

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(505) 393-8161 Fax:(505) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(505) 748-1283 Fax:(505) 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 208957

**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 40474		3. API Number 30-025-42751
5. Property Name CUATRO HIJOS FEE		6. Well No. 002H

**7. Surface Location**

UL - Lot	O	Section	17	Township	19S	Range	35E	Lot Idn	O	Feet From	260	N/S Line	S	Feet From	1980	E/W Line	E	County	Lea
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**8. Proposed Bottom Hole Location**

UL - Lot	B	Section	17	Township	19S	Range	35E	Lot Idn	B	Feet From	330	N/S Line	N	Feet From	1980	E/W Line	E	County	Lea
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**9. Pool Information**

SCHARB;BONE SPRING	55610
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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 3823
16. Multiple N	17. Proposed Depth 14346	18. Formation Bone Spring	19. Contractor	20. Spud Date 8/31/2015
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	1920	1100	
Int1	12.25	9.625	36	3620	850	
Prod	8.75	5.5	17	14346	2250	

**Casing/Cement Program: Additional Comments**

Drill 17-1/2" hole to ~ (+/-) 1920' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1" tubing and Class C w/ 2% CaCl2 to cement to surface, if necessary. Drill 12-1/4" hole to ~ (+/-) 3620' with saturated brine water. Run 9-5/8" 36# J55 LTC casing to TD and cement to surface in one stage. Drill 8-3/4" vertical hole, curve, and lateral to ~ (+/-) 14346' with cut brine. Run 5-1/2" 17# HCP110 LTC casing to TD and cement to surface in one stage.

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Shaeffer

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:	<b>OIL CONSERVATION DIVISION</b>
Printed Name: Electronically filed by Diane Kuykendall Title: Production Reporting Mgr Email Address: production@concho.com Date: 8/24/2015	Approved By: Paul Kautz Title: Geologist Approved Date: 8/25/2015 Conditions of Approval Attached
Phone: 432-683-7443	Expiration Date: 8/25/2017

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Form C-102  
August 1, 2011  
Permit 208957

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-42751	2. Pool Code 55610	3. Pool Name SCHARB,BONE SPRING
4. Property Code 40474	5. Property Name CUATRO HIJOS FEE	6. Well No. 002H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3823

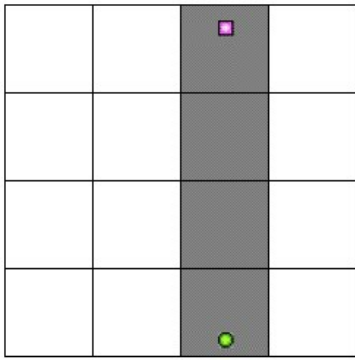
**10. Surface Location**

UL - Lot O	Section 17	Township 19S	Range 35E	Lot Idn O	Feet From 260	N/S Line S	Feet From 1980	E/W Line E	County Lea
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**11. Bottom Hole Location If Different From Surface**

UL - Lot B	Section 17	Township 19S	Range 35E	Lot Idn B	Feet From 330	N/S Line N	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: 8/24/2015</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: FChad Harcrow Date of Survey: 1/17/2014 Certificate Number: 17777</p>
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**Santa Fe, NM 87505**

Form APD Comments

Permit 208957

**PERMIT COMMENTS**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-025-42751
		Well: CUATRO HIJOS FEE #002H
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.	8/24/2015

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Form APD Conditions

Permit 208957

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701	API Number: 30-025-42751
	Well: CUATRO HIJOS FEE #002H

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 --
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.