

**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

**NSOCCD**

**FEB 20 2014**

**RECEIVED**

**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> Property Code <b>39678</b>	<sup>4</sup> Property Name <b>Osprey 20 State Corn</b>	<sup>5</sup> API Number <b>30-025-41674</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
L	20	21S	34E		2430	South	330	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
M	29	21S	34E		330	South	380	West	Lea

**9. Pool Information**

<sup>10</sup> Pool Name <b>WC-025 G07 S213430M: Bone Spring</b>	<sup>11</sup> Pool Code <b>97692 92962</b>
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**Additional Well Information**

<sup>12</sup> Work Type <b>New Well</b>	<sup>13</sup> Well Type <b>Oil</b>	<sup>14</sup> Cable/Rotary 	<sup>15</sup> Lease Type <b>State</b>	<sup>16</sup> Ground Level Elevation <b>3741.2'</b>
<sup>17</sup> Multiple <b>N</b>	<sup>18</sup> Proposed Depth <b>18157'</b>	<sup>19</sup> Formation <b>Bone Spring</b>	<sup>20</sup> Contractor 	<sup>21</sup> Spud Date <b>2/28/2014</b>
<sup>22</sup> Depth to Ground water 		<sup>23</sup> Distance from nearest fresh water well 		<sup>24</sup> 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	1930'	1125	
Intmd	12.25	9.625	40	5880'	2230	
Production	7.875	5.5	17	18157'97692-	2340	5580

**Casing/Cement Program: Additional Comments**

Drill 17-1/2" hole to ~1930' 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% CaCl<sub>2</sub> to cement to surface if necessary.

Drill 12-1/4" hole to ~5880' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 40# L80 BTC casing to TD with a DV tool placed ~100' above the Reef. Plan to circulate cement on both stages.

Drill 7-7/8" vertical hole, curve and lateral to 18157' with cut brine. Run 5-1/2" 17# P110 TXP casing to TD and cement to 5580' (300' overlap) in one stage.

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	T3 Energy Services

<sup>25</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>		<b>OIL CONSERVATION DIVISION</b>	
Printed name: <b>Mayte Reyes</b>		Approved By: <i>[Signature]</i>	
Title: <b>Regulatory Analyst</b>		Title: <b>Petroleum Engineer</b>	
E-mail Address: <b>mreyes1@concho.com</b>		Approved Date: <b>02/21/14</b> Expiration Date: <b>02/24/16</b>	
Date: <b>2/20/2014</b>		Phone: <b>575-748-6945</b>	
Conditions of Approval Attached			

**FEB 24 2014**