

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 143562

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 39213		3. API Number 30-015-40409
5. Property Name BIG GIRL 31 STATE		6. Well No. 009H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
L	31	17S	28E	3	1920	S	330	W	EDDY

8. Pool Information

RED LAKE; GLORIETA YESO, NORTHEAST	96836
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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 3678
14. Multiple N	15. Proposed Depth 8447	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	0	900	0
Prod	7.875	5.5	17	8447	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 3523' MD. Drill a 7 7/8" pilot hole to 5000' MD. Log and evaluate well. Cement entire pilot hole from 5000' MD to 3523' MD with 500 sacks of cement. Kick off and drill an 8 1/4" curve to 4273' MD. Drill a 7 7/8" lateral to new BHL at 4000' TVD 8447' MD. Run a tapered string with 7" 26# L-80 from surface to 3523' & 5 1/2" 17# L-80 casing to TD with DV/ECP Combo Tool at 3523' and isolation packers in the open hole. Set isolation packers and ECP. Open DV tool and cement from 3523' to surface.

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 NMOC guidelines ☒ , a general permit ☐ , or an (attached) alternative OCD-approved plan ☐ .	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by Diane Kuykendall	Approved By: Randy Dade
Title: Production Reporting Mgr	Title: District Supervisor
Email Address: dkuykendall@conchoresources.com	Approved Date: 6/21/2012 Expiration Date: 6/21/2014
Date: 6/20/2012 Phone: 432-683-7443	Conditions of Approval Attached

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Santa Fe, NM 87505

Form C-102
August 1, 2011
Permit 143562

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-40409	2. Pool Code 96836	3. Pool Name RED LAKE; GLORIETA YESO, NORTHEAST
4. Property Code 39213	5. Property Name BIG GIRL 31 STATE	6. Well No. 009H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3678

10. Surface Location

UL - Lot L	Section 31	Township 17S	Range 28E	Lot Idn	Feet From 1920	N/S Line S	Feet From 330	E/W Line W	County EDDY
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11. Bottom Hole Location If Different From Surface

11. Bottom Hole Location is Different From Surface									
UL - Lot I	Section 31	Township 17S	Range 28E	Lot Idn I	Feet From 1650	N/S Line S	Feet From 330	E/W Line E	County EDDY
12. Dedicated Acres 163.67		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>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> E-Signed By: Diane Kuykendall Title: Production Reporting Mgr Date: 6/20/2012		
	SURVEYOR CERTIFICATION <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> Surveyed By: Ronald Eidson Date of Survey: 4/11/2012 Certificate Number: 3239		

Permit Comments

Operator: COG OPERATING LLC , 229137

Well: BIG GIRL 31 STATE #009H

API: 30-015-40409

Created By	Comment	Comment Date
konnally	H2S concentrations of wells in this area from surface to TD are low enough tha a contingency plan is not required.	1/26/2012
CSHAPARD	Land p/S	6/21/2012

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: BIG GIRL 31 STATE #009H

API: 30-015-40409

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