

**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<br>COG OPERATING LLC<br>550 W TEXAS<br>MIDLAND, TX 79701 |                                        | 2. OGRID Number<br>229137     |
|                                                                                       |                                        | 3. API Number<br>30-015-35720 |
| 4. Property Code<br>302497                                                            | 5. Property Name<br>G J WEST COOP UNIT | 6. Well No.<br>168            |

**7. Surface Location**

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| B        | 21      | 17S      | 29E   | B       | 990       | N        | 2310      | E        | EDDY   |

**8. Pool Information**

|                             |       |
|-----------------------------|-------|
| GJ,7RVS-QN-GB-GLORIETA-YESO | 97558 |
|-----------------------------|-------|

**Additional Well Information**

|                                                                                                                                                                                                                                                                                                                                                                    |                            |                                                  |                         |                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------|-------------------------|---------------------------------------------|
| 9. Work Type<br>New Well                                                                                                                                                                                                                                                                                                                                           | 10. Well Type<br>OIL       | 11. Cable/Rotary                                 | 12. Lease Type<br>State | 13. Ground Level Elevation<br>3593          |
| 14. Multiple<br>N                                                                                                                                                                                                                                                                                                                                                  | 15. Proposed Depth<br>5600 | 16. Formation<br>Blinbry                         | 17. Contractor          | 18. Spud Date<br>7/25/2007                  |
| Depth to Ground water<br>110                                                                                                                                                                                                                                                                                                                                       |                            | Distance from nearest fresh water well<br>> 1000 |                         | Distance to nearest surface water<br>> 1000 |
| Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 _____ miles thick Clay <input type="checkbox"/> Pit Volume: 3000 _____ bbls Drilling Method:<br>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               | 300           | 350             | 0             |
| Int1 | 12.25     | 8.625       | 24               | 850           | 1000            | 0             |
| Prod | 7.875     | 5.5         | 17               | 5600          | 1700            | 0             |

**Casing/Cement Program: Additional Comments**

COG proposes to drill a 17 1/2 hole to 300' set 13 3/8 casing and cement to surface. Drill a 12 1/4 hole to 850' set 8 5/8 casing and cement. Drill a 7 7/8 hole to 5600 test Blinbry formation, run 5 1/2 casing and cement to surface. Note: On production string a fluid caliper will be run and will figure cement with 25% excess attempt to circ.

**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.<br><b>I further certify that the drilling pit will be constructed according to NMOCB guidelines <input checked="" type="checkbox"/> a general permit <input type="checkbox"/> or an (attached) alternative OCD-approved plan <input type="checkbox"/>.</b> | <b>OIL CONSERVATION DIVISION</b> |                            |
|                                                                                                                                                                                                                                                                                                                                                                           | Approved By: Bryan Arrant        |                            |
|                                                                                                                                                                                                                                                                                                                                                                           | Title: Geologist                 |                            |
|                                                                                                                                                                                                                                                                                                                                                                           | Approved Date: 7/27/2007         | Expiration Date: 7/27/2008 |
|                                                                                                                                                                                                                                                                                                                                                                           | Conditions of Approval Attached  |                            |

Printed Name: Electronically filed by Diane Kuykendall

Title: Regulatory Analyst

Email Address: dkuykendall@conchoresources.com

Date: 7/19/2007

Phone: 432-685-4372

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

Form C-102  
 Permit 57683

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

|                               |                                        |                                            |
|-------------------------------|----------------------------------------|--------------------------------------------|
| 1. API Number<br>30-015-35720 | 2. Pool Code<br>97558                  | 3. Pool Name<br>GJ;RV5-QN-GB-GLORIETA-YESO |
| 4. Property Code<br>302497    | 5. Property Name<br>G J WEST COOP UNIT | 6. Well No.<br>168                         |
| 7. OGRID No.<br>229137        | 8. Operator Name<br>COG OPERATING LLC  | 9. Elevation<br>3593                       |

**10. Surface Location**

|               |               |                 |              |         |                  |               |                   |               |                |
|---------------|---------------|-----------------|--------------|---------|------------------|---------------|-------------------|---------------|----------------|
| UL - Lot<br>B | Section<br>21 | Township<br>17S | Range<br>29E | Lot Idn | Feet From<br>990 | N/S Line<br>N | Feet From<br>2310 | E/W Line<br>E | County<br>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 |
| 12. Dedicated Acres<br>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**

|  |  |  |  |
|--|--|--|--|
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**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: 7/19/2007

**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: 7/3/2007  
 Certificate Number: 3239

## Permit Comments

Operator: COG OPERATING LLC , 229137

Well: G J WEST COOP UNIT #168

API: 30-015-35720

| 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. | 7/19/2007    |

# Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: G J WEST COOP UNIT #168

API: 30-015-35720

| OCD<br>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.                                                                                         |
| BArrant         | Operator to set surface casing above the Salado. Please refer to offset geology for more information.                                                 |