

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-6720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9724

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

¹ Operator Name and Address COG Operating LLC 2208 West Main Street Artesia, NM 88210		² OGRID Number 229137 ³ API Number 30-015-43093
⁴ Property Code 40112	⁵ Property Name SRO State Com	⁶ Well No 69H

⁷ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
C	17	26S	28E		200'	North	1980'	West	Eddy

⁸ Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
N	20	26S	28E		330'	South	1980'	West	Eddy

⁹ Pool Information

¹⁰ Pool Name Hay Hollow; Bone Spring	¹¹ Pool Code 30215
-----------------------------------------------------------	-----------------------------------------

Additional Well Information

¹² Work Type New Well	¹³ Well Type Oil	¹⁴ Cable/Rotary 	¹⁵ Lease Type State	¹⁶ Ground Level Elevation 3099.8'
¹⁷ Multiple N	¹⁸ Proposed Depth 18924'	¹⁹ Formation Bone Spring	²⁰ Contractor 	²¹ Spud Date 5/15/2015
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	620'	505	
Intermd	12.25	9.625	36	2470'	785	
Production	8.75	5.5	17	18924'	3505	

Casing/Cement Program: Additional Comments

Drill 17-1/2" hole to ~620' 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 ~2470' with saturated brine water. Run 9-5/8" 36# J55 LTC casing to TD and cement to surface in one stage.

Drill 8-3/4" vertical hole, curve and lateral to 18924' with cut brine. Run 5-1/2" 17# P110 CDC BTC casing to TD and cement to surface in one stage.

²⁶ Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

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> Printed name: Mayte Reyes Title: Regulatory Analyst E-mail Address: mreyes1@concho.com Date: 5/5/2015	<p style="text-align: center;">OIL CONSERVATION DIVISION</p> Approved By: <i>[Signature]</i> Title: <i>[Signature]</i> Approved Date: 5-11-15 Expiration Date: 5-11-2017 Conditions of Approval Attached
Phone: 575-748-6945	

DISTRICT I
1625 N. FRENCH DR., HOBBBS, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-9722

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1563 Fax: (505) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015- 43093	Pool Code 30215	Pool Name Hay Hollow; Bone Spring
Property Code 40112	Property Name SRO STATE COM	Well Number 69H
GRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3099.8

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	17	26-S	28-E		200'	NORTH	1980'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	20	26-S	28-E		330'	SOUTH	1980'	WEST	EDDY
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>NAD 27 SURFACE LOCATION Y=381669.2 N X=568830.6 E LAT.=32.049129° N LONG.=104.111177° W</p>	<p>Y=381864.0 N X=568166.0 E</p> <p>Y=381874.3 N X=569481.3 E</p> <p>GRID AZ. - 179°55'34" HORZ. DIST. - 10018.1'</p> <p>PRODUCING AREA</p> <p>PROJECT AREA</p> <p>SECTION 17</p> <p>SECTION 20</p> <p>NAD 27 PROPOSED BOTTOM HOLE LOCATION Y=371651.1 N X=568843.6 E LAT.=32.021588° N LONG.=104.111202° W</p> <p>Y=371328.3 N X=568185.7 E</p> <p>Y=371313.8 N X=569507.1 E</p>	<p>OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unless mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Mayte Reyes</i> 5-5-15 Signature Date Mayte Reyes Printed Name mreyes1@concho.com E-mail Address</p> <p>SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>DECEMBER 17, 2014 Date of Survey Signature & Seal of Professional Surveyor</p> <p> Chad L. Harcrow 1/11/15 Certificate No. CHAD HARCROW 17777 W.O. # 14-1230 DRAWN BY: AF</p>
---------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SRO State Com 69H

Casing and Cement

String	Hole Size	Csg OD	PPF	Depth	Sx Cement	TOC
Surface	17-1/2"	13-3/8"	54.5#	620'	505	0'
Intermediate	12-1/4"	9-5/8"	36#	2470'	785	0'
Production	8-3/4"	5-1/2"	17#	18924'	3505	0'

Well Plan

Drill 17-1/2" hole to ~620' 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 ~2470' with saturated brine water. Run 9-5/8" 36# J55 LTC casing to TD and cement to surface in one stage.

Drill 8-3/4" vertical hole, curve and lateral to 18924' with cut brine. Run 5-1/2" 17# P110 CDC BTC casing to TD and cement to surface in one stage.

Well Control

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron