

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-9720

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

Operator Name and Address COG Operating LLC 2208 West Main Street Artesia, NM 88210		OGRID Number 229137
Property Code 315281		API Number 70-225-42822
Property Name Columbus Fee		Well No 2H

Surface Location

UL - Lot	Section	Township	Range	Lot Ida	Feet from	N-S Line	Feet From	E/W Line	County
B	34	25S	33E		210'	North	2310'	East	Lea

Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Ida	Feet from	N-S Line	Feet From	E/W Line	County
O	3	26S	33E		330'	South	2310'	East	Lea

Pool Information

WC 026 G-09 S253335K Bone Spring	Pool Name RED HILLS; UPPER BS SHALE	Pool Code 97741 97900
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Additional Well Information

¹¹ Work Type New Well	¹² Well Type Oil	¹³ Cable/Rotary	¹⁴ Lease Type State	¹⁵ Ground Level Elevation 3327
¹⁶ Multiple N	¹⁷ Proposed Depth 19800'	¹⁸ Formation Bone Spring	¹⁹ Contractor	²⁰ Spud Date 10/15/2015
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

Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/lb	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17.5	13.375	54.5	1150'	900	
Intermd I	12.25	9.625	40	5000'	1450	
Production	8.75	5.5	17	19800'	3000	4400

Casing/Cement Program: Additional Comments

Plan to drill a 17-1/2" hole to 1150' with Fresh Water. Run 13-3/8", 54.5# J-55 casing and cement to surface. 1st Intermediate - Drill 12-1/4" hole to 5000' with Brine, and run 9-5/8", 4300' of 40# J-55 plus 700' of 40# N/L-80 and cement to surface. Production - Drill 8-3/4" hole to 19,800' with Brine/XC Poly Mud, and run 5-1/2" 17# HCP110 and cement to tie back into 1st Intermediate Casing to 4400'.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

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> Printed name: Mayte Reyes Title: Regulatory Analyst E-mail Address: mreyes1@concho.com Date: 10/1/2015		OIL CONSERVATION DIVISION Approved By: <i>[Signature]</i> Title: Petroleum Engineer Approved Date: <i>10/1/15</i> Expiration Date: <i>10/1/17</i> Conditions of Approval Attached	
Phone: 575-748-6945			

See Attached
Conditions of Approval

OCT 07 2015

CONDITIONS OF APPROVAL

API #	Operator	Well name & Number
30-025-42822	COG OPERATING LLC	COLUMBUS FEE # 002H

Applicable conditions of approval marked with XXXXXX

Administrative Orders Required

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Other wells

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Drilling

XXXXXXX	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string

Casing

XXXXXXX	SURFACE & INTERMEDIATE(1) CASING - Cement must circulate to surface --
XXXXXXX	PRODUCTION CASING - Cement must tie back into intermediate casing --
XXXXXXX	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
	South Area
XXXXXXX	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water

Pits

XXXXXXX	If using a pit for drilling and completions, must have an approved pit form prior to spudding the well

Completion & Production

XXXXXXX	Will require a directional survey with the C-104

Stage Tool

XXXXXXX	Must notify OCD Hobbs Office prior to running Stage Tool at 575-370-3186
XXXXXXX	If using Stage Tool on Surface casing, Stage Tool must be greater than 350' and a minimum 200 feet above surface shoe.
XXXXXXX	When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.

Lost Circulation

XXXXXXX	Must notify OCD Hobbs Office if lost circulation is encountered at 575-370-3186