vis 28, set 13-3/8" casing & cement to surface. Drill an 11" hole to 850' w/fr mud system, wt 10, vis 30. Set 8-5/8" casing & cement to surface. Drill 7-7/8" hole to 6000' w/cut brine mud system, wt 9.1, vis 29-32. Test Yeso formation. Run 5-1/2" casing & cement to surface. Note: On production string, a caliper will be run, COG will attempt to circulate cement.

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 ☒ , a general permit ☐ , or an (attached) alternative OCD-approved plan ☐ .	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by Diane Kuykendall	Approved By: Jacqueta Reeves
Title: Regulatory Analyst	Title: District Geologist
Email Address: dkuykendall@conchoresources.com	Approved Date: 4/28/2010 Expiration Date: 4/28/2012
Date: 4/8/2010 Phone: 432-683-7443	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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Form C-102
Permit 106310

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-37765	2. Pool Code 96610	3. Pool Name EMPIRE; GLORIETA-YESO, EAST
4. Property Code 37902	5. Property Name HATFIELD STATE	6. Well No. 002
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3621

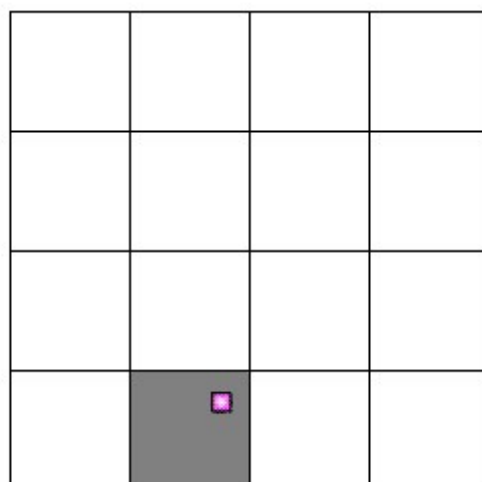
10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
N	8	17S	29E		990	S	2310	W	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
12. Dedicated Acres 40.00	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: 4/8/2010

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: Bruce Pennell
Date of Survey: 2/23/2010
Certificate Number: 9062

Permit Comments

Operator: COG OPERATING LLC , 229137

Well: HATFIELD STATE #002

API: 30-015-37765

Created By	Comment	Comment Date
rodom	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	12/8/2009

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: HATFIELD STATE #002

API: 30-015-37765

OCD Reviewer	Condition
JVREEVES	BOP test must be performed by third party, per District II Supervisor.