

District II  
1301 W. Grand Ave., Artesia, NM 88210  
Phone:(505) 748-1283 Fax:(505) 748-9720

Form C-101  
Permit 67863

**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 <b>COG OPERATING LLC</b> <b>550 W TEXAS</b> <b>MIDLAND, TX 79701</b>		2. OGRID Number <b>229137</b>
		3. API Number <b>30-015-36117</b>
4. Property Code <b>302502</b>	5. Property Name <b>HARPER STATE</b>	6. Well No <b>014</b>

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
K	16	17S	30E	K	2160	S	1770	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 3674
14. Multiple N	15. Proposed Depth 6000	16. Formation Yeso Formation	17. Contractor	18. Spud Date 2/25/2008
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 mils thick Clay <input type="checkbox"/> Pit Volume: 5000 bbls Drilling Method: Closed Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input 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	32	1225	850	0
Prod	7.875	5.5	17	6000	1000	0

**Casing/Cement Program: Additional Comments**

COG proposes to drill a 17-1/2" hole to 425' w/fr water mud system, wt 8.5, vis 28, set 13-3/8" casing & cement to surface. Drill a 12-1/4" hole to 1225' w/fr mud system, wt 10, vis 30, set 8-5/8" casing & cement to surface. Drill a 7-7/8" hole to 6000' w/cut brine mud system, wt 9.1, vis 29-32. Test Yeso formation. Run 5-1/2" casing & cement to surface. Note: On production string, a caliper will be run, COG will attempt to circulate.

**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 ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

**OIL CONSERVATION DIVISION**

Printed Name: Electronically filed by Diane Kuykendall

Approved By: Bryan Arrant

Title: Regulatory Analyst

Title: Geologist

Email Address: dkuykendall@conchoresources.com

Approved Date: 2/12/2008 | Expiration Date: 2/12/2010

Date: 2/11/2008

Phone: 432-683-7443

Conditions of Approval Attached

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505

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

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**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-015-36117	2. Pool Code 96718	3. Pool Name LOCO HILLS; GLORIETA-YESO
4. Property Code 302502	5. Property Name HARPER STATE	6. Well No 014
7. OGRID No 229137	8. Operator Name COG OPERATING LLC	9. Elevation 3674

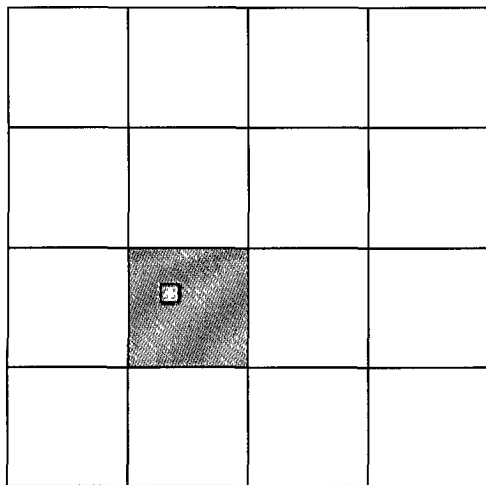
**10. Surface Location**

UL - Lot K	Section 16	Township 17S	Range 30E	Lot Idn	Feet From 2160	N/S Line S	Feet From 1770	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: 2/11/2008

**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: 2/2/2008

Certificate Number: 3239

## Permit Conditions of Approval

**Operator:** COG OPERATING LLC , 229137

**Well:** HARPER STATE #014

**API:** 30-015-36117

OCD Reviewer	Condition
kmwilson	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
kmwilson	Operator must use fresh water mud when drilling surface hole.

## Permit Comments

**Operator:** COG OPERATING LLC , 229137

**Well:** HARPER STATE #014

**API:**

Created By	Comment	Comment Date
PEDWARDS	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	1/17/2008