

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
1100 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

HOBBSCO

JAN 07 2014

RECEIVED
APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address COG Operating LLC 2208 West Main Street Artesia, NM 88210		OGRID Number 229137
Property Code 40718		API Number 30-025-41590
Property Name Merlin State Com		Well No 1H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
N	29	21S	34E		1130	South	1650	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
N	32	21S	34E		330	South	1980	West	Lea

9. Pool Information

Wildcat Bone Spring	Pool Name WC-025 G-07 5213470M: BONE SPRING	Pool Code 96403 97962
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Additional Well Information

Work Type New Well	Well Type Oil	Cable/Rotary	Lease Type State	Ground Level Elevation 3721.4
Multiple N	Proposed Depth 17799	Formation Bone Spring	Contractor	Spud Date 1/15/2014
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	1900	1115	
Intemd	12.25	9.625	40	5850	2220	
Pilot Hole Plug	7.875	-	-	12190	380	11190
Production	7.875	5.5	17	17799	2150	5550

Casing/Cement Program: Additional Comments

Drill 17-1/2" hole to ~1900' 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 -5850' 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" pilot hole to 12190', log and plug back with 380 sx cement plug f/ 11190' - 12190'. Drill 7-7/8" curve and lateral to 17799' with cut brine. Run 5-1/2" 17# P110 TXP casing to TD and cement to 5550' (300' overlap) in one stage.

22. Proposed Blowout Prevention Program

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

<p>23. 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></p>	OIL CONSERVATION DIVISION	
	Approved By: <i>[Signature]</i>	
	Title: Petroleum Engineer	
	Approved Date: 01/08/14	Expiration Date: 01/08/16
	Conditions of Approval Attached <input checked="" type="checkbox"/> ATTACHED	
Printed name: Mayte Reyes		
Title: Regulatory Analyst		
E-mail Address: mreyes1@concho.com		
Date: 1/7/2014	Phone: 575-748-6945	

JAN 09 2014

30-025-41590

CONDITIONS OF APPROVAL

- 1) SURFACE & INTERNEMIATE CASING - Cement must circulate to surface --
- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
- 3) **Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water**
- 4) Directional survey must be attached to C-104