

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-8161 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 Rd., Aztec, NM 87410  
Phone:(505) 334-8178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3482

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form C-101  
August 1, 2011  
Permit 152339

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

1. Operator Name and Address COG OPERATING LLC One Concho Center Midland, TX 79701		2. OGRID Number 229137
4. Property Code 315281		3. API Number 30-025-42810
5. Property Name COLUMBUS FEE		6. Well No. 022H

**7. Surface Location**

UL - Lot	B	Section	3	Township	26S	Range	33E	Lot Idn		Feet From	190	N/S Line	N	Feet From	1980	E/W Line	E	County	Lea
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**8. Proposed Bottom Hole Location**

UL - Lot	O	Section	3	Township	26S	Range	33E	Lot Idn	O	Feet From	330	N/S Line	S	Feet From	1980	E/W Line	E	County	Lea
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**9. Pool Information**

WC-025 G-09 S253336D; UPPER WOLFCAMP	98094
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**Additional Well Information**

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 3316
16. Multiple N	17. Proposed Depth 16900	18. Formation Wolfcamp	19. Contractor	20. Spud Date 10/5/2015
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

**21. Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	975	800	
Int1	12.25	9.625	40	4950	1200	
Prod	8.75	7	29	11850	1100	4400
Liner1	6.125	4.5	13.5	16900	500	11650

**Casing/Cement Program: Additional Comments**

Plan to drill a 17-1/2" hole to 975' with Fresh Water. Run 13-3/8", 54.5# J-55 casing and cement to surface. 1st Intermediate - Drill 12-1/4" hole to 4950' with Brine, and run 9-5/8", 4300' of 40# J-55 plus 650' of 40# N/L-80 and cement to surface. 2nd Intermediate - Drill 8-3/4" hole to 11,850' with Brine, and run 7" 29# HCP110 and cement to tie back into 1st Intermediate Casing to 4400'. Drill a 6-1/8" Pilot Hole to 12,850' with Cut brine/XC Poly Mud and additives/mud as needed to run logs. Plug back to 7" casing shoe at approximately 11,850' (cement volumes per open hole log caliper). Kick off cement plug and drill a 6-1/8" curve and lateral with XC Poly Mud to approximately 16,900' MD. Run 4-1/2" 13.3# HCP110 HCP CDC liner to TD and cement in one stage circulating cement to top of liner (~11,650').

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	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 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: _____ Printed Name: Electronically filed by Diane Kuykendall Title: Production Reporting Mgr Email Address: production@concho.com Date: 9/28/2015	<div style="text-align: center;"><b>OIL CONSERVATION DIVISION</b></div> Approved By: Paul Kautz Title: Geologist Approved Date: 9/28/2015 Expiration Date: 9/28/2017 Conditions of Approval Attached
Phone: 432-683-7443	

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**Santa Fe, NM 87505**

Form C-102  
August 1, 2011  
Permit 152339

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-42810	2. Pool Code 98094	3. Pool Name WC-025 G-09 S253336D;UPPER WOLFCAMP
4. Property Code 315281	5. Property Name COLUMBUS FEE	6. Well No. 022H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3316

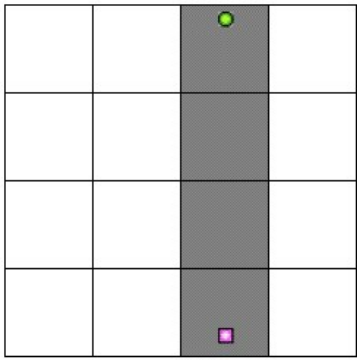
**10. Surface Location**

UL - Lot B	Section 3	Township 26S	Range 33E	Lot Idn	Feet From 190	N/S Line N	Feet From 1980	E/W Line E	County Lea
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**11. Bottom Hole Location If Different From Surface**

UL - Lot O	Section 3	Township 26S	Range 33E	Lot Idn O	Feet From 330	N/S Line S	Feet From 1980	E/W Line E	County Lea
12. Dedicated Acres 160.00	13. Joint or Infill			14. Consolidation Code				15. 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 style="text-align: center;"><b>OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>E-Signed By: Diane Kuykendall Title: Production Reporting Mgr Date: 9/28/2015</p> <hr/> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></p> <p><i>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.</i></p> <p>Surveyed By: Gary Jones Date of Survey: 8/21/2015 Certificate Number: 7977</p>
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Form APD Comments

Permit 152339

**PERMIT COMMENTS**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-025-42810
		Well: COLUMBUS FEE #022H
Created By	Comment	Comment Date
mreyes1	OIL: COG Operating has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore we do not believe that an H2S Contingency Plan would be necessary.	7/20/2012
CSHAPARD	Reject; Referenced location is in the "LMR" and "within buffer zone".	9/4/2012

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Form APD Conditions

Permit 152339

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701	API Number: 30-025-42810
	Well: COLUMBUS FEE #022H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	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
pkautz	If using a pit for drilling and completion operations, must have an approved pit from prior to spudding the well.
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing -- 3) Liner - Cement must tie back into production casing
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	Must notify OCD Hobbs Office if lost circulation is encountered at 575-370-3186
pkautz	1) Must notify OCD Hobbs Office prior to running Stage Tool at 575-370-3186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.