

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., 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 & Natural  
Resources

Form C-104  
Revised August 1, 2011

Submit one copy to appropriate District Office

Oil Conservation Division  
1220 South St. Francis Dr.

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE MINERAL AUTHORIZATION TO TRANSPORT

|                                                                                                    |                                                                 |                                                                      |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------|
| <sup>1</sup> Operator name and Address<br>EOG RESOURCES INC<br>PO BOX 2267<br>MIDLAND, TEXAS 79702 |                                                                 | <sup>2</sup> OGRID Number<br>7377                                    |
|                                                                                                    |                                                                 | <sup>3</sup> Reason for Filing Code/ Effective Date<br>NW 01/18/2022 |
| <sup>4</sup> API Number<br>30 - 025-48223                                                          | <sup>5</sup> Pool Name<br>WC025 G08 S253235G; LOWER BONE SPRING | <sup>6</sup> Pool Code<br>97903                                      |
| <sup>7</sup> Property Code<br>329701                                                               | <sup>8</sup> Property Name<br>RUTHLESS 11 FEDERAL COM           | <sup>9</sup> Well Number<br>503H                                     |

II. <sup>10</sup> Surface Location

| Ul or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South Line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| C             | 11      | 25S      | 32E   |         | 622'          | NORTH            | 1440'         | WEST           | LEA    |

<sup>11</sup> Bottom Hole Location

| UL or lot no.          | Section                                        | Township                          | Range                             | Lot Idn                            | Feet from the                       | North/South line | Feet from the | East/West line | County |
|------------------------|------------------------------------------------|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------------|------------------|---------------|----------------|--------|
| M                      | 14                                             | 25S                               | 32E                               |                                    | 110'                                | SOUTH            | 1280'         | WEST           | LEA    |
| <sup>12</sup> Lse Code | <sup>13</sup> Producing Method Code<br>FLOWING | <sup>14</sup> Gas Connection Date | <sup>15</sup> C-129 Permit Number | <sup>16</sup> C-129 Effective Date | <sup>17</sup> C-129 Expiration Date |                  |               |                |        |

III. Oil and Gas Transporters

| <sup>18</sup> Transporter OGRID | <sup>19</sup> Transporter Name and Address | <sup>20</sup> O/G/W |
|---------------------------------|--------------------------------------------|---------------------|
| 372812                          | EOGRM                                      | OIL                 |
|                                 |                                            |                     |
| 151618                          | ENTERPRISE FIELD SERVICES                  | GAS                 |
|                                 |                                            |                     |
| 298751                          | REGENCY FIELD SERVICES                     | GAS                 |
|                                 |                                            |                     |
| 36785                           | DCP MIDSTREAM                              | GAS                 |
|                                 |                                            |                     |

IV. Well Completion Data

|                                       |                                        |                             |                               |                                                |                       |
|---------------------------------------|----------------------------------------|-----------------------------|-------------------------------|------------------------------------------------|-----------------------|
| <sup>21</sup> Spud Date<br>05/07/2021 | <sup>22</sup> Ready Date<br>01/18/2022 | <sup>23</sup> TD<br>20,689' | <sup>24</sup> PBTD<br>20,666' | <sup>25</sup> Perforations<br>10,545 - 20,666' | <sup>26</sup> DHC, MC |
| <sup>27</sup> Hole Size               | <sup>28</sup> Casing & Tubing Size     | <sup>29</sup> Depth Set     | <sup>30</sup> Sacks Cement    |                                                |                       |
| 17 1/2"                               | 13 3/8"                                | 1005'                       | 1071 SXS CL C/CIRC            |                                                |                       |
| 12 1/4"                               | 9 5/8"                                 | 4787'                       | 1365 SXS CL C/CIRC            |                                                |                       |
| 8 1/2"                                | 5 1/2"                                 | 20,674'                     | 3585 SXS CL H TOC 4370' CBL   |                                                |                       |
|                                       |                                        |                             |                               |                                                |                       |

V. Well Test Data

|                                          |                                               |                                       |                                     |                             |                                    |
|------------------------------------------|-----------------------------------------------|---------------------------------------|-------------------------------------|-----------------------------|------------------------------------|
| <sup>31</sup> Date New Oil<br>01/18/2022 | <sup>32</sup> Gas Delivery Date<br>01/18/2022 | <sup>33</sup> Test Date<br>01/29/2022 | <sup>34</sup> Test Length<br>24 HRS | <sup>35</sup> Tbg. Pressure | <sup>36</sup> Csg. Pressure<br>872 |
| <sup>37</sup> Choke Size<br>128          | <sup>38</sup> Oil<br>3701                     | <sup>39</sup> Water<br>7341           | <sup>40</sup> Gas<br>5924           |                             | <sup>41</sup> Test Method          |

|                                                                                                                                                                                                                                                                                                                                                                                        |                        |                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------|
| <sup>42</sup> I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.<br>Signature:<br>Kay Maddox<br>Printed name:<br>Kay Maddox<br>Title:<br>SENIOR REGULATORY SPECIALIST<br>E-mail Address:<br>kay_maddox@eogresources.com<br>Date:<br>02/22/2022 | Phone:<br>432-638-8475 | OIL CONSERVATION DIVISION             |
|                                                                                                                                                                                                                                                                                                                                                                                        |                        | Approved by: <i>PATRICIA MARTINEZ</i> |
|                                                                                                                                                                                                                                                                                                                                                                                        |                        | Title: <i>PETROLEUM SPECIALIST</i>    |
|                                                                                                                                                                                                                                                                                                                                                                                        |                        | Approval Date: <i>7/24/2024</i>       |
|                                                                                                                                                                                                                                                                                                                                                                                        |                        |                                       |

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) 748-1333 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><b>30-025- 48223</b> | <sup>2</sup> Pool Code<br><b>97903</b>                   | <sup>3</sup> Pool Name<br><b>WC025 G08 S253235G; LOWER BONE SPRING</b> |
| <sup>4</sup> Property Code<br><b>329701</b>     | <sup>5</sup> Property Name<br><b>RUTHLESS 11 FED COM</b> | <sup>6</sup> Well Number<br><b>503H</b>                                |
| <sup>7</sup> OGRID No.<br><b>7377</b>           | <sup>8</sup> Operator Name<br><b>EOG RESOURCES, INC.</b> | <sup>9</sup> Elevation<br><b>3498'</b>                                 |

<sup>10</sup>Surface Location

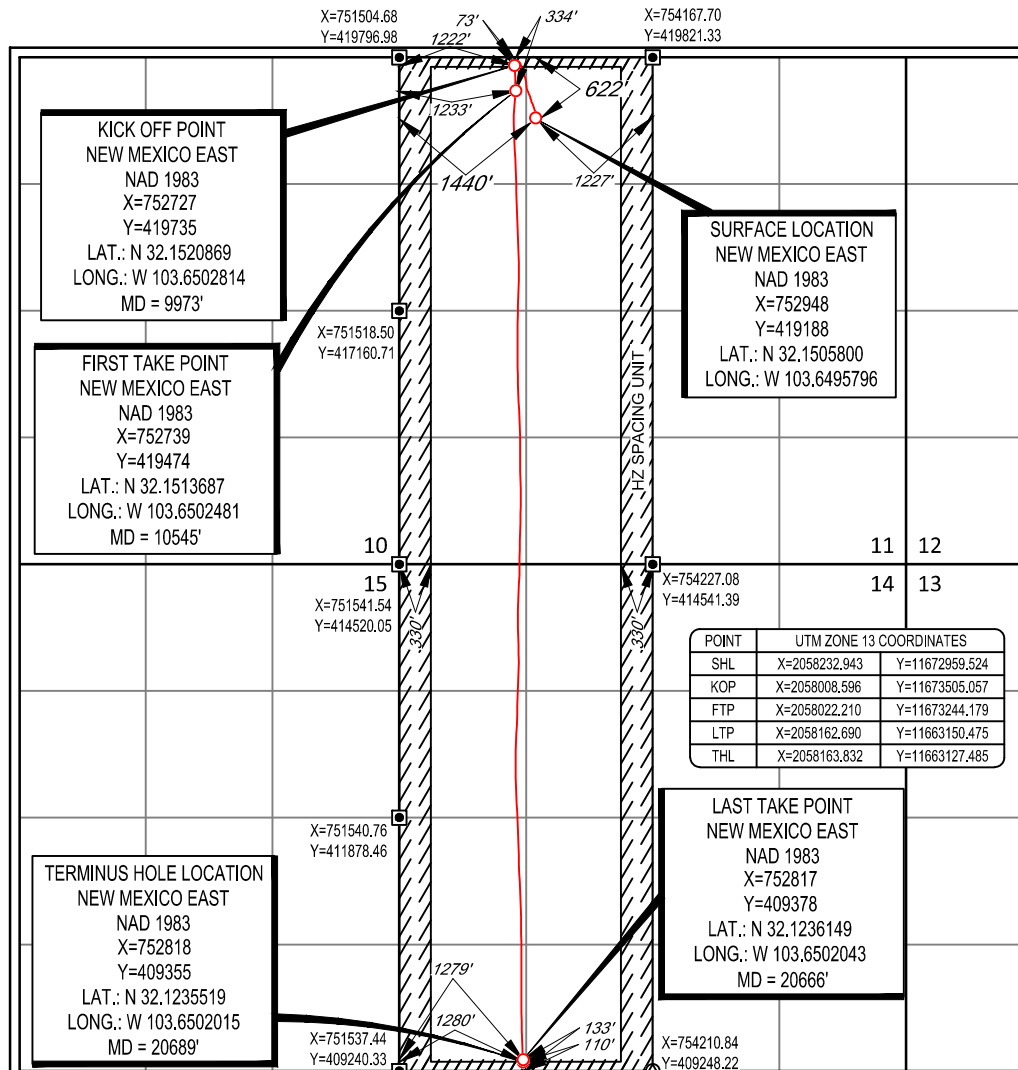
| UL or lot no. | Section   | Township    | Range       | Lot Idn  | Feet from the | North/South line | Feet from the | East/West line | County     |
|---------------|-----------|-------------|-------------|----------|---------------|------------------|---------------|----------------|------------|
| <b>C</b>      | <b>11</b> | <b>25-S</b> | <b>32-E</b> | <b>-</b> | <b>622'</b>   | <b>NORTH</b>     | <b>1440'</b>  | <b>WEST</b>    | <b>LEA</b> |

<sup>11</sup>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     |
|---------------|-----------|-------------|-------------|----------|---------------|------------------|---------------|----------------|------------|
| <b>M</b>      | <b>14</b> | <b>25-S</b> | <b>32-E</b> | <b>-</b> | <b>110'</b>   | <b>SOUTH</b>     | <b>1280'</b>  | <b>WEST</b>    | <b>LEA</b> |

|                                                |                               |                                  |                         |
|------------------------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br><b>640.00</b> | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> 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.

<sup>17</sup>OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location 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.

*Kay Maddox* 02/22/2022  
Signature Date

KAY MADDOX

Printed Name

kay\_maddox@eogresources.com

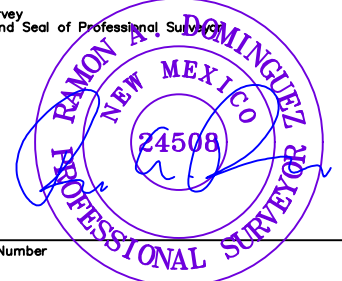
E-mail Address

<sup>18</sup>SURVEYOR CERTIFICATION

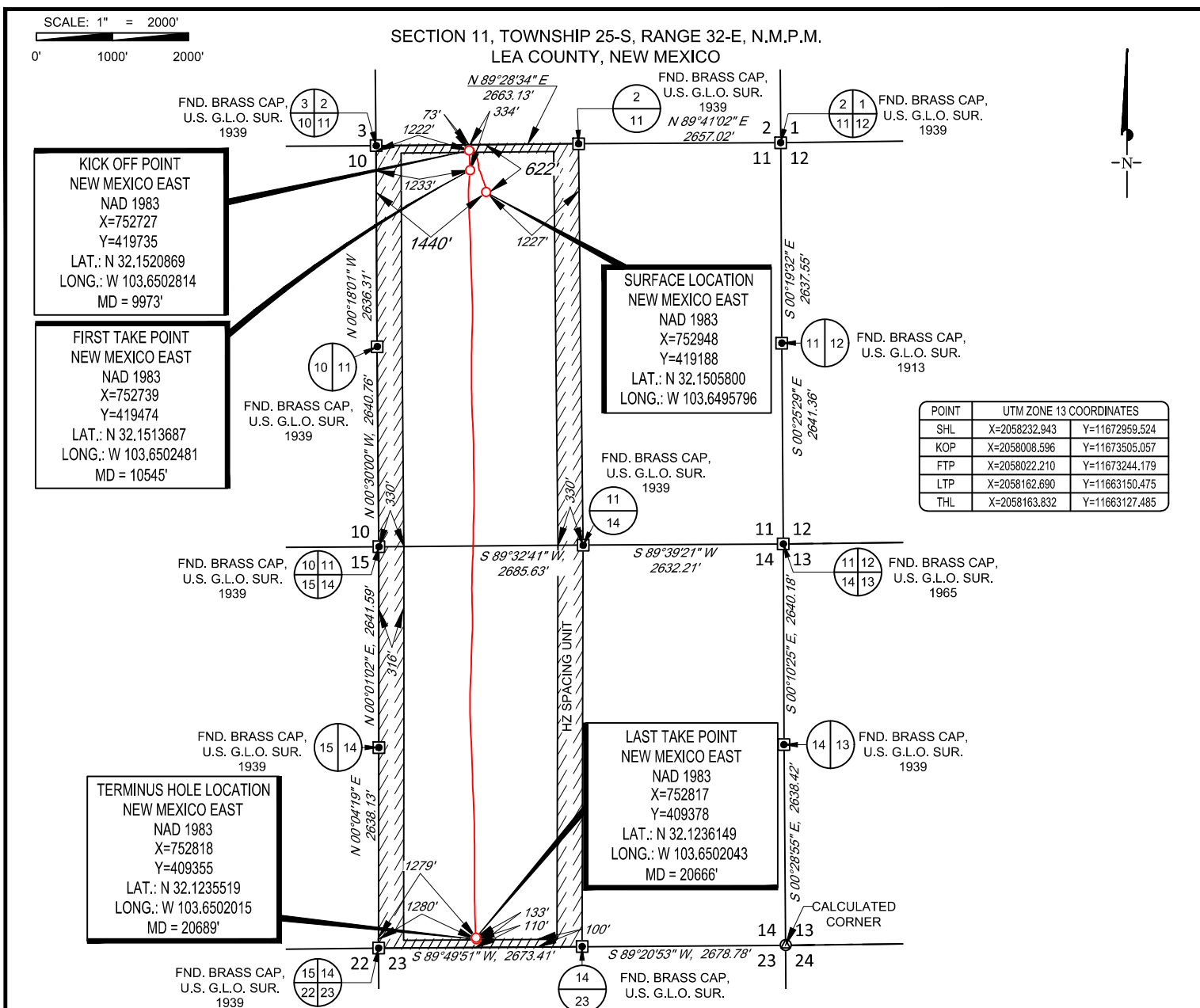
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

05/06/2021

Date of Survey  
Signature and Seal of Professional Surveyor



Certificate Number



LEASE NAME & WELL NO.: RUTHLESS 11 FED COM 503H

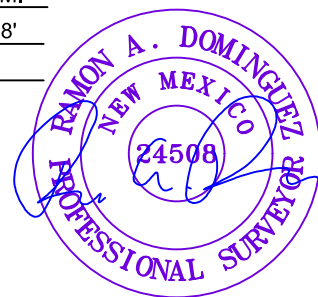
SECTION 11 TWP 25-S RGE 32-E SURVEY N.M.P.M.

COUNTY LEA STATE NM ELEVATION 3498'

DESCRIPTION 622' FNL & 1440' FWL



1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140  
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554  
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705  
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743  
WWW.TOPOGRAPHIC.COM



Ramon A. Dominguez, P.S. No. 24508  
FEBRUARY 16, 2022

RUTHLESS 11 FED COM  
503H  
AS-COMPLETED

REVISION:

DATE: 02/16/22

FILE: AD\_RUTHLESS\_11\_FED\_COM\_503H

DRAWN BY: EAH

SHEET: 2 OF 2

NOTES:

1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.
3. THIS WELL LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY EOG RESOURCES, INC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.





Lea County, NM (NAD 83 NME)

Ruthless 11 Fed Com #503H

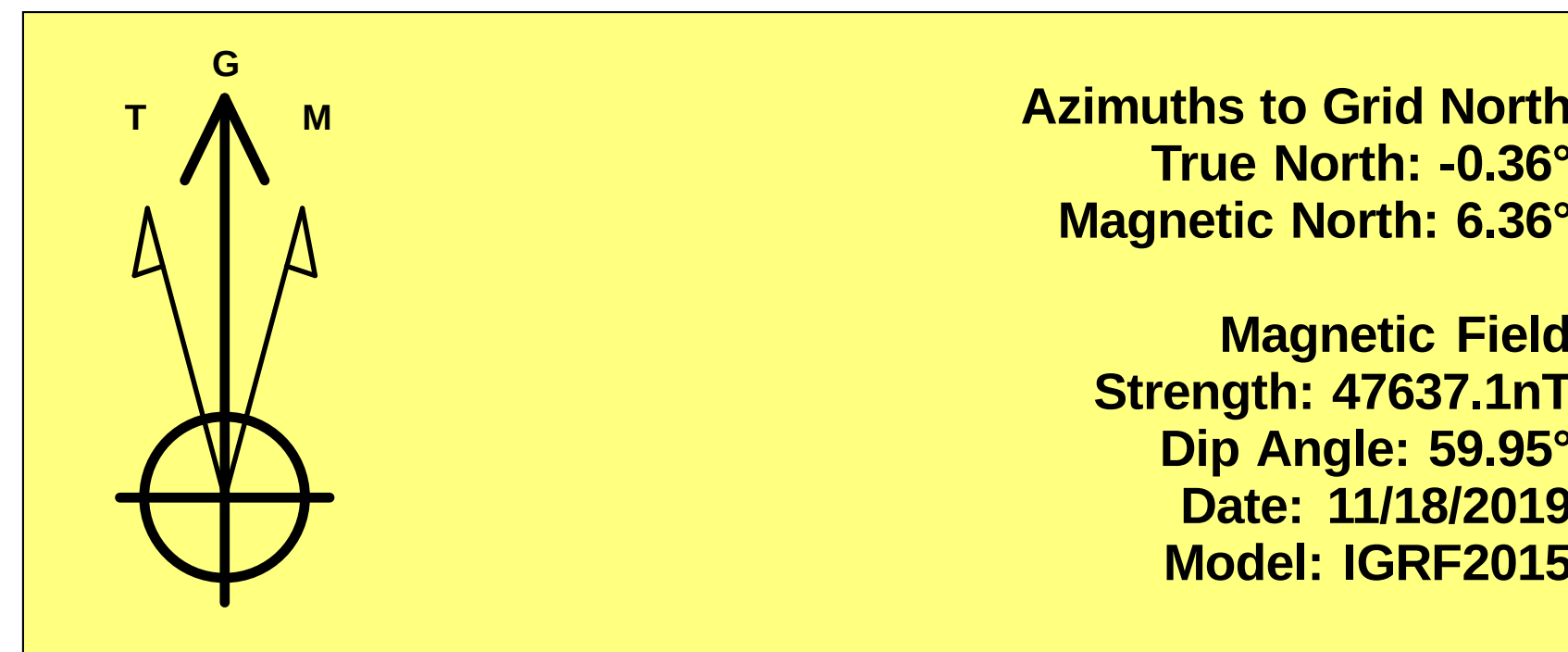
OH

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

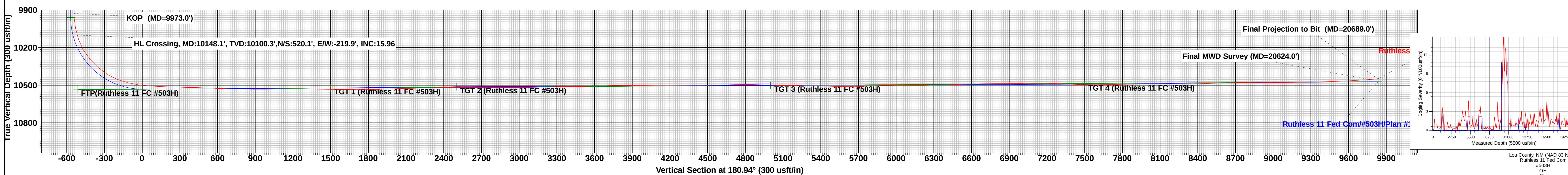
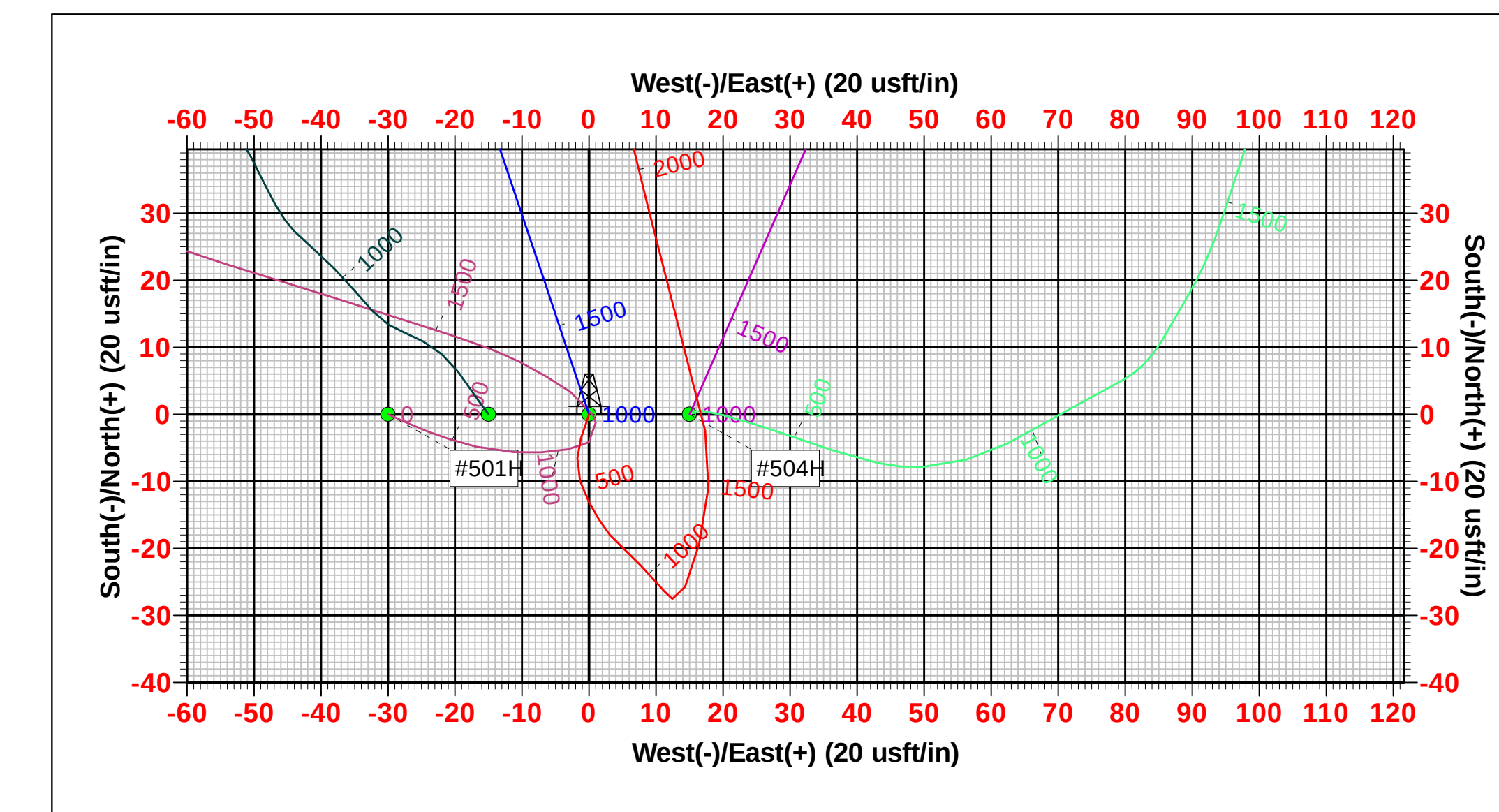
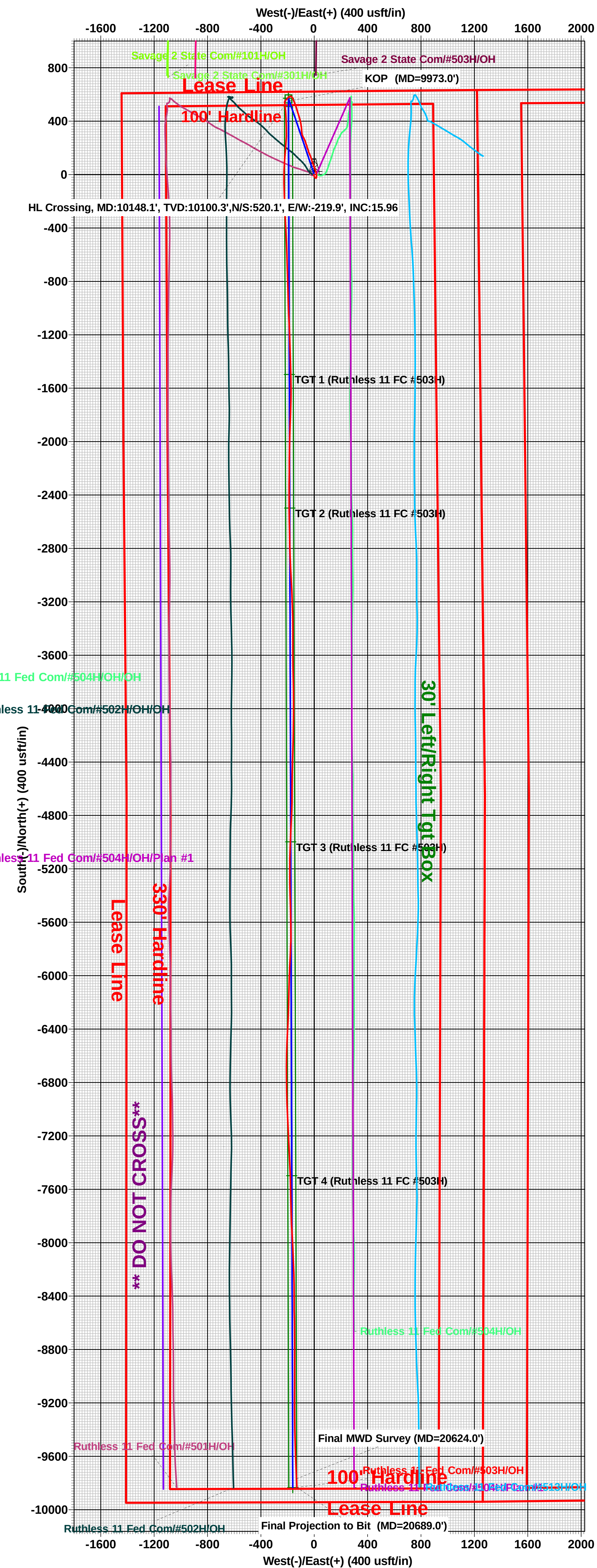
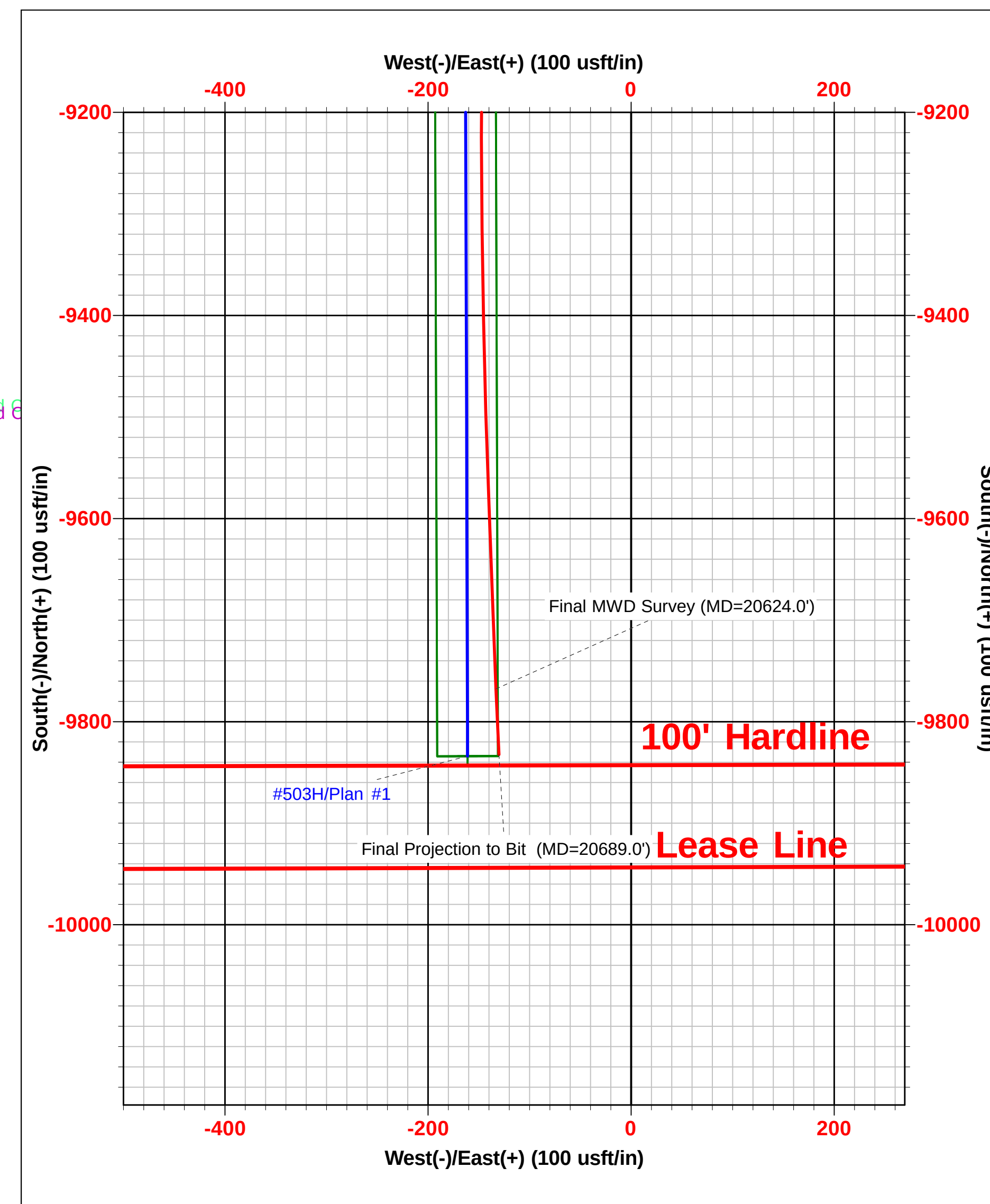
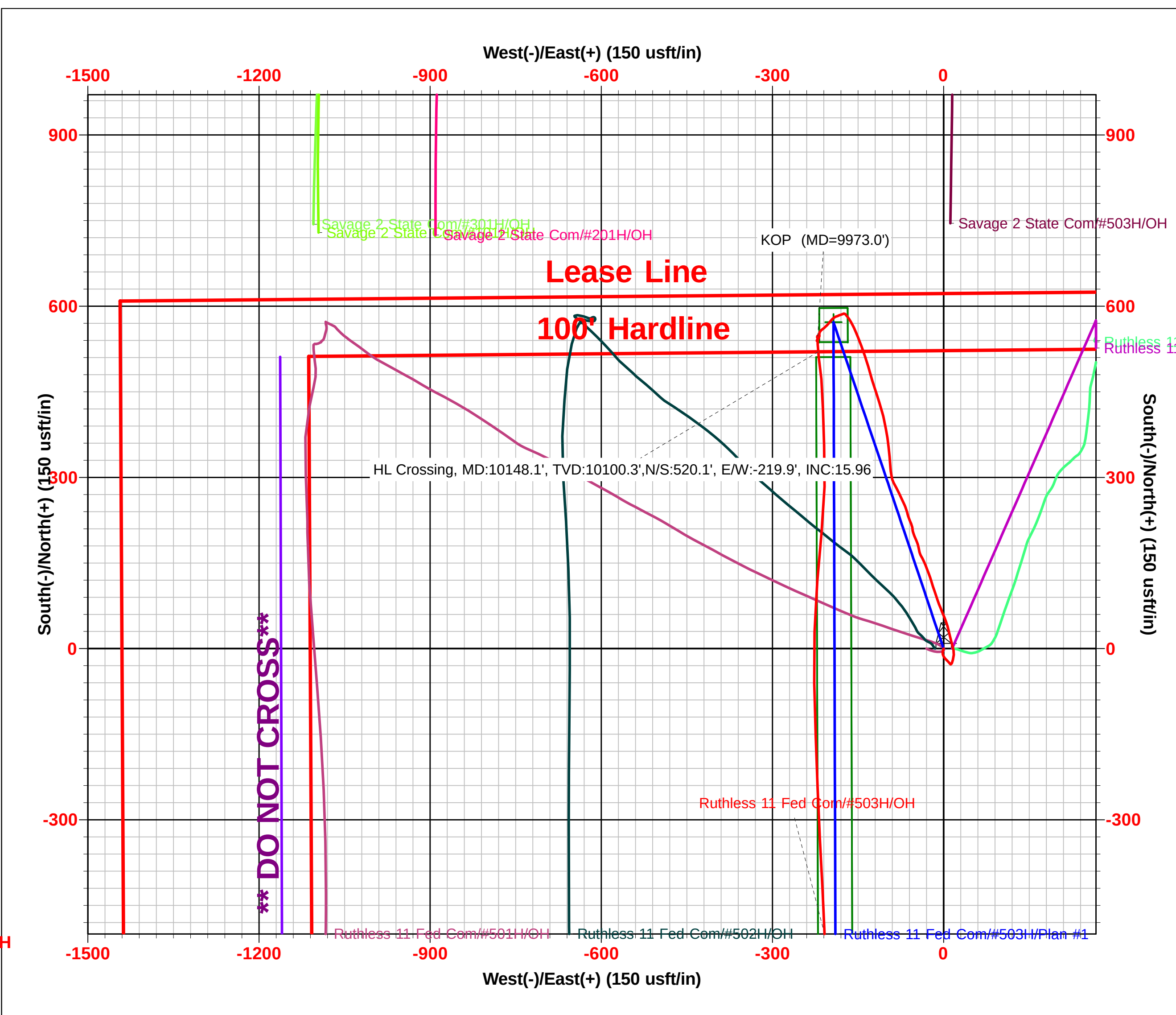
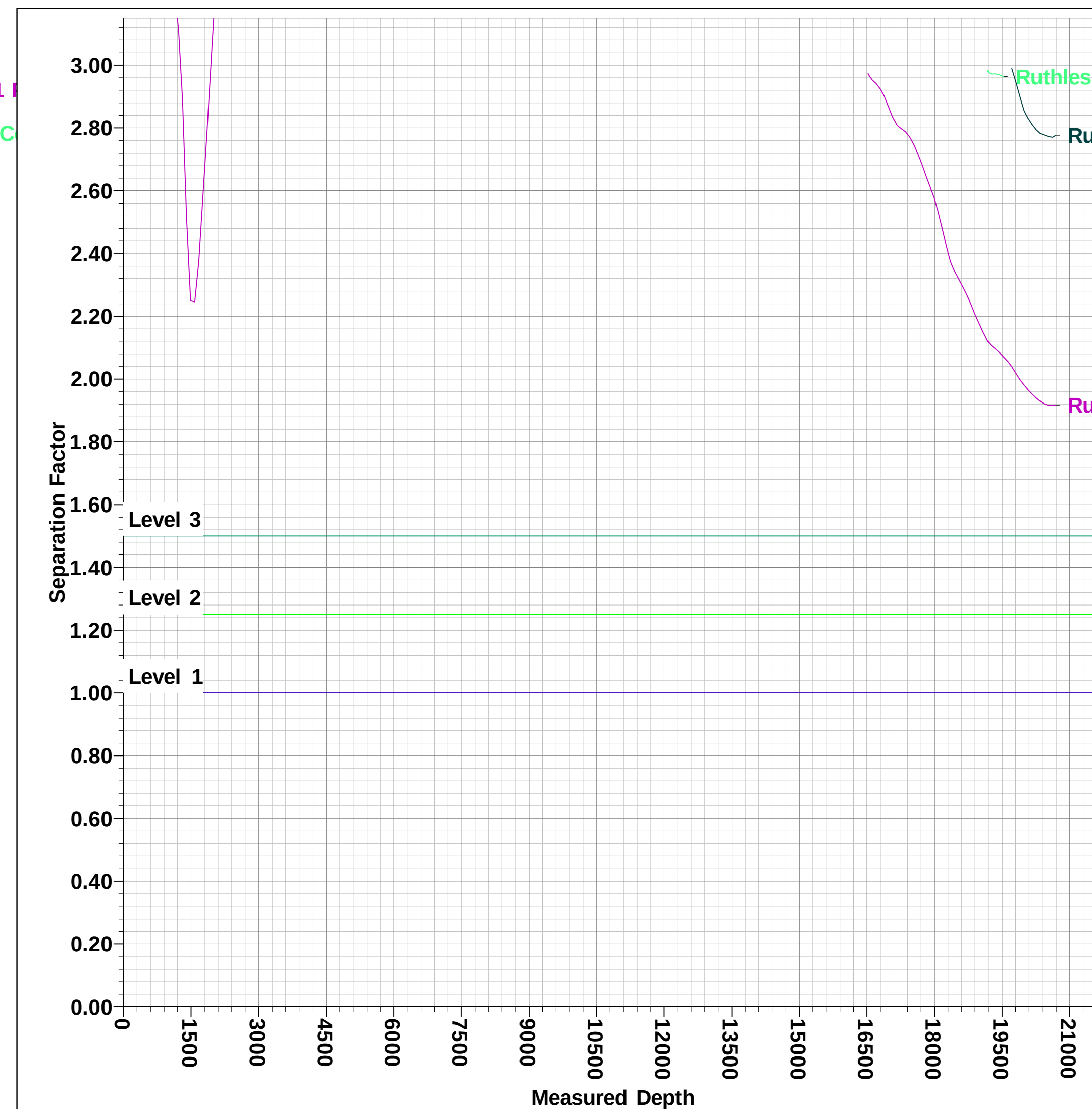
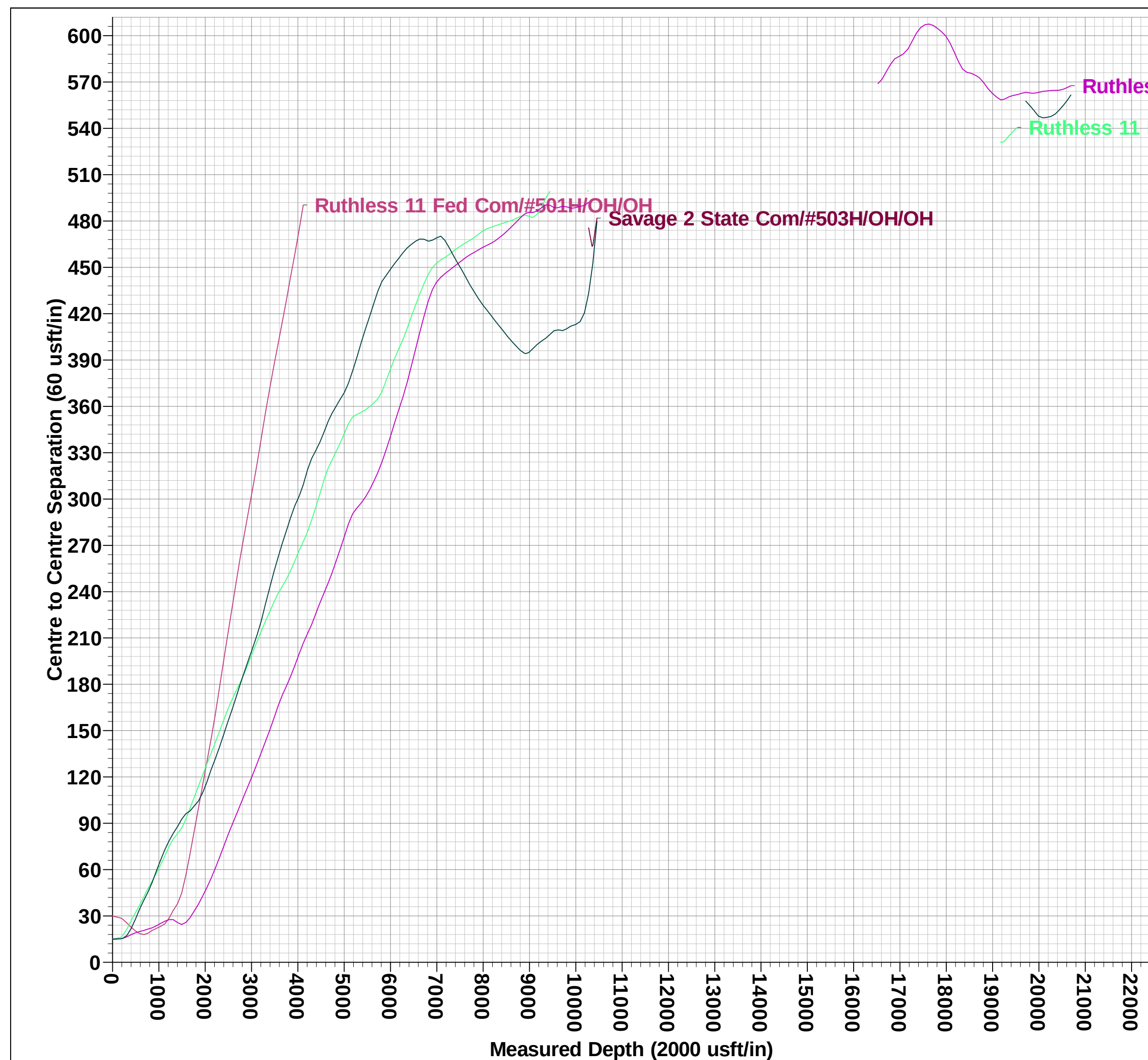
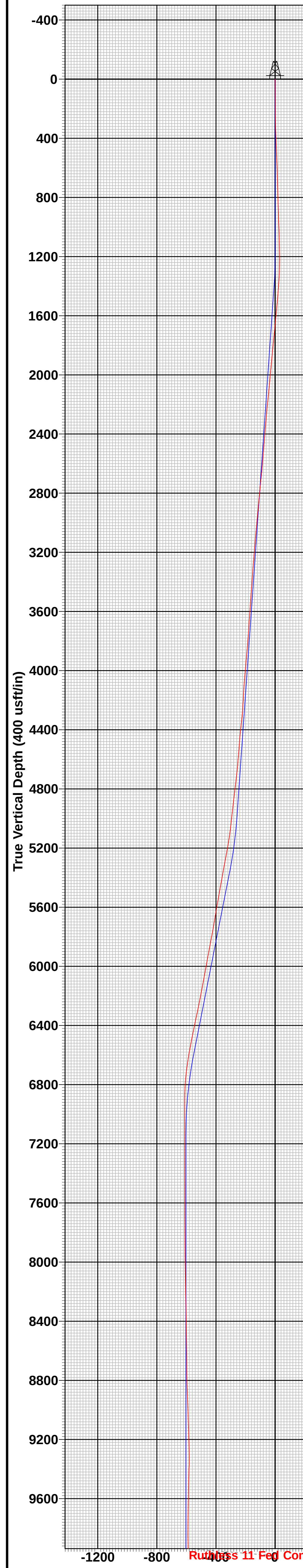
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone  
System Datum: Mean Sea Level

WELL DETAILS: #503H

KB = 25 @ 3523.0usft  
Northing 419188.00 Easting 752948.00 Latitude 32° 9' 2.085 N Longitude 103° 38' 58.487 W



To convert a Magnetic Direction to a Grid Direction, Add 6.36°  
To convert a Magnetic Direction to a True Direction, Add 6.72° East  
To convert a True Direction to a Grid Direction, Subtract 0.36°







## **Midland**

**Lea County, NM (NAD 83 NME)  
Ruthless 11 Fed Com  
#503H  
OH**

**Design: OH**

## **Final PVA**

**16 July, 2021**



## Final PVA

|                  |                             |                                     |                      |
|------------------|-----------------------------|-------------------------------------|----------------------|
| <b>Company:</b>  | Midland                     | <b>Local Co-ordinate Reference:</b> | Well #503H           |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>TVD Reference:</b>               | KB = 25 @ 3523.0usft |
| <b>Site:</b>     | Ruthless 11 Fed Com         | <b>MD Reference:</b>                | KB = 25 @ 3523.0usft |
| <b>Well:</b>     | #503H                       | <b>North Reference:</b>             | Grid                 |
| <b>Wellbore:</b> | OH                          | <b>Survey Calculation Method:</b>   | Minimum Curvature    |
| <b>Design:</b>   | OH                          | <b>Database:</b>                    | PEDM                 |

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

| Site                  | Ruthless 11 Fed Com |                 |  |                   |  |
|-----------------------|---------------------|-----------------|--|-------------------|--|
| Site Position:        |                     | Northing:       |  | Latitude:         |  |
| From:                 | Map                 | 419,142.00 usft |  | 32° 9' 1.687 N    |  |
| Position Uncertainty: |                     | Easting:        |  | Longitude:        |  |
| 0.0 usft              |                     | 752,042.00 usft |  | 103° 39' 9.029 W  |  |
|                       |                     | Slot Radius:    |  | Grid Convergence: |  |
|                       |                     | 13-3/16 "       |  | 0.36 °            |  |

|                      |       |          |                     |                 |               |                   |
|----------------------|-------|----------|---------------------|-----------------|---------------|-------------------|
| Well                 |       | #503H    |                     |                 |               |                   |
| Well Position        | +N/-S | 0.0 usft | Northing:           | 419,188.00 usft | Latitude:     | 32° 9' 2.085 N    |
|                      | +E/-W | 0.0 usft | Easting:            | 752,948.00 usft | Longitude:    | 103° 38' 58.487 W |
| Position Uncertainty |       | 0.0 usft | Wellhead Elevation: | usft            | Ground Level: | 3,498.0usft       |

|           |            |             |                 |               |                     |
|-----------|------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | OH         |             |                 |               |                     |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | IGRF2015   | 11/18/2019  | 6.72            | 59.95         | 47,637.09911730     |

|                   |                            |                 |                 |                   |
|-------------------|----------------------------|-----------------|-----------------|-------------------|
| Design            | OH                         |                 |                 |                   |
| Audit Notes:      |                            |                 |                 |                   |
| Version:          | 1.0                        | Phase:          | ACTUAL          | Tie On Depth: 0.0 |
| Vertical Section: | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°)  |
|                   | 0.0                        | 0.0             | 0.0             | 180.94            |

| Survey Program |           | Date 7/16/2021    |              |             |
|----------------|-----------|-------------------|--------------|-------------|
| From (usft)    | To (usft) | Survey (Wellbore) | Tool Name    | Description |
| 175.0          | 20,689.0  | SDI MWD #1 (OH)   | EOG MWD+IFR1 | MWD + IFR1  |

|                  |                             |                                     |                      |
|------------------|-----------------------------|-------------------------------------|----------------------|
| <b>Company:</b>  | Midland                     | <b>Local Co-ordinate Reference:</b> | Well #503H           |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>TVD Reference:</b>               | KB = 25 @ 3523.0usft |
| <b>Site:</b>     | Ruthless 11 Fed Com         | <b>MD Reference:</b>                | KB = 25 @ 3523.0usft |
| <b>Well:</b>     | #503H                       | <b>North Reference:</b>             | Grid                 |
| <b>Wellbore:</b> | OH                          | <b>Survey Calculation Method:</b>   | Minimum Curvature    |
| <b>Design:</b>   | OH                          | <b>Database:</b>                    | PEDM                 |

| Survey       |            |                      |               |               |               |                     |                      |                     |                        |                         |
|--------------|------------|----------------------|---------------|---------------|---------------|---------------------|----------------------|---------------------|------------------------|-------------------------|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | DLeg<br>(°/100usft) | Build<br>(°/100usft) | Turn<br>(°/100usft) | High to Plan<br>(usft) | Right to Plan<br>(usft) |
| 0.0          | 0.00       | 0.00                 | 0.0           | 0.0           | 0.0           | 0.00                | 0.00                 | 0.00                | 0.0                    | 0.0                     |
| 175.0        | 0.46       | 198.59               | 175.0         | -0.7          | -0.2          | 0.26                | 0.26                 | 0.00                | -0.7                   | 0.0                     |
| 221.0        | 1.22       | 198.53               | 221.0         | -1.3          | -0.4          | 1.65                | 1.65                 | -0.13               | -1.4                   | 0.0                     |
| 312.0        | 1.78       | 198.33               | 312.0         | -3.6          | -1.2          | 0.62                | 0.62                 | -0.22               | -3.8                   | 0.0                     |
| 402.0        | 2.06       | 183.51               | 401.9         | -6.5          | -1.7          | 0.63                | 0.31                 | -16.47              | -6.6                   | -1.3                    |
| 493.0        | 2.34       | 165.30               | 492.8         | -9.9          | -1.4          | 0.82                | 0.31                 | -20.01              | -9.3                   | -3.8                    |
| 584.0        | 2.03       | 147.41               | 583.8         | -13.1         | 0.0           | 0.82                | -0.34                | -19.66              | -11.0                  | -7.1                    |
| 674.0        | 1.73       | 152.77               | 673.7         | -15.6         | 1.5           | 0.39                | -0.33                | 5.96                | -14.6                  | -5.9                    |
| 764.0        | 1.83       | 137.53               | 763.7         | -17.9         | 3.1           | 0.54                | 0.11                 | -16.93              | -15.3                  | -9.8                    |
| 855.0        | 2.18       | 132.28               | 854.6         | -20.1         | 5.3           | 0.43                | 0.38                 | -5.77               | -17.5                  | -11.3                   |
| 945.0        | 1.98       | 137.76               | 944.6         | -22.4         | 7.6           | 0.31                | -0.22                | 6.09                | -21.7                  | -9.4                    |
| 1,038.0      | 1.73       | 136.50               | 1,037.5       | -24.7         | 9.7           | 0.27                | -0.27                | -1.35               | -24.5                  | -10.0                   |
| 1,129.0      | 1.20       | 140.77               | 1,128.5       | -26.4         | 11.2          | 0.59                | -0.58                | 4.69                | -27.5                  | -8.0                    |
| 1,220.0      | 0.92       | 122.81               | 1,219.5       | -27.5         | 12.4          | 0.47                | -0.31                | -19.74              | -25.4                  | -16.4                   |
| 1,311.0      | 3.20       | 30.83                | 1,310.4       | -25.7         | 14.4          | 3.69                | 2.51                 | -101.08             | 16.1                   | -27.1                   |
| 1,402.0      | 5.38       | 10.45                | 1,401.2       | -19.4         | 16.4          | 2.89                | 2.40                 | -22.40              | 22.2                   | -23.0                   |
| 1,492.0      | 5.49       | 8.07                 | 1,490.8       | -11.0         | 17.8          | 0.28                | 0.12                 | -2.64               | 20.2                   | -25.1                   |
| 1,582.0      | 5.59       | 345.89               | 1,580.4       | -2.4          | 17.3          | 2.37                | 0.11                 | -24.64              | 26.1                   | -17.7                   |
| 1,673.0      | 5.57       | 345.50               | 1,670.9       | 6.1           | 15.1          | 0.05                | -0.02                | -0.43               | 23.7                   | -18.0                   |
| 1,854.0      | 5.49       | 345.81               | 1,851.1       | 23.0          | 10.8          | 0.05                | -0.04                | 0.17                | 18.7                   | -19.1                   |
| 1,945.0      | 5.32       | 345.65               | 1,941.7       | 31.3          | 8.7           | 0.19                | -0.19                | -0.18               | 16.5                   | -19.5                   |
| 2,035.0      | 5.10       | 346.67               | 2,031.3       | 39.3          | 6.8           | 0.27                | -0.24                | 1.13                | 14.2                   | -20.3                   |
| 2,125.0      | 5.92       | 339.22               | 2,120.9       | 47.5          | 4.2           | 1.21                | 0.91                 | -8.28               | 14.4                   | -18.5                   |
| 2,216.0      | 5.65       | 338.04               | 2,211.4       | 56.1          | 0.8           | 0.32                | -0.30                | -1.30               | 11.9                   | -18.0                   |
| 2,306.0      | 5.05       | 338.37               | 2,301.0       | 63.8          | -2.3          | 0.67                | -0.67                | 0.37                | 9.7                    | -17.7                   |
| 2,397.0      | 4.61       | 337.21               | 2,391.7       | 70.9          | -5.2          | 0.50                | -0.48                | -1.27               | 8.7                    | -17.1                   |
| 2,487.0      | 4.32       | 337.18               | 2,481.4       | 77.4          | -7.9          | 0.32                | -0.32                | -0.03               | 8.0                    | -16.6                   |



## Final PVA

**Company:** Midland  
**Project:** Lea County, NM (NAD 83 NME)  
**Site:** Ruthless 11 Fed Com  
**Well:** #503H  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well #503H  
**TVD Reference:** KB = 25 @ 3523.0usft  
**MD Reference:** KB = 25 @ 3523.0usft  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** PEDM

| Survey       |            |                      |               |               |               |                     |                      |                     |                        |                         |
|--------------|------------|----------------------|---------------|---------------|---------------|---------------------|----------------------|---------------------|------------------------|-------------------------|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | DLeg<br>(°/100usft) | Build<br>(°/100usft) | Turn<br>(°/100usft) | High to Plan<br>(usft) | Right to Plan<br>(usft) |
| 2,578.0      | 4.98       | 342.25               | 2,572.1       | 84.3          | -10.4         | 0.85                | 0.73                 | 5.57                | 5.5                    | -17.0                   |
| 2,668.0      | 5.30       | 342.33               | 2,661.8       | 92.0          | -12.9         | 0.36                | 0.36                 | 0.09                | 3.6                    | -17.1                   |
| 2,759.0      | 5.66       | 340.86               | 2,752.4       | 100.2         | -15.6         | 0.42                | 0.40                 | -1.62               | 1.7                    | -17.1                   |
| 2,849.0      | 5.65       | 341.56               | 2,841.9       | 108.6         | -18.5         | 0.08                | -0.01                | 0.78                | -1.1                   | -17.1                   |
| 2,939.0      | 5.37       | 342.87               | 2,931.5       | 116.9         | -21.1         | 0.34                | -0.31                | 1.46                | -3.8                   | -17.1                   |
| 3,030.0      | 5.14       | 341.66               | 3,022.1       | 124.8         | -23.6         | 0.28                | -0.25                | -1.33               | -5.5                   | -17.3                   |
| 3,121.0      | 4.88       | 339.71               | 3,112.8       | 132.3         | -26.3         | 0.34                | -0.29                | -2.14               | -6.5                   | -17.4                   |
| 3,211.0      | 4.78       | 338.22               | 3,202.5       | 139.4         | -29.0         | 0.18                | -0.11                | -1.66               | -7.3                   | -17.3                   |
| 3,301.0      | 4.43       | 337.83               | 3,292.2       | 146.1         | -31.7         | 0.39                | -0.39                | -0.43               | -8.2                   | -17.0                   |
| 3,392.0      | 4.22       | 337.21               | 3,382.9       | 152.4         | -34.3         | 0.24                | -0.23                | -0.68               | -8.5                   | -16.6                   |
| 3,483.0      | 3.94       | 330.01               | 3,473.7       | 158.2         | -37.2         | 0.64                | -0.31                | -7.91               | -6.6                   | -16.7                   |
| 3,573.0      | 3.89       | 331.38               | 3,563.5       | 163.6         | -40.2         | 0.12                | -0.06                | 1.52                | -7.0                   | -15.4                   |
| 3,664.0      | 4.38       | 348.38               | 3,654.2       | 169.7         | -42.4         | 1.44                | 0.54                 | 18.68               | -11.3                  | -12.6                   |
| 3,754.0      | 3.89       | 349.92               | 3,744.0       | 176.1         | -43.6         | 0.56                | -0.54                | 1.71                | -11.9                  | -13.1                   |
| 3,845.0      | 4.35       | 343.95               | 3,834.8       | 182.4         | -45.1         | 0.69                | 0.51                 | -6.56               | -10.7                  | -14.8                   |
| 3,935.0      | 5.48       | 336.42               | 3,924.4       | 189.6         | -47.7         | 1.44                | 1.26                 | -8.37               | -10.1                  | -16.0                   |
| 4,026.0      | 4.89       | 335.54               | 4,015.1       | 197.1         | -51.1         | 0.65                | -0.65                | -0.97               | -11.7                  | -15.6                   |
| 4,116.0      | 3.93       | 344.00               | 4,104.8       | 203.6         | -53.5         | 1.29                | -1.07                | 9.40                | -14.5                  | -13.4                   |
| 4,207.0      | 2.82       | 0.26                 | 4,195.6       | 208.8         | -54.4         | 1.60                | -1.22                | 17.87               | -16.9                  | -10.0                   |
| 4,297.0      | 5.08       | 342.97               | 4,285.4       | 214.9         | -55.5         | 2.81                | 2.51                 | -19.21              | -13.0                  | -15.4                   |
| 4,388.0      | 6.72       | 336.25               | 4,375.9       | 223.6         | -58.9         | 1.95                | 1.80                 | -7.38               | -14.1                  | -16.7                   |
| 4,478.0      | 4.97       | 342.26               | 4,465.5       | 232.1         | -62.2         | 2.06                | -1.94                | 6.68                | -18.7                  | -14.6                   |
| 4,569.0      | 3.79       | 347.11               | 4,556.2       | 238.8         | -64.0         | 1.36                | -1.30                | 5.33                | -20.4                  | -13.3                   |
| 4,659.0      | 5.18       | 340.72               | 4,645.9       | 245.5         | -66.0         | 1.64                | 1.54                 | -7.10               | -19.6                  | -15.8                   |
| 4,734.0      | 7.24       | 336.77               | 4,720.5       | 253.1         | -69.0         | 2.80                | 2.75                 | -5.27               | -21.3                  | -16.9                   |
| 4,914.0      | 6.40       | 332.73               | 4,899.2       | 272.4         | -78.1         | 0.54                | -0.47                | -2.24               | -29.1                  | -17.2                   |
| 5,004.0      | 6.47       | 332.16               | 4,988.6       | 281.4         | -82.8         | 0.11                | 0.08                 | -0.63               | -32.8                  | -16.6                   |



|                  |                             |                                     |                      |
|------------------|-----------------------------|-------------------------------------|----------------------|
| <b>Company:</b>  | Midland                     | <b>Local Co-ordinate Reference:</b> | Well #503H           |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>TVD Reference:</b>               | KB = 25 @ 3523.0usft |
| <b>Site:</b>     | Ruthless 11 Fed Com         | <b>MD Reference:</b>                | KB = 25 @ 3523.0usft |
| <b>Well:</b>     | #503H                       | <b>North Reference:</b>             | Grid                 |
| <b>Wellbore:</b> | OH                          | <b>Survey Calculation Method:</b>   | Minimum Curvature    |
| <b>Design:</b>   | OH                          | <b>Database:</b>                    | PEDM                 |

| Survey       |            |                      |               |               |               |                     |                      |                     |                        |                         |
|--------------|------------|----------------------|---------------|---------------|---------------|---------------------|----------------------|---------------------|------------------------|-------------------------|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | DLeg<br>(°/100usft) | Build<br>(°/100usft) | Turn<br>(°/100usft) | High to Plan<br>(usft) | Right to Plan<br>(usft) |
| 5,094.0      | 6.93       | 332.93               | 5,078.0       | 290.7         | -87.6         | 0.52                | 0.51                 | 0.86                | -36.2                  | -14.9                   |
| 5,185.0      | 9.97       | 350.28               | 5,168.0       | 303.3         | -91.4         | 4.32                | 3.34                 | 19.07               | -41.9                  | -3.5                    |
| 5,275.0      | 11.07      | 355.94               | 5,256.5       | 319.6         | -93.4         | 1.68                | 1.22                 | 6.29                | -45.7                  | -2.0                    |
| 5,365.0      | 10.42      | 355.08               | 5,344.9       | 336.4         | -94.7         | 0.74                | -0.72                | -0.96               | -47.0                  | -6.7                    |
| 5,456.0      | 10.67      | 353.35               | 5,434.4       | 352.9         | -96.4         | 0.44                | 0.27                 | -1.90               | -46.1                  | -12.0                   |
| 5,546.0      | 10.47      | 351.32               | 5,522.9       | 369.3         | -98.5         | 0.47                | -0.22                | -2.26               | -45.0                  | -16.9                   |
| 5,637.0      | 9.79       | 349.74               | 5,612.5       | 385.1         | -101.2        | 0.81                | -0.75                | -1.74               | -43.1                  | -21.0                   |
| 5,727.0      | 9.20       | 347.88               | 5,701.2       | 399.6         | -104.0        | 0.74                | -0.66                | -2.07               | -39.9                  | -24.6                   |
| 5,817.0      | 10.97      | 344.63               | 5,789.8       | 414.9         | -107.8        | 2.07                | 1.97                 | -3.61               | -36.8                  | -28.2                   |
| 5,908.0      | 10.61      | 343.10               | 5,879.2       | 431.3         | -112.6        | 0.51                | -0.40                | -1.68               | -35.4                  | -29.9                   |
| 5,998.0      | 10.30      | 341.90               | 5,967.7       | 446.9         | -117.5        | 0.42                | -0.34                | -1.33               | -33.7                  | -31.0                   |
| 6,089.0      | 10.23      | 340.78               | 6,057.3       | 462.2         | -122.7        | 0.23                | -0.08                | -1.23               | -31.6                  | -31.7                   |
| 6,179.0      | 10.90      | 345.07               | 6,145.8       | 478.0         | -127.5        | 1.15                | 0.74                 | 4.77                | -32.9                  | -29.8                   |
| 6,270.0      | 11.01      | 343.55               | 6,235.1       | 494.7         | -132.2        | 0.34                | 0.12                 | -1.67               | -31.8                  | -31.6                   |
| 6,360.0      | 12.36      | 341.45               | 6,323.2       | 512.0         | -137.7        | 1.57                | 1.50                 | -2.33               | -31.5                  | -33.1                   |
| 6,451.0      | 11.64      | 339.34               | 6,412.2       | 529.9         | -144.0        | 0.93                | -0.79                | -2.32               | -31.6                  | -34.0                   |
| 6,541.0      | 11.15      | 338.27               | 6,500.5       | 546.4         | -150.4        | 0.59                | -0.54                | -1.19               | -31.3                  | -33.8                   |
| 6,631.0      | 10.07      | 335.54               | 6,588.9       | 561.7         | -156.9        | 1.32                | -1.20                | -3.03               | -28.9                  | -33.9                   |
| 6,722.0      | 7.67       | 327.98               | 6,678.8       | 574.1         | -163.4        | 2.93                | -2.64                | -8.31               | -22.6                  | -34.7                   |
| 6,812.0      | 5.17       | 321.44               | 6,768.3       | 582.3         | -169.1        | 2.89                | -2.78                | -7.27               | -16.2                  | -33.4                   |
| 6,903.0      | 2.08       | 305.35               | 6,859.1       | 586.5         | -173.0        | 3.54                | -3.40                | -17.68              | -3.5                   | -31.6                   |
| 6,993.0      | 1.07       | 244.71               | 6,949.0       | 587.1         | -175.1        | 2.01                | -1.12                | -67.38              | 23.4                   | -12.5                   |
| 7,084.0      | 1.26       | 248.09               | 7,040.0       | 586.4         | -176.8        | 0.22                | 0.21                 | 3.71                | 20.5                   | -9.1                    |
| 7,174.0      | 1.41       | 248.37               | 7,130.0       | 585.6         | -178.8        | 0.17                | 0.17                 | 0.31                | 18.2                   | -7.4                    |
| 7,265.0      | 1.40       | 256.67               | 7,221.0       | 584.9         | -180.9        | 0.22                | -0.01                | 9.12                | 14.8                   | -9.8                    |
| 7,355.0      | 1.57       | 244.75               | 7,310.9       | 584.1         | -183.1        | 0.39                | 0.19                 | -13.24              | 14.2                   | -6.7                    |
| 7,445.0      | 1.46       | 240.55               | 7,400.9       | 583.0         | -185.2        | 0.17                | -0.12                | -4.67               | 12.2                   | -5.8                    |

|                  |                             |                                     |                      |
|------------------|-----------------------------|-------------------------------------|----------------------|
| <b>Company:</b>  | Midland                     | <b>Local Co-ordinate Reference:</b> | Well #503H           |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>TVD Reference:</b>               | KB = 25 @ 3523.0usft |
| <b>Site:</b>     | Ruthless 11 Fed Com         | <b>MD Reference:</b>                | KB = 25 @ 3523.0usft |
| <b>Well:</b>     | #503H                       | <b>North Reference:</b>             | Grid                 |
| <b>Wellbore:</b> | OH                          | <b>Survey Calculation Method:</b>   | Minimum Curvature    |
| <b>Design:</b>   | OH                          | <b>Database:</b>                    | PEDM                 |

| Survey       |            |                      |               |               |               |                     |                      |                     |                        |                         |  |
|--------------|------------|----------------------|---------------|---------------|---------------|---------------------|----------------------|---------------------|------------------------|-------------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | DLeg<br>(°/100usft) | Build<br>(°/100usft) | Turn<br>(°/100usft) | High to Plan<br>(usft) | Right to Plan<br>(usft) |  |
| 7,536.0      | 1.35       | 250.71               | 7,491.9       | 582.1         | -187.2        | 0.30                | -0.12                | 11.16               | 8.8                    | -7.6                    |  |
| 7,627.0      | 1.51       | 250.57               | 7,582.9       | 581.4         | -189.4        | 0.18                | 0.18                 | -0.15               | 6.6                    | -7.6                    |  |
| 7,718.0      | 1.11       | 231.03               | 7,673.8       | 580.4         | -191.2        | 0.65                | -0.44                | -21.47              | 6.7                    | -5.4                    |  |
| 7,808.0      | 1.24       | 238.14               | 7,763.8       | 579.3         | -192.7        | 0.22                | 0.14                 | 7.90                | 4.2                    | -6.1                    |  |
| 7,898.0      | 1.52       | 227.84               | 7,853.8       | 578.0         | -194.4        | 0.41                | 0.31                 | -11.44              | 3.0                    | -5.4                    |  |
| 7,989.0      | 1.18       | 222.75               | 7,944.8       | 576.5         | -195.9        | 0.40                | -0.37                | -5.59               | 1.4                    | -5.2                    |  |
| 8,079.0      | 1.40       | 219.86               | 8,034.7       | 575.0         | -197.2        | 0.25                | 0.24                 | -3.21               | -0.4                   | -5.2                    |  |
| 8,170.0      | 1.38       | 216.42               | 8,125.7       | 573.3         | -198.6        | 0.09                | -0.02                | -3.78               | -2.3                   | -5.3                    |  |
| 8,260.0      | 1.93       | 217.34               | 8,215.7       | 571.2         | -200.2        | 0.61                | 0.61                 | 1.02                | -5.0                   | -5.2                    |  |
| 8,441.0      | 2.08       | 226.37               | 8,396.6       | 566.5         | -204.4        | 0.19                | 0.08                 | 4.99                | -12.0                  | -3.9                    |  |
| 8,533.0      | 2.17       | 225.76               | 8,488.5       | 564.1         | -206.9        | 0.10                | 0.10                 | -0.66               | -15.4                  | -4.0                    |  |
| 8,624.0      | 2.19       | 229.33               | 8,579.4       | 561.8         | -209.4        | 0.15                | 0.02                 | 3.92                | -19.1                  | -3.0                    |  |
| 8,715.0      | 2.20       | 232.52               | 8,670.4       | 559.6         | -212.1        | 0.13                | 0.01                 | 3.51                | -22.7                  | -1.8                    |  |
| 8,805.0      | 2.22       | 230.34               | 8,760.3       | 557.4         | -214.8        | 0.10                | 0.02                 | -2.42               | -26.1                  | -2.7                    |  |
| 8,896.0      | 2.64       | 210.36               | 8,851.2       | 554.5         | -217.2        | 1.03                | 0.46                 | -21.96              | -27.3                  | -12.1                   |  |
| 8,987.0      | 2.07       | 169.91               | 8,942.2       | 551.1         | -218.0        | 1.88                | -0.63                | -44.45              | -16.2                  | -28.3                   |  |
| 9,078.0      | 2.16       | 182.01               | 9,033.1       | 547.8         | -217.8        | 0.50                | 0.10                 | 13.30               | -25.1                  | -23.9                   |  |
| 9,169.0      | 2.32       | 206.35               | 9,124.0       | 544.4         | -218.7        | 1.05                | 0.18                 | 26.75               | -36.1                  | -10.7                   |  |
| 9,260.0      | 2.21       | 214.27               | 9,215.0       | 541.3         | -220.5        | 0.36                | -0.12                | 8.70                | -40.8                  | -5.4                    |  |
| 9,351.0      | 1.21       | 225.12               | 9,305.9       | 539.2         | -222.1        | 1.15                | -1.10                | 11.92               | -43.8                  | 2.7                     |  |
| 9,441.0      | 2.61       | 23.34                | 9,395.9       | 540.4         | -222.0        | 4.18                | 1.56                 | 175.80              | 40.5                   | 14.1                    |  |
| 9,532.0      | 1.46       | 22.73                | 9,486.8       | 543.3         | -220.7        | 1.26                | -1.26                | -0.67               | 37.1                   | 14.5                    |  |
| 9,622.0      | 0.81       | 307.56               | 9,576.8       | 544.8         | -220.8        | 1.64                | -0.72                | -83.52              | -5.4                   | 38.5                    |  |
| 9,713.0      | 0.77       | 317.68               | 9,667.8       | 545.6         | -221.7        | 0.16                | -0.04                | 11.12               | 0.2                    | 39.0                    |  |
| 9,803.0      | 1.37       | 37.64                | 9,757.8       | 546.9         | -221.5        | 1.61                | 0.67                 | 88.84               | 37.2                   | 7.2                     |  |
| 9,893.0      | 0.41       | 24.53                | 9,847.8       | 548.1         | -220.7        | 1.08                | -1.07                | -14.57              | 33.3                   | 15.2                    |  |

**Company:** Midland  
**Project:** Lea County, NM (NAD 83 NME)  
**Site:** Ruthless 11 Fed Com  
**Well:** #503H  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well #503H  
**TVD Reference:** KB = 25 @ 3523.0usft  
**MD Reference:** KB = 25 @ 3523.0usft  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** PEDM

## Survey

| MD<br>(usft)                                                                      | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | DLeg<br>(°/100usft) | Build<br>(°/100usft) | Turn<br>(°/100usft) | High to Plan<br>(usft) | Right to Plan<br>(usft) |
|-----------------------------------------------------------------------------------|------------|----------------------|---------------|---------------|---------------|---------------------|----------------------|---------------------|------------------------|-------------------------|
| 9,973.0                                                                           | 2.15       | 184.78               | 9,927.8       | 546.8         | -220.7        | 3.17                | 2.17                 | 200.32              | -27.4                  | -25.5                   |
| <b>KOP (MD=9973.0')</b>                                                           |            |                      |               |               |               |                     |                      |                     |                        |                         |
| 10,005.0                                                                          | 3.16       | 185.79               | 9,959.7       | 545.4         | -220.8        | 3.17                | 3.17                 | 3.14                | -29.3                  | -25.0                   |
| 10,095.0                                                                          | 12.52      | 178.36               | 10,048.8      | 533.1         | -220.8        | 10.44               | 10.40                | -8.26               | -30.6                  | -28.7                   |
| 10,148.1                                                                          | 15.96      | 174.46               | 10,100.3      | 520.1         | -219.9        | 6.73                | 6.48                 | -7.34               | -30.4                  | -29.9                   |
| <b>HL Crossing, MD:10148.1', TVD:10100.3', N/S:520.1', E/W:-219.9', INC:15.96</b> |            |                      |               |               |               |                     |                      |                     |                        |                         |
| 10,186.0                                                                          | 18.45      | 172.56               | 10,136.5      | 509.0         | -218.6        | 6.73                | 6.56                 | -5.02               | -29.7                  | -29.6                   |
| 10,276.0                                                                          | 30.72      | 173.49               | 10,218.1      | 471.9         | -214.2        | 13.64               | 13.63                | 1.03                | -31.5                  | -24.6                   |
| 10,367.0                                                                          | 40.58      | 179.83               | 10,292.0      | 419.0         | -211.4        | 11.56               | 10.84                | 6.97                | -36.9                  | -18.9                   |
| 10,457.0                                                                          | 48.02      | 176.67               | 10,356.4      | 356.3         | -209.4        | 8.62                | 8.27                 | -3.51               | -37.9                  | -18.5                   |
| 10,548.0                                                                          | 57.70      | 181.86               | 10,411.3      | 283.8         | -208.7        | 11.56               | 10.64                | 5.70                | -38.7                  | -15.8                   |
| 10,639.0                                                                          | 68.40      | 185.45               | 10,452.5      | 203.0         | -214.0        | 12.27               | 11.76                | 3.95                | -39.8                  | -20.6                   |
| 10,729.0                                                                          | 75.74      | 184.69               | 10,480.2      | 117.8         | -221.5        | 8.19                | 8.16                 | -0.84               | -39.0                  | -29.1                   |
| 10,820.0                                                                          | 81.64      | 181.53               | 10,498.0      | 28.7          | -226.3        | 7.32                | 6.48                 | -3.47               | -33.2                  | -35.0                   |
| 10,910.0                                                                          | 87.08      | 178.70               | 10,506.9      | -60.8         | -226.5        | 6.81                | 6.04                 | -3.14               | -24.7                  | -35.5                   |
| 11,001.0                                                                          | 87.62      | 178.29               | 10,511.1      | -151.6        | -224.1        | 0.74                | 0.59                 | -0.45               | -19.9                  | -33.4                   |
| 11,091.0                                                                          | 88.22      | 177.80               | 10,514.3      | -241.5        | -221.1        | 0.86                | 0.67                 | -0.54               | -16.0                  | -30.6                   |
| 11,182.0                                                                          | 88.66      | 176.98               | 10,516.8      | -332.4        | -216.9        | 1.02                | 0.48                 | -0.90               | -12.9                  | -26.7                   |
| 11,272.0                                                                          | 88.89      | 177.05               | 10,518.7      | -422.3        | -212.2        | 0.27                | 0.26                 | 0.08                | -10.4                  | -22.3                   |
| 11,363.0                                                                          | 87.31      | 177.80               | 10,521.8      | -513.1        | -208.1        | 1.92                | -1.74                | 0.82                | -6.8                   | -18.5                   |
| 11,453.0                                                                          | 87.69      | 178.17               | 10,525.7      | -603.0        | -205.0        | 0.59                | 0.42                 | 0.41                | -2.3                   | -15.6                   |
| 11,544.0                                                                          | 88.36      | 178.29               | 10,528.8      | -693.9        | -202.2        | 0.75                | 0.74                 | 0.13                | 1.5                    | -13.1                   |
| 11,634.0                                                                          | 89.03      | 178.33               | 10,530.9      | -783.8        | -199.5        | 0.75                | 0.74                 | 0.04                | 4.1                    | -10.7                   |
| 11,725.0                                                                          | 89.63      | 178.39               | 10,531.9      | -874.8        | -196.9        | 0.66                | 0.66                 | 0.07                | 5.8                    | -8.4                    |
| 11,815.0                                                                          | 90.03      | 177.90               | 10,532.2      | -964.7        | -194.0        | 0.70                | 0.44                 | -0.54               | 6.6                    | -5.7                    |
| 11,905.0                                                                          | 90.74      | 177.93               | 10,531.6      | -1,054.7      | -190.7        | 0.79                | 0.79                 | 0.03                | 6.6                    | -2.7                    |
| 11,996.0                                                                          | 90.64      | 177.43               | 10,530.5      | -1,145.6      | -187.0        | 0.56                | -0.11                | -0.55               | 6.2                    | 0.7                     |





## Final PVA

|                  |                             |                                     |                      |
|------------------|-----------------------------|-------------------------------------|----------------------|
| <b>Company:</b>  | Midland                     | <b>Local Co-ordinate Reference:</b> | Well #503H           |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>TVD Reference:</b>               | KB = 25 @ 3523.0usft |
| <b>Site:</b>     | Ruthless 11 Fed Com         | <b>MD Reference:</b>                | KB = 25 @ 3523.0usft |
| <b>Well:</b>     | #503H                       | <b>North Reference:</b>             | Grid                 |
| <b>Wellbore:</b> | OH                          | <b>Survey Calculation Method:</b>   | Minimum Curvature    |
| <b>Design:</b>   | OH                          | <b>Database:</b>                    | PEDM                 |

| Survey       |            |                      |               |               |               |                     |                      |                     |                        |                         |
|--------------|------------|----------------------|---------------|---------------|---------------|---------------------|----------------------|---------------------|------------------------|-------------------------|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | DLeg<br>(°/100usft) | Build<br>(°/100usft) | Turn<br>(°/100usft) | High to Plan<br>(usft) | Right to Plan<br>(usft) |
| 12,086.0     | 89.60      | 177.77               | 10,530.3      | -1,235.5      | -183.3        | 1.22                | -1.16                | 0.38                | 6.6                    | 4.2                     |
| 12,177.0     | 89.33      | 178.67               | 10,531.2      | -1,326.4      | -180.4        | 1.03                | -0.30                | 0.99                | 8.0                    | 6.7                     |
| 12,268.0     | 89.43      | 178.04               | 10,532.1      | -1,417.4      | -177.8        | 0.70                | 0.11                 | -0.69               | 9.6                    | 9.1                     |
| 12,358.0     | 89.46      | 178.79               | 10,533.0      | -1,507.4      | -175.3        | 0.83                | 0.03                 | 0.83                | 11.1                   | 11.3                    |
| 12,449.0     | 89.03      | 179.64               | 10,534.2      | -1,598.3      | -174.1        | 1.05                | -0.47                | 0.93                | 13.2                   | 12.2                    |
| 12,539.0     | 89.83      | 181.23               | 10,535.1      | -1,688.3      | -174.8        | 1.98                | 0.89                 | 1.77                | 15.0                   | 11.3                    |
| 12,630.0     | 90.10      | 182.05               | 10,535.2      | -1,779.3      | -177.4        | 0.95                | 0.30                 | 0.90                | 16.0                   | 8.4                     |
| 12,720.0     | 91.88      | 181.80               | 10,533.6      | -1,869.2      | -180.4        | 2.00                | 1.98                 | -0.28               | 15.3                   | 5.1                     |
| 12,811.0     | 93.05      | 181.93               | 10,529.7      | -1,960.1      | -183.4        | 1.29                | 1.29                 | 0.14                | 12.3                   | 1.9                     |
| 12,901.0     | 90.81      | 180.86               | 10,526.7      | -2,050.0      | -185.6        | 2.76                | -2.49                | -1.19               | 10.2                   | -0.6                    |
| 12,992.0     | 91.14      | 180.58               | 10,525.1      | -2,141.0      | -186.7        | 0.48                | 0.36                 | -0.31               | 9.5                    | -2.0                    |
| 13,082.0     | 92.01      | 180.02               | 10,522.6      | -2,231.0      | -187.2        | 1.15                | 0.97                 | -0.62               | 8.0                    | -2.8                    |
| 13,173.0     | 91.14      | 180.56               | 10,520.1      | -2,321.9      | -187.6        | 1.13                | -0.96                | 0.59                | 6.4                    | -3.5                    |
| 13,263.0     | 90.27      | 180.02               | 10,519.0      | -2,411.9      | -188.1        | 1.14                | -0.97                | -0.60               | 6.2                    | -4.3                    |
| 13,354.0     | 90.60      | 180.08               | 10,518.3      | -2,502.9      | -188.2        | 0.37                | 0.36                 | 0.07                | 6.4                    | -4.6                    |
| 13,444.0     | 88.96      | 178.34               | 10,518.7      | -2,592.9      | -186.9        | 2.66                | -1.82                | -1.93               | 7.1                    | -3.7                    |
| 13,535.0     | 90.54      | 179.08               | 10,519.1      | -2,683.9      | -184.9        | 1.92                | 1.74                 | 0.81                | 7.9                    | -1.9                    |
| 13,625.0     | 90.20      | 179.15               | 10,518.5      | -2,773.8      | -183.5        | 0.39                | -0.38                | 0.08                | 7.7                    | -0.8                    |
| 13,715.0     | 89.50      | 177.57               | 10,518.7      | -2,863.8      | -180.9        | 1.92                | -0.78                | -1.76               | 8.2                    | 1.5                     |
| 13,806.0     | 90.44      | 176.86               | 10,518.8      | -2,954.7      | -176.5        | 1.29                | 1.03                 | -0.78               | 8.7                    | 5.7                     |
| 13,896.0     | 90.40      | 176.92               | 10,518.1      | -3,044.6      | -171.6        | 0.08                | -0.04                | 0.07                | 8.4                    | 10.3                    |
| 13,986.0     | 91.44      | 177.89               | 10,516.7      | -3,134.5      | -167.5        | 1.58                | 1.16                 | 1.08                | 7.3                    | 14.1                    |
| 14,077.0     | 92.28      | 177.78               | 10,513.7      | -3,225.3      | -164.1        | 0.93                | 0.92                 | -0.12               | 4.7                    | 17.2                    |
| 14,167.0     | 91.14      | 178.19               | 10,511.0      | -3,315.2      | -160.9        | 1.35                | -1.27                | 0.46                | 2.4                    | 20.1                    |
| 14,258.0     | 90.17      | 180.16               | 10,510.0      | -3,406.2      | -159.6        | 2.41                | -1.07                | 2.16                | 1.7                    | 21.1                    |
| 14,348.0     | 90.70      | 180.56               | 10,509.3      | -3,496.2      | -160.2        | 0.74                | 0.59                 | 0.44                | 1.3                    | 20.3                    |
| 14,439.0     | 91.31      | 179.43               | 10,507.7      | -3,587.2      | -160.2        | 1.41                | 0.67                 | -1.24               | 0.1                    | 20.0                    |

|                  |                             |                                     |                      |
|------------------|-----------------------------|-------------------------------------|----------------------|
| <b>Company:</b>  | Midland                     | <b>Local Co-ordinate Reference:</b> | Well #503H           |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>TVD Reference:</b>               | KB = 25 @ 3523.0usft |
| <b>Site:</b>     | Ruthless 11 Fed Com         | <b>MD Reference:</b>                | KB = 25 @ 3523.0usft |
| <b>Well:</b>     | #503H                       | <b>North Reference:</b>             | Grid                 |
| <b>Wellbore:</b> | OH                          | <b>Survey Calculation Method:</b>   | Minimum Curvature    |
| <b>Design:</b>   | OH                          | <b>Database:</b>                    | PEDM                 |

| Survey       |            |                      |               |               |               |                     |                      |                     |                        |                         |
|--------------|------------|----------------------|---------------|---------------|---------------|---------------------|----------------------|---------------------|------------------------|-------------------------|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | DLeg<br>(°/100usft) | Build<br>(°/100usft) | Turn<br>(°/100usft) | High to Plan<br>(usft) | Right to Plan<br>(usft) |
| 14,529.0     | 92.22      | 179.37               | 10,505.0      | -3,677.2      | -159.2        | 1.01                | 1.01                 | -0.07               | -2.3                   | 20.7                    |
| 14,620.0     | 90.24      | 178.52               | 10,503.0      | -3,768.1      | -157.6        | 2.37                | -2.18                | -0.93               | -3.9                   | 22.1                    |
| 14,711.0     | 90.84      | 178.56               | 10,502.1      | -3,859.1      | -155.2        | 0.66                | 0.66                 | 0.04                | -4.4                   | 24.1                    |
| 14,801.0     | 89.70      | 180.43               | 10,501.7      | -3,949.1      | -154.4        | 2.43                | -1.27                | 2.08                | -4.5                   | 24.6                    |
| 14,891.0     | 90.74      | 180.30               | 10,501.4      | -4,039.1      | -155.0        | 1.16                | 1.16                 | -0.14               | -4.4                   | 23.8                    |
| 14,982.0     | 90.87      | 180.82               | 10,500.1      | -4,130.1      | -155.9        | 0.59                | 0.14                 | 0.57                | -5.4                   | 22.6                    |
| 15,073.0     | 89.56      | 181.16               | 10,499.8      | -4,221.0      | -157.5        | 1.49                | -1.44                | 0.37                | -5.3                   | 20.8                    |
| 15,164.0     | 90.20      | 182.11               | 10,499.9      | -4,312.0      | -160.1        | 1.26                | 0.70                 | 1.04                | -4.8                   | 17.9                    |
| 15,254.0     | 90.20      | 181.61               | 10,499.6      | -4,402.0      | -163.0        | 0.56                | 0.00                 | -0.56               | -4.7                   | 14.7                    |
| 15,345.0     | 89.56      | 180.83               | 10,499.8      | -4,492.9      | -164.9        | 1.11                | -0.70                | -0.86               | -4.2                   | 12.5                    |
| 15,436.0     | 90.70      | 180.27               | 10,499.6      | -4,583.9      | -165.8        | 1.40                | 1.25                 | -0.62               | -4.0                   | 11.3                    |
| 15,527.0     | 92.72      | 180.51               | 10,496.9      | -4,674.9      | -166.4        | 2.24                | 2.22                 | 0.26                | -6.4                   | 10.4                    |
| 15,618.0     | 90.64      | 182.67               | 10,494.2      | -4,765.8      | -169.0        | 3.29                | -2.29                | 2.37                | -8.7                   | 7.6                     |
| 15,708.0     | 88.79      | 182.70               | 10,494.7      | -4,855.7      | -173.2        | 2.06                | -2.06                | 0.03                | -7.9                   | 3.1                     |
| 15,799.0     | 87.28      | 182.24               | 10,497.8      | -4,946.5      | -177.1        | 1.73                | -1.66                | -0.51               | -4.4                   | -1.1                    |
| 15,889.0     | 88.09      | 181.67               | 10,501.4      | -5,036.4      | -180.2        | 1.10                | 0.90                 | -0.63               | -0.4                   | -4.4                    |
| 15,980.0     | 90.77      | 181.16               | 10,502.3      | -5,127.4      | -182.4        | 3.00                | 2.95                 | -0.56               | 0.9                    | -6.9                    |
| 16,070.0     | 88.15      | 179.76               | 10,503.2      | -5,217.4      | -183.1        | 3.30                | -2.91                | -1.56               | 2.1                    | -7.9                    |
| 16,161.0     | 88.99      | 179.51               | 10,505.5      | -5,308.3      | -182.5        | 0.96                | 0.92                 | -0.27               | 4.7                    | -7.6                    |
| 16,251.0     | 89.26      | 178.25               | 10,506.8      | -5,398.3      | -180.8        | 1.43                | 0.30                 | -1.40               | 6.4                    | -6.1                    |
| 16,342.0     | 87.95      | 178.24               | 10,509.0      | -5,489.2      | -178.0        | 1.44                | -1.44                | -0.01               | 9.0                    | -3.6                    |
| 16,432.0     | 89.13      | 179.03               | 10,511.3      | -5,579.2      | -175.9        | 1.58                | 1.31                 | 0.88                | 11.7                   | -1.8                    |
| 16,523.0     | 90.67      | 179.37               | 10,511.5      | -5,670.2      | -174.6        | 1.73                | 1.69                 | 0.37                | 12.2                   | -0.8                    |
| 16,613.0     | 93.60      | 182.11               | 10,508.1      | -5,760.1      | -175.7        | 4.46                | 3.26                 | 3.04                | 9.2                    | -2.2                    |
| 16,704.0     | 91.18      | 182.41               | 10,504.3      | -5,850.9      | -179.3        | 2.68                | -2.66                | 0.33                | 5.7                    | -6.1                    |
| 16,794.0     | 91.71      | 183.07               | 10,502.1      | -5,940.8      | -183.6        | 0.94                | 0.59                 | 0.73                | 3.9                    | -10.7                   |
| 16,884.0     | 89.63      | 181.90               | 10,501.0      | -6,030.7      | -187.5        | 2.65                | -2.31                | -1.30               | 3.1                    | -14.8                   |

|                  |                             |                                     |                      |
|------------------|-----------------------------|-------------------------------------|----------------------|
| <b>Company:</b>  | Midland                     | <b>Local Co-ordinate Reference:</b> | Well #503H           |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>TVD Reference:</b>               | KB = 25 @ 3523.0usft |
| <b>Site:</b>     | Ruthless 11 Fed Com         | <b>MD Reference:</b>                | KB = 25 @ 3523.0usft |
| <b>Well:</b>     | #503H                       | <b>North Reference:</b>             | Grid                 |
| <b>Wellbore:</b> | OH                          | <b>Survey Calculation Method:</b>   | Minimum Curvature    |
| <b>Design:</b>   | OH                          | <b>Database:</b>                    | PEDM                 |

| Survey       |            |                      |               |               |               |                     |                      |                     |                        |                         |
|--------------|------------|----------------------|---------------|---------------|---------------|---------------------|----------------------|---------------------|------------------------|-------------------------|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | DLeg<br>(°/100usft) | Build<br>(°/100usft) | Turn<br>(°/100usft) | High to Plan<br>(usft) | Right to Plan<br>(usft) |
| 16,975.0     | 89.70      | 181.31               | 10,501.6      | -6,121.6      | -190.1        | 0.65                | 0.08                 | -0.65               | 4.0                    | -17.7                   |
| 17,065.0     | 90.13      | 181.44               | 10,501.7      | -6,211.6      | -192.2        | 0.50                | 0.48                 | 0.14                | 4.5                    | -20.1                   |
| 17,176.0     | 91.68      | 181.96               | 10,499.9      | -6,322.6      | -195.5        | 1.47                | 1.40                 | 0.47                | 3.2                    | -23.7                   |
| 17,267.0     | 92.32      | 183.35               | 10,496.8      | -6,413.4      | -199.7        | 1.68                | 0.70                 | 1.53                | 0.5                    | -28.2                   |
| 17,358.0     | 92.02      | 182.01               | 10,493.3      | -6,504.2      | -204.0        | 1.51                | -0.33                | -1.47               | -2.6                   | -32.8                   |
| 17,449.0     | 91.61      | 181.05               | 10,490.4      | -6,595.2      | -206.4        | 1.15                | -0.45                | -1.05               | -5.2                   | -35.5                   |
| 17,540.0     | 90.67      | 180.43               | 10,488.6      | -6,686.1      | -207.6        | 1.24                | -1.03                | -0.68               | -6.7                   | -36.9                   |
| 17,630.0     | 90.74      | 179.44               | 10,487.5      | -6,776.1      | -207.5        | 1.10                | 0.08                 | -1.10               | -7.4                   | -37.1                   |
| 17,721.0     | 89.93      | 179.05               | 10,487.0      | -6,867.1      | -206.3        | 0.99                | -0.89                | -0.43               | -7.6                   | -36.2                   |
| 17,811.0     | 90.37      | 178.14               | 10,486.8      | -6,957.1      | -204.1        | 1.12                | 0.49                 | -1.01               | -7.5                   | -34.2                   |
| 17,902.0     | 91.48      | 177.19               | 10,485.3      | -7,048.0      | -200.4        | 1.61                | 1.22                 | -1.04               | -8.6                   | -30.8                   |
| 17,992.0     | 90.40      | 177.43               | 10,483.8      | -7,137.9      | -196.2        | 1.23                | -1.20                | 0.27                | -9.7                   | -26.9                   |
| 18,083.0     | 87.98      | 177.02               | 10,485.1      | -7,228.8      | -191.8        | 2.70                | -2.66                | -0.45               | -8.0                   | -22.8                   |
| 18,173.0     | 87.32      | 177.55               | 10,488.8      | -7,318.6      | -187.5        | 0.94                | -0.73                | 0.59                | -4.0                   | -18.8                   |
| 18,264.0     | 87.55      | 177.03               | 10,492.9      | -7,409.4      | -183.2        | 0.62                | 0.25                 | -0.57               | 0.5                    | -14.7                   |
| 18,354.0     | 88.76      | 178.17               | 10,495.8      | -7,499.3      | -179.4        | 1.85                | 1.34                 | 1.27                | 3.8                    | -11.3                   |
| 18,445.0     | 90.81      | 179.13               | 10,496.1      | -7,590.2      | -177.3        | 2.49                | 2.25                 | 1.05                | 4.8                    | -9.4                    |
| 18,536.0     | 90.84      | 178.54               | 10,494.8      | -7,681.2      | -175.4        | 0.65                | 0.03                 | -0.65               | 4.3                    | -7.8                    |
| 18,627.0     | 90.84      | 178.40               | 10,493.4      | -7,772.2      | -173.0        | 0.15                | 0.00                 | -0.15               | 3.8                    | -5.7                    |
| 18,717.0     | 90.91      | 177.65               | 10,492.1      | -7,862.1      | -169.9        | 0.84                | 0.08                 | -0.83               | 3.2                    | -2.8                    |
| 18,809.0     | 90.47      | 176.38               | 10,491.0      | -7,954.0      | -165.1        | 1.46                | -0.48                | -1.38               | 2.8                    | 1.7                     |
| 18,900.0     | 89.83      | 177.41               | 10,490.7      | -8,044.8      | -160.2        | 1.33                | -0.70                | 1.13                | 3.4                    | 6.3                     |
| 18,991.0     | 90.54      | 177.87               | 10,490.4      | -8,135.7      | -156.4        | 0.93                | 0.78                 | 0.51                | 3.9                    | 9.8                     |
| 19,082.0     | 89.77      | 177.87               | 10,490.2      | -8,226.7      | -153.1        | 0.85                | -0.85                | 0.00                | 4.4                    | 12.9                    |
| 19,172.0     | 90.30      | 179.32               | 10,490.1      | -8,316.6      | -150.9        | 1.72                | 0.59                 | 1.61                | 5.1                    | 14.8                    |
| 19,264.0     | 91.78      | 179.86               | 10,488.5      | -8,408.6      | -150.2        | 1.71                | 1.61                 | 0.59                | 4.2                    | 15.2                    |
| 19,354.0     | 91.98      | 179.48               | 10,485.5      | -8,498.6      | -149.7        | 0.48                | 0.22                 | -0.42               | 2.1                    | 15.4                    |



## Final PVA

**Company:** Midland  
**Project:** Lea County, NM (NAD 83 NME)  
**Site:** Ruthless 11 Fed Com  
**Well:** #503H  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well #503H  
**TVD Reference:** KB = 25 @ 3523.0usft  
**MD Reference:** KB = 25 @ 3523.0usft  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** PEDM

## Survey

| MD<br>(usft)                                 | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | DLeg<br>(°/100usft) | Build<br>(°/100usft) | Turn<br>(°/100usft) | High to Plan<br>(usft) | Right to Plan<br>(usft) |
|----------------------------------------------|------------|----------------------|---------------|---------------|---------------|---------------------|----------------------|---------------------|------------------------|-------------------------|
| 19,445.0                                     | 92.12      | 178.86               | 10,482.3      | -8,589.5      | -148.4        | 0.70                | 0.15                 | -0.68               | -0.4                   | 16.5                    |
| 19,535.0                                     | 90.81      | 179.72               | 10,480.0      | -8,679.5      | -147.2        | 1.74                | -1.46                | 0.96                | -1.9                   | 17.3                    |
| 19,626.0                                     | 91.41      | 180.04               | 10,478.2      | -8,770.4      | -147.1        | 0.75                | 0.66                 | 0.35                | -2.9                   | 17.2                    |
| 19,717.0                                     | 89.66      | 180.02               | 10,477.3      | -8,861.4      | -147.1        | 1.92                | -1.92                | -0.02               | -3.0                   | 16.9                    |
| 19,808.0                                     | 89.70      | 179.90               | 10,477.9      | -8,952.4      | -147.0        | 0.14                | 0.04                 | -0.13               | -1.7                   | 16.7                    |
| 19,899.0                                     | 90.03      | 180.16               | 10,478.1      | -9,043.4      | -147.1        | 0.46                | 0.36                 | 0.29                | -0.7                   | 16.3                    |
| 19,989.0                                     | 90.47      | 180.22               | 10,477.7      | -9,133.4      | -147.4        | 0.49                | 0.49                 | 0.07                | -0.3                   | 15.8                    |
| 20,080.0                                     | 90.74      | 179.85               | 10,476.7      | -9,224.4      | -147.4        | 0.50                | 0.30                 | -0.41               | -0.5                   | 15.4                    |
| 20,170.0                                     | 91.27      | 179.21               | 10,475.1      | -9,314.4      | -146.7        | 0.92                | 0.59                 | -0.71               | -1.3                   | 15.9                    |
| 20,261.0                                     | 91.61      | 179.05               | 10,472.8      | -9,405.4      | -145.3        | 0.41                | 0.37                 | -0.18               | -2.8                   | 17.0                    |
| 20,351.0                                     | 92.25      | 178.10               | 10,469.8      | -9,495.3      | -143.1        | 1.27                | 0.71                 | -1.06               | -5.1                   | 19.0                    |
| 20,442.0                                     | 92.89      | 177.92               | 10,465.7      | -9,586.1      | -139.9        | 0.73                | 0.70                 | -0.20               | -8.4                   | 21.8                    |
| 20,532.0                                     | 93.46      | 177.94               | 10,460.7      | -9,676.0      | -136.7        | 0.63                | 0.63                 | 0.02                | -12.6                  | 24.8                    |
| 20,624.0                                     | 94.41      | 177.47               | 10,454.4      | -9,767.7      | -133.0        | 1.15                | 1.03                 | -0.51               | -18.0                  | 28.2                    |
| <b>Final MWD Survey (MD=20624.0')</b>        |            |                      |               |               |               |                     |                      |                     |                        |                         |
| 20,689.0                                     | 94.41      | 177.47               | 10,449.4      | -9,832.4      | -130.1        | 0.00                | 0.00                 | 0.00                | -22.5                  | 30.9                    |
| <b>Final Projection to Bit (MD=20689.0')</b> |            |                      |               |               |               |                     |                      |                     |                        |                         |

## Design Annotations

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                                                               |
|-----------------------------|-----------------------------|-------------------|-----------------|-----------------------------------------------------------------------|
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                                                       |
| 9,973.0                     | 9,927.8                     | 546.8             | -220.7          | KOP (MD=9973.0')                                                      |
| 10,148.1                    | 10,100.3                    | 520.1             | -219.9          | HL Crossing, MD:10148.1', TVD:10100.3', N/S:520.1', E/W:-219.9', INC: |
| 20,624.0                    | 10,454.4                    | -9,767.7          | -133.0          | Final MWD Survey (MD=20624.0')                                        |
| 20,689.0                    | 10,449.4                    | -9,832.4          | -130.1          | Final Projection to Bit (MD=20689.0')                                 |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



Intent ☐ As Drilled ☐

|                |                |             |
|----------------|----------------|-------------|
| API #          |                |             |
| Operator Name: | Property Name: | Well Number |

## Kick Off Point (KOP)

|          |         |          |       |     |           |          |      |          |        |
|----------|---------|----------|-------|-----|-----------|----------|------|----------|--------|
| UL       | Section | Township | Range | Lot | Feet      | From N/S | Feet | From E/W | County |
| Latitude |         |          |       |     | Longitude |          |      |          | NAD    |

## First Take Point (FTP)

|          |         |          |       |     |           |          |      |          |        |
|----------|---------|----------|-------|-----|-----------|----------|------|----------|--------|
| UL       | Section | Township | Range | Lot | Feet      | From N/S | Feet | From E/W | County |
| Latitude |         |          |       |     | Longitude |          |      |          | NAD    |

## Last Take Point (LTP)

|          |         |          |       |     |           |          |      |          |        |
|----------|---------|----------|-------|-----|-----------|----------|------|----------|--------|
| UL       | Section | Township | Range | Lot | Feet      | From N/S | Feet | From E/W | County |
| Latitude |         |          |       |     | Longitude |          |      |          | NAD    |

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

|                |                |             |
|----------------|----------------|-------------|
| API #          |                |             |
| Operator Name: | Property Name: | Well Number |

KZ 06/29/2018

|                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------|---------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------|------------|---------------|
| Submit To Appropriate District Office<br>Two Copies<br><u>District I</u><br>1625 N. French Dr., Hobbs, NM 88240<br><u>District II</u><br>811 S. First St., Artesia, NM 88210<br><u>District III</u><br>1000 Rio Brazos Rd., Aztec, NM 87410<br><u>District IV</u><br>1220 S. St. Francis Dr., Santa Fe, NM 87505                                                                      |                                            | <b>State of New Mexico</b><br><b>Energy, Minerals and Natural Resources</b><br><br><b>Oil Conservation Division</b><br><b>1220 South St. Francis Dr.</b><br><b>Santa Fe, NM 87505</b> |                                                               |                          | <b>Form C-105</b><br>Revised August 1, 2011 |                                                             |                                                                          |                                                                        |            |               |
| WELL COMPLETION OR RECOMPLETION REPORT AND LOG                                                                                                                                                                                                                                                                                                                                        |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| 4. Reason for filing:<br><input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)<br><br><input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC) |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          | 5. Lease Name or Unit Agreement Name<br><b>RUTHLESS 11 FEDERAL COM</b> |            |               |
|                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          | 6. Well Number:<br><b>503H</b>                                         |            |               |
| 7. Type of Completion:<br><input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER _____                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| 8. Name of Operator<br><b>EOG RESOURCES INC</b>                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             | 9. OGRID<br><b>7377</b>                                                  |                                                                        |            |               |
| 10. Address of Operator<br><b>PO BOX 2267 MIDLAND, TEXAS 79702</b>                                                                                                                                                                                                                                                                                                                    |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             | 11. Pool name or Wildcat<br><b>WC025 G08 S253235G; LOWER BONE SPRING</b> |                                                                        |            |               |
| 12. Location                                                                                                                                                                                                                                                                                                                                                                          | Unit Ltr                                   | Section                                                                                                                                                                               | Township                                                      | Range                    | Lot                                         | Feet from the                                               | N/S Line                                                                 | Feet from the                                                          | E/W Line   | County        |
| <b>Surface:</b>                                                                                                                                                                                                                                                                                                                                                                       | C                                          | 11                                                                                                                                                                                    | 25S                                                           | 32E                      |                                             | 622                                                         | NORTH                                                                    | 1440                                                                   | WEST       | LEA           |
| <b>BH:</b>                                                                                                                                                                                                                                                                                                                                                                            | M                                          | 14                                                                                                                                                                                    | 25S                                                           | 32E                      |                                             | 110                                                         | SOUTH                                                                    | 1280                                                                   | WEST       | LEA           |
| 13. Date Spudded<br><b>05/07/2021</b>                                                                                                                                                                                                                                                                                                                                                 | 14. Date T.D. Reached<br><b>07/02/2021</b> |                                                                                                                                                                                       | 15. Date Rig Released<br><b>07/03/2021</b>                    |                          |                                             | 16. Date Completed (Ready to Produce)<br><b>01/18/2022</b>  |                                                                          | 17. Elevations (DF and RKB, RT, GR, etc.) <b>3498' GL</b>              |            |               |
| 18. Total Measured Depth of Well<br><b>MD 20,689' TVD 10,449'</b>                                                                                                                                                                                                                                                                                                                     |                                            |                                                                                                                                                                                       | 19. Plug Back Measured Depth<br><b>MD 20,666' TVD 10,449'</b> |                          |                                             | 20. Was Directional Survey Made?<br><b>YES</b>              |                                                                          | 21. Type Electric and Other Logs Run<br><b>None</b>                    |            |               |
| 22. Producing Interval(s), of this completion - Top, Bottom, Name<br><b>BONE SPRING 10,545 - 20,666'</b>                                                                                                                                                                                                                                                                              |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| <b>23. CASING RECORD (Report all strings set in well)</b>                                                                                                                                                                                                                                                                                                                             |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| CASING SIZE                                                                                                                                                                                                                                                                                                                                                                           |                                            | WEIGHT LB./FT.                                                                                                                                                                        |                                                               | DEPTH SET                |                                             | HOLE SIZE                                                   |                                                                          | CEMENTING RECORD                                                       |            | AMOUNT PULLED |
| 13 3/8"                                                                                                                                                                                                                                                                                                                                                                               |                                            | 54.5# J-55                                                                                                                                                                            |                                                               | 1005'                    |                                             | 17 1/2"                                                     |                                                                          | 1071 CL C/CIRC                                                         |            |               |
| 9 5/8"                                                                                                                                                                                                                                                                                                                                                                                |                                            | 40# HCL 80                                                                                                                                                                            |                                                               | 4,787'                   |                                             | 12 1/4"                                                     |                                                                          | 1365 CL C & H/CIRC                                                     |            |               |
| 5 1/2"                                                                                                                                                                                                                                                                                                                                                                                |                                            | 20# ECP 110                                                                                                                                                                           |                                                               | 20,674'                  |                                             | 8 1/2"                                                      |                                                                          | 3585 CL H TOC 4370' CB                                                 |            |               |
|                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
|                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| <b>24. LINER RECORD</b>                                                                                                                                                                                                                                                                                                                                                               |                                            |                                                                                                                                                                                       |                                                               |                          |                                             | <b>25. TUBING RECORD</b>                                    |                                                                          |                                                                        |            |               |
| SIZE                                                                                                                                                                                                                                                                                                                                                                                  | TOP                                        | BOTTOM                                                                                                                                                                                | SACKS CEMENT                                                  | SCREEN                   |                                             | SIZE                                                        | DEPTH SET                                                                |                                                                        | PACKER SET |               |
|                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
|                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| 26. Perforation record (interval, size, and number)<br><br><b>10,545 - 20,666'   3 1/8", 2175 holes</b>                                                                                                                                                                                                                                                                               |                                            |                                                                                                                                                                                       |                                                               |                          |                                             | 27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.             |                                                                          |                                                                        |            |               |
|                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             | DEPTH INTERVAL                                              |                                                                          | AMOUNT AND KIND MATERIAL USED                                          |            |               |
|                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             | 10,545 - 20,666'                                            |                                                                          | FRAC W/24,893,800 lbs proppant, 403,527 bbls load fld                  |            |               |
|                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| <b>28. PRODUCTION</b>                                                                                                                                                                                                                                                                                                                                                                 |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| Date First Production<br><b>01/18/2022</b>                                                                                                                                                                                                                                                                                                                                            |                                            | Production Method ( <i>Flowing, gas lift, pumping - Size and type pump</i> )<br><b>Flowing</b>                                                                                        |                                                               |                          |                                             | Well Status ( <i>Prod. or Shut-in</i> )<br><b>Producing</b> |                                                                          |                                                                        |            |               |
| Date of Test<br><b>01/29/2022</b>                                                                                                                                                                                                                                                                                                                                                     | Hours Tested<br><b>24</b>                  | Choke Size<br><b>128</b>                                                                                                                                                              | Prod'n For Test Period                                        | Oil - Bbl<br><b>3701</b> | Gas - MCF<br><b>5924</b>                    | Water - Bbl.<br><b>7341</b>                                 | Gas - Oil Ratio<br><b>1600</b>                                           |                                                                        |            |               |
| Flow Tubing Press.                                                                                                                                                                                                                                                                                                                                                                    | Casing Pressure<br><b>872</b>              | Calculated 24-Hour Rate                                                                                                                                                               | Oil - Bbl.                                                    | Gas - MCF                | Water - Bbl.                                | Oil Gravity - API - ( <i>Corr.</i> )<br><b>44</b>           |                                                                          |                                                                        |            |               |
| 29. Disposition of Gas ( <i>Sold, used for fuel, vented, etc.</i> )<br><b>SOLD</b>                                                                                                                                                                                                                                                                                                    |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          | 30. Test Witnessed By                                                  |            |               |
| 31. List Attachments<br><b>C-102, C-104, Directional Survey, H spacing</b>                                                                                                                                                                                                                                                                                                            |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| 32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.                                                                                                                                                                                                                                                                                    |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| 33. If an on-site burial was used at the well, report the exact location of the on-site burial:                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| Latitude _____ Longitude _____ NAD 1927 1983                                                                                                                                                                                                                                                                                                                                          |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |
| I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief<br>Printed<br>Signature <b>Kay Maddox</b> Name <b>Kay Maddox</b> Title <b>Senior Regulatory Specialist</b> Date <b>02/22/2022</b><br>E-mail Address <b>kay_maddox@eogresources.com</b>                                                             |                                            |                                                                                                                                                                                       |                                                               |                          |                                             |                                                             |                                                                          |                                                                        |            |               |

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

| Southeastern New Mexico |         |       | Northwestern New Mexico |         |       |                    |                  |
|-------------------------|---------|-------|-------------------------|---------|-------|--------------------|------------------|
| T. Anhy                 | Rustler | 860'  | T. Canyon               | Brushy  | 7143' | T. Ojo Alamo       | T. Penn A"       |
| T. Salt                 |         | 1174' | T. Strawn               |         |       | T. Kirtland        | T. Penn. "B"     |
| B. Salt                 |         | 4570' | T. Atoka                |         |       | T. Fruitland       | T. Penn. "C"     |
| T. Yates                |         |       | T. Miss                 |         |       | T. Pictured Cliffs | T. Penn. "D"     |
| T. 7 Rivers             |         |       | T. Devonian             |         |       | T. Cliff House     | T. Leadville     |
| T. Queen                |         |       | T. Silurian             |         |       | T. Menefee         | T. Madison       |
| T. Grayburg             |         |       | T. Montoya              |         |       | T. Point Lookout   | T. Elbert        |
| T. San Andres           |         |       | T. Simpson              |         |       | T. Mancos          | T. McCracken     |
| T. Glorieta             |         |       | T. McKee                |         |       | T. Gallup          | T. Ignacio Otzte |
| T. Paddock              |         |       | T. Ellenburger          |         |       | Base Greenhorn     | T. Granite       |
| T. Blinebry             |         |       | T. Gr. Wash             |         |       | T. Dakota          |                  |
| T. Tubb                 |         |       | T. Delaware Sand        |         |       | T. Morrison        |                  |
| T. Drinkard             |         |       | T. Bone Springs         |         |       | T. Todilto         |                  |
| T. Abo                  |         |       | T. 1st BS Sand          | 9855'   |       | T. Entrada         |                  |
| T. Wolfcamp             |         |       | T. 2nd BS Sand          | 10,393' |       | T. Wingate         |                  |
| T. Penn                 |         |       | T.                      |         |       | T. Chinle          |                  |
| T. Cisco (Bough C)      |         |       | T.                      |         |       | T. Permian         |                  |

No. 1, from.....to.....  
No. 2, from.....to.....  
No. 3, from.....to.....  
No. 4, from.....to.....

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....  
 No. 2, from.....to.....feet.....  
 No. 3, from.....to.....feet.....

| From | To | Thickness<br>In Feet | Lithology |
|------|----|----------------------|-----------|
|      |    |                      |           |

| From | To | Thickness<br>In Feet | Lithology |
|------|----|----------------------|-----------|
|      |    |                      |           |

**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 Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

ACKNOWLEDGMENTS  
  
Action 83429

ACKNOWLEDGMENTS

|                                                                             |                                                    |
|-----------------------------------------------------------------------------|----------------------------------------------------|
| Operator:<br>EOG RESOURCES INC<br>5509 Champions Drive<br>Midland, TX 79706 | OGRID:<br>7377                                     |
|                                                                             | Action Number:<br>83429                            |
|                                                                             | Action Type:<br>[C-104] Completion Packet (C-104C) |

ACKNOWLEDGMENTS

|                                     |                                                                                                                    |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.     |
| <input checked="" type="checkbox"/> | I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion. |



**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 Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 83429

CONDITIONS

|                                                                             |                                                    |
|-----------------------------------------------------------------------------|----------------------------------------------------|
| Operator:<br>EOG RESOURCES INC<br>5509 Champions Drive<br>Midland, TX 79706 | OGRID:<br>7377                                     |
|                                                                             | Action Number:<br>83429                            |
|                                                                             | Action Type:<br>[C-104] Completion Packet (C-104C) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|-----------|----------------|
| plmartinez | None      | 7/24/2024      |