

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 146640

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 30-015-40430
4. Property Code 37902	5. Property Name HATFIELD STATE	6. Well No. 006H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
J	8	17S	29E	J	2310	S	2560	E	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 3618
14. Multiple N	15. Proposed Depth 7057	16. Formation Yeso Formation	17. Contractor	18. Spud Date 8/31/2012
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	17.5	13.375	48	350	400	0
Int1	12.25	9.625	36	850	500	0
Int2	8.75	7	26	4375	900	0
Prod	6.125	4.5	11.6	6577	0	0
Prod	6.125	4.5	11.6	7057	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 1/4" hole to 4375'. Run open hole logs and evaluate hole. Set 7" casing and cement to surface. Drill an 6 1/8" hole to +/- 4473' and kick off and drill an 6 1/8" hole, building curve over +/- 470' of horizontal section in a westerly direction to +/- 5241' MD. Drill a 6 1/8" lateral to new BHL at 4918' TVD +/- 7057' MD. Run 4 1/2" production liner in uncemented open hole lateral to +/- 7057' MD, utilizing open hole packers and liner top packer for isolation. Liner overlap only 125' to facilitate pumping. Set retrievable bridge plug at +/- 4150' MD. Set hydraulic actuated whipstock at +/- 3940' MD. Mill window and drill to +/- 3945' MD. Drill a 6 1/8" hole to +/- 4473' and kick off and drill an 6 1/8" hole,

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	
Printed Name: Electronically filed by Diane Kuykendall	Title: District Supervisor	
Title: Production Reporting Mgr	Approved Date: 6/28/2012	Expiration Date: 6/28/2014
Email Address: dkuykendall@conchoresources.com		
Date: 6/27/2012	Phone: 432-683-7443	Conditions of Approval Attached

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Form C-102
August 1, 2011
Permit 146640

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-40430	2. Pool Code 96610	3. Pool Name EMPIRE; GLORIETA-YESO, EAST
4. Property Code 37902	5. Property Name HATFIELD STATE	6. Well No. 006H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3618

10. Surface Location

UL - Lot J	Section 8	Township 17S	Range 29E	Lot Idn 2	Feet From 2310	N/S Line S	Feet From 2560	E/W Line E	County EDDY
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11. Bottom Hole Location If Different From Surface

11. Bottom Hole Location If Different From Surface									
UL - Lot L	Section 8	Township 17S	Range 29E	Lot Idn L	Feet From 2310	N/S Line S	Feet From 330	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

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: Production Reporting Mgr
Date: 6/27/2012

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: Ronald Eidson
Date of Survey: 4/21/2012
Certificate Number: 3239

Permit Comments

Operator: COG OPERATING LLC , 229137

Well: HATFIELD STATE #006H

API: 30-015-40430

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.	4/3/2012
kholly1	CONTINUED ADDITIONAL INFORMATION ON THE PROPOSED CASING/CEMENT PROGRAM: building curve over +/- 470' of horizontal section in a westerly direction to +/- 4761' MD. Drill a 6 1/8" lateral to new BHL at 4438' TVD +/- 6577' MD. Run 4 1/2" production liner in uncemented open hole lateral to +/- 6577' MD, utilizing open hole packers. J off of liner and leave top of liner at +/- 3970' MD (+/- 30' outside of casing window.)	6/27/2012
CSHAPARD	Land p/S	6/28/2012

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: HATFIELD STATE #006H

API: 30-015-40430

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