<u>District I</u> 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

<u>District III</u> 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 134733

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

| | Name and Address | 2. OGRID Number | | | | |
|---|------------------|---|--|------------------|------------------|-------------|
| COG OPERATING LLC 550 W TEXAS MIDLAND, TX 79701 | | 229137 3. API Number 30-015-39814 | | | | |
| | | | | 4. Property Code | 5. Property Name | 6. Well No. |
| | | | | 38945 | PATTON 5 FEE | 001H |

7. Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| D | 5 | 198 | 26E | 4 | 380 | N | 330 | W | EDDY |

8. Pool Information

| ATOKA:GLORIETA-YESO | 3250 |
|---------------------|------|

Additional Well Information

| | | Additional Well Inform | ation | | |
|---|--------------------------|--|---|------------------------------------|--|
| 9. Work Type 10. Weti Type New Weti OIL | | 11. Cable/Rotary | 12. Lesse Type Private | 13. Ground Level Elevation 3381 | |
| 14. Multiple N | 15. Proposed Dep 7164 | 16. Formation Yeso Formation | | | |
| Depth to Ground water | | Distance from nearest fresh water > 1000 | Distance from nearest fresh water well > 1000 | | |

19. Proposed Casing and Cement Program

| | | - | | | 8 | |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Type | Hole Size | Casing Type | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
| Surf | 12.25 | 9.625 | 36 | 825 | 600 | 0 |
| Int1 | 8.75 | 7 | 26 | | 0 | 0 |
| Prod | 7.875 | 5.5 | 17 | 7164 | 300 | |

Casing/Cement Program: Additional Comments

COG proposes to drill a 12 '4" hole to 825' w/ fresh water, run 9 5/8" 36# J-55 and cement to surface. Drill a 8 '4" hole to 2273' MD and kick off and drill curve to 3023' MD. Drill a 7 7/8" lateral to new BHL @ 2750' TVD 7164' MD. Run a tapered string with 7" 26# L-80 from surface to 2273' & 5 '4" 17# L-80 casing to TD with DV/ECP Combo Tool at 2273' and isolation packers in the open hole. Set isolation packers and ECP. Open DV tool and cement from 2273' to surface.

Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|-----------|------------------|---------------|--------------|
| DoubleRam | 2000 | 2000 | |

| I hereby certify that the information give of my knowledge and belief. I further certify that the drilling pit v | S. S. C. | OIL CONSERVATION DIVISION Approved By: Randy Dade | | |
|--|--|--|---------------------------|--|
| NMOCD guidelines X, a general per OCD-approved plan . | mit , or an (attached) alternative | | | |
| Printed Name: Electronically file | by Diane Kuykendall | Title: District Supervisor | | |
| Title: Production Reporting Mgr | 39 | Approved Date: 1/9/2012 | Expiration Date: 1/9/2014 | |
| Email Address: dkuykendall@co | nchoresources.com | | | |
| Date: 1/4/2012 | Phone: 432-683-7443 | Conditions of Approval Attached | | |

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Energy, Minerals and Natural Resources

Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505 Form C-102 August 1, 2011

Permit 134733

WELL LOCATION AND ACREAGE DEDICATION PLAT

| 1. API Number 30-015-39814 | 2. Pool Code 3. Pool Name 3250 ATOKA;GLORIETA-YES | |
|-------------------------------|---|--|
| 4. Property Code 38945 | 5. Property N PATTON 5 | |
| 7. OGRID No. 229137 | 8. Operator N COG OPERATI | |

10. Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| D | 5 | 198 | 26E | | 380 | N | 330 | W | EDDY |

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 |
|----------|-------------|----------|----------------|---------|-----------------|----------|-----------|---------------|--------|
| A | 5 | 198 | 26E | 1 | 380 | N | 330 | E | EDDY |
| | cated Acres | 13. J | oint 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

| 0 | | |
|---|--|--|
| | | |
| | | |
| | | |

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: Production Reporting Mgr

Date: 1/4/2012

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: Gary Eidson Date of Survey: 11/10/2011 Certificate Number: 12641

Permit Comments

Operator: COG OPERATING LLC , 229137 Well: PATTON 5 FEE #001H

API: 30-015-39814

| 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. | 7/18/2011 |
| CSHAPARD | Land p/P | 1/4/2012 |

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137 Well: PATTON 5 FEE #001H

API: 30-015-39814

| 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 |