

**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**

<sup>1</sup> Operator Name and Address <b>COG Operating LLC</b> <b>2208 West Main Street</b> <b>Artesia, NM 88210</b>		<sup>2</sup> OGRID Number <b>229137</b>
		<sup>3</sup> API Number <b>30-025-42179</b>
<sup>4</sup> Property Code <b>313787</b>	<sup>5</sup> Property Name <b>Skull Cap State</b>	<sup>6</sup> Well No <b>4H</b>

**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	<sup>7</sup> Pool Name <b>WC-025 G-06 525 3206M; BONE SPRING</b>	<sup>8</sup> Well Code <b>97899</b>
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**Additional Well Information**

<sup>11</sup> Work Type New Well	<sup>12</sup> Well Type Oil	<sup>13</sup> Cable/Rotary	<sup>14</sup> Lease Type State	<sup>15</sup> Ground Level Elevation 3297.3'
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 17049	<sup>18</sup> Formation Bone Spring	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 10/18/2014
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/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17.5	13.375	54.5	1000'	770	
Intrmd	12.25	9.625	40	5430'	1835	
Intrmd/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

<sup>23</sup> 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 <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> , if applicable. Signature: <i>Mayte Reyes</i> Printed name: Mayte Reyes Title: Regulatory Analyst E-mail Address: mreyes1@concho.com Date: 10/10/2014	<b>OIL CONSERVATION DIVISION</b> Approved By: <i>[Signature]</i> Title: Petroleum Engineer Approved Date: 10/10/14    Expiration Date: 10/10/16 Conditions of Approval Attached <input checked="" type="checkbox"/>
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OCT 15 2014 *KR*