



NM OIL CONSERVATION  
ARTESIA DISTRICT  
AUG 02 2017  
RECEIVED



**Tiger 14-24S-28E RB No. 222H(OH)**

**Eddy County, NM**

30.015-44119

**June 19, 2017**

**Job No. LNM5137117**

**ORIGINAL**

## Survey Completion Report



PRODIRECTIONAL

## Survey Certification Letter

June 19, 2017



Operator Name: Matador Resources  
Well Name: Tiger 14-24S-28E RB No. 222H(OH)  
County/Parish: Eddy County,  
State: NM  
Rig Name: Patterson 274  
Job Number: LNM5137117

This is to certify the surveys performed on the referenced well by Professional Directional Ent., Inc. are true and correct MWD Surveys, data provided as follows:

| Surveyor       | Surveyed Depths      | Projection to Bit | Dates Performed     | Type of Survey |
|----------------|----------------------|-------------------|---------------------|----------------|
| ProDirectional | 169' MD – 10,819' MD | 10,926' MD        | 04/16/17 – 04/23/17 | MWD-OWSG       |

Sincerely,

Mike Coats  
Well Planning  
Professional Directional

850 Conroe Park West Drive | Conroe, TX 77303 | Phone: 936.441.7266

prodirectional.com



## **Matador Resources**

**Eddy County, NM  
Tiger 14-24S-28E RB  
No. 222H  
OH**

**Survey: ProDirectional**

## **Survey Report**

**23 May, 2017**





# ProDirectional Survey Report



|           |                     |                              |                                                    |
|-----------|---------------------|------------------------------|----------------------------------------------------|
| Company:  | Matador Resources   | Local Co-ordinate Reference: | Well No. 222H                                      |
| Project:  | Eddy County, NM     | TVD Reference:               | Well @ 2993.00usft (GL: 2964' + KB: 29' (Patt274)) |
| Site:     | Tiger 14-24S-28E RB | MD Reference:                | Well @ 2993.00usft (GL: 2964' + KB: 29' (Patt274)) |
| Well:     | No. 222H            | North Reference:             | Grid                                               |
| Wellbore: | OH                  | Survey Calculation Method:   | Minimum Curvature                                  |
| Design:   | MWD                 | Database:                    | WellPlanner1                                       |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| Project     | Eddy County, NM                      |               |                |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum:  | NAD 1927 (NADCON CONUS)              |               |                |
| Map Zone:   | New Mexico East 3001                 |               |                |

|                       |                     |                   |                  |
|-----------------------|---------------------|-------------------|------------------|
| Site                  | Tiger 14-24S-28E RB |                   |                  |
| Site Position:        |                     | Northing:         | 440,880.00 usft  |
| From:                 | Map                 | Easting:          | 587,752.00 usft  |
| Position Uncertainty: | 3.30 usft           | Slot Radius:      | 13-3/16 "        |
|                       |                     | Latitude:         | 32° 12' 42.400 N |
|                       |                     | Longitude:        | 104° 2' 58.574 W |
|                       |                     | Grid Convergence: | 0.15 °           |

|                      |          |           |                     |                 |               |                  |
|----------------------|----------|-----------|---------------------|-----------------|---------------|------------------|
| Well                 | No. 222H |           |                     |                 |               |                  |
| Well Position        | +N/-S    | 0.00 usft | Northing:           | 443,860.00 usft | Latitude:     | 32° 13' 11.895 N |
|                      | +E/-W    | 0.00 usft | Easting:            | 587,601.00 usft | Longitude:    | 104° 3' 0.240 W  |
| Position Uncertainty |          | 0.00 usft | Wellhead Elevation: | usft            | Ground Level: | 2,964.00 usft    |

|           |            |             |                 |               |                     |
|-----------|------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | OH         |             |                 |               |                     |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | HDGM       | 1/5/2017    | 7.30            | 60.07         | 48,164.40           |

|                   |                            |                 |                 |                    |
|-------------------|----------------------------|-----------------|-----------------|--------------------|
| Design            |                            | MWD             |                 |                    |
| Audit Notes:      |                            |                 |                 |                    |
| Version:          | 1.0                        | Phase:          | ACTUAL          | Tie On Depth: 0.00 |
| Vertical Section: | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°)   |
|                   | 0.00                       | 0.00            | 0.00            | 271.02             |

|                |                |                   |            |             |
|----------------|----------------|-------------------|------------|-------------|
| Survey Program | Date 5/23/2017 |                   |            |             |
| From<br>(usft) | To<br>(usft)   | Survey (Wellbore) | Tool Name  | Description |
| 169.00         | 10,926.00      | Survey #1 (OH)    | MWD - OWSG | MWD - OWSG  |



ProDirectional  
Survey Report



|           |                     |                              |                                                   |
|-----------|---------------------|------------------------------|---------------------------------------------------|
| Company:  | Matador Resources   | Local Co-ordinate Reference: | Well No. 222H                                     |
| Project:  | Eddy County, NM     | TVD Reference:               | Well @ 2993.00usft (GL: 2964' + KB: 29' (Pat274)) |
| Site:     | Tiger 14-24S-28E RB | MD Reference:                | Well @ 2993.00usft (GL: 2964' + KB: 29' (Pat274)) |
| Well:     | No. 222H            | North Reference:             | Grid                                              |
| Wellbore: | OH                  | Survey Calculation Method:   | Minimum Curvature                                 |
| Design:   | MWD                 | Database:                    | WellPlanner1                                      |

| Survey                        |            |                      |               |                  |               |               |                            |                        |                    |                   |
|-------------------------------|------------|----------------------|---------------|------------------|---------------|---------------|----------------------------|------------------------|--------------------|-------------------|
| MD<br>(usft)                  | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | V. Sec<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | Northing<br>(usft) | Easting<br>(usft) |
| 0.00                          | 0.00       | 0.00                 | 0.00          | 0.00             | 0.00          | 0.00          | 0.00                       | 0.00                   | 443,860.00         | 587,601.00        |
| 169.00                        | 1.30       | 82.20                | 168.99        | -1.89            | 0.26          | 1.90          | 1.92                       | 82.20                  | 443,860.26         | 587,602.90        |
| Pro MWD First Survey: 169' MD |            |                      |               |                  |               |               |                            |                        |                    |                   |
| 323.00                        | 1.40       | 63.10                | 322.94        | -5.28            | 1.35          | 5.31          | 5.48                       | 75.75                  | 443,861.35         | 587,606.31        |
| 505.00                        | 1.50       | 77.80                | 504.89        | -9.57            | 2.86          | 9.62          | 10.03                      | 73.45                  | 443,862.86         | 587,610.62        |
| 693.00                        | 1.80       | 72.60                | 692.81        | -14.76           | 4.26          | 14.84         | 15.44                      | 73.98                  | 443,864.26         | 587,615.84        |
| 877.00                        | 0.90       | 73.10                | 876.75        | -18.88           | 5.54          | 18.98         | 19.78                      | 73.72                  | 443,865.54         | 587,619.98        |
| 1,068.00                      | 0.90       | 74.20                | 1,067.73      | -21.74           | 6.39          | 21.86         | 22.78                      | 73.71                  | 443,866.39         | 587,622.86        |
| 1,259.00                      | 3.40       | 110.20               | 1,258.59      | -28.53           | 4.84          | 28.62         | 29.03                      | 80.40                  | 443,864.84         | 587,629.62        |
| 1,447.00                      | 3.20       | 120.30               | 1,446.28      | -38.37           | 0.27          | 38.38         | 38.38                      | 89.60                  | 443,860.27         | 587,639.38        |
| 1,637.00                      | 2.70       | 116.40               | 1,636.02      | -47.04           | -4.40         | 46.97         | 47.18                      | 95.35                  | 443,855.60         | 587,647.97        |
| 1,828.00                      | 3.30       | 97.20                | 1,826.77      | -56.57           | -7.09         | 56.45         | 56.90                      | 97.15                  | 443,852.91         | 587,657.45        |
| 2,018.00                      | 4.00       | 115.20               | 2,016.39      | -68.05           | -10.59        | 67.88         | 68.70                      | 98.87                  | 443,849.41         | 587,668.88        |
| 2,209.00                      | 4.20       | 118.90               | 2,206.90      | -80.31           | -16.81        | 80.03         | 81.77                      | 101.86                 | 443,843.19         | 587,681.03        |
| 2,399.00                      | 7.00       | 103.60               | 2,395.98      | -97.77           | -22.90        | 97.38         | 100.03                     | 103.23                 | 443,837.10         | 587,698.38        |
| 2,590.00                      | 4.90       | 86.40                | 2,585.96      | -117.26          | -25.12        | 116.83        | 119.50                     | 102.13                 | 443,834.88         | 587,717.83        |
| 2,708.00                      | 4.50       | 93.10                | 2,703.56      | -126.91          | -25.05        | 126.48        | 128.94                     | 101.20                 | 443,834.95         | 587,727.48        |
| 2,907.00                      | 4.10       | 93.60                | 2,902.00      | -141.82          | -25.92        | 141.38        | 143.74                     | 100.39                 | 443,834.08         | 587,742.38        |
| 3,097.00                      | 6.00       | 80.70                | 3,091.26      | -158.38          | -24.74        | 157.96        | 159.89                     | 98.90                  | 443,835.26         | 587,758.96        |
| 3,288.00                      | 6.80       | 77.30                | 3,281.07      | -179.18          | -20.65        | 178.84        | 180.03                     | 96.59                  | 443,839.35         | 587,779.84        |
| 3,478.00                      | 6.80       | 77.00                | 3,469.73      | -201.02          | -15.64        | 200.78        | 201.38                     | 94.45                  | 443,844.36         | 587,801.78        |
| 3,669.00                      | 6.30       | 75.90                | 3,659.49      | -222.11          | -10.55        | 221.96        | 222.21                     | 92.72                  | 443,849.45         | 587,822.96        |
| 3,859.00                      | 6.20       | 75.60                | 3,848.36      | -242.07          | -5.45         | 242.01        | 242.07                     | 91.29                  | 443,854.55         | 587,843.01        |
| 4,050.00                      | 6.20       | 75.50                | 4,038.24      | -261.95          | -0.31         | 261.98        | 261.98                     | 90.07                  | 443,859.69         | 587,862.98        |
| 4,241.00                      | 5.80       | 72.80                | 4,228.19      | -281.05          | 5.13          | 281.19        | 281.23                     | 88.95                  | 443,865.13         | 587,882.19        |
| 4,431.00                      | 7.20       | 72.80                | 4,416.97      | -301.48          | 11.49         | 301.73        | 301.95                     | 87.82                  | 443,871.49         | 587,902.73        |
| 4,622.00                      | 6.60       | 93.70                | 4,606.61      | -323.82          | 14.32         | 324.12        | 324.44                     | 87.47                  | 443,874.32         | 587,925.12        |



# ProDirectional Survey Report



Company: Matador Resources  
Project: Eddy County, NM  
Site: Tiger 14-24S-28E RB  
Well: No. 222H  
Wellbore: OH  
Design: MWD

Local Co-ordinate Reference:  
TVD Reference:  
MD Reference:  
North Reference:  
Survey Calculation Method:  
Database:  
Well No. 222H  
Well @ 2993.00usft (GL: 2964' + KB: 29' (Patt274))  
Well @ 2993.00usft (GL: 2964' + KB: 29' (Patt274))  
Grid  
Minimum Curvature  
WellPlanner1

| Survey       |            |                      |               |                  |               |               |                            |                        |                    |                   |  |
|--------------|------------|----------------------|---------------|------------------|---------------|---------------|----------------------------|------------------------|--------------------|-------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | V. Sec<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | Northing<br>(usft) | Easting<br>(usft) |  |
| 4,813.00     | 6.60       | 96.00                | 4,796.35      | -345.72          | 12.47         | 345.99        | 346.22                     | 87.94                  | 443,872.47         | 587,946.99        |  |
| 5,003.00     | 6.50       | 96.40                | 4,985.11      | -367.30          | 10.13         | 367.54        | 367.68                     | 88.42                  | 443,870.13         | 587,968.54        |  |
| 5,194.00     | 5.80       | 97.00                | 5,175.01      | -387.66          | 7.74          | 387.86        | 387.94                     | 88.86                  | 443,867.74         | 587,988.86        |  |
| 5,384.00     | 5.20       | 83.00                | 5,364.14      | -405.74          | 7.62          | 405.94        | 406.01                     | 88.92                  | 443,867.62         | 588,006.94        |  |
| 5,574.00     | 5.40       | 85.60                | 5,553.33      | -423.17          | 9.36          | 423.40        | 423.50                     | 88.73                  | 443,869.36         | 588,024.40        |  |
| 5,765.00     | 5.20       | 86.30                | 5,743.51      | -440.74          | 10.61         | 441.00        | 441.12                     | 88.62                  | 443,870.61         | 588,042.00        |  |
| 5,956.00     | 5.00       | 89.90                | 5,933.76      | -457.69          | 11.18         | 457.96        | 458.09                     | 88.60                  | 443,871.18         | 588,058.96        |  |
| 6,147.00     | 4.30       | 89.60                | 6,124.13      | -473.17          | 11.24         | 473.44        | 473.58                     | 88.64                  | 443,871.24         | 588,074.44        |  |
| 6,338.00     | 3.80       | 90.10                | 6,314.65      | -486.65          | 11.28         | 486.93        | 487.06                     | 88.67                  | 443,871.28         | 588,087.93        |  |
| 6,528.00     | 0.40       | 108.10               | 6,504.49      | -493.58          | 11.07         | 493.86        | 493.98                     | 88.72                  | 443,871.07         | 588,094.86        |  |
| 6,719.00     | 0.70       | 261.50               | 6,695.49      | -493.07          | 10.69         | 493.34        | 493.46                     | 88.76                  | 443,870.69         | 588,094.34        |  |
| 6,909.00     | 0.80       | 313.10               | 6,885.47      | -490.94          | 11.42         | 491.22        | 491.36                     | 88.67                  | 443,871.42         | 588,092.22        |  |
| 7,100.00     | 1.10       | 323.90               | 7,076.45      | -488.85          | 13.81         | 489.17        | 489.36                     | 88.38                  | 443,873.81         | 588,090.17        |  |
| 7,291.00     | 1.90       | 331.50               | 7,267.38      | -486.18          | 18.08         | 486.58        | 486.91                     | 87.87                  | 443,878.08         | 588,087.58        |  |
| 7,481.00     | 1.70       | 328.10               | 7,457.29      | -483.10          | 23.24         | 483.59        | 484.14                     | 87.25                  | 443,883.24         | 588,084.59        |  |
| 7,576.00     | 0.80       | 308.30               | 7,552.26      | -481.80          | 24.85         | 482.32        | 482.96                     | 87.05                  | 443,884.85         | 588,083.32        |  |
| 7,764.00     | 0.80       | 286.50               | 7,740.25      | -479.49          | 26.03         | 480.03        | 480.74                     | 86.90                  | 443,886.03         | 588,081.03        |  |
| 7,954.00     | 1.20       | 45.20                | 7,930.23      | -479.60          | 27.81         | 480.17        | 480.98                     | 86.69                  | 443,887.81         | 588,081.17        |  |
| 8,144.00     | 0.30       | 286.80               | 8,120.22      | -480.51          | 29.36         | 481.11        | 482.00                     | 86.51                  | 443,889.36         | 588,082.11        |  |
| 8,334.00     | 0.60       | 253.20               | 8,310.21      | -479.08          | 29.21         | 479.68        | 480.57                     | 86.51                  | 443,889.21         | 588,080.68        |  |
| 8,523.00     | 0.90       | 236.00               | 8,499.20      | -476.93          | 28.10         | 477.50        | 478.33                     | 86.63                  | 443,888.10         | 588,078.50        |  |
| 8,714.00     | 0.40       | 81.20                | 8,690.19      | -476.35          | 27.36         | 476.92        | 477.70                     | 86.72                  | 443,887.36         | 588,077.92        |  |
| 8,905.00     | 0.50       | 47.80                | 8,881.18      | -477.62          | 28.02         | 478.19        | 479.01                     | 86.65                  | 443,888.02         | 588,079.19        |  |
| 9,095.00     | 0.50       | 20.80                | 9,071.18      | -478.50          | 29.35         | 479.10        | 480.00                     | 86.49                  | 443,889.35         | 588,080.10        |  |
| 9,286.00     | 0.70       | 32.60                | 9,262.17      | -479.40          | 31.12         | 480.03        | 481.03                     | 86.29                  | 443,891.12         | 588,081.03        |  |
| 9,477.00     | 0.50       | 80.70                | 9,453.16      | -480.83          | 32.23         | 481.48        | 482.56                     | 86.17                  | 443,892.23         | 588,082.48        |  |
| 9,668.00     | 0.90       | 111.20               | 9,644.14      | -483.06          | 31.83         | 483.70        | 484.74                     | 86.24                  | 443,891.83         | 588,084.70        |  |



# ProDirectional Survey Report



Company: Matador Resources  
Project: Eddy County, NM  
Site: Tiger 14-24S-28E RB  
Well: No. 222H  
Wellbore: OH  
Design: MWD

Local Co-ordinate Reference: Well No. 222H  
TVD Reference: Well @ 2993.00usft (GL: 2964' + KB: 29' (Pat274))  
MD Reference: Well @ 2993.00usft (GL: 2964' + KB: 29' (Pat274))  
North Reference: Grid  
Survey Calculation Method: Minimum Curvature  
Database: WellPlanner1

| Survey                                    |            |                      |               |                  |               |               |                            |                        |                    |                   |  |
|-------------------------------------------|------------|----------------------|---------------|------------------|---------------|---------------|----------------------------|------------------------|--------------------|-------------------|--|
| MD<br>(usft)                              | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | V. Sec<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Distance<br>(usft) | Closure Azimuth<br>(°) | Northing<br>(usft) | Easting<br>(usft) |  |
| 9,859.00                                  | 1.00       | 58.20                | 9,835.12      | -485.86          | 32.16         | 486.51        | 487.58                     | 86.22                  | 443,892.16         | 588,087.51        |  |
| 9,985.00                                  | 1.10       | 27.20                | 9,961.10      | -487.32          | 33.82         | 488.00        | 489.17                     | 86.04                  | 443,893.82         | 588,089.00        |  |
| 10,058.00                                 | 0.40       | 2.00                 | 10,034.09     | -487.63          | 34.69         | 488.33        | 489.56                     | 85.94                  | 443,894.69         | 588,089.33        |  |
| 10,121.00                                 | 1.60       | 315.30               | 10,097.08     | -487.01          | 35.54         | 487.72        | 489.01                     | 85.83                  | 443,895.54         | 588,088.72        |  |
| 10,153.00                                 | 4.90       | 285.00               | 10,129.03     | -485.36          | 36.21         | 486.08        | 487.43                     | 85.74                  | 443,896.21         | 588,087.08        |  |
| 10,201.00                                 | 10.80      | 267.00               | 10,176.56     | -478.88          | 36.51         | 479.61        | 480.99                     | 85.65                  | 443,896.51         | 588,080.61        |  |
| 10,248.00                                 | 14.10      | 261.20               | 10,222.46     | -468.84          | 35.40         | 469.55        | 470.88                     | 85.69                  | 443,895.40         | 588,070.55        |  |
| 10,296.00                                 | 16.50      | 262.20               | 10,268.75     | -456.34          | 33.58         | 457.02        | 458.25                     | 85.80                  | 443,893.58         | 588,058.02        |  |
| 10,344.00                                 | 20.40      | 261.00               | 10,314.27     | -441.37          | 31.34         | 441.99        | 443.10                     | 85.94                  | 443,891.34         | 588,042.99        |  |
| 10,392.00                                 | 26.20      | 261.60               | 10,358.34     | -422.66          | 28.49         | 423.23        | 424.19                     | 86.15                  | 443,888.49         | 588,024.23        |  |
| 10,439.00                                 | 31.00      | 265.30               | 10,399.60     | -400.36          | 25.98         | 400.89        | 401.73                     | 86.29                  | 443,885.98         | 588,001.89        |  |
| 10,487.00                                 | 31.50      | 271.50               | 10,440.64     | -375.52          | 25.29         | 376.03        | 376.88                     | 86.15                  | 443,885.29         | 587,977.03        |  |
| 10,534.00                                 | 36.00      | 273.80               | 10,479.71     | -349.43          | 26.53         | 349.96        | 350.96                     | 85.66                  | 443,886.53         | 587,950.96        |  |
| 10,582.00                                 | 38.50      | 277.90               | 10,517.93     | -320.50          | 29.52         | 321.07        | 322.43                     | 84.75                  | 443,889.52         | 587,922.07        |  |
| 10,629.00                                 | 43.30      | 279.40               | 10,553.44     | -290.01          | 34.16         | 290.66        | 292.67                     | 83.30                  | 443,894.16         | 587,891.66        |  |
| 10,724.00                                 | 51.60      | 279.00               | 10,617.63     | -220.80          | 45.33         | 221.64        | 226.23                     | 78.44                  | 443,905.33         | 587,822.64        |  |
| 10,772.00                                 | 59.30      | 277.70               | 10,644.83     | -181.61          | 51.04         | 182.55        | 189.55                     | 74.38                  | 443,911.04         | 587,783.55        |  |
| 10,819.00                                 | 65.40      | 277.90               | 10,666.63     | -140.29          | 56.69         | 141.32        | 152.27                     | 68.14                  | 443,916.69         | 587,742.32        |  |
| Last Survey(OH): 10819' MD, 10666.63' TVD |            |                      |               |                  |               |               |                            |                        |                    |                   |  |
| 10,926.00                                 | 65.40      | 277.90               | 10,711.17     | -43.70           | 70.07         | 44.96         | 83.25                      | 32.69                  | 443,930.07         | 587,645.96        |  |
| PTB(OH): 10926' MD                        |            |                      |               |                  |               |               |                            |                        |                    |                   |  |



**ProDirectional**  
Survey Report



**Company:** Matador Resources  
**Project:** Eddy County, NM  
**Site:** Tiger 14-24S-28E RB  
**Well:** No. 222H  
**Wellbore:** OH  
**Design:** MWD

**Local Co-ordinate Reference:**  
**TVD Reference:**  
**MD Reference:**  
**North Reference:**  
**Survey Calculation Method:**  
**Database:**

Well No. 222H  
Well @ 2993.00usft (GL: 2964' + KB: 29' (Patt274))  
Well @ 2993.00usft (GL: 2964' + KB: 29' (Patt274))  
Grid  
Minimum Curvature  
WellPlanner1

**Design Annotations**

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                                   |
|-----------------------------|-----------------------------|-------------------|-----------------|-------------------------------------------|
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                           |
| 169.00                      | 168.99                      | 0.26              | 1.90            | Pro MWD First Survey: 169' MD             |
| 10,819.00                   | 10,666.63                   | 56.69             | 141.32          | Last Survey(OH): 10819' MD, 10666.63' TVD |
| 10,926.00                   | 10,711.17                   | 70.07             | 44.96           | PTB(OH): 10926' MD                        |