



**PRO**DIRECTIONAL

**HOBBS OCD**

**JAN 30 2017**

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**Mallon 27 Federal No. 1H**

**Lea County, NM**

**August 05, 2016**

**Job No. LNM5124716**

# **Survey Completion Report**



**PRO**DIRECTIONAL

## Survey Certification Letter

August 05, 2016



Operator Name: Matador Resources  
Well Name: Mallon 27 Federal No. 1H  
County/Parish: Lea County,  
State: NM  
Rig Name: Patterson 809  
Job Number: LNM5124716

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 – 18,199' MD | 18,255' MD        | 07/15/16 – 08/05/16 | MWD-OWSG       |

Sincerely,

Mike Coats  
Well Planning  
Professional Directional

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

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



## **Matador Resources**

**Lea County, NM  
Mallon 27 Federal  
No. 1H  
OH**

**Survey: ProDirectional**

## **Survey Report**

**05 August, 2016**





ProDirectional  
Survey Report



|                  |                   |                                     |                                                      |
|------------------|-------------------|-------------------------------------|------------------------------------------------------|
| <b>Company:</b>  | Matador Resources | <b>Local Co-ordinate Reference:</b> | Well No. 1H                                          |
| <b>Project:</b>  | Lea County, NM    | <b>TVD Reference:</b>               | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Site:</b>     | Mallon 27 Federal | <b>MD Reference:</b>                | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Well:</b>     | No. 1H            | <b>North Reference:</b>             | Grid                                                 |
| <b>Wellbore:</b> | OH                | <b>Survey Calculation Method:</b>   | Minimum Curvature                                    |
| <b>Design:</b>   | MWD               | <b>Database:</b>                    | Well_Planner1                                        |

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

|                              |                   |                          |                   |
|------------------------------|-------------------|--------------------------|-------------------|
| <b>Site</b>                  | Mallon 27 Federal |                          |                   |
| <b>Site Position:</b>        |                   | <b>Northing:</b>         | 591,992.00 usft   |
| <b>From:</b>                 | Map               | <b>Easting:</b>          | 743,820.00 usft   |
| <b>Position Uncertainty:</b> | 3.30 usft         | <b>Slot Radius:</b>      | 13-3/16 "         |
|                              |                   | <b>Latitude:</b>         | 32° 37' 29.971 N  |
|                              |                   | <b>Longitude:</b>        | 103° 32' 29.024 W |
|                              |                   | <b>Grid Convergence:</b> | 0.43 °            |

|                      |        |           |                     |                 |               |                   |
|----------------------|--------|-----------|---------------------|-----------------|---------------|-------------------|
| Well                 | No. 1H |           |                     |                 |               |                   |
| Well Position        | +N/-S  | 0.00 usft | Northing:           | 591,992.00 usft | Latitude:     | 32° 37' 29.971 N  |
|                      | +E/-W  | 0.00 usft | Easting:            | 743,820.00 usft | Longitude:    | 103° 32' 29.024 W |
| Position Uncertainty |        | 1.10 usft | Wellhead Elevation: | 0.00 usft       | Ground Level: | 3,720.00 usft     |

|           |            |             |                    |                  |                        |
|-----------|------------|-------------|--------------------|------------------|------------------------|
| Wellbore  | OH         |             |                    |                  |                        |
| Magnetics | Model Name | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|           | HDGM       | 7/4/2016    | 6.80               | 60.67            | 48,436                 |

|                   |                            |                 |                 |                    |
|-------------------|----------------------------|-----------------|-----------------|--------------------|
| 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            | 359.48             |

| Survey Program |           | Date 8/5/2016     |            |             |
|----------------|-----------|-------------------|------------|-------------|
| From (usft)    | To (usft) | Survey (Wellbore) | Tool Name  | Description |
| 169.00         | 18,255.00 | MWD (OH)          | MWD - OWSG | MWD - OWSG  |



# ProDirectional Survey Report



|                  |                   |                                     |                                                      |
|------------------|-------------------|-------------------------------------|------------------------------------------------------|
| <b>Company:</b>  | Matador Resources | <b>Local Co-ordinate Reference:</b> | Well No. 1H                                          |
| <b>Project:</b>  | Lea County, NM    | <b>TVD Reference:</b>               | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Site:</b>     | Mallon 27 Federal | <b>MD Reference:</b>                | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Well:</b>     | No. 1H            | <b>North Reference:</b>             | Grid                                                 |
| <b>Wellbore:</b> | OH                | <b>Survey Calculation Method:</b>   | Minimum Curvature                                    |
| <b>Design:</b>   | MWD               | <b>Database:</b>                    | Well_Planner1                                        |

| 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                   | 591,992.00         | 743,820.00        |  |
| 169.00       | 0.80       | 109.20               | 168.99        | -0.40            | -0.39         | 1.11          | 1.18                       | 109.20                 | 591,991.61         | 743,821.11        |  |
| 266.00       | 0.90       | 113.10               | 265.98        | -0.93            | -0.91         | 2.45          | 2.62                       | 110.33                 | 591,991.09         | 743,822.45        |  |
| 363.00       | 0.60       | 109.80               | 362.98        | -1.41            | -1.38         | 3.63          | 3.89                       | 110.81                 | 591,990.62         | 743,823.63        |  |
| 520.00       | 0.90       | 99.60                | 519.96        | -1.92            | -1.86         | 5.62          | 5.92                       | 108.35                 | 591,990.14         | 743,825.62        |  |
| 582.00       | 0.60       | 97.50                | 581.96        | -2.05            | -1.99         | 6.42          | 6.72                       | 107.20                 | 591,990.01         | 743,826.42        |  |
| 674.00       | 0.60       | 81.30                | 673.95        | -2.05            | -1.98         | 7.38          | 7.64                       | 105.01                 | 591,990.02         | 743,827.38        |  |
| 766.00       | 0.70       | 80.30                | 765.95        | -1.89            | -1.81         | 8.41          | 8.60                       | 102.15                 | 591,990.19         | 743,828.41        |  |
| 858.00       | 1.00       | 81.50                | 857.94        | -1.69            | -1.60         | 9.76          | 9.89                       | 99.30                  | 591,990.40         | 743,829.76        |  |
| 951.00       | 1.10       | 82.80                | 950.92        | -1.47            | -1.37         | 11.44         | 11.53                      | 96.80                  | 591,990.63         | 743,831.44        |  |
| 1,045.00     | 1.10       | 109.90               | 1,044.90      | -1.68            | -1.56         | 13.19         | 13.28                      | 96.74                  | 591,990.44         | 743,833.19        |  |
| 1,138.00     | 0.90       | 91.60                | 1,137.89      | -2.02            | -1.88         | 14.76         | 14.88                      | 97.27                  | 591,990.12         | 743,834.76        |  |
| 1,232.00     | 0.50       | 95.30                | 1,231.88      | -2.09            | -1.94         | 15.90         | 16.02                      | 96.96                  | 591,990.06         | 743,835.90        |  |
| 1,325.00     | 0.60       | 148.90               | 1,324.88      | -2.55            | -2.40         | 16.56         | 16.73                      | 98.24                  | 591,989.60         | 743,836.56        |  |
| 1,419.00     | 0.50       | 158.00               | 1,418.87      | -3.35            | -3.20         | 16.97         | 17.27                      | 100.68                 | 591,988.80         | 743,836.97        |  |
| 1,512.00     | 0.60       | 217.70               | 1,511.87      | -4.11            | -3.96         | 16.82         | 17.28                      | 103.25                 | 591,988.04         | 743,836.82        |  |
| 1,605.00     | 0.40       | 218.70               | 1,604.87      | -4.75            | -4.60         | 16.32         | 16.96                      | 105.74                 | 591,987.40         | 743,836.32        |  |
| 1,698.00     | 0.70       | 205.80               | 1,697.86      | -5.51            | -5.36         | 15.87         | 16.75                      | 108.67                 | 591,986.64         | 743,835.87        |  |
| 1,784.00     | 0.60       | 203.90               | 1,783.86      | -6.39            | -6.25         | 15.46         | 16.67                      | 112.01                 | 591,985.75         | 743,835.46        |  |
| 1,978.00     | 0.80       | 144.40               | 1,977.84      | -8.42            | -8.28         | 15.84         | 17.87                      | 117.60                 | 591,983.72         | 743,835.84        |  |
| 2,072.00     | 0.60       | 120.70               | 2,071.84      | -9.21            | -9.06         | 16.64         | 18.95                      | 118.57                 | 591,982.94         | 743,836.64        |  |
| 2,166.00     | 0.10       | 58.70                | 2,165.84      | -9.43            | -9.27         | 17.13         | 19.48                      | 118.42                 | 591,982.73         | 743,837.13        |  |
| 2,259.00     | 1.60       | 149.50               | 2,258.82      | -10.51           | -10.35        | 17.86         | 20.64                      | 120.08                 | 591,981.65         | 743,837.86        |  |
| 2,353.00     | 4.30       | 162.70               | 2,352.69      | -15.02           | -14.84        | 19.58         | 24.57                      | 127.17                 | 591,977.16         | 743,839.58        |  |
| 2,447.00     | 7.00       | 164.70               | 2,446.23      | -23.94           | -23.74        | 22.14         | 32.46                      | 137.00                 | 591,968.26         | 743,842.14        |  |
| 2,540.00     | 7.70       | 167.70               | 2,538.46      | -35.51           | -35.29        | 24.96         | 43.22                      | 144.73                 | 591,956.71         | 743,844.96        |  |
| 2,634.00     | 6.30       | 172.10               | 2,631.76      | -46.79           | -46.55        | 27.01         | 53.82                      | 149.88                 | 591,945.45         | 743,847.01        |  |



# ProDirectional Survey Report



|                  |                   |                                     |                                                      |
|------------------|-------------------|-------------------------------------|------------------------------------------------------|
| <b>Company:</b>  | Matador Resources | <b>Local Co-ordinate Reference:</b> | Well No. 1H                                          |
| <b>Project:</b>  | Lea County, NM    | <b>TVD Reference:</b>               | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Site:</b>     | Mallon 27 Federal | <b>MD Reference:</b>                | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Well:</b>     | No. 1H            | <b>North Reference:</b>             | Grid                                                 |
| <b>Wellbore:</b> | OH                | <b>Survey Calculation Method:</b>   | Minimum Curvature                                    |
| <b>Design:</b>   | MWD               | <b>Database:</b>                    | Well_Planner1                                        |

| 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) |  |
| 2,728.00          | 4.30       | 172.00               | 2,725.35      | -55.40           | -55.15        | 28.21         | 61.95                      | 152.91                 | 591,936.85         | 743,848.21        |  |
| 2,822.00          | 4.10       | 170.90               | 2,819.10      | -62.22           | -61.96        | 29.23         | 68.51                      | 154.74                 | 591,930.04         | 743,849.23        |  |
| 2,915.00          | 4.00       | 164.70               | 2,911.87      | -68.64           | -68.37        | 30.61         | 74.91                      | 155.88                 | 591,923.63         | 743,850.61        |  |
| 2,975.00          | 3.68       | 164.40               | 2,971.73      | -72.53           | -72.24        | 31.68         | 78.89                      | 156.32                 | 591,919.76         | 743,851.68        |  |
| HL Xing: 2975' MD |            |                      |               |                  |               |               |                            |                        |                    |                   |  |
| 3,009.00          | 3.50       | 164.20               | 3,005.67      | -74.58           | -74.29        | 32.26         | 80.99                      | 156.53                 | 591,917.71         | 743,852.26        |  |
| 3,103.00          | 3.20       | 156.70               | 3,099.51      | -79.77           | -79.46        | 34.08         | 86.46                      | 156.79                 | 591,912.54         | 743,854.08        |  |
| 3,196.00          | 4.00       | 167.40               | 3,192.32      | -85.33           | -85.01        | 35.81         | 92.25                      | 157.16                 | 591,906.99         | 743,855.81        |  |
| 3,290.00          | 4.40       | 172.50               | 3,286.07      | -92.12           | -91.79        | 37.00         | 98.96                      | 158.05                 | 591,900.21         | 743,857.00        |  |
| 3,384.00          | 3.70       | 177.60               | 3,379.84      | -98.73           | -98.39        | 37.60         | 105.33                     | 159.09                 | 591,893.61         | 743,857.60        |  |
| 3,477.00          | 4.10       | 164.30               | 3,472.62      | -104.94          | -104.59       | 38.62         | 111.49                     | 159.73                 | 591,887.41         | 743,858.62        |  |
| 3,571.00          | 5.60       | 160.40               | 3,566.28      | -112.52          | -112.15       | 41.07         | 119.43                     | 159.89                 | 591,879.85         | 743,861.07        |  |
| 3,664.00          | 6.50       | 163.20               | 3,658.76      | -121.86          | -121.46       | 44.11         | 129.22                     | 160.04                 | 591,870.54         | 743,864.11        |  |
| 3,758.00          | 6.00       | 162.20               | 3,752.21      | -131.66          | -131.23       | 47.15         | 139.45                     | 160.24                 | 591,860.77         | 743,867.15        |  |
| 3,852.00          | 5.20       | 165.30               | 3,845.76      | -140.48          | -140.03       | 49.74         | 148.60                     | 160.45                 | 591,851.97         | 743,869.74        |  |
| 3,945.00          | 4.80       | 162.90               | 3,938.40      | -148.29          | -147.83       | 51.95         | 156.69                     | 160.64                 | 591,844.17         | 743,871.95        |  |
| 4,039.00          | 5.10       | 169.30               | 4,032.05      | -156.17          | -155.69       | 53.88         | 164.75                     | 160.91                 | 591,836.31         | 743,873.88        |  |
| 4,132.00          | 5.90       | 175.30               | 4,124.62      | -165.01          | -164.52       | 55.04         | 173.48                     | 161.50                 | 591,827.48         | 743,875.04        |  |
| 4,226.00          | 5.60       | 172.60               | 4,218.15      | -174.38          | -173.88       | 56.03         | 182.68                     | 162.14                 | 591,818.12         | 743,876.03        |  |
| 4,320.00          | 5.40       | 173.20               | 4,311.72      | -183.33          | -182.82       | 57.14         | 191.54                     | 162.64                 | 591,809.18         | 743,877.14        |  |
| 4,413.00          | 5.10       | 175.40               | 4,404.33      | -191.80          | -191.29       | 57.99         | 199.88                     | 163.13                 | 591,800.71         | 743,877.99        |  |
| 4,507.00          | 4.80       | 180.50               | 4,497.98      | -199.90          | -199.38       | 58.29         | 207.73                     | 163.70                 | 591,792.62         | 743,878.29        |  |
| 4,601.00          | 4.60       | 182.70               | 4,591.66      | -207.60          | -207.08       | 58.08         | 215.07                     | 164.33                 | 591,784.92         | 743,878.08        |  |
| 4,695.00          | 4.40       | 182.90               | 4,685.37      | -214.96          | -214.45       | 57.72         | 222.08                     | 164.94                 | 591,777.55         | 743,877.72        |  |
| 4,788.00          | 5.00       | 180.70               | 4,778.06      | -222.58          | -222.06       | 57.49         | 229.38                     | 165.49                 | 591,769.94         | 743,877.49        |  |
| 4,882.00          | 5.80       | 178.80               | 4,871.64      | -231.42          | -230.91       | 57.54         | 237.97                     | 166.01                 | 591,761.09         | 743,877.54        |  |
| 4,975.00          | 5.40       | 180.80               | 4,964.20      | -240.49          | -239.98       | 57.58         | 246.79                     | 166.51                 | 591,752.02         | 743,877.58        |  |



# ProDirectional Survey Report



|                  |                   |                                     |                                                      |
|------------------|-------------------|-------------------------------------|------------------------------------------------------|
| <b>Company:</b>  | Matador Resources | <b>Local Co-ordinate Reference:</b> | Well No. 1H                                          |
| <b>Project:</b>  | Lea County, NM    | <b>TVD Reference:</b>               | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Site:</b>     | Mallon 27 Federal | <b>MD Reference:</b>                | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Well:</b>     | No. 1H            | <b>North Reference:</b>             | Grid                                                 |
| <b>Wellbore:</b> | OH                | <b>Survey Calculation Method:</b>   | Minimum Curvature                                    |
| <b>Design:</b>   | MWD               | <b>Database:</b>                    | Well_Planner1                                        |

| 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) |  |
| 5,069.00     | 5.40       | 180.80               | 5,057.78      | -249.34          | -248.83       | 57.45         | 255.37                     | 167.00                 | 591,743.17         | 743,877.45        |  |
| 5,163.00     | 5.20       | 181.30               | 5,151.38      | -258.02          | -257.51       | 57.30         | 263.81                     | 167.46                 | 591,734.49         | 743,877.30        |  |
| 5,256.00     | 5.20       | 181.20               | 5,244.00      | -266.44          | -265.93       | 57.11         | 272.00                     | 167.88                 | 591,726.07         | 743,877.11        |  |
| 5,350.00     | 4.80       | 174.80               | 5,337.64      | -274.62          | -274.11       | 57.38         | 280.05                     | 168.18                 | 591,717.89         | 743,877.38        |  |
| 5,443.00     | 4.40       | 170.60               | 5,430.34      | -282.02          | -281.51       | 58.31         | 287.48                     | 168.30                 | 591,710.49         | 743,878.31        |  |
| 5,551.00     | 4.10       | 170.60               | 5,538.04      | -289.93          | -289.40       | 59.62         | 295.48                     | 168.36                 | 591,702.60         | 743,879.62        |  |
| 5,653.00     | 3.70       | 175.90               | 5,639.81      | -296.82          | -296.28       | 60.45         | 302.39                     | 168.47                 | 591,695.72         | 743,880.45        |  |
| 5,746.00     | 2.50       | 149.40               | 5,732.67      | -301.57          | -301.02       | 61.70         | 307.28                     | 168.42                 | 591,690.98         | 743,881.70        |  |
| 5,840.00     | 2.50       | 146.20               | 5,826.58      | -305.06          | -304.49       | 63.88         | 311.12                     | 168.15                 | 591,687.51         | 743,883.88        |  |
| 5,933.00     | 2.50       | 146.10               | 5,919.49      | -308.45          | -307.86       | 66.14         | 314.88                     | 167.87                 | 591,684.14         | 743,886.14        |  |
| 6,027.00     | 1.40       | 160.00               | 6,013.44      | -311.24          | -310.64       | 67.68         | 317.93                     | 167.71                 | 591,681.36         | 743,887.68        |  |
| 6,121.00     | 1.00       | 175.80               | 6,107.42      | -313.14          | -312.54       | 68.13         | 319.88                     | 167.70                 | 591,679.46         | 743,888.13        |  |
| 6,214.00     | 1.00       | 176.70               | 6,200.40      | -314.76          | -314.16       | 68.24         | 321.48                     | 167.75                 | 591,677.84         | 743,888.24        |  |
| 6,308.00     | 1.30       | 177.40               | 6,294.39      | -316.65          | -316.04       | 68.33         | 323.34                     | 167.80                 | 591,675.96         | 743,888.33        |  |
| 6,401.00     | 1.30       | 178.40               | 6,387.36      | -318.76          | -318.15       | 68.41         | 325.42                     | 167.86                 | 591,673.85         | 743,888.41        |  |
| 6,495.00     | 1.50       | 183.30               | 6,481.33      | -321.05          | -320.44       | 68.37         | 327.65                     | 167.96                 | 591,671.56         | 743,888.37        |  |
| 6,588.00     | 1.60       | 181.40               | 6,574.30      | -323.56          | -322.96       | 68.27         | 330.09                     | 168.06                 | 591,669.04         | 743,888.27        |  |
| 6,682.00     | 1.70       | 183.00               | 6,668.26      | -326.26          | -325.66       | 68.16         | 332.72                     | 168.18                 | 591,666.34         | 743,888.16        |  |
| 6,775.00     | 1.70       | 178.60               | 6,761.22      | -329.02          | -328.42       | 68.12         | 335.41                     | 168.28                 | 591,663.58         | 743,888.12        |  |
| 6,869.00     | 1.60       | 178.50               | 6,855.18      | -331.73          | -331.12       | 68.19         | 338.07                     | 168.36                 | 591,660.88         | 743,888.19        |  |
| 6,962.00     | 1.80       | 178.40               | 6,948.14      | -334.49          | -333.88       | 68.27         | 340.79                     | 168.44                 | 591,658.12         | 743,888.27        |  |
| 7,056.00     | 1.80       | 174.30               | 7,042.09      | -337.43          | -336.82       | 68.46         | 343.71                     | 168.51                 | 591,655.18         | 743,888.46        |  |
| 7,149.00     | 1.80       | 178.30               | 7,135.05      | -340.35          | -339.74       | 68.64         | 346.60                     | 168.58                 | 591,652.26         | 743,888.64        |  |
| 7,243.00     | 1.80       | 173.90               | 7,229.00      | -343.29          | -342.68       | 68.84         | 349.53                     | 168.64                 | 591,649.32         | 743,888.84        |  |
| 7,336.00     | 1.30       | 181.60               | 7,321.97      | -345.80          | -345.19       | 68.97         | 352.01                     | 168.70                 | 591,646.81         | 743,888.97        |  |
| 7,430.00     | 1.10       | 183.40               | 7,415.95      | -347.77          | -347.16       | 68.89         | 353.92                     | 168.78                 | 591,644.84         | 743,888.89        |  |
| 7,523.00     | 1.30       | 188.80               | 7,508.93      | -349.70          | -349.09       | 68.67         | 355.78                     | 168.87                 | 591,642.91         | 743,888.67        |  |



# ProDirectional Survey Report



|                  |                   |                                     |                                                      |
|------------------|-------------------|-------------------------------------|------------------------------------------------------|
| <b>Company:</b>  | Matador Resources | <b>Local Co-ordinate Reference:</b> | Well No. 1H                                          |
| <b>Project:</b>  | Lea County, NM    | <b>TVD Reference:</b>               | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Site:</b>     | Mallon 27 Federal | <b>MD Reference:</b>                | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Well:</b>     | No. 1H            | <b>North Reference:</b>             | Grid                                                 |
| <b>Wellbore:</b> | OH                | <b>Survey Calculation Method:</b>   | Minimum Curvature                                    |
| <b>Design:</b>   | MWD               | <b>Database:</b>                    | Well_Planner1                                        |

| 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) |
| 7,617.00     | 1.30       | 183.60               | 7,602.90      | -351.81          | -351.21       | 68.44         | 357.81                     | 168.97                 | 591,640.79         | 743,888.44        |
| 7,711.00     | 1.30       | 183.80               | 7,696.88      | -353.94          | -353.34       | 68.31         | 359.88                     | 169.06                 | 591,638.66         | 743,888.31        |
| 7,804.00     | 1.30       | 180.10               | 7,789.85      | -356.05          | -355.44       | 68.23         | 361.93                     | 169.13                 | 591,636.56         | 743,888.23        |
| 7,898.00     | 0.60       | 146.00               | 7,883.84      | -357.52          | -356.92       | 68.51         | 363.43                     | 169.13                 | 591,635.08         | 743,888.51        |
| 7,991.00     | 0.60       | 129.00               | 7,976.84      | -358.24          | -357.63       | 69.16         | 364.25                     | 169.06                 | 591,634.37         | 743,889.16        |
| 8,085.00     | 0.70       | 127.40               | 8,070.83      | -358.91          | -358.29       | 70.00         | 365.06                     | 168.95                 | 591,633.71         | 743,890.00        |
| 8,178.00     | 0.60       | 118.10               | 8,163.82      | -359.49          | -358.86       | 70.88         | 365.79                     | 168.83                 | 591,633.14         | 743,890.88        |
| 8,272.00     | 0.70       | 108.90               | 8,257.82      | -359.92          | -359.28       | 71.85         | 366.39                     | 168.69                 | 591,632.72         | 743,891.85        |
| 8,366.00     | 0.70       | 105.10               | 8,351.81      | -360.26          | -359.61       | 72.95         | 366.94                     | 168.53                 | 591,632.39         | 743,892.95        |
| 8,459.00     | 0.80       | 110.10               | 8,444.80      | -360.64          | -359.98       | 74.11         | 367.53                     | 168.37                 | 591,632.02         | 743,894.11        |
| 8,553.00     | 1.00       | 107.30               | 8,538.79      | -361.12          | -360.45       | 75.51         | 368.28                     | 168.17                 | 591,631.55         | 743,895.51        |
| 8,646.00     | 0.60       | 268.80               | 8,631.79      | -361.38          | -360.71       | 75.80         | 368.58                     | 168.13                 | 591,631.29         | 743,895.80        |
| 8,740.00     | 0.30       | 328.80               | 8,725.78      | -361.17          | -360.51       | 75.18         | 368.26                     | 168.22                 | 591,631.49         | 743,895.18        |
| 8,833.00     | 0.70       | 10.90                | 8,818.78      | -360.41          | -359.74       | 75.16         | 367.51                     | 168.20                 | 591,632.26         | 743,895.16        |
| 8,927.00     | 0.90       | 18.20                | 8,912.77      | -359.14          | -358.47       | 75.50         | 366.34                     | 168.11                 | 591,633.53         | 743,895.50        |
| 9,020.00     | 0.80       | 26.40                | 9,005.76      | -357.87          | -357.20       | 76.02         | 365.20                     | 167.99                 | 591,634.80         | 743,896.02        |
| 9,114.00     | 0.60       | 27.30                | 9,099.75      | -356.85          | -356.17       | 76.53         | 364.30                     | 167.87                 | 591,635.83         | 743,896.53        |
| 9,207.00     | 0.50       | 14.60                | 9,192.75      | -356.03          | -355.35       | 76.86         | 363.57                     | 167.80                 | 591,636.65         | 743,896.86        |
| 9,300.00     | 0.60       | 1.10                 | 9,285.75      | -355.15          | -354.47       | 76.97         | 362.73                     | 167.75                 | 591,637.53         | 743,896.97        |
| 9,394.00     | 0.50       | 359.80               | 9,379.74      | -354.25          | -353.57       | 76.98         | 361.85                     | 167.72                 | 591,638.43         | 743,896.98        |
| 9,487.00     | 1.00       | 333.80               | 9,472.73      | -353.11          | -352.43       | 76.62         | 360.66                     | 167.73                 | 591,639.57         | 743,896.62        |
| 9,581.00     | 0.80       | 5.60                 | 9,566.72      | -351.72          | -351.04       | 76.32         | 359.24                     | 167.73                 | 591,640.96         | 743,896.32        |
| 9,675.00     | 0.80       | 36.70                | 9,660.71      | -350.55          | -349.86       | 76.78         | 358.19                     | 167.62                 | 591,642.14         | 743,896.78        |
| 9,769.00     | 1.00       | 63.10                | 9,754.70      | -349.66          | -348.97       | 77.90         | 357.56                     | 167.42                 | 591,643.03         | 743,897.90        |
| 9,858.00     | 0.20       | 52.70                | 9,843.70      | -349.22          | -348.52       | 78.72         | 357.30                     | 167.27                 | 591,643.48         | 743,898.72        |
| 9,951.00     | 0.20       | 149.50               | 9,936.70      | -349.26          | -348.56       | 78.93         | 357.39                     | 167.24                 | 591,643.44         | 743,898.93        |
| 10,045.00    | 0.30       | 112.70               | 10,030.70     | -349.50          | -348.80       | 79.24         | 357.69                     | 167.20                 | 591,643.20         | 743,899.24        |



# ProDirectional Survey Report



|                  |                   |                                     |                                                      |
|------------------|-------------------|-------------------------------------|------------------------------------------------------|
| <b>Company:</b>  | Matador Resources | <b>Local Co-ordinate Reference:</b> | Well No. 1H                                          |
| <b>Project:</b>  | Lea County, NM    | <b>TVD Reference:</b>               | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Site:</b>     | Mallon 27 Federal | <b>MD Reference:</b>                | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| <b>Well:</b>     | No. 1H            | <b>North Reference:</b>             | Grid                                                 |
| <b>Wellbore:</b> | OH                | <b>Survey Calculation Method:</b>   | Minimum Curvature                                    |
| <b>Design:</b>   | MWD               | <b>Database:</b>                    | Well_Planner1                                        |

| 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) |  |
| 10,139.00          | 0.80       | 108.20               | 10,124.69     | -349.81          | -349.10       | 80.09         | 358.17                     | 167.08                 | 591,642.90         | 743,900.09        |  |
| 10,232.00          | 0.40       | 12.10                | 10,217.69     | -349.70          | -348.98       | 80.77         | 358.21                     | 166.97                 | 591,643.02         | 743,900.77        |  |
| 10,263.00          | 3.20       | 356.00               | 10,248.67     | -348.73          | -348.02       | 80.74         | 357.26                     | 166.94                 | 591,643.98         | 743,900.74        |  |
| 10,295.00          | 6.30       | 350.30               | 10,280.56     | -346.11          | -345.39       | 80.38         | 354.62                     | 166.90                 | 591,646.61         | 743,900.38        |  |
| 10,326.00          | 9.30       | 352.50               | 10,311.27     | -341.94          | -341.23       | 79.76         | 350.43                     | 166.84                 | 591,650.77         | 743,899.76        |  |
| 10,357.00          | 12.70      | 354.80               | 10,341.69     | -336.06          | -335.35       | 79.13         | 344.56                     | 166.72                 | 591,656.65         | 743,899.13        |  |
| 10,388.00          | 15.90      | 352.40               | 10,371.73     | -328.45          | -327.75       | 78.26         | 336.96                     | 166.57                 | 591,664.25         | 743,898.26        |  |
| 10,419.00          | 19.60      | 350.80               | 10,401.25     | -319.09          | -318.40       | 76.86         | 327.55                     | 166.43                 | 591,673.60         | 743,896.86        |  |
| 10,450.00          | 23.00      | 348.00               | 10,430.13     | -308.01          | -307.34       | 74.77         | 316.31                     | 166.33                 | 591,684.66         | 743,894.77        |  |
| 10,481.00          | 25.60      | 348.40               | 10,458.38     | -295.50          | -294.86       | 72.17         | 303.56                     | 166.25                 | 591,697.14         | 743,892.17        |  |
| 10,512.00          | 27.40      | 349.60               | 10,486.12     | -281.90          | -281.28       | 69.53         | 289.75                     | 166.11                 | 591,710.72         | 743,889.53        |  |
| 10,544.00          | 29.80      | 350.50               | 10,514.21     | -266.79          | -266.19       | 66.89         | 274.47                     | 165.89                 | 591,725.81         | 743,886.89        |  |
| 10,575.00          | 31.60      | 351.50               | 10,540.87     | -251.14          | -250.56       | 64.42         | 258.71                     | 165.58                 | 591,741.44         | 743,884.42        |  |
| 10,606.00          | 33.30      | 353.40               | 10,567.03     | -234.63          | -234.07       | 62.24         | 242.21                     | 165.11                 | 591,757.93         | 743,882.24        |  |
| 10,653.00          | 36.10      | 355.10               | 10,605.66     | -207.99          | -207.46       | 59.57         | 215.84                     | 163.98                 | 591,784.54         | 743,879.57        |  |
| 10,700.00          | 37.60      | 356.10               | 10,643.27     | -179.87          | -179.35       | 57.41         | 188.32                     | 162.25                 | 591,812.65         | 743,877.41        |  |
| 10,747.00          | 40.90      | 356.60               | 10,679.66     | -150.18          | -149.68       | 55.53         | 159.65                     | 159.65                 | 591,842.32         | 743,875.53        |  |
| 10,793.00          | 47.50      | 355.20               | 10,712.63     | -118.19          | -117.71       | 53.21         | 129.18                     | 155.67                 | 591,874.29         | 743,873.21        |  |
| 10,840.00          | 54.00      | 354.90               | 10,742.35     | -81.92           | -81.47        | 50.07         | 95.63                      | 148.43                 | 591,910.53         | 743,870.07        |  |
| 10,851.00          | 54.93      | 355.22               | 10,748.74     | -73.00           | -72.55        | 49.30         | 87.72                      | 145.81                 | 591,919.45         | 743,869.30        |  |
| HL Xing: 10851' MD |            |                      |               |                  |               |               |                            |                        |                    |                   |  |
| 10,887.00          | 58.00      | 356.20               | 10,768.62     | -43.06           | -42.63        | 47.06         | 63.50                      | 132.18                 | 591,949.37         | 743,867.06        |  |
| 10,934.00          | 62.20      | 357.20               | 10,792.05     | -2.37            | -1.97         | 44.72         | 44.76                      | 92.52                  | 591,990.03         | 743,864.72        |  |
| 10,980.00          | 66.60      | 358.10               | 10,811.92     | 39.08            | 39.47         | 43.02         | 58.39                      | 47.47                  | 592,031.47         | 743,863.02        |  |
| 11,032.00          | 70.70      | 0.70                 | 10,830.85     | 87.50            | 87.89         | 42.53         | 97.64                      | 25.82                  | 592,079.89         | 743,862.53        |  |
| 11,074.00          | 73.80      | 1.00                 | 10,843.65     | 127.48           | 127.88        | 43.13         | 134.95                     | 18.64                  | 592,119.88         | 743,863.13        |  |
| 11,121.00          | 78.20      | 0.30                 | 10,855.02     | 173.06           | 173.47        | 43.64         | 178.87                     | 14.12                  | 592,165.47         | 743,863.64        |  |



ProDirectional  
Survey Report



Company: Matador Resources  
Project: Lea County, NM  
Site: Mallon 27 Federal  
Well: No. 1H  
Wellbore: OH  
Design: MWD

Local Co-ordinate Reference: Well No. 1H  
TVD Reference: Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809))  
MD Reference: Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809))  
North Reference: Grid  
Survey Calculation Method: Minimum Curvature  
Database: Well\_Planner1

| 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) |
| 11,167.00    | 82.40      | 359.40               | 10,862.77     | 218.39           | 218.80        | 43.52         | 223.08                     | 11.25                  | 592,210.80         | 743,863.52        |
| 11,214.00    | 85.30      | 0.90                 | 10,867.80     | 265.11           | 265.52        | 43.64         | 269.08                     | 9.33                   | 592,257.52         | 743,863.64        |
| 11,261.00    | 86.50      | 1.90                 | 10,871.16     | 311.97           | 312.39        | 44.79         | 315.58                     | 8.16                   | 592,304.39         | 743,864.79        |
| 11,354.00    | 87.50      | 2.40                 | 10,876.03     | 404.74           | 405.19        | 48.27         | 408.06                     | 6.79                   | 592,397.19         | 743,868.27        |
| 11,448.00    | 90.60      | 0.10                 | 10,877.59     | 498.66           | 499.14        | 50.32         | 501.67                     | 5.76                   | 592,491.14         | 743,870.32        |
| 11,581.00    | 92.00      | 0.30                 | 10,874.57     | 631.61           | 632.10        | 50.79         | 634.14                     | 4.59                   | 592,624.10         | 743,870.79        |
| 11,675.00    | 93.10      | 0.90                 | 10,870.39     | 725.50           | 726.00        | 51.77         | 727.84                     | 4.08                   | 592,718.00         | 743,871.77        |
| 11,768.00    | 94.10      | 359.00               | 10,864.55     | 818.31           | 818.81        | 51.69         | 820.44                     | 3.61                   | 592,810.81         | 743,871.69        |
| 11,862.00    | 91.60      | 358.80               | 10,859.88     | 912.18           | 912.67        | 49.89         | 914.03                     | 3.13                   | 592,904.67         | 743,869.89        |
| 11,955.00    | 92.00      | 359.00               | 10,856.96     | 1,005.13         | 1,005.61      | 48.10         | 1,006.76                   | 2.74                   | 592,997.61         | 743,868.10        |
| 12,049.00    | 92.90      | 359.70               | 10,852.94     | 1,099.04         | 1,099.51      | 47.04         | 1,100.52                   | 2.45                   | 593,091.51         | 743,867.04        |
| 12,142.00    | 91.50      | 0.20                 | 10,849.37     | 1,191.97         | 1,192.44      | 46.96         | 1,193.37                   | 2.26                   | 593,184.44         | 743,866.96        |
| 12,236.00    | 90.20      | 359.20               | 10,847.97     | 1,285.95         | 1,286.43      | 46.47         | 1,287.27                   | 2.07                   | 593,278.43         | 743,866.47        |
| 12,330.00    | 90.60      | 0.00                 | 10,847.32     | 1,379.95         | 1,380.42      | 45.81         | 1,381.18                   | 1.90                   | 593,372.42         | 743,865.81        |
| 12,423.00    | 91.00      | 0.80                 | 10,846.02     | 1,472.93         | 1,473.41      | 46.46         | 1,474.14                   | 1.81                   | 593,465.41         | 743,866.46        |
| 12,517.00    | 92.00      | 1.80                 | 10,843.56     | 1,566.84         | 1,567.35      | 48.59         | 1,568.10                   | 1.78                   | 593,559.35         | 743,868.59        |
| 12,610.00    | 91.30      | 1.00                 | 10,840.88     | 1,659.75         | 1,660.28      | 50.86         | 1,661.06                   | 1.75                   | 593,652.28         | 743,870.86        |
| 12,704.00    | 89.50      | 359.50               | 10,840.22     | 1,753.74         | 1,754.27      | 51.27         | 1,755.02                   | 1.67                   | 593,746.27         | 743,871.27        |
| 12,797.00    | 90.00      | 0.60                 | 10,840.63     | 1,846.73         | 1,847.27      | 51.35         | 1,847.98                   | 1.59                   | 593,839.27         | 743,871.35        |
| 12,890.00    | 89.30      | 359.10               | 10,841.20     | 1,939.72         | 1,940.26      | 51.11         | 1,940.94                   | 1.51                   | 593,932.26         | 743,871.11        |
| 12,984.00    | 90.70      | 357.70               | 10,841.20     | 2,033.70         | 2,034.22      | 48.48         | 2,034.80                   | 1.37                   | 594,026.22         | 743,868.48        |
| 13,078.00    | 91.70      | 358.00               | 10,839.23     | 2,127.64         | 2,128.14      | 44.96         | 2,128.61                   | 1.21                   | 594,120.14         | 743,864.96        |
| 13,171.00    | 92.30      | 359.00               | 10,835.98     | 2,220.57         | 2,221.05      | 42.53         | 2,221.45                   | 1.10                   | 594,213.05         | 743,862.53        |
| 13,264.00    | 93.10      | 359.90               | 10,831.60     | 2,313.46         | 2,313.94      | 41.63         | 2,314.31                   | 1.03                   | 594,305.94         | 743,861.63        |
| 13,359.00    | 90.70      | 359.40               | 10,828.45     | 2,408.40         | 2,408.87      | 41.05         | 2,409.22                   | 0.98                   | 594,400.87         | 743,861.05        |
| 13,452.00    | 90.90      | 359.40               | 10,827.15     | 2,501.39         | 2,501.86      | 40.08         | 2,502.18                   | 0.92                   | 594,493.86         | 743,860.08        |
| 13,546.00    | 91.90      | 0.30                 | 10,824.86     | 2,595.36         | 2,595.83      | 39.83         | 2,596.14                   | 0.88                   | 594,587.83         | 743,859.83        |



ProDirectional  
Survey Report



Company: Matador Resources  
Project: Lea County, NM  
Site: Mallon 27 Federal  
Well: No. 1H  
Wellbore: OH  
Design: MWD

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

Well No. 1H  
Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809))  
Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809))  
Grid  
Minimum Curvature  
Well\_Planner1

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) |
|--------------|------------|----------------------|---------------|------------------|---------------|---------------|----------------------------|------------------------|--------------------|-------------------|
| 13,640.00    | 90.70      | 358.50               | 10,822.73     | 2,689.33         | 2,689.80      | 38.85         | 2,690.08                   | 0.83                   | 594,681.80         | 743,858.85        |
| 13,733.00    | 90.80      | 358.50               | 10,821.51     | 2,782.31         | 2,782.76      | 36.41         | 2,782.99                   | 0.75                   | 594,774.76         | 743,856.41        |
| 13,827.00    | 88.90      | 357.70               | 10,821.75     | 2,876.28         | 2,876.70      | 33.30         | 2,876.89                   | 0.66                   | 594,868.70         | 743,853.30        |
| 13,920.00    | 88.30      | 357.70               | 10,824.03     | 2,969.20         | 2,969.60      | 29.57         | 2,969.74                   | 0.57                   | 594,961.60         | 743,849.57        |
| 14,014.00    | 89.00      | 358.50               | 10,826.24     | 3,063.15         | 3,063.52      | 26.45         | 3,063.63                   | 0.49                   | 595,055.52         | 743,846.45        |
| 14,107.00    | 89.50      | 359.00               | 10,827.46     | 3,156.13         | 3,156.49      | 24.42         | 3,156.58                   | 0.44                   | 595,148.49         | 743,844.42        |
| 14,201.00    | 90.10      | 359.80               | 10,827.79     | 3,250.13         | 3,250.48      | 23.44         | 3,250.56                   | 0.41                   | 595,242.48         | 743,843.44        |
| 14,295.00    | 90.70      | 0.60                 | 10,827.13     | 3,344.12         | 3,344.47      | 23.77         | 3,344.56                   | 0.41                   | 595,336.47         | 743,843.77        |
| 14,388.00    | 91.10      | 1.50                 | 10,825.67     | 3,437.07         | 3,437.45      | 25.47         | 3,437.54                   | 0.42                   | 595,429.45         | 743,845.47        |
| 14,482.00    | 91.10      | 0.40                 | 10,823.86     | 3,531.02         | 3,531.41      | 27.03         | 3,531.52                   | 0.44                   | 595,523.41         | 743,847.03        |
| 14,575.00    | 89.80      | 358.70               | 10,823.13     | 3,624.02         | 3,624.40      | 26.30         | 3,624.50                   | 0.42                   | 595,616.40         | 743,846.30        |
| 14,669.00    | 89.90      | 358.30               | 10,823.38     | 3,718.00         | 3,718.37      | 23.84         | 3,718.45                   | 0.37                   | 595,710.37         | 743,843.84        |
| 14,762.00    | 89.10      | 357.70               | 10,824.19     | 3,810.97         | 3,811.31      | 20.59         | 3,811.36                   | 0.31                   | 595,803.31         | 743,840.59        |
| 14,856.00    | 89.20      | 357.50               | 10,825.59     | 3,904.90         | 3,905.22      | 16.66         | 3,905.25                   | 0.24                   | 595,897.22         | 743,836.66        |
| 14,949.00    | 89.80      | 357.90               | 10,826.40     | 3,997.86         | 3,998.14      | 12.92         | 3,998.16                   | 0.19                   | 595,990.14         | 743,832.92        |
| 15,043.00    | 90.90      | 358.60               | 10,825.82     | 4,091.83         | 4,092.09      | 10.05         | 4,092.10                   | 0.14                   | 596,084.09         | 743,830.05        |
| 15,136.00    | 92.00      | 359.70               | 10,823.47     | 4,184.80         | 4,185.05      | 8.67          | 4,185.06                   | 0.12                   | 596,177.05         | 743,828.67        |
| 15,229.00    | 90.60      | 359.30               | 10,821.36     | 4,277.77         | 4,278.02      | 7.86          | 4,278.02                   | 0.11                   | 596,270.02         | 743,827.86        |
| 15,323.00    | 90.70      | 359.30               | 10,820.29     | 4,371.76         | 4,372.00      | 6.71          | 4,372.01                   | 0.09                   | 596,364.00         | 743,826.71        |
| 15,416.00    | 91.30      | 359.80               | 10,818.67     | 4,464.75         | 4,464.99      | 5.98          | 4,464.99                   | 0.08                   | 596,456.99         | 743,825.98        |
| 15,510.00    | 91.90      | 0.30                 | 10,816.05     | 4,558.71         | 4,558.95      | 6.07          | 4,558.95                   | 0.08                   | 596,550.95         | 743,826.07        |
| 15,604.00    | 91.10      | 359.50               | 10,813.59     | 4,652.67         | 4,652.91      | 5.90          | 4,652.92                   | 0.07                   | 596,644.91         | 743,825.90        |
| 15,697.00    | 90.50      | 359.60               | 10,812.29     | 4,745.66         | 4,745.90      | 5.17          | 4,745.91                   | 0.06                   | 596,737.90         | 743,825.17        |
| 15,791.00    | 88.20      | 359.10               | 10,813.35     | 4,839.65         | 4,839.88      | 4.11          | 4,839.89                   | 0.05                   | 596,831.88         | 743,824.11        |
| 15,885.00    | 88.50      | 359.20               | 10,816.06     | 4,933.61         | 4,933.83      | 2.71          | 4,933.83                   | 0.03                   | 596,925.83         | 743,822.71        |
| 15,978.00    | 89.60      | 359.70               | 10,817.60     | 5,026.59         | 5,026.82      | 1.82          | 5,026.82                   | 0.02                   | 597,018.82         | 743,821.82        |
| 16,072.00    | 90.60      | 0.30                 | 10,817.44     | 5,120.59         | 5,120.81      | 1.82          | 5,120.81                   | 0.02                   | 597,112.81         | 743,821.82        |



ProDirectional  
Survey Report



|           |                   |                              |                                                      |
|-----------|-------------------|------------------------------|------------------------------------------------------|
| Company:  | Matador Resources | Local Co-ordinate Reference: | Well No. 1H                                          |
| Project:  | Lea County, NM    | TVD Reference:               | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| Site:     | Mallon 27 Federal | MD Reference:                | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| Well:     | No. 1H            | North Reference:             | Grid                                                 |
| Wellbore: | OH                | Survey Calculation Method:   | Minimum Curvature                                    |
| Design:   | MWD               | Database:                    | Well_Planner1                                        |

| 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) |
| 16,165.00                             | 90.90      | 0.40                 | 10,816.22     | 5,213.57         | 5,213.80      | 2.39          | 5,213.80                   | 0.03                   | 597,205.80         | 743,822.39        |
| 16,259.00                             | 91.90      | 0.70                 | 10,813.92     | 5,307.52         | 5,307.77      | 3.29          | 5,307.77                   | 0.04                   | 597,299.77         | 743,823.29        |
| 16,352.00                             | 89.50      | 0.00                 | 10,812.79     | 5,400.50         | 5,400.75      | 3.86          | 5,400.76                   | 0.04                   | 597,392.75         | 743,823.86        |
| 16,446.00                             | 89.70      | 359.40               | 10,813.44     | 5,494.49         | 5,494.75      | 3.36          | 5,494.75                   | 0.04                   | 597,486.75         | 743,823.36        |
| 16,539.00                             | 89.30      | 359.30               | 10,814.26     | 5,587.49         | 5,587.74      | 2.31          | 5,587.74                   | 0.02                   | 597,579.74         | 743,822.31        |
| 16,633.00                             | 88.00      | 359.30               | 10,816.47     | 5,681.46         | 5,681.71      | 1.16          | 5,681.71                   | 0.01                   | 597,673.71         | 743,821.16        |
| 16,726.00                             | 88.80      | 359.40               | 10,819.07     | 5,774.42         | 5,774.66      | 0.11          | 5,774.66                   | 0.00                   | 597,766.66         | 743,820.11        |
| 16,820.00                             | 89.40      | 359.30               | 10,820.54     | 5,868.41         | 5,868.64      | -0.96         | 5,868.64                   | 359.99                 | 597,860.64         | 743,819.04        |
| 16,914.00                             | 90.20      | 359.80               | 10,820.87     | 5,962.41         | 5,962.64      | -1.70         | 5,962.64                   | 359.98                 | 597,954.64         | 743,818.30        |
| 17,007.00                             | 91.00      | 0.80                 | 10,819.90     | 6,055.39         | 6,055.63      | -1.21         | 6,055.63                   | 359.99                 | 598,047.63         | 743,818.79        |
| 17,100.00                             | 91.80      | 1.40                 | 10,817.63     | 6,148.33         | 6,148.59      | 0.57          | 6,148.59                   | 0.01                   | 598,140.59         | 743,820.57        |
| 17,194.00                             | 91.70      | 0.00                 | 10,814.75     | 6,242.26         | 6,242.53      | 1.72          | 6,242.53                   | 0.02                   | 598,234.53         | 743,821.72        |
| 17,288.00                             | 91.90      | 358.80               | 10,811.80     | 6,336.21         | 6,336.48      | 0.74          | 6,336.48                   | 0.01                   | 598,328.48         | 743,820.74        |
| 17,381.00                             | 92.70      | 359.30               | 10,808.07     | 6,429.13         | 6,429.39      | -0.80         | 6,429.39                   | 359.99                 | 598,421.39         | 743,819.20        |
| 17,475.00                             | 91.30      | 359.30               | 10,804.79     | 6,523.07         | 6,523.32      | -1.95         | 6,523.32                   | 359.98                 | 598,515.32         | 743,818.05        |
| 17,569.00                             | 91.10      | 359.80               | 10,802.82     | 6,617.05         | 6,617.30      | -2.69         | 6,617.30                   | 359.98                 | 598,609.30         | 743,817.31        |
| 17,662.00                             | 89.40      | 359.80               | 10,802.41     | 6,710.05         | 6,710.29      | -3.01         | 6,710.30                   | 359.97                 | 598,702.29         | 743,816.99        |
| 17,756.00                             | 90.10      | 359.60               | 10,802.82     | 6,804.04         | 6,804.29      | -3.50         | 6,804.29                   | 359.97                 | 598,796.29         | 743,816.50        |
| 17,850.00                             | 91.00      | 0.00                 | 10,801.92     | 6,898.04         | 6,898.29      | -3.83         | 6,898.29                   | 359.97                 | 598,890.29         | 743,816.17        |
| 17,943.00                             | 92.00      | 0.20                 | 10,799.49     | 6,991.00         | 6,991.25      | -3.67         | 6,991.25                   | 359.97                 | 598,983.25         | 743,816.33        |
| 18,037.00                             | 90.40      | 359.80               | 10,797.52     | 7,084.97         | 7,085.23      | -3.67         | 7,085.23                   | 359.97                 | 599,077.23         | 743,816.33        |
| 18,130.00                             | 90.50      | 359.90               | 10,796.79     | 7,177.97         | 7,178.23      | -3.91         | 7,178.23                   | 359.97                 | 599,170.23         | 743,816.09        |
| 18,156.00                             | 90.69      | 359.94               | 10,796.52     | 7,203.96         | 7,204.22      | -3.95         | 7,204.23                   | 359.97                 | 599,196.22         | 743,816.05        |
| HL Xing: 18156' MD                    |            |                      |               |                  |               |               |                            |                        |                    |                   |
| 18,199.00                             | 91.00      | 0.00                 | 10,795.89     | 7,246.96         | 7,247.22      | -3.97         | 7,247.22                   | 359.97                 | 599,239.22         | 743,816.03        |
| Last Survey: 18199' MD, 10795.89' TVD |            |                      |               |                  |               |               |                            |                        |                    |                   |



ProDirectional  
Survey Report



|           |                   |                              |                                                      |
|-----------|-------------------|------------------------------|------------------------------------------------------|
| Company:  | Matador Resources | Local Co-ordinate Reference: | Well No. 1H                                          |
| Project:  | Lea County, NM    | TVD Reference:               | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| Site:     | Mallon 27 Federal | MD Reference:                | Well @ 3748.50usft (GL: 3720' + KB: 28.5' (Patt809)) |
| Well:     | No. 1H            | North Reference:             | Grid                                                 |
| Wellbore: | OH                | Survey Calculation Method:   | Minimum Curvature                                    |
| Design:   | MWD               | Database:                    | Well_Planner1                                        |

| 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) |  |
| 18,255.00                     | 91.00      | 0.00                 | 10,794.91     | 7,302.95         | 7,303.21      | -3.97         | 7,303.21                   | 359.97                 | 599,295.21         | 743,816.03        |  |
| PTB: 18255' MD, 10794.91' TVD |            |                      |               |                  |               |               |                            |                        |                    |                   |  |

| Design Annotations          |                             |                   |                 |                                       |
|-----------------------------|-----------------------------|-------------------|-----------------|---------------------------------------|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                               |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                       |
| 2,975.00                    | 2,971.73                    | -72.24            | 31.68           | HL Xing: 2975' MD                     |
| 10,851.00                   | 10,748.74                   | -72.55            | 49.30           | HL Xing: 10851' MD                    |
| 18,156.00                   | 10,796.52                   | 7,204.22          | -3.95           | HL Xing: 18156' MD                    |
| 18,199.00                   | 10,795.89                   | 7,247.22          | -3.97           | Last Survey: 18199' MD, 10795.89' TVD |
| 18,255.00                   | 10,794.91                   | 7,303.21          | -3.97           | PTB: 18255' MD, 10794.91' TVD         |