

District I  
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  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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 August 1, 2011  
Submit one copy to appropriate  
District Office  
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                                 |                                                          |                                                                              |
|-------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------------------|
| <sup>1</sup> API Number<br>30-025- <b>42085</b> | <sup>2</sup> Pool Code<br><b>96674 96682</b>             | <sup>3</sup> Pool Name<br>Triple X; Bone Spring, <del>West</del> <b>EAST</b> |
| <sup>4</sup> Property Code<br><b>313638</b>     | <sup>5</sup> Property Name<br><b>HEARNS 27 STATE COM</b> |                                                                              |
| <sup>6</sup> Well Number<br><b>#501H</b>        | <sup>7</sup> Operator Name<br><b>EOG RESOURCES, INC.</b> |                                                                              |
| <sup>8</sup> OGRID No.<br><b>7377</b>           | <sup>9</sup> Elevation<br><b>3479'</b>                   |                                                                              |

<sup>10</sup>Surface Location

| U/L or lot no. | Section   | Township    | Range       | Lot Idn. | Feet from the | North/South line | Feet from the | East/West line | County     |
|----------------|-----------|-------------|-------------|----------|---------------|------------------|---------------|----------------|------------|
| <b>M</b>       | <b>27</b> | <b>24-S</b> | <b>33-E</b> | <b>-</b> | <b>210'</b>   | <b>SOUTH</b>     | <b>570'</b>   | <b>WEST</b>    | <b>LEA</b> |

| U/L or lot no. | Section   | Township    | Range       | Lot Idn. | Feet from the | North/South line | Feet from the | East/West line | County     |
|----------------|-----------|-------------|-------------|----------|---------------|------------------|---------------|----------------|------------|
| <b>M</b>       | <b>34</b> | <b>24-S</b> | <b>33-E</b> | <b>-</b> | <b>230'</b>   | <b>SOUTH</b>     | <b>380'</b>   | <b>WEST</b>    | <b>LEA</b> |

| <sup>12</sup> Dedicated Acres | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| <b>160.00</b>                 |                               |                                  |                         |

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.

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <sup>17</sup> OPERATOR CERTIFICATION<br>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization neither owns a working interest or undivided mineral interest in the land including the proposed bottom hole location 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.<br>Signature: <u>Stan Wagner</u> Date: <u>9/3/14</u><br>Printed Name: <u>Stan Wagner</u><br>E-mail Address: _____ |  |
|  | <sup>18</sup> SURVEYOR CERTIFICATION<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 to the best of my belief.<br>Date of Survey: <u>08/18/14</u><br>Signature and Seal of Professional Surveyor: <u>Michael J. Brown</u><br>Certificate Number: <u>18329</u>                                                                                                                                                                                                                                                                            |  |
|  | SURFACE LOCATION<br>NEW MEXICO EAST<br>NAD 1927<br>X=737281<br>Y=430705<br>LAT.: N 32.817999<br>LONG.: W 103.5663920<br>UPPER MOST PERF.<br>NEW MEXICO EAST<br>NAD 1927<br>X=737054<br>Y=430164<br>LAT.: N 32.1803157<br>LONG.: W 103.5670059<br>LOWER MOST PERF.<br>NEW MEXICO EAST<br>NAD 1927<br>X=737126<br>Y=425551<br>LAT.: N 32.1676350<br>LONG.: W 103.5670032<br>BOTTOM HOLE LOCATION<br>NEW MEXICO EAST<br>NAD 1927<br>X=737129<br>Y=425451<br>LAT.: N 32.1673501<br>LONG.: W 103.5670031                                                                                                                                                                 |  |
|  | 28 27 26<br>33 34 35<br>4 3 34 35<br>3 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |

SEP 11 2014

**Permit Information:**

Well Name: Hearn 27 State Com No. 501H

**Location:**

SL: 210' FSL &amp; 570' FWL, Section 27, T-24-S, R-33-E, Lea Co., N.M.

BIIL: 230' FSL &amp; 380' FWL, Section 34, T-24-S, R-33-E, Lea Co., N.M.

**Casing Program:**

| Hole Size | Interval      | Csg OD  | Weight | Grade   | Conn | DF <sub>min</sub> Collapse | DF <sub>min</sub> Burst | DF <sub>min</sub> Tension |
|-----------|---------------|---------|--------|---------|------|----------------------------|-------------------------|---------------------------|
| 17.5"     | 0 – 1205'     | 13.375" | 54.5#  | J55     | STC  | 1.125                      | 1.25                    | 1.60                      |
| 12.25"    | 0-4000'       | 9.625"  | 40#    | J55     | LTC  | 1.125                      | 1.25                    | 1.60                      |
| 12.25"    | 4000' – 5000' | 9.625"  | 40#    | HCK-55  | LTC  | 1.125                      | 1.25                    | 1.60                      |
| 8.75"     | 0'-16,267'    | 5.5"    | 17#    | HCP-110 | LTC  | 1.125                      | 1.25                    | 1.60                      |

**Cement Program:**

| Depth   | No. Sacks | Wt. ppg | Yld Ft <sup>3</sup> /ft | Slurry Description                                                                                                                          |
|---------|-----------|---------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 1205'   | 500       | 13.5    | 1.73                    | Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl <sub>2</sub> + 0.25 lb/sk Cello-Flake (TOC @ Surface)                                     |
|         | 200       | 14.8    | 1.34                    | Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate                                                                    |
| 5,000'  | 800       | 12.7    | 2.22                    | Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free (TOC @ Surface)              |
|         | 200       | 14.8    | 1.32                    | Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free                                                                          |
| 16,267' | 375       | 10.8    | 3.67                    | 60:40:0 Class C + 15.0 pps BA-90 + 4% MPA-5 + 3.0% SMS + 5.0% A-10 + 1.0% BA-10A + 0.80% ASA-301 + 2.55% R-21 + 8.0 pps LCM-1 (TOC @ 4500') |
|         | 400       | 11.8    | 2.38                    | 50:50:10 Class II + 0.80% FL-52 + 0.30% ASA-301 + 0.40% SMS + 2.0% Salt + 0.30% R-21 + 3.0 pps LCM-1 + 0.25 pps Celloflake                  |
|         | 1300      | 14.2    | 1.28                    | 50:50:2 Class H + 0.65% FL-52 + 0.45% CD-32 + 0.10% SMS + 2.0% Salt                                                                         |

**Mud Program:**

| Depth                     | Type        | Weight (ppg) | Viscosity | Water Loss |
|---------------------------|-------------|--------------|-----------|------------|
| 0 – 1205'                 | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 1205' – 5,000'            | Brine       | 10.0-10.2    | 28-34     | N/c        |
| 5,000' – 10,722'          | Cut Brine   | 8.4-9.0      | 28-34     | N/c        |
| 10,722' – 16,267' Lateral | Cut Brine   | 9.0-9.5      | 40-42     | 8-10       |

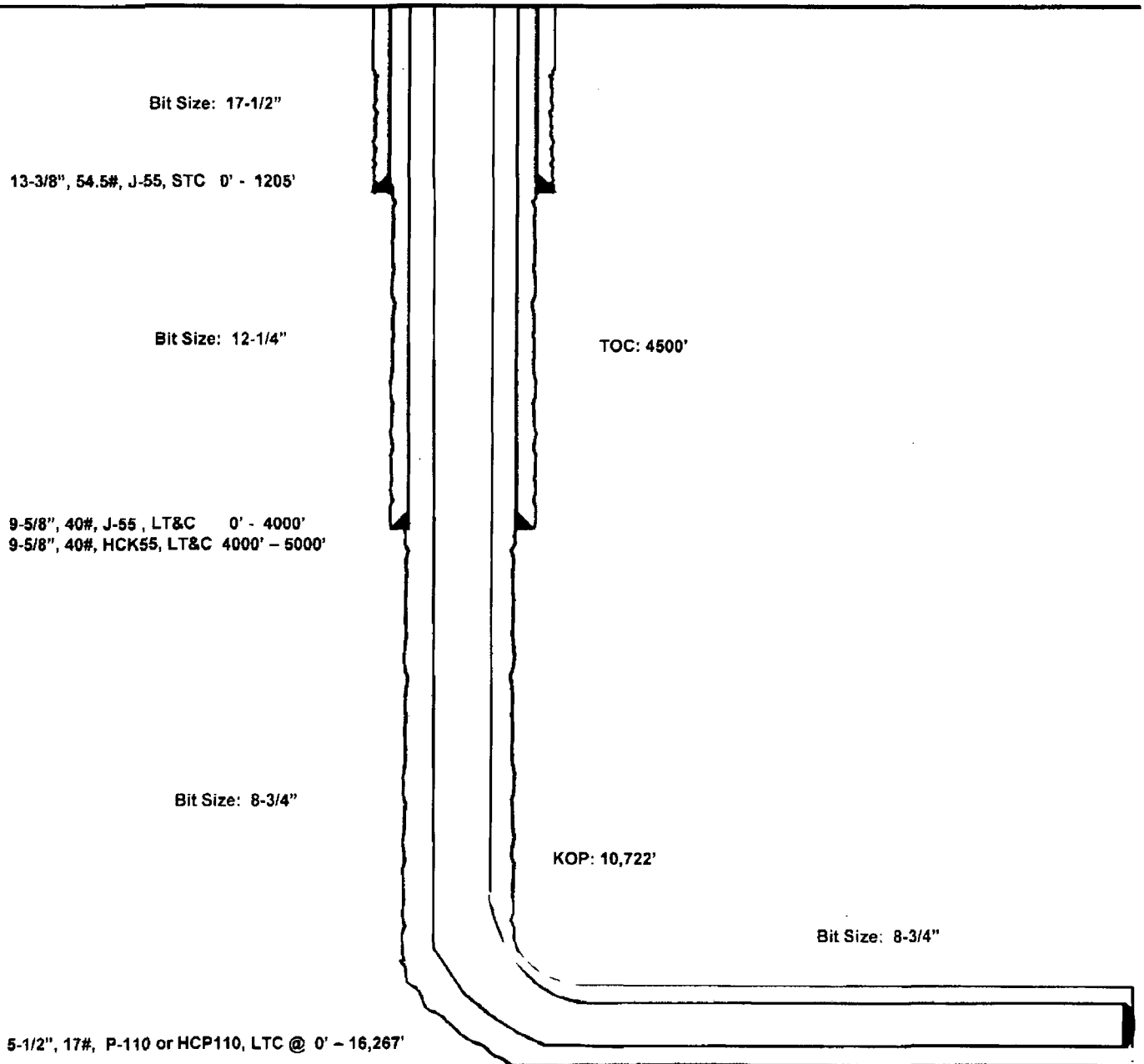
Hearns 27 State Com #501H  
Lea County, New Mexico

210' FSL  
570' FWL  
Section 27  
T-24-S, R-33-E

Proposed Wellbore

API: 30-025-

KB: 3,500'  
GL: 3,479'



Lateral: 16,267' MD, 11,200' TVD

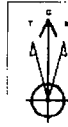
BH Location: 230' FSL & 380' FWL  
Section 34  
T-24-S, R-33-E



Lea County, NM (NAD 27 NME)  
Hearns 27 State Com #501H  
Nomac 55  
Plan #2

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: New Mexico East 3001  
System Datum: Mean Sea Level



Azimuths to Grid North

True North: 0.41°

Magnetic North: 8.52°

Magnetic Field

Strength: 48,285.7 nT

Dip Angle: 60.87°

Date: 8/23/2014

Model: IGRF2014

To convert a Magnetic Direction to a Grid Direction, Add 8.50°  
To convert a True Direction to a Grid Direction, Subtract 0.41°

WELL DETAILS: Hearns 27 State Com #501H

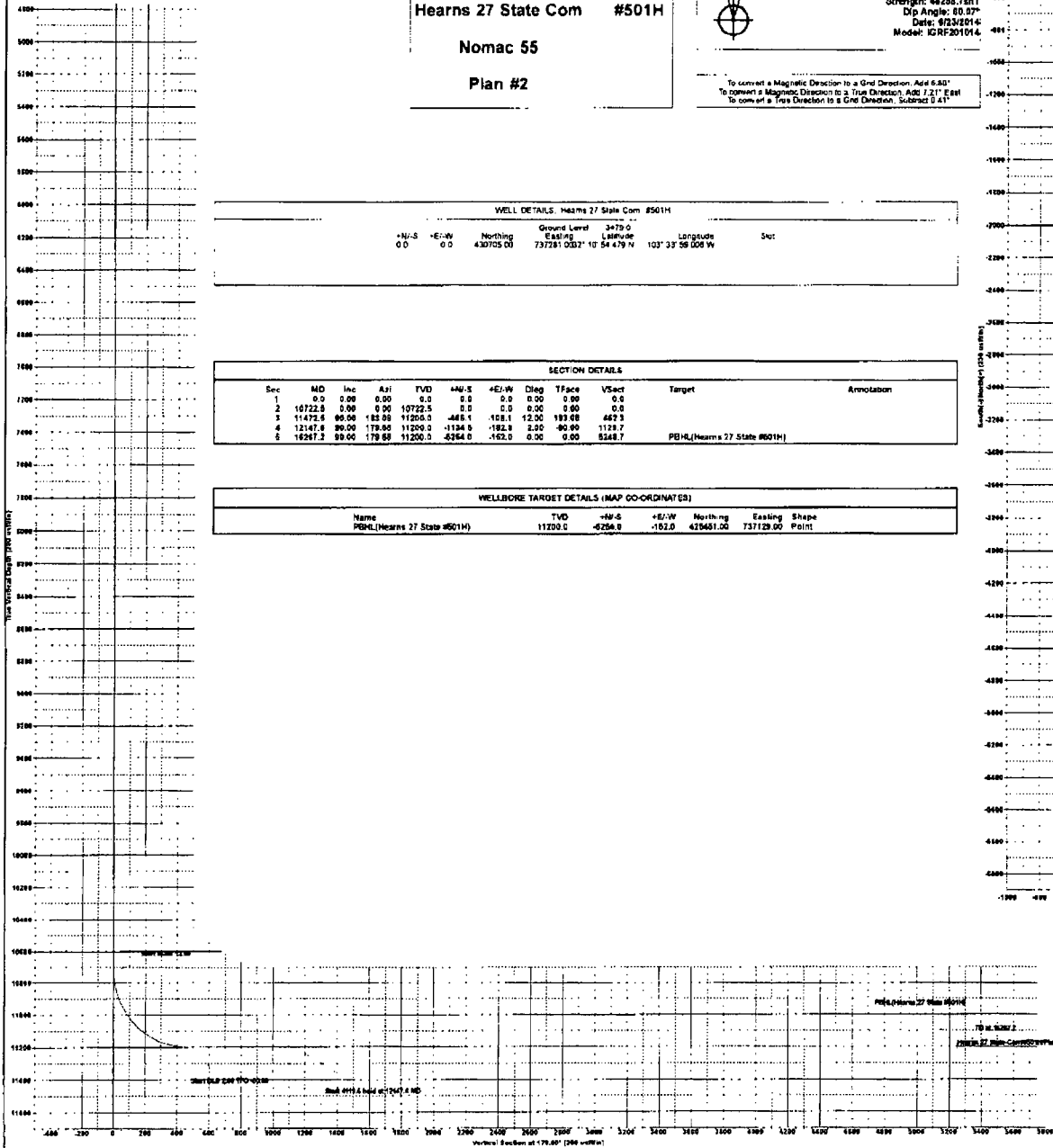
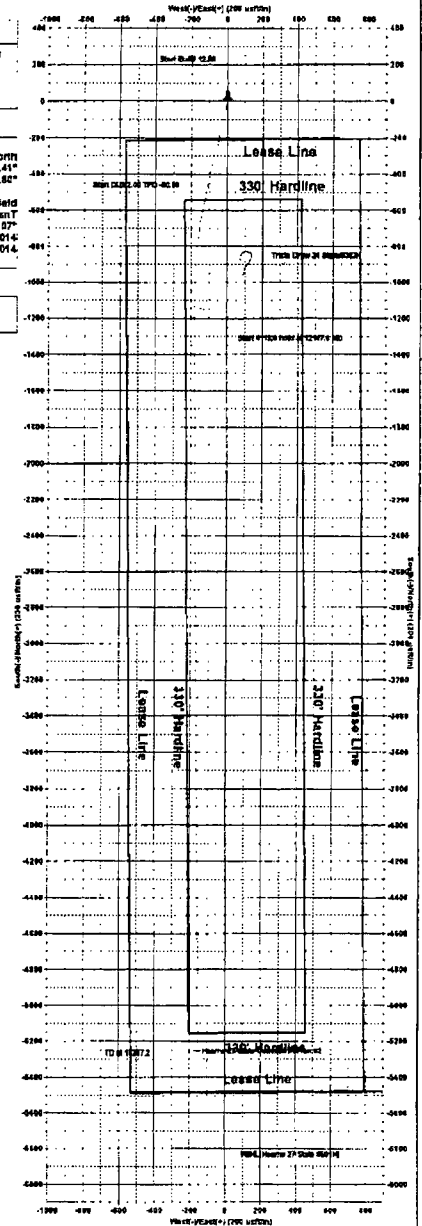
Ground Level 3479.0  
+N-S +E-W Northing Easting Lateral Longitude Slat  
0.0 0.0 430705.00 737781.03 107 54 479 N 103° 37' 38.008 W

SECTION DETAILS

| Sec | MD      | Inc   | Alt    | TVD     | +N-S    | +E-W   | Deg   | TFace  | VSec   | Target                      | Annotation |
|-----|---------|-------|--------|---------|---------|--------|-------|--------|--------|-----------------------------|------------|
| 1   | 0.0     | 0.00  | 0.00   | 0.0     | 0.0     | 0.0    | 0.00  | 0.00   | 0.0    |                             |            |
| 2   | 10722.8 | 0.00  | 0.00   | 10722.5 | 0.0     | 0.0    | 0.00  | 0.00   | 0.0    |                             |            |
| 3   | 11472.8 | 90.00 | 183.00 | 11200.0 | -485.1  | 158.1  | 12.00 | 193.68 | 487.3  |                             |            |
| 4   | 12147.0 | 90.00 | 179.00 | 11200.0 | -1156.9 | -182.8 | 2.00  | -90.00 | 1173.7 |                             |            |
| 5   | 16267.3 | 90.00 | 179.00 | 11200.0 | -6264.0 | -162.0 | 0.00  | 0.00   | 5248.7 | PBHL(Hearns 27 State #501H) |            |

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name TVD +N-S +E-W Northing Easting Shape  
PBHL(Hearns 27 State #501H) 11200.0 -6264.0 -162.0 429481.00 737129.00 Point





## **EOG Resources - Midland**

**Lea County, NM (NAD 27 NME)**

**Hearns 27 State Com**

**#501H**

**OH**

**Plan: Plan #2**

## **Standard Planning Report**

**02 September, 2014**



# EOG Resources, Inc.

## Planning Report

**Database:** EDM 5000.1 Single User Db  
**Company:** EOG Resources - Midland  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** Hearn 27 State Com  
**Well:** #501H  
**Wellbore:** OH  
**Design:** Plan #2

**Local Co-ordinate Reference:** Well #501H  
**TVD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**MD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County, NM (NAD 27 NME)          |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico East 3001                 |                      |                |

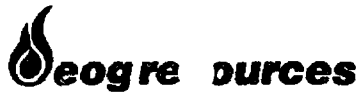
|                       |          |                     |                 |                   |                   |
|-----------------------|----------|---------------------|-----------------|-------------------|-------------------|
| Site                  |          | Hearns 27 State Com |                 |                   |                   |
| Site Position:        |          | Northing:           | 430,710.00 usft | Latitude:         | 32° 10' 54.484 N  |
| From:                 | Map      | Easting:            | 737,910.00 usft | Longitude:        | 103° 33' 51.687 W |
| Position Uncertainty: | 0.0 usft | Slot Radius:        | 13-3/16 "       | Grid Convergence: | 0.41 °            |

|                      |       |             |                     |                 |               |                   |
|----------------------|-------|-------------|---------------------|-----------------|---------------|-------------------|
| Well                 | #501H |             |                     |                 |               |                   |
| Well Position        | +N/-S | -5.0 usft   | Northing:           | 430,705.00 usft | Latitude:     | 32° 10' 54.479 N  |
|                      | +E/-W | -629.0 usft | Easting:            | 737,281.00 usft | Longitude:    | 103° 33' 59.006 W |
| Position Uncertainty |       | 0.0 usft    | Wellhead Elevation: | 0.0 usft        | Ground Level: | 3,479.0 usft      |

|                  |                   |                    |                    |                  |                       |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| <b>Wellbore</b>  | OH                |                    |                    |                  |                       |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination</b> | <b>Dip Angle</b> | <b>Field Strength</b> |
|                  | IGRF201014        | 6/23/2014          | (°)                | (°)              | (nT)                  |
|                  |                   |                    | 7.21               | 60.07            | 48.289                |

|                          |                         |               |              |                      |     |
|--------------------------|-------------------------|---------------|--------------|----------------------|-----|
| <b>Design</b>            | Plan #2                 |               |              |                      |     |
| <b>Audit Notes:</b>      |                         |               |              |                      |     |
| <b>Version:</b>          |                         | <b>Phase:</b> | PLAN         | <b>Tie On Depth:</b> | 0.0 |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b>  | <b>+E/-W</b> | <b>Direction</b>     |     |
|                          | (usft)                  | (usft)        | (usft)       | (°)                  |     |
|                          | 0.0                     | 0.0           | 0.0          | 178.60               |     |

| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |                    |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|--------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target             |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 10,722.5              | 0.00            | 0.00        | 10,722.5              | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 11,472.5              | 90.00           | 193.08      | 11,200.0              | -465.1       | -108.1       | 12.00                   | 12.00                  | 0.00                  | 193.08  |                    |
| 12,147.6              | 90.00           | 179.58      | 11,200.0              | -1,134.5     | -182.3       | 2.00                    | 0.00                   | -2.00                 | -90.00  |                    |
| 16,267.2              | 90.00           | 179.58      | 11,200.0              | -5,254.0     | -152.0       | 0.00                    | 0.00                   | 0.00                  | 0.00    | PBHL(Hearn 27 Stat |



# EOG Resources, Inc.

## Planning Report

**Database:** EDM 5000.1 Single User Db  
**Company:** EOG Resources - Midland  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** Hears 27 State Com  
**Well:** #501H  
**Wellbore:** OH  
**Design:** Plan #2

**Local Co-ordinate Reference:** Well #501H  
**TVD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**MD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 100.0                 | 0.00            | 0.00        | 100.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 200.0                 | 0.00            | 0.00        | 200.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 300.0                 | 0.00            | 0.00        | 300.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 400.0                 | 0.00            | 0.00        | 400.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 500.0                 | 0.00            | 0.00        | 500.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 600.0                 | 0.00            | 0.00        | 600.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 700.0                 | 0.00            | 0.00        | 700.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 800.0                 | 0.00            | 0.00        | 800.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 900.0                 | 0.00            | 0.00        | 900.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,000.0               | 0.00            | 0.00        | 1,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0               | 0.00            | 0.00        | 1,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0               | 0.00            | 0.00        | 1,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0               | 0.00            | 0.00        | 1,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0               | 0.00            | 0.00        | 1,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0               | 0.00            | 0.00        | 1,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0               | 0.00            | 0.00        | 1,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,700.0               | 0.00            | 0.00        | 1,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0               | 0.00            | 0.00        | 1,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,900.0               | 0.00            | 0.00        | 1,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,000.0               | 0.00            | 0.00        | 2,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,100.0               | 0.00            | 0.00        | 2,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,200.0               | 0.00            | 0.00        | 2,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,300.0               | 0.00            | 0.00        | 2,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,400.0               | 0.00            | 0.00        | 2,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,500.0               | 0.00            | 0.00        | 2,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,600.0               | 0.00            | 0.00        | 2,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,700.0               | 0.00            | 0.00        | 2,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,800.0               | 0.00            | 0.00        | 2,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0               | 0.00            | 0.00        | 2,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0               | 0.00            | 0.00        | 3,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0               | 0.00            | 0.00        | 3,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0               | 0.00            | 0.00        | 3,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0               | 0.00            | 0.00        | 3,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,400.0               | 0.00            | 0.00        | 3,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,500.0               | 0.00            | 0.00        | 3,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0               | 0.00            | 0.00        | 3,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0               | 0.00            | 0.00        | 3,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0               | 0.00            | 0.00        | 3,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0               | 0.00            | 0.00        | 3,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0               | 0.00            | 0.00        | 4,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0               | 0.00            | 0.00        | 4,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0               | 0.00            | 0.00        | 4,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0               | 0.00            | 0.00        | 4,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0               | 0.00            | 0.00        | 4,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0               | 0.00            | 0.00        | 4,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0               | 0.00            | 0.00        | 4,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0               | 0.00            | 0.00        | 4,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0               | 0.00            | 0.00        | 4,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0               | 0.00            | 0.00        | 4,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0               | 0.00            | 0.00        | 5,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,100.0               | 0.00            | 0.00        | 5,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,200.0               | 0.00            | 0.00        | 5,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,300.0               | 0.00            | 0.00        | 5,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |



# EOG Resources, Inc.

## Planning Report

**Database:** EDM 5000.1 Single User Db  
**Company:** EOG Resources - Midland  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** Hearn 27 State Com  
**Well:** #501H  
**Wellbore:** OH  
**Design:** Plan #2

**Local Co-ordinate Reference:** Well #501H  
**TVD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**MD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N-S (usft) | +E-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|-------------|-------------|-------------------------|-------------------------|------------------------|-----------------------|
| 5,400.0               | 0.00            | 0.00        | 5,400.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0               | 0.00            | 0.00        | 5,500.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,600.0               | 0.00            | 0.00        | 5,600.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0               | 0.00            | 0.00        | 5,700.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0               | 0.00            | 0.00        | 5,800.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0               | 0.00            | 0.00        | 5,900.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0               | 0.00            | 0.00        | 6,000.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0               | 0.00            | 0.00        | 6,100.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0               | 0.00            | 0.00        | 6,200.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,300.0               | 0.00            | 0.00        | 6,300.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0               | 0.00            | 0.00        | 6,400.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0               | 0.00            | 0.00        | 6,500.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0               | 0.00            | 0.00        | 6,600.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,700.0               | 0.00            | 0.00        | 6,700.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0               | 0.00            | 0.00        | 6,800.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0               | 0.00            | 0.00        | 6,900.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0               | 0.00            | 0.00        | 7,000.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0               | 0.00            | 0.00        | 7,100.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0               | 0.00            | 0.00        | 7,200.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0               | 0.00            | 0.00        | 7,300.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0               | 0.00            | 0.00        | 7,400.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0               | 0.00            | 0.00        | 7,500.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0               | 0.00            | 0.00        | 7,600.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0               | 0.00            | 0.00        | 7,700.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0               | 0.00            | 0.00        | 7,800.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0               | 0.00            | 0.00        | 7,900.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0               | 0.00            | 0.00        | 8,000.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0               | 0.00            | 0.00        | 8,100.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0               | 0.00            | 0.00        | 8,200.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0               | 0.00            | 0.00        | 8,300.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0               | 0.00            | 0.00        | 8,400.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,500.0               | 0.00            | 0.00        | 8,500.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,600.0               | 0.00            | 0.00        | 8,600.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,700.0               | 0.00            | 0.00        | 8,700.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,800.0               | 0.00            | 0.00        | 8,800.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,900.0               | 0.00            | 0.00        | 8,900.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,000.0               | 0.00            | 0.00        | 9,000.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,100.0               | 0.00            | 0.00        | 9,100.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,200.0               | 0.00            | 0.00        | 9,200.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,300.0               | 0.00            | 0.00        | 9,300.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0               | 0.00            | 0.00        | 9,400.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,500.0               | 0.00            | 0.00        | 9,500.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,600.0               | 0.00            | 0.00        | 9,600.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,700.0               | 0.00            | 0.00        | 9,700.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,800.0               | 0.00            | 0.00        | 9,800.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,900.0               | 0.00            | 0.00        | 9,900.0               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,000.0              | 0.00            | 0.00        | 10,000.0              | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,100.0              | 0.00            | 0.00        | 10,100.0              | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,200.0              | 0.00            | 0.00        | 10,200.0              | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,300.0              | 0.00            | 0.00        | 10,300.0              | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,400.0              | 0.00            | 0.00        | 10,400.0              | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,500.0              | 0.00            | 0.00        | 10,500.0              | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,600.0              | 0.00            | 0.00        | 10,600.0              | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,700.0              | 0.00            | 0.00        | 10,700.0              | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |



# EOG Resources, Inc.

## Planning Report

**Database:** EDM 5000.1 Single User Db  
**Company:** EOG Resources - Midland  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** Hearn 27 State Com  
**Well:** #501H  
**Wellbore:** OH  
**Design:** Plan #2

**Local Co-ordinate Reference:** Well #501H  
**TVD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**MD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 10,722.5              | 0.00            | 0.00        | 10,722.5              | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,725.0              | 0.30            | 193.08      | 10,725.0              | 0.0          | 0.0          | 0.0                     | 12.00                   | 12.00                  | 0.00                  |
| 10,750.0              | 3.30            | 193.08      | 10,750.0              | -0.8         | -0.2         | 0.8                     | 12.00                   | 12.00                  | 0.00                  |
| 10,775.0              | 6.30            | 193.08      | 10,774.9              | -2.8         | -0.7         | 2.8                     | 12.00                   | 12.00                  | 0.00                  |
| 10,800.0              | 9.30            | 193.08      | 10,799.7              | -6.1         | -1.4         | 6.1                     | 12.00                   | 12.00                  | 0.00                  |
| 10,825.0              | 12.30           | 193.08      | 10,824.2              | -10.7        | -2.5         | 10.6                    | 12.00                   | 12.00                  | 0.00                  |
| 10,850.0              | 15.30           | 193.08      | 10,848.5              | -16.5        | -3.8         | 16.4                    | 12.00                   | 12.00                  | 0.00                  |
| 10,875.0              | 18.30           | 193.08      | 10,872.4              | -23.5        | -5.5         | 23.4                    | 12.00                   | 12.00                  | 0.00                  |
| 10,900.0              | 21.30           | 193.08      | 10,895.9              | -31.8        | -7.4         | 31.6                    | 12.00                   | 12.00                  | 0.00                  |
| 10,925.0              | 24.30           | 193.08      | 10,919.0              | -41.2        | -9.6         | 41.0                    | 12.00                   | 12.00                  | 0.00                  |
| 10,950.0              | 27.30           | 193.08      | 10,941.5              | -51.8        | -12.0        | 51.5                    | 12.00                   | 12.00                  | 0.00                  |
| 10,975.0              | 30.30           | 193.08      | 10,963.4              | -63.5        | -14.8        | 63.2                    | 12.00                   | 12.00                  | 0.00                  |
| 11,000.0              | 33.30           | 193.08      | 10,984.6              | -76.4        | -17.7        | 75.9                    | 12.00                   | 12.00                  | 0.00                  |
| 11,025.0              | 36.30           | 193.08      | 11,005.2              | -90.3        | -21.0        | 89.7                    | 12.00                   | 12.00                  | 0.00                  |
| 11,050.0              | 39.30           | 193.08      | 11,024.9              | -105.2       | -24.4        | 104.6                   | 12.00                   | 12.00                  | 0.00                  |
| 11,075.0              | 42.30           | 193.08      | 11,043.8              | -121.1       | -28.1        | 120.4                   | 12.00                   | 12.00                  | 0.00                  |
| 11,100.0              | 45.30           | 193.08      | 11,061.9              | -137.9       | -32.0        | 137.1                   | 12.00                   | 12.00                  | 0.00                  |
| 11,125.0              | 48.30           | 193.08      | 11,079.0              | -155.7       | -36.2        | 154.8                   | 12.00                   | 12.00                  | 0.00                  |
| 11,150.0              | 51.30           | 193.08      | 11,095.1              | -174.3       | -40.5        | 173.3                   | 12.00                   | 12.00                  | 0.00                  |
| 11,175.0              | 54.30           | 193.08      | 11,110.2              | -193.7       | -45.0        | 192.5                   | 12.00                   | 12.00                  | 0.00                  |
| 11,200.0              | 57.30           | 193.08      | 11,124.3              | -213.8       | -49.7        | 212.5                   | 12.00                   | 12.00                  | 0.00                  |
| 11,225.0              | 60.30           | 193.08      | 11,137.2              | -234.7       | -54.5        | 233.3                   | 12.00                   | 12.00                  | 0.00                  |
| 11,250.0              | 63.30           | 193.08      | 11,149.1              | -256.1       | -59.5        | 254.6                   | 12.00                   | 12.00                  | 0.00                  |
| 11,275.0              | 66.30           | 193.08      | 11,159.7              | -278.1       | -64.6        | 276.5                   | 12.00                   | 12.00                  | 0.00                  |
| 11,300.0              | 69.30           | 193.08      | 11,169.1              | -300.7       | -69.9        | 298.9                   | 12.00                   | 12.00                  | 0.00                  |
| 11,325.0              | 72.30           | 193.08      | 11,177.4              | -323.7       | -75.2        | 321.7                   | 12.00                   | 12.00                  | 0.00                  |
| 11,350.0              | 75.30           | 193.08      | 11,184.3              | -347.1       | -80.6        | 345.0                   | 12.00                   | 12.00                  | 0.00                  |
| 11,375.0              | 78.30           | 193.08      | 11,190.0              | -370.8       | -86.1        | 368.6                   | 12.00                   | 12.00                  | 0.00                  |
| 11,400.0              | 81.30           | 193.08      | 11,194.5              | -394.7       | -91.7        | 392.4                   | 12.00                   | 12.00                  | 0.00                  |
| 11,425.0              | 84.30           | 193.08      | 11,197.6              | -418.9       | -97.3        | 416.4                   | 12.00                   | 12.00                  | 0.00                  |
| 11,450.0              | 87.30           | 193.08      | 11,199.4              | -443.2       | -103.0       | 440.5                   | 12.00                   | 12.00                  | 0.00                  |
| 11,472.5              | 90.00           | 193.08      | 11,200.0              | -465.1       | -108.1       | 462.3                   | 12.00                   | 12.00                  | 0.00                  |
| 11,500.0              | 90.00           | 182.53      | 11,200.0              | -491.9       | -114.2       | 489.0                   | 2.00                    | 0.00                   | -2.00                 |
| 11,600.0              | 90.00           | 190.53      | 11,200.0              | -589.9       | -134.1       | 586.4                   | 2.00                    | 0.00                   | -2.00                 |
| 11,700.0              | 90.00           | 188.53      | 11,200.0              | -688.5       | -150.7       | 684.6                   | 2.00                    | 0.00                   | -2.00                 |
| 11,800.0              | 90.00           | 186.53      | 11,200.0              | -787.6       | -163.8       | 783.4                   | 2.00                    | 0.00                   | -2.00                 |
| 11,900.0              | 90.00           | 184.53      | 11,200.0              | -887.1       | -173.4       | 882.7                   | 2.00                    | 0.00                   | -2.00                 |
| 12,000.0              | 90.00           | 182.53      | 11,200.0              | -987.0       | -179.6       | 982.3                   | 2.00                    | 0.00                   | -2.00                 |
| 12,100.0              | 90.00           | 180.53      | 11,200.0              | -1,086.9     | -182.3       | 1,082.1                 | 2.00                    | 0.00                   | -2.00                 |
| 12,147.6              | 90.00           | 179.58      | 11,200.0              | -1,134.5     | -182.3       | 1,129.7                 | 2.00                    | 0.00                   | -2.00                 |
| 12,200.0              | 90.00           | 179.58      | 11,200.0              | -1,186.9     | -181.9       | 1,182.1                 | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0              | 90.00           | 179.58      | 11,200.0              | -1,286.9     | -181.2       | 1,282.1                 | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0              | 90.00           | 179.58      | 11,200.0              | -1,386.9     | -180.4       | 1,382.1                 | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0              | 90.00           | 179.58      | 11,200.0              | -1,486.9     | -179.7       | 1,482.1                 | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0              | 90.00           | 179.58      | 11,200.0              | -1,586.9     | -179.0       | 1,582.1                 | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0              | 90.00           | 179.58      | 11,200.0              | -1,686.9     | -178.2       | 1,682.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0              | 90.00           | 179.58      | 11,200.0              | -1,786.9     | -177.5       | 1,782.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0              | 90.00           | 179.58      | 11,200.0              | -1,886.9     | -176.8       | 1,882.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0              | 90.00           | 179.58      | 11,200.0              | -1,986.9     | -176.0       | 1,982.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0              | 90.00           | 179.58      | 11,200.0              | -2,086.9     | -175.3       | 2,082.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,200.0              | 90.00           | 179.58      | 11,200.0              | -2,186.9     | -174.6       | 2,182.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,300.0              | 90.00           | 179.58      | 11,200.0              | -2,286.9     | -173.8       | 2,282.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,400.0              | 90.00           | 179.58      | 11,200.0              | -2,386.9     | -173.1       | 2,381.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,500.0              | 90.00           | 179.58      | 11,200.0              | -2,486.9     | -172.4       | 2,481.9                 | 0.00                    | 0.00                   | 0.00                  |



**EOG Resources, Inc.**  
Planning Report

**Database:** EDM 5000.1 Single User Db  
**Company:** EOG Resources - Midland  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** Hearn 27 State Com  
**Well:** #501H  
**Wellbore:** OH  
**Design:** Plan #2

**Local Co-ordinate Reference:** Well #501H  
**TVD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**MD Reference:** KB = 21 @ 3500.0usft (Nomac 55)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

**Planned Survey**

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 13,600.0              | 90.00           | 179.58      | 11,200.0              | -2,586.9     | -171.6       | 2,581.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,700.0              | 90.00           | 179.58      | 11,200.0              | -2,686.9     | -170.9       | 2,681.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,800.0              | 90.00           | 179.58      | 11,200.0              | -2,786.9     | -170.1       | 2,781.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,900.0              | 90.00           | 179.58      | 11,200.0              | -2,886.9     | -169.4       | 2,881.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,000.0              | 90.00           | 179.58      | 11,200.0              | -2,986.9     | -168.7       | 2,981.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,100.0              | 90.00           | 179.58      | 11,200.0              | -3,086.9     | -167.9       | 3,081.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,200.0              | 90.00           | 179.58      | 11,200.0              | -3,186.9     | -167.2       | 3,181.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,300.0              | 90.00           | 179.58      | 11,200.0              | -3,286.9     | -166.5       | 3,281.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,400.0              | 90.00           | 179.58      | 11,200.0              | -3,386.8     | -165.7       | 3,381.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,500.0              | 90.00           | 179.58      | 11,200.0              | -3,486.8     | -165.0       | 3,481.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,600.0              | 90.00           | 179.58      | 11,200.0              | -3,586.8     | -164.3       | 3,581.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0              | 90.00           | 179.58      | 11,200.0              | -3,686.8     | -163.5       | 3,681.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,800.0              | 90.00           | 179.58      | 11,200.0              | -3,786.8     | -162.8       | 3,781.7                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0              | 90.00           | 179.58      | 11,200.0              | -3,886.8     | -162.1       | 3,881.7                 | 0.00                    | 0.00                   | 0.00                  |
| 15,000.0              | 90.00           | 179.58      | 11,200.0              | -3,986.8     | -161.3       | 3,981.7                 | 0.00                    | 0.00                   | 0.00                  |
| 15,100.0              | 90.00           | 179.58      | 11,200.0              | -4,086.8     | -160.6       | 4,081.7                 | 0.00                    | 0.00                   | 0.00                  |
| 15,200.0              | 90.00           | 179.58      | 11,200.0              | -4,186.8     | -159.9       | 4,181.7                 | 0.00                    | 0.00                   | 0.00                  |
| 15,300.0              | 90.00           | 179.58      | 11,200.0              | -4,286.8     | -159.1       | 4,281.7                 | 0.00                    | 0.00                   | 0.00                  |
| 15,400.0              | 90.00           | 179.58      | 11,200.0              | -4,386.8     | -158.4       | 4,381.7                 | 0.00                    | 0.00                   | 0.00                  |
| 15,500.0              | 90.00           | 179.58      | 11,200.0              | -4,486.8     | -157.6       | 4,481.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,600.0              | 90.00           | 179.58      | 11,200.0              | -4,586.8     | -156.9       | 4,581.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,700.0              | 90.00           | 179.58      | 11,200.0              | -4,686.8     | -156.2       | 4,681.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,800.0              | 90.00           | 179.58      | 11,200.0              | -4,786.8     | -155.4       | 4,781.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,900.0              | 90.00           | 179.58      | 11,200.0              | -4,886.8     | -154.7       | 4,881.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,000.0              | 90.00           | 179.58      | 11,200.0              | -4,986.8     | -154.0       | 4,981.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,100.0              | 90.00           | 179.58      | 11,200.0              | -5,086.8     | -153.2       | 5,081.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,200.0              | 90.00           | 179.58      | 11,200.0              | -5,186.8     | -152.5       | 5,181.5                 | 0.00                    | 0.00                   | 0.00                  |
| 16,267.2              | 90.00           | 179.58      | 11,200.0              | -5,254.0     | -152.0       | 5,248.7                 | 0.00                    | 0.00                   | 0.00                  |

PBHL(Hearn 27 State #501H)

**Design Targets**

| Target Name               | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude        | Longitude        |
|---------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------------|------------------|
| - hit/miss target         |               |              |            |              |              |                 |                |                 |                  |
| - Shape                   |               |              |            |              |              |                 |                |                 |                  |
| PBHL(Hearn 27 State #     | 0.00          | 0.00         | 11,200.0   | -5,254.0     | -152.0       | 425,451.00      | 737,129.00     | 32° 10' 2.499 N | 103° 34' 1.210 W |
| - plan hits target center |               |              |            |              |              |                 |                |                 |                  |
| - Point                   |               |              |            |              |              |                 |                |                 |                  |

**EOG RESOURCES, INC.**  
**HEARNS 27 STATE COM #501H**

**Hydrogen Sulfide Plan Summary**

- A. All personnel shall receive proper H<sub>2</sub>S training in accordance with Onshore Order III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:

- Well control equipment
  - a. Flare line 150' from wellhead to be ignited by flare gun.
  - b. Choke manifold with a remotely operated choke.
  - c. Mud/gas separator

- Protective equipment for essential personnel.

Breathing apparatus:

- a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escapes packs — 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
- c. Emergency Escape Packs — 4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher

- H<sub>2</sub>S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

- Visual warning systems.
  - a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
  - b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
  - c. Two wind socks will be placed in strategic locations, visible from all angles.

**EOG RESOURCES, INC.**  
**HEARNS 27 STATE COM #501H**

- **Mud program:**  
The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S bearing zones.
- **Metallurgy:**  
All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.
- **Communication:**  
Communication will be via cell phones and land lines where available.

**EOG RESOURCES, INC.**  
**HEARNS 27 STATE COM #501H**

**Emergency Assistance Telephone List**

| <b><u>PUBLIC SAFETY:</u></b>    | <b><u>911 or</u></b> |
|---------------------------------|----------------------|
| Lea County Sheriff's Department | (575) 396-3611       |
| Rod Coffman                     |                      |
| Fire Department:                |                      |
| Carlsbad                        | (575) 885-3125       |
| Artesia                         | (575) 746-5050       |
| Hospitals:                      |                      |
| Carlsbad                        | (575) 887-4121       |
| Artesia                         | (575) 748-3333       |
| Hobbs                           | (575) 392-1979       |
| Dept. of Public Safety/Carlsbad | (575) 748-9718       |
| Highway Department              | (575) 885-3281       |
| New Mexico Oil Conservation     | (575) 476-3440       |
| U.S. Dept. of Labor             | (575) 887-1174       |

**EOG Resources, Inc.**

|               |                       |
|---------------|-----------------------|
| EOG / Midland | Office (432) 686-3600 |
|---------------|-----------------------|

**Company Drilling Consultants:**

|              |                     |
|--------------|---------------------|
| Jett Dueitt  | Cell (432) 230-4840 |
| Blake Burney |                     |

**Drilling Engineer**

|               |                       |
|---------------|-----------------------|
| Robert Brosig | Office (432) 686-3737 |
|               | Cell (432) 770-0705   |

**Drilling Manager**

|              |                       |
|--------------|-----------------------|
| Lee Lohoefer | Office (432) 686-6716 |
|              | Cell (817) 374-9686   |

**Drilling Superintendent**

|              |                       |
|--------------|-----------------------|
| Jason Richey | Office (432) 686-3665 |
|              | Cell (817) 879-6521   |

**H&P Drilling**

|                      |                       |
|----------------------|-----------------------|
| H&P Drilling         | Office (432) 563-5757 |
| H&P 415 Drilling Rig | Rig (432) 230-4840    |

**Tool Pusher:**

|                 |                     |
|-----------------|---------------------|
| Johnathan Craig | Cell (817) 760-6374 |
| Brad Garrett    |                     |

**Safety**

|                               |                       |
|-------------------------------|-----------------------|
| Reggie Phillips (HSE Manager) | Office (432) 686-3747 |
|                               | Cell (432) 250-7507   |