

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-101
Revised July 18, 2013

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

¹ Operator Name and Address COG Operating LLC 2208 West Main Street Artesia, NM 88210		² OGRID Number 229137	
		³ API Number 30-025-43489	
⁴ Property Code 315281	⁵ Property Name Columbus Fee		⁶ Well No 23H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
B	34	25S	33E		210'	North	1340'	East	Lea

⁸ Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
O	3	26S	33E		200'	South	1650'	East	Lea

9. Pool Information

Wildcat: Wolfcamp	Pool Name WC-025 G-09 5253336D; UPPER WOLFCAMP	Pool Code 98094
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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 3326'
¹⁶ Multiple N	¹⁷ Proposed Depth 22,444'	¹⁸ Formation Wolfcamp	¹⁹ Contractor	²⁰ Spud Date 11/20/2016
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/lb	Setting Depth	Sacks of Cement	Estimated TOC
Surface	13.5	10.75	45.5	1,025'	700	
Intnrd I	9.875	7.625	29.7	11,700'	1000	
Production	6.75	5.5	23	22,444'	2500	11,000

Casing/Cement Program: Additional Comments

Drill 13-1/2" hole to ~1025' w/ fresh water spud mud. Run 10-3/4" 45.5# J55 STC casing to TD and cement to surface in one stage.
Drill 9-7/8" hole to ~11,700' with diesel brine emulsion. Run 7-5/8" 29.7# P110 casing to TD and cement to surface in one stage.
Drill 6-3/4" vertical hole, curve & lateral to 22,444' with OBM. Run 5-1/2" 23# P110 LTC casing to TD and cement to 11,000' in one stage.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	3000	Cameron

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC and/or 19.15.14.9 (B) NMAC if applicable.
Signature: *Mayte Reyes*

Printed name: Mayte Reyes
Title: Regulatory Analyst
E-mail Address: mreyesl@concho.com
Date: 11/15/2016 Phone: 575-748-6945

OIL CONSERVATION DIVISION

Approved By: *[Signature]*
Title: **Petroleum Engineer**
Approved Date: *12/08/16* Expiration Date: *12/08/18*
Conditions of Approval Attached

Columbus Fee 23H

Casing and Cement

<u>String</u>	<u>Hole Size</u>	<u>Csg OD</u>	<u>PPF</u>	<u>Depth</u>	<u>Sx Cement</u>	<u>TOC</u>
Surface	13-1/2"	10-3/4"	45.5#	1,025'	700	0'
Intermediate	9-7/8"	7-5/8"	29.7#	11,700'	1000	0'
Production	6-3/4"	5-1/2"	23#	22,444'	2500	11,000'

Well Plan

Drill 13-1/2" hole to ~1025' w/ fresh water spud mud. Run 10-3/4" 45.5# J55 STC casing to TD and cement to surface in one stage.

Drill 9-7/8" hole to ~11,700' with diesel brine emulsion. Run 7-5/8" 29.7# P110 casing to TD and cement to surface in one stage.

Drill 6-3/4" vertical hole, curve & lateral to 22,444' with OBM. Run 5-1/2" 23# P110 LTC casing to TD and cement to 11,000' in one stage.

Well Control

After setting 10-3/4" casing and installing 3000 psi casing head, NU 13-5/8" Cameron BOP. Test annular and casing to 1500 psi and other BOP equipment to 3000 psi.

After setting 7-5/8" casing and installing 5000 psi casing spool, NU 13-5/8" Cameron BOP. Test annular to 3000 psi and other BOP equipment to 5000 psi.