

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 30-025-42179
⁴ Property Code 313787	⁵ Property Name Skull Cap State	⁶ Well No 4H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
M	32	24S	32E		190	South	380	West	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
D	32	24S	32E		330	North	380	West	Lea

9. Pool Information

Wildcat: Bone Spring	¹⁰ Pool Name WC-025 G-06 5253206M; BONE SPRING	¹¹ Well Code 97899
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Additional Well Information

¹² Work Type New Well	¹³ Well Type Oil	¹⁴ Cable/Rotary 	¹⁵ Lease Type State	¹⁶ Ground Level Elevation 3297.3'
¹⁷ Multiple N	¹⁸ Proposed Depth 17049	¹⁹ Formation Bone Spring	²⁰ Contractor 	²¹ Spud Date 10/18/2014
²² Depth to Ground water		²³ Distance from nearest fresh water well		²⁴ 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/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17.5	13.375	54.5	1000'	770	
Intemd	12.25	9.625	40	5430'	1835	
Intemd/Prod	8.75	7	29	12769'	1400	
Liner	6.125	4.5	13.5	11800' - 17049'	450	11800

Casing/Cement Program: Additional Comments

Drill 17-1/2" hole to ~1000' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1" tubing and Class C w/ 2% CaCl2 to cement to surface, if necessary. Drill 12-1/4" hole to ~5430' with saturated brine water. Run 9-5/8" 40# L80 LTC casing to TD and cement to surface in one stage. Drill 8-3/4" vertical hole and curve to 12769' with cut brine. Run 7" 29# HCP110 BTC casing to TD and cement in two stages with DV tool @ ~5600' circulating cement on both stages. Drill 6-1/8" lateral to 17049' with cut brine / brine. Run 4-1/2" 13.5# HCP110 Tenaris TXP BTC liner to TD and cement in one stage circulating cement to top of liner.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	Cameron

²⁵ 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: mreyes1@concho.com

Date: 10/10/2014

Phone: 575-748-6945

OIL CONSERVATION DIVISION

Approved By:

Title: Petroleum Engineer

Approved Date: 10/10/14

Expiration Date: 10/10/16

Conditions of Approval Attached ☒

Oct 15 2014 *KZ*