

# RECEIVED

Form 3160-4

(August 2007)

JAN 09 2012

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No 1004-0137  
Expires July 31, 2010

## NMOC WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.  
NMNM97874

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other  
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff Resvr  
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No

2. Name of Operator  
COG OPERATING LLC  
Contact: NETHA AARON  
E-Mail: oaaron@conchoresources.com

8. Lease Name and Well No.  
HIGH LONESOME 26 FEDERAL COM 2H

3. Address 550 WEST TEXAS SUITE 100  
MIDLAND, TX 79701

3a. Phone No. (include area code)  
Ph. 432-818-2319

9. API Well No  
30-015-35894

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface Lot H 2030FNL 530FEL

At top prod interval reported below Lot H 2030FNL 530FEL

At total depth Lot E 2034FNL 340FWL

10. Field and Pool, or Exploratory  
WILDCAT;WOLFCAMP OIL

11. Sec., T, R, M., or Block and Survey  
or Area Sec 26 T16S R29E Mer

12. County or Parish  
EDDY

13. State  
NM

14. Date Spudded  
09/03/2011

15. Date T D Reached  
10/05/2011

16. Date Completed  
☐ D & A ☒ Ready to Prod.  
11/19/2011

17. Elevations (DF, KB, RT, GL)\*  
3700 GL

18. Total Depth. MD 11561  
TVD 7335

19. Plug Back T.D. MD 11561  
TVD 7335

20. Depth Bridge Plug Set. MD  
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
BOREHOLE COMP;HI-RES LAT ARRAY;3-DET LITHO DEN

22. Was well cored? ☒ No ☐ Yes (Submit analysis)  
Was DST run? ☒ No ☐ Yes (Submit analysis)  
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

| Hole Size | Size/Grade | Wt. (#/ft.) | Top (MD) | Bottom (MD) | Stage Cementer Depth | No. of Sks & Type of Cement | Slurry Vol (BBL) | Cement Top* | Amount Pulled |
|-----------|------------|-------------|----------|-------------|----------------------|-----------------------------|------------------|-------------|---------------|
| 17.500    | 13.375 H40 | 48.0        | 0        | 402         |                      | 1092                        |                  | 0           |               |
| 12.250    | 9.625 J55  | 40.0        | 0        | 2735        |                      | 1150                        |                  | 0           |               |
| 8.750     | 7.000 P110 | 26.0        | 0        | 6627        |                      | 1000                        |                  | 0           |               |
| 6.125     | 4.500 P110 | 11.6        | 6475     | 11385       |                      | 0                           |                  | 0           |               |

24. Tubing Record

| Size  | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|-------|----------------|-------------------|------|----------------|-------------------|------|----------------|-------------------|
| 2.875 | 6448           |                   |      |                |                   |      |                |                   |

25. Producing Intervals

26. Perforation Record

| Formation   | Top  | Bottom | Perforated Interval | Size | No Holes | Perf. Status      |
|-------------|------|--------|---------------------|------|----------|-------------------|
| A) WOLFCAMP | 7591 | 11232  | 7591 TO 11232       |      |          | OPEN STRATA PORTS |
| B)          |      |        |                     |      |          |                   |
| C)          |      |        |                     |      |          |                   |
| D)          |      |        |                     |      |          |                   |

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

| Depth Interval | Amount and Type of Material                                                                         |
|----------------|-----------------------------------------------------------------------------------------------------|
| 7591 TO 11232  | ACIDIZED W/38,332 GALS 15% HCL                                                                      |
| 7591 TO 11232  | FRAC W/ 1,422,544 GALS GEL PLUS 152,790 GALS WF-G, 1,255,993# 20/40 WHITE SAND, 192,836# 20/40 CRC. |

28. Production - Interval A

| Date First Produced | Test Date         | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr API | Gas Gravity | Production Method         |
|---------------------|-------------------|--------------|-----------------|---------|---------|-----------|----------------------|-------------|---------------------------|
| 11/19/2011          | 11/23/2011        | 24           | →               | 264.0   | 537.0   | 1154.0    | 41.4                 | 0.60        | ELECTRIC PUMP SUB-SURFACE |
| Choke Size          | Tbg Press Flwg SI | Csg Press    | 24 Hr Rate      | Oil BBL | Gas MCF | Water BBL | Gas Oil Ratio        | Well Status |                           |
|                     | 70                | 70.0         | →               |         |         |           | 2034                 | POW         |                           |

28a. Production - Interval B

| Date First Produced | Test Date         | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr API | Gas Gravity | Production Method |
|---------------------|-------------------|--------------|-----------------|---------|---------|-----------|----------------------|-------------|-------------------|
|                     |                   |              | →               |         |         |           |                      |             |                   |
| Choke Size          | Tbg Press Flwg SI | Csg Press    | 24 Hr Rate      | Oil BBL | Gas MCF | Water BBL | Gas Oil Ratio        | Well Status |                   |
|                     |                   |              | →               |         |         |           |                      |             |                   |

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #127416 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

NMOC

Accepted for record  
1/18/2012

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO 1004-0135  
Expires July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

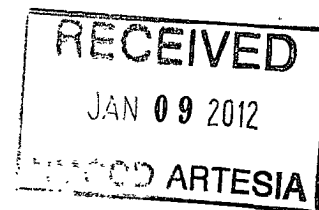
|                                                                                                                                 |  |                                                           |
|---------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------|
| 1 Type of Well<br><input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other |  | 8 Well Name and No.<br>HIGH LONESOME 26 FED COM 2H        |
| 2 Name of Operator<br>COG OPERATING LLC                                                                                         |  | 9. API Well No<br>30-015-35894                            |
| 3a. Address<br>550 WEST TEXAS SUITE 100<br>MIDLAND, TX 79701                                                                    |  | 10 Field and Pool, or Exploratory<br>WILDCAT;WOLFCAMP OIL |
| 3b. Phone No (include area code)<br>Ph: 432-818-2319<br>Fx: 432-685-4396                                                        |  | 11 County or Parish, and State<br>EDDY COUNTY, NM         |
| 4 Location of Well (Footage, Sec, T, R, M, or Survey Description)<br>Sec 26 T16S R29E 2030FNL 530FEL                            |  |                                                           |

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

| TYPE OF SUBMISSION                                    | TYPE OF ACTION                                |                                           |                                                    |                                           |
|-------------------------------------------------------|-----------------------------------------------|-------------------------------------------|----------------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> Notice of Intent             | <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off   |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity   |
| <input type="checkbox"/> Final Abandonment Notice     | <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input checked="" type="checkbox"/> Other |
|                                                       | <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       | Drilling Operations                       |
|                                                       | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal            |                                           |

- 13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

11/02/11 Top of Liner @ 6475  
Packer @ 7404  
Frac Port @ 7591  
Packer @ 7739  
Frac Port @ 7923  
Packer @ 8069  
Frac Port @ 8300  
Packer @ 8445  
Frac Port @ 8631  
Packer @ 8776  
Frac Port @ 9007  
Packer @ 9152



|                                                                                                                                                                                                 |                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| 14 I hereby certify that the foregoing is true and correct.<br><b>Electronic Submission #127413 verified by the BLM Well Information System<br/>For COG OPERATING LLC, sent to the Carlsbad</b> |                                 |
| Name (Printed/Typed) NETHA AARON                                                                                                                                                                | Title AUTHORIZED REPRESENTATIVE |
| Signature (Electronic Submission)                                                                                                                                                               | Date 01/05/2012                 |

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

|                                                                                                                                                                                                                                                           |             |              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|
| Approved By _____                                                                                                                                                                                                                                         | Title _____ | Date _____   |
| Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. |             | Office _____ |

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***

# **COG Operating, LLC**

**Eddy County, NM (NAD 83)**

**High Lonesome "26" Federal Com #2H**

**High Lonesome "26" Federal Com #2H**

**Lateral #1**

**Survey: MWD Survey #1**

## **Standard Survey Report**

**05 October, 2011**

# Survey Report

|                  |                                    |                                     |                                         |
|------------------|------------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | COG Operating, LLC                 | <b>Local Co-ordinate Reference:</b> | Site High Lonesome "26" Federal Com #2H |
| <b>Project:</b>  | Eddy County, NM (NAD 83)           | <b>TVD Reference:</b>               | KB @ 3718 50ft                          |
| <b>Site:</b>     | High Lonesome "26" Federal Com #2H | <b>MD Reference:</b>                | KB @ 3718 50ft                          |
| <b>Well:</b>     | High Lonesome "26" Federal Com #2H | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral #1                         | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Lateral #1                         | <b>Database:</b>                    | EDM 5000 1 Black Viper                  |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Eddy County, NM (NAD 83)  |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | New Mexico Eastern Zone   |                      |                |

|                              |                                            |                     |               |                          |                  |
|------------------------------|--------------------------------------------|---------------------|---------------|--------------------------|------------------|
| <b>Site</b>                  | High Lonesome "26" Federal Com #2H, Unit H |                     |               |                          |                  |
| <b>Site Position:</b>        |                                            | <b>Northing:</b>    | 689,203 96 ft | <b>Latitude:</b>         | 32° 53' 39.438 N |
| <b>From:</b>                 | Map                                        | <b>Easting:</b>     | 631,822 12 ft | <b>Longitude:</b>        | 104° 2' 18.758 W |
| <b>Position Uncertainty:</b> | 0 00 ft                                    | <b>Slot Radius:</b> | 13 200 in     | <b>Grid Convergence:</b> | 0 16 °           |

|                             |                                    |         |                            |               |                                    |
|-----------------------------|------------------------------------|---------|----------------------------|---------------|------------------------------------|
| <b>Well</b>                 | High Lonesome "26" Federal Com #2H |         |                            |               |                                    |
| <b>Well Position</b>        | <b>+N/-S</b>                       | 0 00 ft | <b>Northing:</b>           | 689,203 96 ft | <b>Latitude:</b> 32° 53' 39.438 N  |
|                             | <b>+E/-W</b>                       | 0 00 ft | <b>Easting:</b>            | 631,822.12 ft | <b>Longitude:</b> 104° 2' 18.758 W |
| <b>Position Uncertainty</b> |                                    | 0 00 ft | <b>Wellhead Elevation:</b> | 3,718.50 ft   | <b>Ground Level:</b> 3,700 00 ft   |

|                  |                   |                    |                    |                  |                       |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| <b>Wellbore:</b> | Lateral #1        |                    |                    |                  |                       |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination</b> | <b>Dip Angle</b> | <b>Field Strength</b> |
|                  |                   |                    | (°)                | (°)              | (nT)                  |
|                  | IGRF2010          | 9/2/2011           | 7.83               | 60 72            | 48,944                |

|                          |                         |               |              |                      |          |
|--------------------------|-------------------------|---------------|--------------|----------------------|----------|
| <b>Design</b>            | Lateral #1              |               |              |                      |          |
| <b>Audit Notes:</b>      |                         |               |              |                      |          |
| <b>Version:</b>          | 1 0                     | <b>Phase:</b> | ACTUAL       | <b>Tie On Depth:</b> | 6,579 00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b>  | <b>+E/-W</b> | <b>Direction</b>     |          |
|                          | (ft)                    | (ft)          | (ft)         | (°)                  |          |
|                          | 0 00                    | 0 00          | 0 00         | 7 72                 |          |

|                       |             |                            |                  |                    |  |
|-----------------------|-------------|----------------------------|------------------|--------------------|--|
| <b>Survey Program</b> | <b>Date</b> | 10/5/2011                  |                  |                    |  |
| <b>From</b>           | <b>To</b>   | <b>Survey (Wellbore)</b>   | <b>Tool Name</b> | <b>Description</b> |  |
| (ft)                  | (ft)        |                            |                  |                    |  |
| 100 00                | 6,579 00    | Gyro Survey #1 (OH)        | Gyro             |                    |  |
| 6,704.00              | 11,561 00   | MWD Survey #1 (Lateral #1) | MWD              |                    |  |

| Measured Depth (ft)         | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|-----------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 6,579 00                    | 0 38            | 144 92      | 6,578 86            | 17 09      | 3 59       | 17.42                 | 0 00                  | 0 00                 | 0.00                |
| HL[hLF26#2H] - LL[hLF26#2H] |                 |             |                     |            |            |                       |                       |                      |                     |
| 6,704 00                    | 0 50            | 102 90      | 6,703 85            | 16 63      | 4.36       | 17 06                 | 0 27                  | 0 10                 | -33.62              |
| First MWD Survey            |                 |             |                     |            |            |                       |                       |                      |                     |
| 6,767 00                    | 0 50            | 99 20       | 6,766 85            | 16 52      | 4 90       | 17 03                 | 0 05                  | 0 00                 | -5 87               |
| 6,799 00                    | 0 50            | 112 80      | 6,798 85            | 16 45      | 5 17       | 16.99                 | 0 37                  | 0 00                 | 42 50               |
| 6,831 00                    | 0 80            | 223 10      | 6,830 85            | 16 23      | 5 14       | 16 77                 | 3 38                  | 0 94                 | 344 69              |
| 6,862 00                    | 3 50            | 241 40      | 6,861 82            | 15 62      | 4 17       | 16 04                 | 8 88                  | 8.71                 | 59 03               |
| 6,894 00                    | 7 10            | 253 20      | 6,893 68            | 14 58      | 1 41       | 14 64                 | 11 70                 | 11 25                | 36 88               |

# Survey Report

|                  |                                    |                                     |                                         |
|------------------|------------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | COG Operating, LLC                 | <b>Local Co-ordinate Reference:</b> | Site High Lonesome "26" Federal Com #2H |
| <b>Project:</b>  | Eddy County, NM (NAD 83)           | <b>TVD Reference:</b>               | KB @ 3718 50ft                          |
| <b>Site:</b>     | High Lonesome "26" Federal Com #2H | <b>MD Reference:</b>                | KB @ 3718 50ft                          |
| <b>Well:</b>     | High Lonesome "26" Federal Com #2H | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral #1                         | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Lateral #1                         | <b>Database:</b>                    | EDM 5000 1 Black Viper                  |

| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| 6,926 00                  | 10 90              | 262 80         | 6,925 28                  | 13.63         | -3 48         | 13 04                       | 12 73                       | 11.88                      | 30 00                     |
| 6,957.00                  | 14 90              | 266 80         | 6,955 50                  | 13 04         | -10 37        | 11 53                       | 13 21                       | 12 90                      | 12 90                     |
| 6,989 00                  | 18 00              | 268 20         | 6,986.18                  | 12 65         | -19 43        | 9 93                        | 9 77                        | 9 69                       | 4 38                      |
| 7,021 00                  | 20 00              | 267 30         | 7,016 44                  | 12 24         | -29 83        | 8 12                        | 6 32                        | 6 25                       | -2 81                     |
| 7,052 00                  | 23 30              | 267.20         | 7,045 25                  | 11 69         | -41 26        | 6 04                        | 10 65                       | 10 65                      | -0 32                     |
| 7,084 00                  | 26 60              | 268 30         | 7,074 26                  | 11 17         | -54 74        | 3 71                        | 10 41                       | 10 31                      | 3 44                      |
| 7,115 00                  | 29 70              | 268 30         | 7,101 59                  | 10 73         | -69 36        | 1.32                        | 10 00                       | 10.00                      | 0 00                      |
| 7,147 00                  | 31 80              | 268 90         | 7,129 09                  | 10 34         | -85 72        | -1 27                       | 6 63                        | 6.56                       | 1 88                      |
| 7,178 00                  | 35 60              | 269.40         | 7,154 87                  | 10 09         | -102 91       | -3 83                       | 12 29                       | 12 26                      | 1 61                      |
| 7,210 00                  | 39 80              | 270 20         | 7,180 18                  | 10 02         | -122 47       | -6 52                       | 13 21                       | 13 13                      | 2 50                      |
| 7,242 00                  | 43.90              | 270.20         | 7,204 02                  | 10 10         | -143.82       | -9 32                       | 12 81                       | 12 81                      | 0 00                      |
| 7,274 00                  | 48 30              | 270 00         | 7,226 20                  | 10 14         | -166 87       | -12 38                      | 13 76                       | 13 75                      | -0 63                     |
| 7,306 00                  | 53 00              | 269 80         | 7,246 48                  | 10 09         | -191 61       | -15 74                      | 14 70                       | 14 69                      | -0 63                     |
| 7,338 00                  | 57 60              | 269 70         | 7,264 70                  | 9 98          | -217 91       | -19 39                      | 14 38                       | 14 38                      | -0 31                     |
| 7,369 00                  | 61 80              | 269 70         | 7,280 33                  | 9 84          | -244 67       | -23 13                      | 13 55                       | 13 55                      | 0 00                      |
| 7,401 00                  | 65 50              | 269 60         | 7,294.53                  | 9 66          | -273 34       | -27 15                      | 11 57                       | 11 56                      | -0 31                     |
| 7,432 00                  | 69 40              | 269 60         | 7,306 42                  | 9 46          | -301 96       | -31 20                      | 12 58                       | 12 58                      | 0 00                      |
| 7,464 00                  | 73 50              | 269 10         | 7,316 60                  | 9 12          | -332 29       | -35 62                      | 12 90                       | 12 81                      | -1 56                     |
| 7,495 00                  | 76 90              | 268 50         | 7,324 52                  | 8 49          | -362 25       | -40 26                      | 11 13                       | 10 97                      | -1 94                     |
| 7,527 00                  | 79 70              | 268.50         | 7,331 00                  | 7 67          | -393 57       | -45 29                      | 8 75                        | 8 75                       | 0 00                      |
| 7,559 00                  | 82 40              | 268.80         | 7,335 98                  | 6 92          | -425 17       | -50 27                      | 8 49                        | 8 44                       | 0 94                      |
| 7,591 00                  | 83 40              | 269 00         | 7,339 94                  | 6 31          | -456 92       | -55 14                      | 3 19                        | 3 13                       | 0 63                      |
| 7,622 00                  | 85 00              | 269 20         | 7,343 07                  | 5 83          | -487 76       | -59 76                      | 5.20                        | 5 16                       | 0 65                      |
| 7,654 00                  | 87 30              | 269 30         | 7,345 22                  | 5 41          | -519 68       | -64 47                      | 7 19                        | 7 19                       | 0.31                      |
| 7,686.00                  | 90 90              | 269 70         | 7,345 72                  | 5 13          | -551 67       | -69 04                      | 11 32                       | 11 25                      | 1.25                      |
| 7,749 00                  | 91 30              | 270 70         | 7,344 51                  | 5 35          | -614 66       | -77 29                      | 1 71                        | 0 63                       | 1 59                      |
| 7,812 00                  | 92 40              | 270 50         | 7,342.48                  | 6 01          | -677 62       | -85 09                      | 1 77                        | 1 75                       | -0 32                     |
| 7,907 00                  | 90 40              | 269 90         | 7,340.16                  | 6 34          | -772 58       | -97 52                      | 2 20                        | -2.11                      | -0 63                     |
| 8,001.00                  | 87 80              | 268.30         | 7,341 63                  | 4 87          | -866 55       | -111 61                     | 3 25                        | -2 77                      | -1 70                     |
| 8,096 00                  | 88 40              | 267 50         | 7,344 78                  | 1 39          | -961 43       | -127 81                     | 1 05                        | 0 63                       | -0 84                     |
| 8,191 00                  | 89 10              | 268 80         | 7,346 86                  | -1 68         | -1,056 36     | -143 60                     | 1 55                        | 0 74                       | 1 37                      |
| 8,286 00                  | 88 80              | 269 40         | 7,348 60                  | -3 17         | -1,151 33     | -157 84                     | 0 71                        | -0 32                      | 0 63                      |
| 8,381 00                  | 88 20              | 267 10         | 7,351 08                  | -6 07         | -1,246 25     | -173 47                     | 2 50                        | -0 63                      | -2 42                     |
| 8,476 00                  | 88 10              | 269 50         | 7,354 15                  | -8 89         | -1,341 15     | -189 01                     | 2 53                        | -0 11                      | 2 53                      |
| 8,571 00                  | 87.60              | 270.90         | 7,357 71                  | -8 56         | -1,436 08     | -201 44                     | 1 56                        | -0 53                      | 1 47                      |
| 8,666.00                  | 87 30              | 269 50         | 7,361 94                  | -8.22         | -1,530 98     | -213 86                     | 1 51                        | -0 32                      | -1 47                     |
| 8,761 00                  | 89 70              | 271.00         | 7,364 43                  | -7 81         | -1,625 94     | -226 21                     | 2 98                        | 2 53                       | 1 58                      |
| 8,855.00                  | 90 90              | 272 30         | 7,363 94                  | -5.10         | -1,719 89     | -236 15                     | 1 88                        | 1.28                       | 1 38                      |
| 8,950 00                  | 91 00              | 269 70         | 7,362 36                  | -3 44         | -1,814 86     | -247 27                     | 2 74                        | 0 11                       | -2 74                     |
| 9,045.00                  | 91 50              | 270 20         | 7,360 29                  | -3 53         | -1,909 84     | -260 12                     | 0 74                        | 0 53                       | 0 53                      |
| 9,140 00                  | 91 30              | 270 60         | 7,357 97                  | -2 86         | -2,004 80     | -272 22                     | 0 47                        | -0 21                      | 0 42                      |
| 9,235 00                  | 91 00              | 268 20         | 7,356 06                  | -3 86         | -2,099 77     | -285 97                     | 2 55                        | -0 32                      | -2 53                     |
| 9,330.00                  | 91 30              | 269.40         | 7,354.15                  | -5 85         | -2,194.73     | -300 70                     | 1 30                        | 0 32                       | 1.26                      |

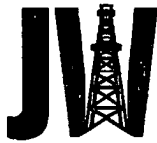
# Survey Report

|                  |                                    |                                     |                                         |
|------------------|------------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | COG Operating, LLC                 | <b>Local Co-ordinate Reference:</b> | Site High Lonesome "26" Federal Com #2H |
| <b>Project:</b>  | Eddy County, NM (NAD 83)           | <b>TVD Reference:</b>               | KB @ 3718 50ft                          |
| <b>Site:</b>     | High Lonesome "26" Federal Com #2H | <b>MD Reference:</b>                | KB @ 3718.50ft                          |
| <b>Well:</b>     | High Lonesome "26" Federal Com #2H | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral #1                         | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Lateral #1                         | <b>Database:</b>                    | EDM 5000 1 Black Viper                  |

| Measured Depth (ft)                                  | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|------------------------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 9,425 00                                             | 91 50           | 271 60      | 7,351 83            | -5 02      | -2,289 69  | -312.63               | 2 32                  | 0.21                 | 2 32                |
| 9,520.00                                             | 93 30           | 271 10      | 7,347 85            | -2 78      | -2,384 58  | -323.17               | 1 97                  | 1 89                 | -0 53               |
| 9,615 00                                             | 94 00           | 270 90      | 7,341 81            | -1 13      | -2,479 37  | -334 26               | 0 77                  | 0 74                 | -0 21               |
| 9,710 00                                             | 93 50           | 268 60      | 7,335 59            | -1 54      | -2,574 16  | -347 41               | 2 47                  | -0 53                | -2 42               |
| 9,805 00                                             | 94 50           | 269 10      | 7,328 97            | -3 44      | -2,668 91  | -362 03               | 1 18                  | 1 05                 | 0 53                |
| 9,900 00                                             | 93 80           | 269 90      | 7,322 09            | -4 27      | -2,763 65  | -375 58               | 1 12                  | -0 74                | 0 84                |
| 9,995 00                                             | 91 60           | 269 70      | 7,317.62            | -4 60      | -2,858 54  | -388 66               | 2 33                  | -2 32                | -0 21               |
| 10,090 00                                            | 90.50           | 268 60      | 7,315 87            | -6 01      | -2,953 51  | -402 81               | 1 64                  | -1 16                | -1 16               |
| 10,185 00                                            | 89 60           | 270 00      | 7,315 79            | -7 17      | -3,048 50  | -416 73               | 1 75                  | -0 95                | 1 47                |
| 10,281 00                                            | 89 90           | 270 50      | 7,316 21            | -6 75      | -3,144 50  | -429 21               | 0 61                  | 0 31                 | 0 52                |
| 10,375 00                                            | 89 80           | 267 50      | 7,316 46            | -8 39      | -3,238 48  | -443 46               | 3 19                  | -0 11                | -3 19               |
| 10,471 00                                            | 89 50           | 269 80      | 7,317 04            | -10.66     | -3,334.44  | -458 60               | 2 42                  | -0 31                | 2 40                |
| 10,566 00                                            | 90 30           | 269 30      | 7,317.21            | -11 40     | -3,429 44  | -472 10               | 0 99                  | 0 84                 | -0 53               |
| 10,661.00                                            | 90 20           | 269 90      | 7,316 79            | -12 06     | -3,524 43  | -485.52               | 0 64                  | -0 11                | 0 63                |
| 10,757 00                                            | 88 00           | 271 50      | 7,318 30            | -10 89     | -3,620 40  | -497 26               | 2 83                  | -2 29                | 1 67                |
| 10,852 00                                            | 87 60           | 273 30      | 7,321 95            | -6 92      | -3,715 25  | -506 06               | 1 94                  | -0 42                | 1 89                |
| 10,947 00                                            | 87 80           | 272 40      | 7,325 76            | -2 20      | -3,810 05  | -514.12               | 0 97                  | 0 21                 | -0 95               |
| 11,042.00                                            | 89 60           | 273 50      | 7,327 92            | 2 69       | -3,904 90  | -522.03               | 2 22                  | 1 89                 | 1 16                |
| 11,137 00                                            | 89 30           | 271 40      | 7,328 83            | 6 75       | -3,999 80  | -530 75               | 2 23                  | -0 32                | -2 21               |
| 11,232 00                                            | 89 00           | 269 00      | 7,330 24            | 7 08       | -4,094.78  | -543 19               | 2 55                  | -0 32                | -2 53               |
| 11,326 00                                            | 88 70           | 268 40      | 7,332 13            | 4 95       | -4,188 74  | -557 92               | 0.71                  | -0 32                | -0 64               |
| 11,421 00                                            | 89 40           | 270 20      | 7,333 70            | 3 79       | -4,283 71  | -571 84               | 2 03                  | 0 74                 | 1 89                |
| 11,497 00                                            | 89 20           | 269 90      | 7,334.63            | 3 86       | -4,359 71  | -581 98               | 0 47                  | -0 26                | -0 39               |
| 11,561 00                                            | 89 20           | 269 90      | 7,335 52            | 3 74       | -4,423 70  | -590.69               | 0 00                  | 0 00                 | 0 00                |
| Proj. to Bit - PBHL#1[HL26FC#2H] - PBHL#2[HL26FC#2H] |                 |             |                     |            |            |                       |                       |                      |                     |

| Survey Annotations  |                     |                   |            |                  |
|---------------------|---------------------|-------------------|------------|------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates |            | Comment          |
|                     |                     | +N/-S (ft)        | +E/-W (ft) |                  |
| 6,704 00            | 6,703 85            | 16 63             | 4 36       | First MWD Survey |
| 11,561 00           | 7,335 52            | 3 74              | -4,423 70  | Proj to Bit      |

|                   |                   |             |
|-------------------|-------------------|-------------|
| Checked By: _____ | Approved By _____ | Date: _____ |
|-------------------|-------------------|-------------|



# DRILLING INC. Oil Well Drilling Contractor

Post Office Box 160 Artesia, New Mexico 88211-0160 Office (575) 748-8704 Fax (575) 748-8719

October 3, 2011

COG Operating LLC  
550 W. Texas, Suite 1300  
Midland, Texas 79701

Re: High Lonesome "26" Fed Com # 2H  
Sec. 26, T-16-S, R-29-E  
Eddy County, New Mexico

Attn: John Coffman

The following is a Deviation Survey on the referenced well in Eddy County, New Mexico:

|               |               |               |
|---------------|---------------|---------------|
| 341' - 1°     | 2268' - 1°    | 4700' - 0.25° |
| 713' - 0.5°   | 2645' - 1°    | 5051' - 0.75° |
| 1057' - 1°    | 2959' - 0.5°  | 5553' - 0.5°  |
| 1367' - 0.75° | 3433' - 1°    | 5902' - 0.5°  |
| 1617' - 0.5°  | 3733' - 0.75° | 6398' - 0.5°  |
| 1987' - 1°    | 4206' - 0.25° |               |

Sincerely,

Gary W. Chappell  
Contracts Manager

STATE OF NEW MEXICO )  
COUNTY OF EDDY )

The foregoing was acknowledged before me this 3rd day of October, 2011 by Gary W. Chappell.



OFFICIAL SEAL  
CHERYL A. BARTLETT  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 4-29-12

NOTARY PUBLIC

DISTRICT I  
1626 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1301 W. Grand Avenue, 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 Department

Form C-102  
Revised October 12, 2005

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Submit to Appropriate District Office  
State Lease - 3 Copies  
Fee Lease - 3 Copies  
JAN 09 2012  
NM OCS ARTESIA

"AS DRILLED"

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                            |                                                 |                                    |
|----------------------------|-------------------------------------------------|------------------------------------|
| API Number<br>30-015-35894 | Pool Code<br>96794                              | Pool Name<br>Wildcat; Wolfcamp Oil |
| Property Code<br>36816     | Property Name<br>HIGH LONESOME "26" FEDERAL COM | Well Number<br>2H                  |
| OGRID No.<br>229137        | Operator Name<br>C.O.G. OPERATING L.L.C.        | Elevation<br>3700'                 |

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             | 26      | 16 S     | 29 E  |         | 2030          | NORTH            | 530           | 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 |
|------------------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| E                      | 26              | 16 S               | 29 E      |         | 2034          | NORTH            | 340           | WEST           | EDDY   |
| Dedicated Acres<br>160 | 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

|                                                                                                                                              |                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                              |                                                                                                                                              | <p><b>OPERATOR CERTIFICATION</b></p> <p>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 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.</p> <p>Netha Aaron 12/9/11<br/>Signature Date</p> <p>Netha Aaron<br/>Printed Name<br/>aaaron@concho.com</p> |
| <p><b>BOTTOM HOLE LOCATION</b></p> <p>LAT.: N 32°53'39.6"<br/>LONG.: W104°03'10.8"<br/>SPC- N.: 689203.60<br/>E.: 627386.73<br/>(NAD-83)</p> | <p><b>SURFACE LOCATION</b></p> <p>LAT.: N 32°53'39.46"<br/>LONG.: W104°02'18.84"<br/>SPC- N.: 689203.963<br/>E.: 631822.116<br/>(NAD-83)</p> | <p><b>SURVEYOR CERTIFICATION</b></p> <p>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>SEPTEMBER 24 2007<br/>Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor<br/>W.O. JONES 7977</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>                                                                                                                                                             |