

## 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

Submit to appropriate District Office

☐ AMENDED REPORT

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

|  |  |   |
|--|--|---|
| <sup>1</sup> Operator Name and Address<br>COG OPERATING LLC<br>550 W. Texas, Suite 1300<br>Midland, TX 79701 |  | <sup>2</sup> OGRID Number<br>299137     |
|  |  | <sup>3</sup> API Number<br>30-015-31016 |
| <sup>4</sup> Property Code<br>302507   | <sup>5</sup> Property Name<br>Imperial State | <sup>6</sup> Well No<br>1               |
| <sup>9</sup> Proposed Pool 1<br>Loco Hills; Glorieta, Yeso 96718   |  | <sup>10</sup> Proposed Pool 2           |

<sup>7</sup> Surface Location

|                    |               |                 |              |         |                      |                           |                       |                        |                |
|--------------------|---------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|----------------|
| UL or lot no.<br>O | Section<br>16 | Township<br>17S | Range<br>30E | Lot Idn | Feet from the<br>330 | North/South line<br>South | Feet from the<br>1775 | East/West line<br>East | County<br>Eddy |
|--------------------|---------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|----------------|

<sup>8</sup> 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

|   |                                      |  |                                    |  |
|---|--------------------------------------|--|------------------------------------|--|
| <sup>11</sup> Work Type Code<br>D   | <sup>12</sup> Well Type Code<br>O    | <sup>13</sup> Cable/Rotary<br>Rotary   | <sup>14</sup> Lease Type Code<br>S | <sup>15</sup> Ground Level Elevation<br>3674   |
| <sup>16</sup> Multiple<br>N   | <sup>17</sup> Proposed Depth<br>6000 | <sup>18</sup> Formation<br>Yeso        | <sup>19</sup> Contractor           | <sup>20</sup> Spud Date<br>As soon as approved |
| Depth to Groundwater  |                                      | Distance from nearest fresh water well |                                    | Distance from nearest surface water            |
| Pit: Liner: Synthetic <input type="checkbox"/> _____ mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/><br>Closed-Loop System <input checked="" type="checkbox"/> |                                      |  |                                    |  |

<sup>21</sup> 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      | 48                 | 398           | 425             |               |
| 12-1/4    | 8-5/8       | 24                 | 1123          | 475             |               |
| 7-7/8     | 5-1/2       | 17                 | 4921          | 985             |               |
| 4-3/4     | 4           | 11.3               | 6000          | 115             |               |

<sup>22</sup> 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

|  |  |   |  |
|--|--|---|--|
| <sup>23</sup> 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 NMOC guidelines <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> . |  | OIL CONSERVATION DIVISION                             |  |
| Printed name Kanicia Carrillo  |  | Approved by <i>Kanicia Carrillo</i>                   |  |
| Title: Regulatory Analyst  |  | Title: Geologist                                      |  |
| E-mail Address kccarrillo@conchoresources.com  |  | Approval Date: 11/17/2009 Expiration Date: 11/17/2011 |  |

|                |                     |  |
|----------------|---------------------|--|
| Date: 10/19/09 | Phone: 432-685-4332 | Conditions of Approval Attached <input type="checkbox"/> |
|----------------|---------------------|--|

COG Operating, LLC  
Imperial State 1 Deepening  
Unit O, Sec 16, T17S, R30E  
330 FSL & 1775 FEL  
API# 30-015-31016  
Eddy County, NM

Deepening Procedure

1. MIRU rig.
2. PU 4-3/4" bit and drill 4-3/4" from 4921' to 6000'.
3. POOH w/ bit and drillstring.
4. RIH w/ logs and log from TD to 4900'.
5. RIH w/ 4", 11.3# casing.
6. Cement casing from TD to 4850' w/ 115 sxs Class C cmt.
7. RDMO rig.

Completion Procedure

1. MIRU rig.
2. RIH/ w/ perforating guns and perforate Yeso from 5900 – 5700 w/ 2 spf, 30 holes.
3. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 190,000 # of sand. Set plug at 5650'.
4. RIH w/ perforating guns and perforate Yeso from 5600' – 5400'.
5. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 190,000 # of sand. Set plug at 5350'.
6. RIH w/ perforating guns and perforate Yeso from 5300' – 5100'.
7. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 190,000 # of sand.
8. RIH and drill out plug at 5350' and 5650'.
9. RIH and cut 4" casing at 4850'. POOH w/ 4" casing. Leave 4" liner from 4850' to 6000' (TD).
10. RIH w/ tbg and locate end of tbg at 4700'.
11. RIH w/ rods and pump.
12. RDMO rig.

DISTRICT I  
P.O. Box 1880, Hobbs, NM 88241-1880

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1800 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                            |                                     |   |
|----------------------------|-------------------------------------|---|
| API Number<br>30-015-31016 | Pool Code<br>96718                  | Pool Name<br>Loco Hills; Glorieta, Yeso |
| Property Code<br>302507    | Property Name<br>IMPERIAL STATE     | Well Number<br>1                        |
| OGRIID No.<br>229137       | Operator Name<br>COG Operating, LLC | Elevation<br>3674                       |

Surface Location

|               |         |          |       |         |               |                  |               |                |        |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| 0             | 16      | 17 S     | 30 E  |         | 330           | SOUTH            | 1775          | EAST           | EDDY   |

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 |
|                       |                 |                    |           |         |               |                  |               |                |        |
| Dedicated Acres<br>40 | Joint or Infill | Consolidation Code | 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

|  |   |
|--|---|
|  | <b>OPERATOR CERTIFICATION</b><br><br>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.<br><br><br>Signature<br>Kanicia Carrillo<br>Printed Name<br>Regulatory Analyst<br>Title<br>10/19/09<br>Date  |
|  | <b>SURVEYOR CERTIFICATION</b><br><br>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.<br><br>MARCH 9, 2000<br>Date Surveyed<br>Signature & Seal of Professional Surveyor<br><br>00-11-0315<br>Certificate No. GONALD J. EBDSON 3239<br>GARY EBDSON 12541<br>MACOM McDONALD 12185 |
|  |   |
|  |   |