



NM OIL CONSERVATION  
ARTESIA DISTRICT  
FEB 15 2018  
RECEIVED



**Stebbins Fed 20 No. 124H**

**Eddy County, NM** 30-015-44185

**September 18, 2017**

**Job No. LNM5147517**

**ORIGINAL**

# Survey Completion Report



**PRODIRECTIONAL**

## Survey Certification Letter

September 18, 2017



Operator Name: Matador Resources  
Well Name: Stebbins Federal 20 No. 124H  
County/Parish: Eddy County,  
State: NM  
Rig Name: Patterson 809  
Job Number: LNM5147517

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:

| <u>Surveyor</u> | <u>Surveyed Depths</u> | <u>Projection to Bit</u> | <u>Dates Performed</u> | <u>Type of Survey</u> |
|-----------------|------------------------|--------------------------|------------------------|-----------------------|
| ProDirectional  | 786' MD – 12,547' MD   | 12,675' MD               | 08/14/17 – 08/26/17    | MWD-OWSG              |

Sincerely,

*Mike Coats*

Mike Coats  
Regulatory Specialist  
Professional Directional

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

[prodirectional.com](http://prodirectional.com)



## **Matador Resources**

**Eddy County, NM  
Stebbins Fed 20  
No. 124H  
OH**

**Survey: ProDirectional**

## **Survey Report**

**18 September, 2017**

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FEB 15 2018  
NM OIL CONSERVATION  
ARTESIA DISTRICT**





# ProDirectional Survey Report



|                  |                                      |                                     |                    |
|------------------|--------------------------------------|-------------------------------------|--------------------|
| <b>Company:</b>  | Matador Resources                    | <b>Local Co-ordinate Reference:</b> | Well No. 124H      |
| <b>Project:</b>  | Eddy County, NM(NAD 83)              | <b>TVD Reference:</b>               | Well @ 3274.50usft |
| <b>Site:</b>     | Stebbins Fed 20                      | <b>MD Reference:</b>                | Well @ 3274.50usft |
| <b>Well:</b>     | No. 124H                             | <b>North Reference:</b>             | Grid               |
| <b>Wellbore:</b> | OH                                   | <b>Survey Calculation Method:</b>   | Minimum Curvature  |
| <b>Design:</b>   | Gyro-MWD-71.22'-12547', Proj. 12675' | <b>Database:</b>                    | WellPlanner1       |

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

|                              |                 |                          |                 |
|------------------------------|-----------------|--------------------------|-----------------|
| <b>Site</b>                  | Stebbins Fed 20 |                          |                 |
| <b>Site Position:</b>        |                 | <b>Northing:</b>         | 564,851.00 usft |
| <b>From:</b>                 | Map             | <b>Easting:</b>          | 611,709.00 usft |
| <b>Position Uncertainty:</b> | 0.00 usft       | <b>Slot Radius:</b>      | 13-3/16 "       |
|                              |                 | <b>Latitude:</b>         | 32.5526247      |
|                              |                 | <b>Longitude:</b>        | -104.1049395    |
|                              |                 | <b>Grid Convergence:</b> | 0.12 °          |

|                      |           |           |                     |                 |               |               |
|----------------------|-----------|-----------|---------------------|-----------------|---------------|---------------|
| Well                 |           | No. 124H  |                     |                 |               |               |
| Well Position        | +N/-S     | 0.00 usft | Northing:           | 564,851.00 usft | Latitude:     | 32.5526247    |
|                      | +E/-W     | 0.00 usft | Easting:            | 611,709.00 usft | Longitude:    | -104.1049395  |
| Position Uncertainty | 0.00 usft |           | Wellhead Elevation: | usft            | Ground Level: | 3,246.00 usft |

|           |            |             |                    |                  |                        |
|-----------|------------|-------------|--------------------|------------------|------------------------|
| Wellbore  | OH         |             |                    |                  |                        |
| Magnetics | Model Name | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|           | HDGM       | 6/23/2017   | 7.40               | 60.42            | 48,197.60              |

|                   |  |                  |  |        |                                      |        |        |               |           |      |  |
|-------------------|--|------------------|--|--------|--------------------------------------|--------|--------|---------------|-----------|------|--|
| Design            |  |                  |  |        | Gyro-MWD-71.22'-12547', Proj. 12675' |        |        |               |           |      |  |
| Audit Notes:      |  |                  |  |        |                                      |        |        |               |           |      |  |
| Version:          |  | 1.0              |  | Phase: |                                      | ACTUAL |        | Tie On Depth: |           | 0.00 |  |
| Vertical Section: |  | Depth From (TVD) |  |        | +N/-S                                |        | +E/-W  |               | Direction |      |  |
|                   |  | (usft)           |  |        | (usft)                               |        | (usft) |               | (*)       |      |  |
|                   |  | 0.00             |  |        | 0.00                                 |        | 0.00   |               | 90.05     |      |  |



# ProDirectional Survey Report



**Company:** Matador Resources  
**Project:** Eddy County, NM(NAD 83)  
**Site:** Stebbins Fed 20  
**Well:** No. 124H  
**Wellbore:** OH  
**Design:** Gyro-MWD-71.22'-12547', Proj. 12675'

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

**Well No. 124H**  
 Well Well @ 3274.50usft  
 Well Well @ 3274.50usft  
 Grid  
 Minimum Curvature  
 WellPlanner1

## Survey Program

Date 9/18/2017

| From (usft) | To (usft) | Survey (Wellbore) | Tool Name  | Description                                       |
|-------------|-----------|-------------------|------------|---------------------------------------------------|
| 71.22       | 712.00    | Survey #1 (OH)    | GYRO-NS-CT | OWSG XYZ Accel with XY Static and Continuous Gyro |
| 786.00      | 12,675.00 | Survey #2 (OH)    | MWD+HDGM   | OWSG MWD + HRGM                                   |

## Survey

| MD (usft)                            | Inc (") | Azi (azimuth) (") | TVD (usft) | V. Sec (usft) | N/S (usft) | E/W (usft) | Closure Distance (usft) | Closure Azimuth (") | Northing (usft) | Easting (usft) |
|--------------------------------------|---------|-------------------|------------|---------------|------------|------------|-------------------------|---------------------|-----------------|----------------|
| 0.00                                 | 0.00    | 0.00              | 0.00       | 0.00          | 0.00       | 0.00       | 0.00                    | 0.00                | 564,851.00      | 611,709.00     |
| 71.22                                | 0.40    | 140.81            | 71.22      | 0.16          | -0.19      | 0.16       | 0.25                    | 140.81              | 564,850.81      | 611,709.16     |
| 162.76                               | 0.53    | 129.49            | 162.76     | 0.69          | -0.71      | 0.69       | 0.99                    | 135.98              | 564,850.29      | 611,709.69     |
| 254.30                               | 0.84    | 136.19            | 254.29     | 1.48          | -1.46      | 1.48       | 2.08                    | 134.73              | 564,849.54      | 611,710.48     |
| 345.84                               | 1.95    | 145.05            | 345.80     | 2.84          | -3.22      | 2.83       | 4.29                    | 138.69              | 564,847.78      | 611,711.83     |
| 437.38                               | 2.21    | 147.14            | 437.28     | 4.69          | -5.98      | 4.68       | 7.60                    | 141.95              | 564,845.02      | 611,713.68     |
| 528.92                               | 1.98    | 149.28            | 528.76     | 6.46          | -8.83      | 6.45       | 10.93                   | 143.84              | 564,842.17      | 611,715.45     |
| 620.46                               | 1.75    | 155.77            | 620.25     | 7.84          | -11.46     | 7.83       | 13.88                   | 145.65              | 564,839.54      | 611,716.83     |
| 712.00                               | 1.82    | 159.90            | 711.75     | 8.92          | -14.10     | 8.90       | 16.68                   | 147.73              | 564,836.90      | 611,717.90     |
| <b>Last Survey: 712' MD</b>          |         |                   |            |               |            |            |                         |                     |                 |                |
| 786.00                               | 1.80    | 166.10            | 785.71     | 9.60          | -16.33     | 9.59       | 18.94                   | 149.59              | 564,834.67      | 611,718.59     |
| <b>Pro MWD First Survey: 786' MD</b> |         |                   |            |               |            |            |                         |                     |                 |                |
| 877.00                               | 1.70    | 160.10            | 876.67     | 10.41         | -18.99     | 10.39      | 21.64                   | 151.31              | 564,832.01      | 611,719.39     |
| 970.00                               | 1.60    | 164.50            | 969.63     | 11.22         | -21.54     | 11.21      | 24.28                   | 152.51              | 564,829.46      | 611,720.21     |
| 1,063.00                             | 1.70    | 150.00            | 1,062.59   | 12.26         | -23.98     | 12.24      | 26.93                   | 152.95              | 564,827.02      | 611,721.24     |
| 1,252.00                             | 2.00    | 155.30            | 1,251.49   | 15.05         | -29.41     | 15.02      | 33.02                   | 152.94              | 564,821.59      | 611,724.02     |
| 1,346.00                             | 1.30    | 194.20            | 1,345.46   | 15.47         | -31.93     | 15.45      | 35.47                   | 154.18              | 564,819.07      | 611,724.45     |
| 1,440.00                             | 3.00    | 261.30            | 1,439.40   | 12.78         | -33.34     | 12.75      | 35.69                   | 159.06              | 564,817.66      | 611,721.75     |
| 1,534.00                             | 5.90    | 269.10            | 1,533.10   | 5.52          | -33.78     | 5.49       | 34.23                   | 170.77              | 564,817.22      | 611,714.49     |
| 1,627.00                             | 7.30    | 265.00            | 1,625.49   | -5.15         | -34.37     | -5.18      | 34.76                   | 188.56              | 564,816.63      | 611,703.82     |
| 1,721.00                             | 8.50    | 259.90            | 1,718.59   | -17.93        | -36.11     | -17.97     | 40.33                   | 206.45              | 564,814.89      | 611,691.03     |
| 1,814.00                             | 8.00    | 257.60            | 1,810.63   | -31.02        | -38.71     | -31.05     | 49.62                   | 218.74              | 564,812.29      | 611,677.95     |



# ProDirectional Survey Report



Company: Matador Resources  
Project: Eddy County, NM(NAD 83)  
Site: Stebbins Fed 20  
Well: No. 124H  
Wellbore: OH  
Design: Gyro-MWD-71.22'-12547', Proj. 12675'

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

Well No. 124H  
Well @ 3274.50usft  
Well @ 3274.50usft  
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) |  |
| 1,908.00     | 6.00       | 264.50               | 1,903.93      | -42.30           | -40.58        | -42.33        | 58.64                      | 226.21                 | 564,810.42         | 611,666.67        |  |
| 2,001.00     | 5.30       | 277.90               | 1,996.48      | -51.39           | -40.46        | -51.43        | 65.43                      | 231.81                 | 564,810.54         | 611,657.57        |  |
| 2,095.00     | 6.10       | 278.30               | 2,090.01      | -60.63           | -39.14        | -60.67        | 72.20                      | 237.17                 | 564,811.86         | 611,648.33        |  |
| 2,188.00     | 7.00       | 276.00               | 2,182.41      | -71.16           | -37.84        | -71.19        | 80.62                      | 242.01                 | 564,813.16         | 611,637.81        |  |
| 2,282.00     | 6.50       | 275.40               | 2,275.75      | -82.16           | -36.74        | -82.19        | 90.02                      | 245.92                 | 564,814.26         | 611,626.81        |  |
| 2,376.00     | 5.90       | 276.80               | 2,369.20      | -92.25           | -35.66        | -92.28        | 98.93                      | 248.87                 | 564,815.34         | 611,616.72        |  |
| 2,469.00     | 5.10       | 285.70               | 2,461.78      | -100.98          | -33.98        | -101.01       | 106.57                     | 251.41                 | 564,817.02         | 611,607.99        |  |
| 2,562.00     | 4.50       | 294.30               | 2,554.45      | -108.29          | -31.36        | -108.31       | 112.76                     | 253.85                 | 564,819.64         | 611,600.69        |  |
| 2,656.00     | 4.90       | 294.00               | 2,648.14      | -115.32          | -28.21        | -115.34       | 118.74                     | 256.26                 | 564,822.79         | 611,593.66        |  |
| 2,749.00     | 5.40       | 291.40               | 2,740.76      | -123.02          | -25.00        | -123.04       | 125.56                     | 258.52                 | 564,826.00         | 611,585.96        |  |
| 2,843.00     | 6.30       | 288.20               | 2,834.27      | -132.04          | -21.77        | -132.06       | 133.84                     | 260.64                 | 564,829.23         | 611,576.94        |  |
| 2,936.00     | 5.60       | 288.50               | 2,926.77      | -141.20          | -18.74        | -141.21       | 142.45                     | 262.44                 | 564,832.26         | 611,567.79        |  |
| 3,030.00     | 4.40       | 295.80               | 3,020.41      | -148.80          | -15.71        | -148.81       | 149.64                     | 263.97                 | 564,835.29         | 611,560.19        |  |
| 3,052.00     | 4.40       | 297.80               | 3,042.34      | -150.30          | -14.95        | -150.32       | 151.06                     | 264.32                 | 564,836.05         | 611,558.68        |  |
| 3,125.00     | 4.50       | 298.80               | 3,115.12      | -155.29          | -12.27        | -155.30       | 155.79                     | 265.48                 | 564,838.73         | 611,553.70        |  |
| 3,219.00     | 4.20       | 302.40               | 3,208.85      | -161.43          | -8.65         | -161.44       | 161.67                     | 266.93                 | 564,842.35         | 611,547.56        |  |
| 3,312.00     | 4.00       | 304.30               | 3,301.62      | -166.99          | -4.99         | -166.99       | 167.07                     | 268.29                 | 564,846.01         | 611,542.01        |  |
| 3,406.00     | 3.30       | 259.20               | 3,395.44      | -172.36          | -3.65         | -172.36       | 172.40                     | 268.79                 | 564,847.35         | 611,536.64        |  |
| 3,499.00     | 3.60       | 251.50               | 3,488.27      | -177.76          | -5.08         | -177.76       | 177.83                     | 268.36                 | 564,845.92         | 611,531.24        |  |
| 3,593.00     | 3.60       | 255.40               | 3,582.09      | -183.41          | -6.76         | -183.41       | 183.54                     | 267.89                 | 564,844.24         | 611,525.59        |  |
| 3,686.00     | 3.70       | 252.50               | 3,674.90      | -189.09          | -8.40         | -189.10       | 189.29                     | 267.46                 | 564,842.60         | 611,519.90        |  |
| 3,780.00     | 2.80       | 237.00               | 3,768.75      | -193.91          | -10.56        | -193.92       | 194.21                     | 266.88                 | 564,840.44         | 611,515.08        |  |
| 3,873.00     | 1.00       | 290.40               | 3,861.70      | -196.58          | -11.52        | -196.59       | 196.92                     | 266.65                 | 564,839.48         | 611,512.41        |  |
| 3,966.00     | 3.10       | 29.50                | 3,954.65      | -196.10          | -9.04         | -196.11       | 196.32                     | 267.36                 | 564,841.96         | 611,512.89        |  |
| 4,060.00     | 3.30       | 28.80                | 4,048.51      | -193.55          | -4.46         | -193.55       | 193.60                     | 268.68                 | 564,846.54         | 611,515.45        |  |
| 4,153.00     | 3.40       | 23.00                | 4,141.35      | -191.19          | 0.42          | -191.19       | 191.19                     | 270.13                 | 564,851.42         | 611,517.81        |  |
| 4,247.00     | 3.50       | 20.30                | 4,235.18      | -189.11          | 5.68          | -189.10       | 189.19                     | 271.72                 | 564,856.68         | 611,519.90        |  |



ProDirectional  
Survey Report



Company: Matador Resources  
Project: Eddy County, NM(NAD 83)  
Site: Stebbins Fed 20  
Well: No. 124H  
Wellbore: OH  
Design: Gyro-MWD-71.22'-12547', Proj. 12675'

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

Well No. 124H  
Well Well @ 3274.50usft  
Well Well @ 3274.50usft  
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) |  |
| 4,341.00     | 1.90       | 354.50               | 4,329.07      | -188.26          | 9.92          | -188.26       | 188.52                     | 273.02                 | 564,860.92         | 611,520.74        |  |
| 4,434.00     | 1.90       | 345.80               | 4,422.02      | -188.79          | 12.95         | -188.78       | 189.23                     | 273.93                 | 564,863.95         | 611,520.22        |  |
| 4,528.00     | 2.10       | 345.20               | 4,515.96      | -189.62          | 16.13         | -189.60       | 190.29                     | 274.86                 | 564,867.13         | 611,519.40        |  |
| 4,621.00     | 2.20       | 342.00               | 4,608.90      | -190.61          | 19.47         | -190.59       | 191.58                     | 275.83                 | 564,870.47         | 611,518.41        |  |
| 4,715.00     | 2.30       | 336.30               | 4,702.83      | -191.93          | 22.92         | -191.91       | 193.27                     | 276.81                 | 564,873.92         | 611,517.09        |  |
| 4,808.00     | 0.70       | 294.40               | 4,795.79      | -193.20          | 24.86         | -193.17       | 194.77                     | 277.33                 | 564,875.86         | 611,515.83        |  |
| 4,902.00     | 0.40       | 262.60               | 4,889.79      | -194.04          | 25.06         | -194.02       | 195.63                     | 277.36                 | 564,876.06         | 611,514.98        |  |
| 4,996.00     | 0.80       | 274.00               | 4,983.78      | -195.02          | 25.06         | -195.00       | 196.61                     | 277.32                 | 564,876.06         | 611,514.00        |  |
| 5,089.00     | 0.80       | 281.00               | 5,076.78      | -196.31          | 25.23         | -196.29       | 197.90                     | 277.32                 | 564,876.23         | 611,512.71        |  |
| 5,183.00     | 1.00       | 281.60               | 5,170.76      | -197.76          | 25.52         | -197.73       | 199.37                     | 277.35                 | 564,876.52         | 611,511.27        |  |
| 5,276.00     | 1.00       | 283.80               | 5,263.75      | -199.34          | 25.87         | -199.32       | 200.99                     | 277.40                 | 564,876.87         | 611,509.68        |  |
| 5,370.00     | 1.20       | 277.10               | 5,357.73      | -201.11          | 26.19         | -201.09       | 202.79                     | 277.42                 | 564,877.19         | 611,507.91        |  |
| 5,464.00     | 1.30       | 272.80               | 5,451.71      | -203.16          | 26.37         | -203.13       | 204.84                     | 277.40                 | 564,877.37         | 611,505.87        |  |
| 5,558.00     | 1.30       | 276.90               | 5,545.69      | -205.28          | 26.55         | -205.26       | 206.97                     | 277.37                 | 564,877.55         | 611,503.74        |  |
| 5,651.00     | 1.40       | 271.00               | 5,638.66      | -207.46          | 26.69         | -207.44       | 209.15                     | 277.33                 | 564,877.69         | 611,501.56        |  |
| 5,744.00     | 3.10       | 207.90               | 5,731.60      | -209.77          | 24.49         | -209.75       | 211.18                     | 276.66                 | 564,875.49         | 611,499.25        |  |
| 5,838.00     | 1.90       | 162.90               | 5,825.51      | -210.50          | 20.75         | -210.48       | 211.50                     | 275.63                 | 564,871.75         | 611,498.52        |  |
| 5,932.00     | 1.80       | 146.30               | 5,919.46      | -209.22          | 18.04         | -209.21       | 209.98                     | 274.93                 | 564,869.04         | 611,499.79        |  |
| 6,025.00     | 0.80       | 143.30               | 6,012.44      | -208.02          | 16.30         | -208.01       | 208.65                     | 274.48                 | 564,867.30         | 611,500.99        |  |
| 6,119.00     | 0.20       | 53.90                | 6,106.44      | -207.50          | 15.87         | -207.48       | 208.09                     | 274.37                 | 564,866.87         | 611,501.52        |  |
| 6,212.00     | 0.40       | 348.40               | 6,199.44      | -207.43          | 16.28         | -207.42       | 208.06                     | 274.49                 | 564,867.28         | 611,501.58        |  |
| 6,305.00     | 0.40       | 348.50               | 6,292.43      | -207.56          | 16.92         | -207.55       | 208.24                     | 274.66                 | 564,867.92         | 611,501.45        |  |
| 6,399.00     | 0.30       | 108.10               | 6,386.43      | -207.39          | 17.17         | -207.38       | 208.09                     | 274.73                 | 564,868.17         | 611,501.62        |  |
| 6,492.00     | 0.60       | 135.30               | 6,479.43      | -206.82          | 16.74         | -206.81       | 207.48                     | 274.63                 | 564,867.74         | 611,502.19        |  |
| 6,585.00     | 0.80       | 105.60               | 6,572.42      | -205.85          | 16.22         | -205.84       | 206.48                     | 274.51                 | 564,867.22         | 611,503.16        |  |
| 6,679.00     | 0.60       | 89.70                | 6,666.42      | -204.73          | 16.05         | -204.71       | 205.34                     | 274.48                 | 564,867.05         | 611,504.29        |  |
| 6,772.00     | 0.30       | 223.30               | 6,759.41      | -204.41          | 15.87         | -204.39       | 205.01                     | 274.44                 | 564,866.87         | 611,504.61        |  |



ProDirectional  
Survey Report



Company: Matador Resources  
Project: Eddy County, NM(NAD 83)  
Site: Stebbins Fed 20  
Well: No. 124H  
Wellbore: OH  
Design: Gyro-MWD-71.22'-12547', Proj. 12675'

Local Co-ordinate Reference:

TVD Reference:  
MD Reference:  
North Reference:  
Survey Calculation Method:  
Database:

Well No. 124H

Well @ 3274.50usft

Well @ 3274.50usft

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) |
|--------------|------------|----------------------|---------------|------------------|---------------|---------------|----------------------------|------------------------|--------------------|-------------------|
| 6,866.00     | 1.10       | 251.60               | 6,853.41      | -205.43          | 15.41         | -205.42       | 206.00                     | 274.29                 | 564,866.41         | 611,503.58        |
| 6,960.00     | 1.70       | 246.10               | 6,947.38      | -207.56          | 14.56         | -207.55       | 208.06                     | 274.01                 | 564,865.56         | 611,501.45        |
| 7,053.00     | 0.30       | 166.90               | 7,040.36      | -208.77          | 13.76         | -208.76       | 209.21                     | 273.77                 | 564,864.76         | 611,500.24        |
| 7,147.00     | 0.20       | 79.50                | 7,134.36      | -208.55          | 13.56         | -208.54       | 208.98                     | 273.72                 | 564,864.56         | 611,500.46        |
| 7,240.00     | 0.00       | 319.20               | 7,227.36      | -208.39          | 13.58         | -208.38       | 208.82                     | 273.73                 | 564,864.58         | 611,500.62        |
| 7,310.00     | 0.40       | 266.90               | 7,297.36      | -208.63          | 13.57         | -208.62       | 209.06                     | 273.72                 | 564,864.57         | 611,500.38        |
| 7,357.00     | 4.10       | 92.40                | 7,344.33      | -207.12          | 13.49         | -207.11       | 207.55                     | 273.73                 | 564,864.49         | 611,501.89        |
| 7,403.00     | 9.90       | 99.90                | 7,389.96      | -201.57          | 12.74         | -201.56       | 201.97                     | 273.62                 | 564,863.74         | 611,507.44        |
| 7,450.00     | 15.60      | 90.40                | 7,435.79      | -191.26          | 12.00         | -191.25       | 191.63                     | 273.59                 | 564,863.00         | 611,517.75        |
| 7,497.00     | 21.30      | 80.30                | 7,480.37      | -176.52          | 13.40         | -176.50       | 177.01                     | 274.34                 | 564,864.40         | 611,532.50        |
| 7,544.00     | 28.40      | 78.80                | 7,522.99      | -157.12          | 17.01         | -157.10       | 158.02                     | 276.18                 | 564,868.01         | 611,551.90        |
| 7,590.00     | 31.70      | 78.10                | 7,562.80      | -134.56          | 21.63         | -134.54       | 136.27                     | 279.13                 | 564,872.63         | 611,574.46        |
| 7,637.00     | 33.90      | 82.50                | 7,602.31      | -109.48          | 25.89         | -109.45       | 112.47                     | 283.31                 | 564,876.89         | 611,599.55        |
| 7,684.00     | 37.00      | 87.70                | 7,640.60      | -82.34           | 28.17         | -82.31        | 87.00                      | 288.89                 | 564,879.17         | 611,626.69        |
| 7,731.00     | 39.20      | 94.80                | 7,677.60      | -53.39           | 27.49         | -53.36        | 60.03                      | 297.26                 | 564,878.49         | 611,655.64        |
| 7,777.00     | 42.10      | 98.40                | 7,712.51      | -23.63           | 24.02         | -23.61        | 33.69                      | 315.49                 | 564,875.02         | 611,685.39        |
| 7,824.00     | 44.80      | 98.00                | 7,746.62      | 8.36             | 19.42         | 8.38          | 21.15                      | 23.34                  | 564,870.42         | 611,717.38        |
| 7,870.00     | 49.80      | 95.30                | 7,777.81      | 41.93            | 15.53         | 41.94         | 44.73                      | 69.68                  | 564,866.53         | 611,750.94        |
| 7,917.00     | 53.60      | 92.70                | 7,806.94      | 78.71            | 12.98         | 78.73         | 79.79                      | 80.63                  | 564,863.98         | 611,787.73        |
| 7,964.00     | 57.40      | 91.30                | 7,833.56      | 117.42           | 11.64         | 117.43        | 118.00                     | 84.34                  | 564,862.64         | 611,826.43        |
| 8,011.00     | 62.60      | 91.70                | 7,857.05      | 158.09           | 10.58         | 158.10        | 158.46                     | 86.17                  | 564,861.58         | 611,867.10        |
| 8,057.00     | 67.10      | 91.10                | 7,876.59      | 199.71           | 9.56          | 199.72        | 199.95                     | 87.26                  | 564,860.56         | 611,908.72        |
| 8,104.00     | 72.00      | 91.10                | 7,893.01      | 243.73           | 8.72          | 243.73        | 243.89                     | 87.95                  | 564,859.72         | 611,952.73        |
| 8,151.00     | 74.70      | 90.40                | 7,906.48      | 288.75           | 8.13          | 288.76        | 288.87                     | 88.39                  | 564,859.13         | 611,997.76        |
| 8,198.00     | 78.20      | 89.00                | 7,917.49      | 334.43           | 8.37          | 334.44        | 334.54                     | 88.57                  | 564,859.37         | 612,043.44        |
| 8,244.00     | 81.20      | 87.60                | 7,925.71      | 379.66           | 9.72          | 379.67        | 379.80                     | 88.53                  | 564,860.72         | 612,088.67        |
| 8,291.00     | 85.20      | 85.70                | 7,931.27      | 426.24           | 12.45         | 426.25        | 426.43                     | 88.33                  | 564,863.45         | 612,135.25        |



# ProDirectional Survey Report



Company: Matador Resources  
Project: Eddy County, NM(NAD 83)  
Site: Stebbins Fed 20  
Well: No. 124H  
Wellbore: OH  
Design: Gyro-MWD-71.22'-12547', Proj. 12675'

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

Well No. 124H  
Well @ 3274.50usft  
Well @ 3274.50usft  
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) |  |
| 8,338.00     | 88.10      | 84.20                | 7,934.02      | 472.97           | 16.58         | 472.98        | 473.27                     | 87.99                  | 564,867.58         | 612,181.98        |  |
| 8,432.00     | 89.40      | 85.80                | 7,936.07      | 566.57           | 24.77         | 566.60        | 567.14                     | 87.50                  | 564,875.77         | 612,275.60        |  |
| 8,525.00     | 89.60      | 88.50                | 7,936.88      | 659.44           | 29.39         | 659.47        | 660.12                     | 87.45                  | 564,880.39         | 612,368.47        |  |
| 8,619.00     | 90.50      | 90.10                | 7,936.80      | 753.43           | 30.54         | 753.46        | 754.08                     | 87.68                  | 564,881.54         | 612,462.46        |  |
| 8,712.00     | 91.20      | 90.40                | 7,935.42      | 846.42           | 30.13         | 846.44        | 846.98                     | 87.96                  | 564,881.13         | 612,555.44        |  |
| 8,806.00     | 91.60      | 90.50                | 7,933.12      | 940.39           | 29.40         | 940.41        | 940.87                     | 88.21                  | 564,880.40         | 612,649.41        |  |
| 8,899.00     | 90.00      | 90.10                | 7,931.83      | 1,033.37         | 28.91         | 1,033.40      | 1,033.80                   | 88.40                  | 564,879.91         | 612,742.40        |  |
| 8,993.00     | 87.30      | 90.20                | 7,934.04      | 1,127.34         | 28.66         | 1,127.37      | 1,127.73                   | 88.54                  | 564,879.66         | 612,836.37        |  |
| 9,087.00     | 87.00      | 90.00                | 7,938.71      | 1,221.22         | 28.50         | 1,221.25      | 1,221.58                   | 88.66                  | 564,879.50         | 612,930.25        |  |
| 9,180.00     | 87.20      | 90.10                | 7,943.42      | 1,314.10         | 28.42         | 1,314.13      | 1,314.44                   | 88.76                  | 564,879.42         | 613,023.13        |  |
| 9,274.00     | 87.20      | 90.90                | 7,948.01      | 1,407.99         | 27.60         | 1,408.01      | 1,408.28                   | 88.88                  | 564,878.60         | 613,117.01        |  |
| 9,368.00     | 87.00      | 91.40                | 7,952.77      | 1,501.85         | 25.71         | 1,501.87      | 1,502.09                   | 89.02                  | 564,876.71         | 613,210.87        |  |
| 9,461.00     | 86.80      | 92.40                | 7,957.80      | 1,594.66         | 22.64         | 1,594.68      | 1,594.85                   | 89.19                  | 564,873.64         | 613,303.68        |  |
| 9,555.00     | 87.70      | 92.30                | 7,962.31      | 1,688.48         | 18.79         | 1,688.50      | 1,688.60                   | 89.36                  | 564,869.79         | 613,397.50        |  |
| 9,648.00     | 88.40      | 92.70                | 7,965.47      | 1,781.34         | 14.73         | 1,781.35      | 1,781.41                   | 89.53                  | 564,865.73         | 613,490.35        |  |
| 9,742.00     | 88.80      | 90.00                | 7,967.77      | 1,875.28         | 12.52         | 1,875.29      | 1,875.33                   | 89.62                  | 564,863.52         | 613,584.29        |  |
| 9,836.00     | 89.60      | 89.10                | 7,969.08      | 1,969.26         | 13.26         | 1,969.28      | 1,969.32                   | 89.61                  | 564,864.26         | 613,678.28        |  |
| 9,929.00     | 90.40      | 91.70                | 7,969.08      | 2,062.25         | 12.61         | 2,062.27      | 2,062.30                   | 89.65                  | 564,863.61         | 613,771.27        |  |
| 10,023.00    | 90.30      | 89.90                | 7,968.51      | 2,156.24         | 11.30         | 2,156.25      | 2,156.28                   | 89.70                  | 564,862.30         | 613,865.25        |  |
| 10,116.00    | 89.10      | 87.20                | 7,968.99      | 2,249.20         | 13.65         | 2,249.21      | 2,249.25                   | 89.65                  | 564,864.65         | 613,958.21        |  |
| 10,209.00    | 89.80      | 87.50                | 7,969.89      | 2,342.09         | 17.95         | 2,342.11      | 2,342.17                   | 89.56                  | 564,868.95         | 614,051.11        |  |
| 10,303.00    | 89.60      | 87.90                | 7,970.38      | 2,436.01         | 21.72         | 2,436.03      | 2,436.12                   | 89.49                  | 564,872.72         | 614,145.03        |  |
| 10,396.00    | 89.90      | 88.20                | 7,970.78      | 2,528.95         | 24.88         | 2,528.97      | 2,529.10                   | 89.44                  | 564,875.88         | 614,237.97        |  |
| 10,489.00    | 89.90      | 87.60                | 7,970.95      | 2,621.88         | 28.29         | 2,621.91      | 2,622.06                   | 89.38                  | 564,879.29         | 614,330.91        |  |
| 10,583.00    | 90.40      | 88.00                | 7,970.70      | 2,715.81         | 31.90         | 2,715.84      | 2,716.03                   | 89.33                  | 564,882.90         | 614,424.84        |  |
| 10,676.00    | 90.60      | 87.90                | 7,969.89      | 2,808.74         | 35.23         | 2,808.78      | 2,809.00                   | 89.28                  | 564,886.23         | 614,517.78        |  |
| 10,770.00    | 88.50      | 88.20                | 7,970.63      | 2,902.68         | 38.43         | 2,902.71      | 2,902.97                   | 89.24                  | 564,889.43         | 614,611.71        |  |



# ProDirectional Survey Report



Company: Matador Resources  
Project: Eddy County, NM(NAD 83)  
Site: Stebbins Fed 20  
Well: No. 124H  
Wellbore: OH  
Design: Gyro-MWD-71.22'-12547'. Proj. 12675'

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

Well No. 124H  
Well Well @ 3274.50usft  
Well Well @ 3274.50usft  
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) |
|--------------------------------------|------------|----------------------|---------------|------------------|---------------|---------------|----------------------------|------------------------|--------------------|-------------------|
| 10,864.00                            | 87.30      | 89.00                | 7,974.07      | 2,996.58         | 40.72         | 2,996.62      | 2,996.90                   | 89.22                  | 564,891.72         | 614,705.62        |
| 10,957.00                            | 87.90      | 91.60                | 7,977.97      | 3,089.49         | 40.23         | 3,089.53      | 3,089.79                   | 89.25                  | 564,891.23         | 614,798.53        |
| 11,051.00                            | 88.60      | 93.60                | 7,980.84      | 3,183.35         | 35.97         | 3,183.38      | 3,183.59                   | 89.35                  | 564,886.97         | 614,892.38        |
| 11,144.00                            | 89.30      | 94.30                | 7,982.54      | 3,276.12         | 29.57         | 3,276.15      | 3,276.28                   | 89.48                  | 564,880.57         | 614,985.15        |
| 11,238.00                            | 88.20      | 93.30                | 7,984.59      | 3,369.89         | 23.34         | 3,369.91      | 3,369.99                   | 89.60                  | 564,874.34         | 615,078.91        |
| 11,331.00                            | 88.80      | 93.40                | 7,987.03      | 3,462.71         | 17.91         | 3,462.72      | 3,462.77                   | 89.70                  | 564,868.91         | 615,171.72        |
| 11,424.00                            | 88.10      | 92.30                | 7,989.54      | 3,555.56         | 13.28         | 3,555.57      | 3,555.60                   | 89.79                  | 564,864.28         | 615,264.57        |
| 11,518.00                            | 88.00      | 91.00                | 7,992.74      | 3,649.47         | 10.58         | 3,649.48      | 3,649.49                   | 89.83                  | 564,861.58         | 615,358.48        |
| 11,611.00                            | 88.40      | 91.20                | 7,995.66      | 3,742.40         | 8.79          | 3,742.41      | 3,742.42                   | 89.87                  | 564,859.79         | 615,451.41        |
| 11,705.00                            | 89.30      | 92.40                | 7,997.55      | 3,836.34         | 5.84          | 3,836.34      | 3,836.35                   | 89.91                  | 564,856.84         | 615,545.34        |
| 11,799.00                            | 90.90      | 90.00                | 7,997.39      | 3,930.31         | 3.87          | 3,930.31      | 3,930.32                   | 89.94                  | 564,854.87         | 615,639.31        |
| 11,892.00                            | 92.20      | 89.10                | 7,994.87      | 4,023.27         | 4.60          | 4,023.27      | 4,023.28                   | 89.93                  | 564,855.60         | 615,732.27        |
| 11,986.00                            | 90.50      | 88.20                | 7,992.66      | 4,117.21         | 6.82          | 4,117.22      | 4,117.22                   | 89.91                  | 564,857.82         | 615,826.22        |
| 12,079.00                            | 90.70      | 87.80                | 7,991.68      | 4,210.15         | 10.06         | 4,210.16      | 4,210.17                   | 89.86                  | 564,861.06         | 615,919.16        |
| 12,173.00                            | 91.50      | 88.40                | 7,989.88      | 4,304.07         | 13.18         | 4,304.09      | 4,304.11                   | 89.82                  | 564,864.18         | 616,013.09        |
| 12,266.00                            | 88.40      | 88.20                | 7,989.96      | 4,397.02         | 15.94         | 4,397.03      | 4,397.06                   | 89.79                  | 564,866.94         | 616,106.03        |
| 12,360.00                            | 87.40      | 88.10                | 7,993.40      | 4,490.90         | 18.97         | 4,490.92      | 4,490.96                   | 89.76                  | 564,869.97         | 616,199.92        |
| 12,453.00                            | 87.70      | 87.80                | 7,997.38      | 4,583.75         | 22.29         | 4,583.78      | 4,583.83                   | 89.72                  | 564,873.29         | 616,292.78        |
| 12,547.00                            | 87.70      | 87.90                | 8,001.15      | 4,677.61         | 25.82         | 4,677.63      | 4,677.70                   | 89.68                  | 564,876.82         | 616,386.63        |
| Last Survey: 12547' MD, 8001.15' TVD |            |                      |               |                  |               |               |                            |                        |                    |                   |
| 12,675.00                            | 87.70      | 87.90                | 8,006.29      | 4,805.42         | 30.50         | 4,805.44      | 4,805.54                   | 89.64                  | 564,881.50         | 616,514.44        |
| PTB: 12675' MD                       |            |                      |               |                  |               |               |                            |                        |                    |                   |



# ProDirectional Survey Report



|                  |                                      |                                     |                         |
|------------------|--------------------------------------|-------------------------------------|-------------------------|
| <b>Company:</b>  | Matador Resources                    | <b>Local Co-ordinate Reference:</b> | Well No. 124H           |
| <b>Project:</b>  | Eddy County, NM(NAD 83)              | <b>TVD Reference:</b>               | Well Well @ 3274.50usft |
| <b>Site:</b>     | Stebbins Fed 20                      | <b>MD Reference:</b>                | Well Well @ 3274.50usft |
| <b>Well:</b>     | No. 124H                             | <b>North Reference:</b>             | Grid                    |
| <b>Wellbore:</b> | OH                                   | <b>Survey Calculation Method:</b>   | Minimum Curvature       |
| <b>Design:</b>   | Gyro-MWD-71.22'-12547', Proj. 12675' | <b>Database:</b>                    | WellPlanner1            |

| Design Annotations          |                             |                   |                 |                                      |
|-----------------------------|-----------------------------|-------------------|-----------------|--------------------------------------|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                              |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                      |
| 712.00                      | 711.75                      | -14.10            | 8.90            | Last Survey: 712' MD                 |
| 786.00                      | 785.71                      | -16.33            | 9.59            | Pro MWD First Survey: 786' MD        |
| 12,547.00                   | 8,001.15                    | 25.82             | 4,677.63        | Last Survey: 12547' MD, 8001.15' TVD |
| 12,675.00                   | 8,006.29                    | 30.50             | 4,805.44        | PTB: 12675' MD                       |