

District I
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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

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 API Number 30-025-42349
Property Code 39678	Property Name Osprey 20 State Com	Well No 5H

Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
A	20	21S	34E		190	North	710	East	Lea

Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
P	29	21S	34E		330	South	380	East	Lea

Pool Information

Pool Name	Pool Code
WC-025 G07 S213-430M: Bone Spring	97962

Additional Well Information

Work Type New Well	Well Type Oil	Cable/Rotary	Lease Type State	Ground Level Elevation 3754.1'
Multiple N	Proposed Depth 21771'	Formation Bone Spring	Contractor	Spud Date 12/30/2014
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

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	1920'	1225	
Intermd	12.25	9.625	40	5830'	1500	
Production	8.75	5.5	17	21771'	3500	3400

Casing/Cement Program: Additional Comments

Plan to drill a 17-1/2" hole to 1920' with Fresh Water. Run 13-3/8", 54.5#, J-55 csg and cmt to surface. Drill 12-1/4" hole to 5830' with Brine, and run 9-5/8", 40# J55 and cement to surface. Drill 8-3/4" vertical & curve. Drill 8-3/4" lateral with cut brine to approximately 21,771' MD. Run 5-1/2", 17#, P-110 csg and cement to 5600'.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Horn

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: 12/22/2014	<div style="text-align: center;">OIL CONSERVATION DIVISION</div> Approved By: <i>[Signature]</i> Title: Petroleum Engineer Approved Date: 12/22/14 Expiration Date: 12/22/16 Conditions of Approval Attached
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DEC 22 2014

Osprey 20 State Com #5H

	Hole Size	Casing	Wt	Depth	Cmt	TOC
Surface	17.5	13.375	54.5	1920'	1225	0
Intrmd	12.25	9.625	40	5830'	1500	0
Prod	8.75	5.5	17	21,771'	3500	3,400'

Plan to drill a 17-1/2" hole to 1920' with Fresh Water. Run 13-3/8", 54.5#, J-55 csg and cmt to surface. Drill 12-1/4" hole to 5830' with Brine, and run 9-5/8", 40# J55 and cement to surface. Drill 8-3/4" vertical & curve. Drill 8-3/4" lateral with cut brine to approximately 21,771' MD. Run 5-1/2", 17#, P-110 csg and cement to 5600'.

Well Control

Type	Pressure	Test	Manufacture
Double Ram	3000	3000	Horn

CONDITIONS OF APPROVAL

API #	Operator	Well name & Number
30-025-42349	COG Operating LLC	Osprey 20 State Com # 5H

Applicable conditions of approval marked with XXXXXX

Administrative Orders Required

XXXXXXX	Will require a directional drill survey with the C-104
XXXXXXXX	If using a pit for drilling and completion operations, must have an approved pit form prior to spudding the well

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 --
XXXXXXXX	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
XXXXXXX	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
	North Area
	Surface casing minimum setting depth of 350' and at least 50' into the red beds whichever is greater.