

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 166493

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 40132		3. API Number 30-015-41669
5. Property Name JUNIPER HARPER STATE COM		6. Well No. 004H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
P	16	17S	30E	P	783	S	155	E	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	16	17S	30E	M	660	S	330	W	Eddy

9. Pool Information

LOCO HILLS; GLORIETA-YESO	96718
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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 3677
16. Multiple N	17. Proposed Depth 10277	18. Formation Yeso Formation	19. Contractor	20. Spud Date 11/30/2013
Depth to Ground water 110		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000

☒ 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	350	400	0
Int1	12.25	9.625	36	1350	600	0
Int2	8.75	7	26	0	900	0
Prod	7.875	5.5	17	10277	800	0

Casing/Cement Program: Additional Comments

COG proposes to drill a 17 1/2" hole to 350' with a 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 1350' with a 10 ppg, 30 viscosity brine water mud system. Set 9 5/8" casing and cement to surface. Drill an 8 3/4" hole to 3823' MD and kick off and drill an 8 3/4" curve to 4581' MD. Drill a 7 7/8" lateral to new BHL at 5625' TVD 10277' MD. Run a tapered string with 7" 26# L-80 from surface to 5200' & 5 1/2" 17# L-80 casing to TD. Cement from TD to surface.

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:	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by Diane Kuykendall Title: Production Reporting Mgr Email Address: dkuykendall@conchoresources.com Date: 9/16/2013	Approved By: Randy Dade Title: District Supervisor Approved Date: 9/18/2013 Expiration Date: 9/18/2015 Conditions of Approval Attached

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Form C-102
August 1, 2011
Permit 166493

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-41669	2. Pool Code 96718	3. Pool Name LOCO HILLS; GLORIETA-YESO
4. Property Code 40132	5. Property Name JUNIPER HARPER STATE COM	6. Well No. 004H
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3677

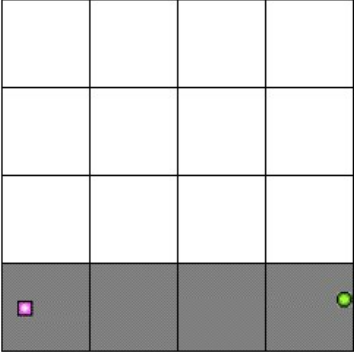
10. Surface Location

UL - Lot P	Section 16	Township 17S	Range 30E	Lot Idn	Feet From 783	N/S Line S	Feet From 155	E/W Line E	County Eddy
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11. Bottom Hole Location If Different From Surface

UL - Lot M	Section 16	Township 17S	Range 30E	Lot Idn M	Feet From 660	N/S Line S	Feet From 330	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

	<p style="text-align: center;">OPERATOR CERTIFICATION</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: 9/16/2013</p> <hr/> <p style="text-align: center;">SURVEYOR CERTIFICATION</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: 3/13/2013 Certificate Number: 19680</p>
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Form APD Comments

Permit 166493

PERMIT COMMENTS

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701		API Number: 30-015-41669
		Well: JUNIPER HARPER STATE COM #004H

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.	5/1/2013
kholly1	COG Operating LLC respectfully requests permission to drill this well with a closed loop system.	9/12/2013

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Form APD Conditions
Permit 166493

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: COG OPERATING LLC [229137] One Concho Center Midland, TX 79701	API Number: 30-015-41669
	Well: JUNIPER HARPER STATE COM #004H
OCD Reviewer	Condition