

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

CONCHO

FEB 20 2014

RECEIVED

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 Property Code 39678		⁴ Property Name Osprey 20 State Com
		⁵ API Number 30-025-41674
		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
L	20	21S	34E		2450	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

¹⁰ Pool Name WC-025 G07 S213430M: Bone Spring	¹¹ Pool Code 97692 92862
--	---

Additional Well Information

¹² Work Type New Well	¹³ Well Type Oil	¹⁴ Cable/Rotary 	¹⁵ Lease Type State	¹⁶ Ground Level Elevation 3741.2'
¹⁷ Multiple N	¹⁸ Proposed Depth 18157'	¹⁹ Formation Bone Spring	²⁰ Contractor 	²¹ Spud Date 2/28/2014
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	1930'	1125	
Intemd	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% CaCl₂ 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.

²⁶ Proposed Blowout Prevention Program

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

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 <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. Signature: <i>Mayte Reyes</i>		OIL CONSERVATION DIVISION	
Printed name: Mayte Reyes		Approved By: <i>[Signature]</i>	
Title: Regulatory Analyst		Title: Petroleum Engineer	
E-mail Address: mreyes1@concho.com		Approved Date: 02/21/14 Expiration Date: 02/24/16	
Date: 2/20/2014		Phone: 575-748-6945	
Conditions of Approval Attached			

FEB 26 2014

PM