

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 159320

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 39256		3. API Number 30-025-40899
5. Property Name PAN HEAD FEE		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
D	11	17S	32E	D	330	N	990	W	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	14	17S	32E	E	2305	N	988	W	Lea

9. Pool Information

MALJAMAR,YESO, WEST	44500
---------------------	-------

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 4163
16. Multiple N	17. Proposed Depth 13849	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	54.5	980	1000	0
Int1	12.25	9.625	40	2300	750	0
Int2	8.75	7	26	6323	1000	0
Prod	7.875	5.5	17	13849	0	0

Casing/Cement Program: Additional Comments

COG proposes to drill a 17 1/2" hole to 980' 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 2300' 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 6323' MD and kick off and drill a 8 3/4" curve to 7081' MD 6800' TVD. Drill a 8 3/4" lateral to new BHL at 6682' TVD 13,849' MD. Run a tapered string with 7" 26# L-80 from surface to 6323' & 5 1/2" 17# L-80 casing to TD with DV/ECP Combo Tool at 6323' and isolation packers in the open hole. Set isolation packers and ECP. Open DV tool and cement from 6323' to surface.

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 ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable. Signature:	OIL CONSERVATION DIVISION	
Printed Name: Electronically filed by Diane Kuykendall	Approved By: Paul Kautz	
Title: Production Reporting Mgr	Title: Geologist	
Email Address: dkuykendall@conchoresources.com	Approved Date: 12/26/2012 Expiration Date: 12/26/2014	
Date: 12/20/2012 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
811 S. First St., 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

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
August 1, 2011
Permit 159320

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-40899	2. Pool Code 44500	3. Pool Name MALJAMAR,YESO, WEST
4. Property Code 39256	5. Property Name PAN HEAD FEE	6. Well No. 002H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 4163

10. Surface Location

UL - Lot D	Section 11	Township 17S	Range 32E	Lot Idn E	Feet From 330	N/S Line N	Feet From 990	E/W Line W	County LEA
---------------	---------------	-----------------	--------------	--------------	------------------	---------------	------------------	---------------	---------------

11. Bottom Hole Location If Different From Surface

UL - Lot E	Section 14	Township 17S	Range 32E	Lot Idn E	Feet From 2305	N/S Line N	Feet From 988	E/W Line W	County LEA
12. Dedicated Acres 240.00		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>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: 12/20/2012	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: Gary Eidson Date of Survey: 10/11/2012 Certificate Number: 12641
---	---

Permit Comments

Operator: COG OPERATING LLC , 229137

Well: PAN HEAD FEE #002H

API: 30-025-40899

Created By	Comment	Comment Date
khelly1	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	12/12/2012
DMULL	OCD Hobbs has received form C-144CLEZ. OCD Permit Number P1-05548.	12/26/2012

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: PAN HEAD FEE #002H

API: 30-025-40899

OCD Reviewer	Condition
pkautz	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