

**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) 334-8170  
**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 198821

**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 314182		3. API Number 30-025-42426
5. Property Name Petrus D State		6. Well No. 018H

**7. Surface Location**

UL - Lot	P	Section	6	Township	17S	Range	33E	Lot Idn	Feet From	330	N/S Line	S	Feet From	150	E/W Line	E	County	Lea
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**8. Proposed Bottom Hole Location**

UL - Lot	M	Section	6	Township	17S	Range	33E	Lot Idn	7	Feet From	330	N/S Line	S	Feet From	330	E/W Line	W	County	Lea
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**9. Pool Information**

WC-025 G-03 S173318N;YESO	97727
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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 4224
16. Multiple N	17. Proposed Depth 10767	18. Formation Yeso Formation	19. Contractor	20. Spud Date 8/30/2015
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	1380	1000	0
Int1	12.25	9.625	40	2600	750	0
Int2	8.75	7	26	5629	1000	0
Prod	7.875	5.5	17	10767	0	0

**Casing/Cement Program: Additional Comments**

COG proposes to drill an 17 1/2" hole to 1380' 8.5 ppg, 28 viscosity, fresh water mud system. Set 13 3/8" casing and cement to surface. Drill a 12 1/4" hole to 2600' with a 10 ppg, 30 viscosity brine water mud system. Set 9 5/8" casing and cement to surface. Drill 8 3/4" hole to 5629' MD and kick off and drill 8 3/4" curve to 6554' MD 6148' TVD. Drill a 7 7/8" lateral to new BHL at 6075' TVD 10,767' MD. COG will run 5 1/2" 17# L-80 LTC casing from surface to TD. 5 1/2" casing will be cemented in one stage with 1500 sks cement.

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	2000	2000	

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: 2/4/2015	<b>OIL CONSERVATION DIVISION</b>  Approved By: Paul Kautz Title: Geologist Approved Date: 2/5/2015 Expiration Date: 2/5/2017 Conditions of Approval Attached
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**Santa Fe, NM 87505**

Form C-102  
August 1, 2011  
Permit 198821

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-42426	2. Pool Code 97727	3. Pool Name WC-025 G-03 S173318N;YESO
4. Property Code 314182	5. Property Name Petrus D State	6. Well No. 018H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 4224

**10. Surface Location**

UL - Lot P	Section 6	Township 17S	Range 33E	Lot Idn	Feet From 330	N/S Line S	Feet From 150	E/W Line E	County Lea
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**11. Bottom Hole Location If Different From Surface**

UL - Lot M	Section 6	Township 17S	Range 33E	Lot Idn	Feet From 330	N/S Line S	Feet From 330	E/W Line W	County Lea
12. Dedicated Acres 161.15	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**

<table border="1" style="width: 100%; height: 150px; border-collapse: collapse;"> <tr><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> </table>																	<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:                 2/4/2015</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:        Robert Howett Date of Survey:     11/3/2014 Certificate Number: 19680</p>

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**Santa Fe, NM 87505**

Form APD Comments

Permit 198621

**PERMIT COMMENTS**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-025-42426
		Well: Petrus D State #018H
Created By	Comment	Comment Date
kholly1	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	1/21/2015

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Form APD Conditions

Permit 198621

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-025-42426
		Well: Petrus D State #018H
OCD Reviewer	Condition	
DMULL	Will require a directional survey with the C-104	
DMULL	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	
DMULL	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 --	
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	