

District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

Submit to appropriate District Office

OCT 21 2009

☐ AMENDED REPORT

NMOCD ARTESIA

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

| | | |
|--|---|---|
| ¹ Operator Name and Address COG OPERATING LLC 550 W. Texas, Suite 1300 Midland, TX 79701 | | ² OGRID Number 299137 |
| ³ Property Code 302497 | ⁴ Property Name GJ West Coop Unit | ⁵ API Number 30-015-28515 |
| ⁹ Proposed Pool 1 GJ;7RVS-QN-GB-GLORIETA-YESO 97558 | | ¹⁰ Proposed Pool 2 |

⁷ Surface Location

| UL or lot no | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|--------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| H | 28 | 17S | 29E | | 1650 | North | 1030 | East | Eddy |

⁸ Proposed Bottom Hole Location If Different From Surface

| UL or lot no | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|--------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

Additional Well Information

| | | | | |
|--|--------------------------------------|--|------------------------------------|--|
| ¹¹ Work Type Code D | ¹² Well Type Code O | ¹³ Cable/Rotary Rotary | ¹⁴ Lease Type Code S | ¹⁵ Ground Level Elevation 3560 |
| ¹⁶ Multiple N | ¹⁷ Proposed Depth 5600 | ¹⁸ Formation Yeso | ¹⁹ Contractor | ²⁰ Spud Date As soon as approved |
| Depth to Groundwater | | Distance from nearest fresh water well | | Distance from nearest surface water |
| <input type="checkbox"/> Pit. <input type="checkbox"/> Liner Synthetic <input type="checkbox"/> _____ mils thick <input type="checkbox"/> Clay <input type="checkbox"/> Pit Volume _____ bbls <input type="checkbox"/> Drilling Method _____ | | | | |
| Closed-Loop System <input checked="" type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/> | | | | |

²¹ Proposed Casing and Cement Program

| Hole Size | Casing Size | Casing weight/foot | Setting Depth | Sacks of Cement | Estimated TOC |
|-----------|-------------|--------------------|---------------|-----------------|---------------|
| 17-1/2 | 13-3/8 | 54.5 | 125 | 250 | |
| 12-1/4 | 8-5/8 | 24 | 777 | 450 | |
| 7-7/8 | 5-1/2 | 15.5 | 4586 | 1000 | |
| 4-3/4 | 4 | 11.3 | 5600 | 115 | |

²² Describe the proposed program If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone Describe the blowout prevention program, if any Use additional sheets if necessary

See Attachments

²³ 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 ☐.

Printed name: Kanicia Carrillo
Title: Regulatory Analyst
E-mail Address: kcarrillo@conchoresources.com

OIL CONSERVATION DIVISION

Approved by:

Title

Approval Date

Expiration Date

Date: 10/20/09

Phone: 432-685-4332

Conditions of Approval Attached ☐

COG Operating, LLC
GJ West Coop Unit 134 Deepening
Unit H, Sec 28, T17S, R29E
1650 FNL & 1030 FEL
API# 30-015-28515
Eddy County, NM

Deepening Procedure

1. MIRU rig.
2. PU 4-3/4" bit and drill 4-3/4" from 4600' to 5600'.
3. POOH w/ bit and drillstring.
4. RIH w/ logs and log from TD to 4500'.
5. RIH w/ 4", 11.3# casing.
6. Cement casing from TD to 4530' w/ 115 sxs Class C cmt.
7. RDMO rig.

Completion Procedure

1. MIRU rig.
2. RIH/ w/ perforating guns and perforate Yeso from 5500 – 5300 w/ 2 spf, 30 holes.
3. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 190,000 # of sand. Set plug at 5250'.
4. RIH w/ perforating guns and perforate Yeso from 5200' – 5000'.
5. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 190,000 # of sand. Set plug at 4950'.
6. RIH w/ perforating guns and perforate Yeso from 4900' – 4700'.
7. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 190,000 # of sand.
8. RIH and drill out plug at 4950' and 5250'.
9. RIH and cut 4" casing at 4530'. POOH w/ 4" casing. Leave 4" liner from 4530' to 5600' (TD).
10. RIH w/ tbg and locate end of tbg at 4300'.
11. RIH w/ rods and pump.
12. RDMO rig.

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|--|--|---|
| ¹ API Number 30-015-28515 | ² Pool Code 97558 | ³ Pool Name Grayburg Jackson; 7RVS-QN-GB-Glorieta-Yeso, East |
| ⁴ Property Code 302497 | ⁵ Property Name GJ West Coop Unit | |
| ⁷ OGRID No. 229137 | ⁸ Operator Name COG OPERATING LLC | |
| | | ⁶ Well Number 134 |
| | | ⁹ Elevation 3560 |

¹⁰ Surface Location

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|---------------|-----------|------------|------------|---------|---------------|------------------|---------------|----------------|-------------|
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|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|--|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 40 | 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>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p>Signature <i>Kanicia Carrillo</i></p> <p>Printed Name Kanicia Carrillo</p> <p>Title and E-mail Address Regulatory Analyst</p> <p>Date 10/20/09</p> | |
| | <p>¹⁸ 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</p> <p>Referred Original Plat</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> | |
| | <p>Certificate Number</p> | |
| | | |