

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

AMENDED

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	35E		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	35E		330	North	380	West	Lea

⁹ Pool Information

¹⁰ Pool Name WC-025 G-06 S253206M1; Bone Spring	¹¹ Pool 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

²⁵ 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# HCPI 10 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# HCPI 10 Tenaris TXP BTC liner to TD and cement in one stage circulating cement to top of liner.

²⁶ Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	Cameron

²⁷ 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: *10/21/14*

Expiration Date: *10/10/16*

Conditions of Approval Attached:

OCT 31 2014