

**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 184168

**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
		3. API Number 30-015-42282
4. Property Code 40490	5. Property Name Graham Cracker 2 State	6. Well No. 001H

**7. Surface Location**

UL - Lot P	Section 2	Township 26S	Range 28E	Lot Idn	Feet From 600	N/S Line S	Feet From 580	E/W Line E	County Eddy
---------------	--------------	-----------------	--------------	---------	------------------	---------------	------------------	---------------	----------------

**8. Proposed Bottom Hole Location**

UL - Lot A	Section 2	Township 26S	Range 28E	Lot Idn 1	Feet From 330	N/S Line N	Feet From 380	E/W Line E	County Eddy
---------------	--------------	-----------------	--------------	--------------	------------------	---------------	------------------	---------------	----------------

**9. Pool Information**

RED BLUFF;BONE SPRING, SOUTH	51010
------------------------------	-------

**Additional Well Information**

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 2946
16. Multiple N	17. Proposed Depth 12407	18. Formation Bone Spring	19. Contractor	20. Spud Date 4/11/2014
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	54.5	425	375	
Int1	12.25	9.625	36	2600	700	
Prod	8.75	5.5	17	12407	2000	2400

**Casing/Cement Program: Additional Comments**

Plan to drill a 17-1/2" hole to 425' with Fresh Water. Run 13-3/8", 48#, J-55 csg and cmt to surface. Drill 12-1/4" hole to 2600' with Brine, and run 9-5/8", 36# J-55 and cement to surface. Drill 8-3/4" curve and lateral with cut brine to approx 12,407'MD. Run 5-1/2", 17#, P-110 csg and cement to 2,400'.

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

<p>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.</p> <p>Signature:</p> <p>Printed Name: Electronically filed by Diane Kuykendall</p> <p>Title: Production Reporting Mgr</p> <p>Email Address: dkuykendall@conchoresources.com</p> <p>Date: 4/4/2014</p>	<p><b>OIL CONSERVATION DIVISION</b></p> <p>Approved By: Randy Dade</p> <p>Title: District Supervisor</p> <p>Approved Date: 4/8/2014</p> <p>Expiration Date: 4/8/2016</p> <p>Conditions of Approval Attached</p>
--	---

**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-102  
August 1, 2011  
Permit 184168

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-015-42282	2. Pool Code 51010	3. Pool Name RED BLUFF;BONE SPRING, SOUTH
4. Property Code 40490	5. Property Name Graham Cracker 2 State	6. Well No. 001H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 2946

**10. Surface Location**

UL - Lot P	Section 2	Township 26S	Range 28E	Lot Idn	Feet From 600	N/S Line S	Feet From 580	E/W Line E	County Eddy
---------------	--------------	-----------------	--------------	---------	------------------	---------------	------------------	---------------	----------------

**11. Bottom Hole Location If Different From Surface**

UL - Lot A	Section 2	Township 26S	Range 28E	Lot Idn 1	Feet From 330	N/S Line N	Feet From 380	E/W Line E	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**

<table border="1" style="width: 100%; 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; text-align: center;"></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; text-align: center;"></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: 4/4/2014</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: Chad Harcrow Date of Survey: 7/12/2013 Certificate Number: 17777</p>

**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) 334-6178 Fax:(505) 334-6170

**District IV**

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

Form APD Comments

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

Permit 184168

**PERMIT COMMENTS**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-015-42282
		Well: Graham Cracker 2 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.	4/4/2014
CSHAPARD	Land s/s	4/4/2014

**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) 334-6178 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 APD Conditions  
Permit 184168

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-015-42282
		Well: Graham Cracker 2 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