

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

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

1. Operator Name and Address COG OPERATING LLC 550 W TEXAS MIDLAND, TX 79701		2. OGRID Number 229137
4. Property Code 302502		3. API Number 30-015-35657
5. Property Name HARPER STATE		6. Well No. 013

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
N	16	17S	30E	N	330	S	1650	W	EDDY

**8. Pool Information**

LOCO HILLS; GLORIETA-YESO	96718
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**Additional Well Information**

9. Work Type New Well	10. Well Type OIL	11. Cable/Rotary	12. Lease Type State	13. Ground Level Elevation 3666
14. Multiple N	15. Proposed Depth 6200	16. Formation Blinebry	17. Contractor	18. Spud Date 6/20/2007
Depth to Ground water 150		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 _____ miles thick Clay <input type="checkbox"/> Pit Volume: 3000 _____ bbls Drilling Method: Closed Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input checked="" type="checkbox"/>				

**19. Proposed Casing and Cement Program**

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	425	450	0
Int1	12.25	8.625	24	1225	850	0
Prod	7.875	5.5	17	6200	1200	0

**Casing/Cement Program: Additional Comments**

COG proposes to drill a 17 1/2 hole to 425', run 13 3/8 casing and cement. Drill a 12 1/4 hole to 1225', run 8 5/8 casing and cement. Drill a 7 7/8 hole to 6200' test Blinebry formation, run 5 1/2 casing and cement.

**Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	2000	2000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input checked="" type="checkbox"/> a general permit <input type="checkbox"/> or an (attached) alternative OCD-approved plan <input type="checkbox"/> .	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Electronically filed by Diane Kuykendall	Approved By: Bryan Arrant	
Title: Regulatory Analyst	Title: Geologist	
Email Address: dkuykendall@conchoresources.com	Approved Date: 6/7/2007	Expiration Date: 6/7/2008
Date: 6/6/2007	Phone: 432-685-4372	Conditions of Approval Attached

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(505) 393-6161 Fax:(505) 393-0720  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
Phone:(505) 748-1283 Fax:(505) 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

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Form C-102  
Permit 54877

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-35657	2. Pool Code 96718	3. Pool Name LOCO HILLS; GLORIETA-YESO
4. Property Code 302502	5. Property Name HARPER STATE	6. Well No. 013
7. OGRID No. 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3666

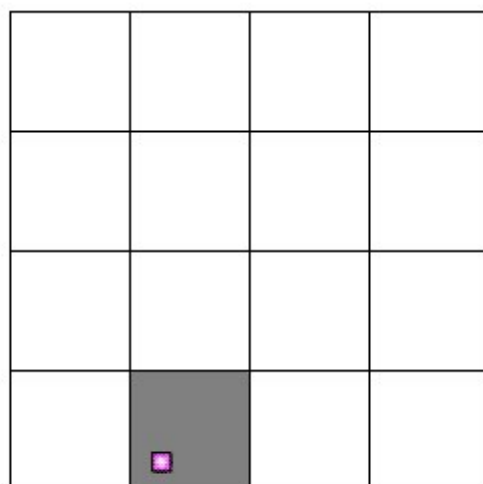
10. Surface Location

UL - Lot N	Section 16	Township 17S	Range 30E	Lot Idn	Feet From 330	N/S Line S	Feet From 1650	E/W Line W	County EDDY
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 40.00	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 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.*

E-Signed By: Diane Kuykendall  
Title: Regulatory Analyst  
Date: 6/6/2007

SURVEYOR CERTIFICATION

*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.*

Surveyed By: Ronald Eidson  
Date of Survey: 5/29/2007  
Certificate Number: 3239

## Permit Comments

Operator: COG OPERATING LLC , 229137

Well: HARPER STATE #013

API: 30-015-35657

Created By	Comment	Comment Date
JSHERRELL	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	6/6/2007

# Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: HARPER STATE #013

API: 30-015-35657

OCD Reviewer	Condition
BArrant	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines
BArrant	As noted, operator to drill surface hole with fresh water mud.