

District I
1625 N. French Dr., Hobbs, NM 88240
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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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 179435

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 40079		3. API Number 30-015-41935
5. Property Name Graham Cracker 16 State		6. Well No. 001H

7. Surface Location

UL - Lot D	Section 16	Township 26S	Range 28E	Lot Idn	Feet From 190	N/S Line N	Feet From 800	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot M	Section 16	Township 26S	Range 28E	Lot Idn M	Feet From 330	N/S Line S	Feet From 760	E/W Line W	County Eddy
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9. Pool Information

HAY HOLLOW;BONE SPRING	30215
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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 3063
16. Multiple N	17. Proposed Depth 12606	18. Formation Bone Spring	19. Contractor	20. Spud Date 1/22/2014
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

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	48	505	375	
Int1	12.25	9.625	36	2480	625	
Prod	7.875	5.5	17	12606	1700	2280

Casing/Cement Program: Additional Comments

Plan to drill a 17-1/2" hole to 505' with Fresh Water. Run 13-3/8", 48#, H-40 csg and cmt to surface. Drill 12-1/4" hole to 2,480' with Brine, and run 9-5/8", 36#, J-55 and cement to surface in 1 stage. Drill 7-7/8" curve and lateral with cut brine to approx 12,606' MD. Run 5-1/2", 17#, P-110 csg and cement to 2,430' in 1 stage.

22. 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 I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ , if applicable. Signature: _____ Printed Name: Electronically filed by Diane Kuykendall Title: Production Reporting Mgr Email Address: dkuykendall@conchoresources.com Date: 1/6/2014	OIL CONSERVATION DIVISION Approved By: Randy Dade Title: District Supervisor Approved Date: 1/7/2014 Expiration Date: 1/7/2016 Conditions of Approval Attached
Phone: 432-683-7443	

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

Form C-102
August 1, 2011

Permit 179435

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-41935	2. Pool Code 30215	3. Pool Name HAY HOLLOW;BONE SPRING
4. Property Code 40079	5. Property Name Graham Cracker 16 State	6. Well No. 001H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3063

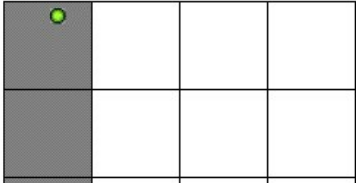
10. Surface Location

UL - Lot D	Section 16	Township 26S	Range 28E	Lot Idn	Feet From 190	N/S Line N	Feet From 800	E/W Line W	County Eddy
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11. Bottom Hole Location If Different From Surface

UL - Lot M	Section 16	Township 26S	Range 28E	Lot Idn	Feet From 330	N/S Line S	Feet From 760	E/W Line W	County Eddy
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

	OPERATOR CERTIFICATION <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>		
	E-Signed By: Diane Kuykendall		
	Title: Production Reporting Mgr		
	Date: 1/6/2014		
	SURVEYOR CERTIFICATION <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>		
	Surveyed By: Chad Harcrow		
	Date of Survey: 7/11/2013		
	Certificate Number: 17777		

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Form APD Comments

 Permit 179435

PERMIT COMMENTS

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701	API Number: 30-015-41935
	Well: Graham Cracker 16 State #001H

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.	1/6/2014
CSHAPARD	Land s/s	1/7/2014

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Form APD Conditions

Permit 179435

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-015-41935
		Well: Graham Cracker 16 State #001H

OCD Reviewer	Condition
CSHAPARD	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