

# Matador Resources

Lea County, NM (NAD 27)

Cimarron 16-19-34

#1H

Wellbore #1

Plan: Plan #1 12-17-14

## Standard Planning Report

17 December, 2014

Oil Conservation Division  
Case No. 11 15243  
Exhibit No. 11

# Planning Report

|           |                         |                              |                                              |
|-----------|-------------------------|------------------------------|----------------------------------------------|
| Database: | Compass 5000 GCR        | Local Co-ordinate Reference: | Well #1H                                     |
| Company:  | Matador Resources       | TVD Reference:               | GL3832.75+KB25 @ 3857.75usft (Patterson 203) |
| Project:  | Lea County, NM (NAD 27) | MD Reference:                | GL3832.75+KB25 @ 3857.75usft (Patterson 203) |
| Site:     | Cimarron 16-19-34       | North Reference:             | Grid                                         |
| Well:     | #1H                     | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1             |                              |                                              |
| Design:   | Plan #1 12-17-14        |                              |                                              |

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

|                       |                   |              |                 |                   |                     |
|-----------------------|-------------------|--------------|-----------------|-------------------|---------------------|
| Site:                 | Cimarron 16-19-34 |              |                 |                   |                     |
| Site Position:        |                   | Northing:    | 607,136.00 usft | Latitude:         | 32° 40' 0.18326 N   |
| From:                 | Map               | Easting:     | 738,819.00 usft | Longitude:        | 103° 33' 26.20197 W |
| Position Uncertainty: | 0.00 usft         | Slot Radius: | 13-3/16 "       | Grid Convergence: | 0.42 °              |

|                      |           |                     |           |                 |               |                     |
|----------------------|-----------|---------------------|-----------|-----------------|---------------|---------------------|
| Well:                | #1H       |                     |           |                 |               |                     |
| Well Position        | +N-S      | 0.00 usft           | Northing: | 607,136.00 usft | Latitude:     | 32° 40' 0.18326 N   |
|                      | +E-W      | 0.00 usft           | Easting:  | 738,819.00 usft | Longitude:    | 103° 33' 26.20197 W |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | 0.00 usft | Ground Level:   | 3,832.75 usft |                     |

|           |             |             |             |              |                |
|-----------|-------------|-------------|-------------|--------------|----------------|
| Wellbore  | Wellbore #1 |             |             |              |                |
| Magnetics | Model Name  | Sample Date | Declination | Dip Angle    | Field Strength |
|           | BGGM2013    | 12/17/2014  | (°)<br>7.30 | (°)<br>60.50 | (nT)<br>48,499 |

|                   |                  |           |               |           |
|-------------------|------------------|-----------|---------------|-----------|
| Design:           | Plan #1 12-17-14 |           |               |           |
| Audit Notes:      |                  |           |               |           |
| Version:          | Phase:           | PROTOTYPE | Tie On Depth: | 0.00      |
| Vertical Section: | Depth From (TVD) | +N-S      | +E-W          | Direction |
|                   | (usft)           | (usft)    | (usft)        | (°)       |
|                   | 0.00             | 0.00      | 0.00          | 180.08    |

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N-S (usft) | +E-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target                |
|-----------------------|-----------------|-------------|-----------------------|-------------|-------------|-------------------------|------------------------|-----------------------|---------|-----------------------|
| 0.00                  | 0.00            | 0.00        | 0.00                  | 0.00        | 0.00        | 0.00                    | 0.00                   | 0.00                  | 0.00    |                       |
| 8,083.00              | 0.00            | 0.00        | 8,083.00              | 0.00        | 0.00        | 0.00                    | 0.00                   | 0.00                  | 0.00    |                       |
| 8,749.95              | 10.00           | 345.38      | 8,746.57              | 56.20       | -14.65      | 1.50                    | 1.50                   | 0.00                  | 345.38  |                       |
| 9,271.24              | 10.00           | 345.38      | 9,259.93              | 143.83      | -37.51      | 0.00                    | 0.00                   | 0.00                  | 0.00    |                       |
| 9,938.19              | 0.00            | 0.00        | 9,923.50              | 200.03      | -52.16      | 1.50                    | -1.50                  | 0.00                  | 180.00  | Vt Cimarron 16-19-34  |
| 10,138.19             | 0.00            | 0.00        | 10,123.50             | 200.03      | -52.16      | 0.00                    | 0.00                   | 0.00                  | 0.00    |                       |
| 11,028.20             | 89.00           | 179.49      | 10,696.37             | -362.91     | -47.18      | 10.00                   | 10.00                  | 20.17                 | 179.49  |                       |
| 15,587.36             | 89.00           | 179.49      | 10,775.90             | -4,921.20   | -6.84       | 0.00                    | 0.00                   | 0.00                  | 0.00    | BHL Cimarron 16-19-34 |

# Planning Report

Database: Compass 5000 GCR  
 Company: Matador Resources  
 Project: Lea County, NM (NAD 27)  
 Site: Cimarron 16-19-34  
 Well: #1H  
 Wellbore: Wellbore #1  
 Design: Plan #1 12-17-14

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

Well #1H  
 GL3832.75+KB25 @ 3857.75usft (Patterson 203)  
 GL3832.75+KB25 @ 3857.75usft (Patterson 203)  
 Grid  
 Minimum Curvature

## Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | N-S (usft) | E-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|------------|------------|-------------------------|-------------------------|------------------------|-----------------------|
| 0.00                  | 0.00            | 0.00        | 0.00                  | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 100.00                | 0.00            | 0.00        | 100.00                | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 200.00                | 0.00            | 0.00        | 200.00                | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 300.00                | 0.00            | 0.00        | 300.00                | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 400.00                | 0.00            | 0.00        | 400.00                | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 500.00                | 0.00            | 0.00        | 500.00                | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 600.00                | 0.00            | 0.00        | 600.00                | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 700.00                | 0.00            | 0.00        | 700.00                | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 800.00                | 0.00            | 0.00        | 800.00                | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 900.00                | 0.00            | 0.00        | 900.00                | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,000.00              | 0.00            | 0.00        | 1,000.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00              | 0.00            | 0.00        | 1,100.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00              | 0.00            | 0.00        | 1,200.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00              | 0.00            | 0.00        | 1,300.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00              | 0.00            | 0.00        | 1,400.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00              | 0.00            | 0.00        | 1,500.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00              | 0.00            | 0.00        | 1,600.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00              | 0.00            | 0.00        | 1,700.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00              | 0.00            | 0.00        | 1,800.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00              | 0.00            | 0.00        | 1,900.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 13 3/8"               |                 |             |                       |            |            |                         |                         |                        |                       |
| 2,000.00              | 0.00            | 0.00        | 2,000.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00              | 0.00            | 0.00        | 2,100.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00              | 0.00            | 0.00        | 2,200.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00              | 0.00            | 0.00        | 2,300.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00              | 0.00            | 0.00        | 2,400.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00              | 0.00            | 0.00        | 2,500.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00              | 0.00            | 0.00        | 2,600.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00              | 0.00            | 0.00        | 2,700.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00              | 0.00            | 0.00        | 2,800.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00              | 0.00            | 0.00        | 2,900.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00              | 0.00            | 0.00        | 3,000.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00              | 0.00            | 0.00        | 3,100.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00              | 0.00            | 0.00        | 3,200.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00              | 0.00            | 0.00        | 3,300.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00              | 0.00            | 0.00        | 3,400.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00              | 0.00            | 0.00        | 3,500.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00              | 0.00            | 0.00        | 3,600.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00              | 0.00            | 0.00        | 3,700.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00              | 0.00            | 0.00        | 3,800.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00              | 0.00            | 0.00        | 3,900.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00              | 0.00            | 0.00        | 4,000.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00              | 0.00            | 0.00        | 4,100.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00              | 0.00            | 0.00        | 4,200.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00              | 0.00            | 0.00        | 4,300.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00              | 0.00            | 0.00        | 4,400.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00              | 0.00            | 0.00        | 4,500.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00              | 0.00            | 0.00        | 4,600.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00              | 0.00            | 0.00        | 4,700.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00              | 0.00            | 0.00        | 4,800.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00              | 0.00            | 0.00        | 4,900.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00              | 0.00            | 0.00        | 5,000.00              | 0.00       | 0.00       | 0.00                    | 0.00                    | 0.00                   | 0.00                  |

# Planning Report

Database: Compass 5000 GCR  
 Company: Malador Resources  
 Project: Lea County, NM (NAD 27)  
 Site: Cimarron 16-19-34  
 Well: #1H  
 Wellbore: Wellbore #1  
 Design: Plan #1 12-17-14

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

Well #1H  
 GL3832.75+KB25 @ 3857.75usft (Patterson 203)  
 GL3832.75+KB25 @ 3857.75usft (Patterson 203)  
 Grid  
 Minimum Curvature

## Planned Survey

| Measured                   | Inclination | Azimuth | Vertical        | +N/-S  | +E/-W  | Vertical          | Dogleg              | Build               | Turn                |
|----------------------------|-------------|---------|-----------------|--------|--------|-------------------|---------------------|---------------------|---------------------|
| Depth<br>(usft)            | (°)         | (°)     | Depth<br>(usft) | (usft) | (usft) | Section<br>(usft) | Rate<br>(°/100usft) | Rate<br>(°/100usft) | Rate<br>(°/100usft) |
| 5,100.00                   | 0.00        | 0.00    | 5,100.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 5,200.00                   | 0.00        | 0.00    | 5,200.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 5,300.00                   | 0.00        | 0.00    | 5,300.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 5,400.00                   | 0.00        | 0.00    | 5,400.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 5,500.00                   | 0.00        | 0.00    | 5,500.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 5,600.00                   | 0.00        | 0.00    | 5,600.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 5,700.00                   | 0.00        | 0.00    | 5,700.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 5,800.00                   | 0.00        | 0.00    | 5,800.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 9 5/8"                     |             |         |                 |        |        |                   |                     |                     |                     |
| 5,900.00                   | 0.00        | 0.00    | 5,900.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,000.00                   | 0.00        | 0.00    | 6,000.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,100.00                   | 0.00        | 0.00    | 6,100.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,200.00                   | 0.00        | 0.00    | 6,200.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,300.00                   | 0.00        | 0.00    | 6,300.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,400.00                   | 0.00        | 0.00    | 6,400.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,500.00                   | 0.00        | 0.00    | 6,500.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,600.00                   | 0.00        | 0.00    | 6,600.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,700.00                   | 0.00        | 0.00    | 6,700.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,800.00                   | 0.00        | 0.00    | 6,800.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 6,900.00                   | 0.00        | 0.00    | 6,900.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,000.00                   | 0.00        | 0.00    | 7,000.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,100.00                   | 0.00        | 0.00    | 7,100.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,200.00                   | 0.00        | 0.00    | 7,200.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,300.00                   | 0.00        | 0.00    | 7,300.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,400.00                   | 0.00        | 0.00    | 7,400.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,500.00                   | 0.00        | 0.00    | 7,500.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,600.00                   | 0.00        | 0.00    | 7,600.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,700.00                   | 0.00        | 0.00    | 7,700.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,800.00                   | 0.00        | 0.00    | 7,800.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 7,900.00                   | 0.00        | 0.00    | 7,900.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 8,000.00                   | 0.00        | 0.00    | 8,000.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| 8,083.00                   | 0.00        | 0.00    | 8,083.00        | 0.00   | 0.00   | 0.00              | 0.00                | 0.00                | 0.00                |
| Build: 1.5°/100            |             |         |                 |        |        |                   |                     |                     |                     |
| 8,100.00                   | 0.26        | 345.38  | 8,100.00        | 0.04   | -0.01  | -0.04             | 1.50                | 1.50                | 0.00                |
| 8,200.00                   | 1.76        | 345.38  | 8,199.98        | 1.73   | -0.45  | -1.73             | 1.50                | 1.50                | 0.00                |
| 8,300.00                   | 3.26        | 345.38  | 8,299.88        | 5.96   | -1.55  | -5.96             | 1.50                | 1.50                | 0.00                |
| 8,400.00                   | 4.76        | 345.38  | 8,399.64        | 12.72  | -3.32  | -12.72            | 1.50                | 1.50                | 0.00                |
| 8,500.00                   | 6.26        | 345.38  | 8,499.17        | 22.00  | -5.74  | -22.00            | 1.50                | 1.50                | 0.00                |
| 8,600.00                   | 7.76        | 345.38  | 8,598.42        | 33.80  | -8.81  | -33.79            | 1.50                | 1.50                | 0.00                |
| 8,700.00                   | 9.26        | 345.38  | 8,697.32        | 48.11  | -12.55 | -48.10            | 1.50                | 1.50                | 0.00                |
| 8,749.95                   | 10.00       | 345.38  | 8,746.57        | 56.20  | -14.65 | -56.18            | 1.50                | 1.50                | 0.00                |
| Hold: 10° Inc, 345.38° Azm |             |         |                 |        |        |                   |                     |                     |                     |
| 8,800.00                   | 10.00       | 345.38  | 8,795.86        | 64.61  | -16.85 | -64.59            | 0.00                | 0.00                | 0.00                |
| 8,900.00                   | 10.00       | 345.38  | 8,894.33        | 81.42  | -21.23 | -81.39            | 0.00                | 0.00                | 0.00                |
| 9,000.00                   | 10.00       | 345.38  | 8,992.81        | 98.23  | -25.62 | -98.20            | 0.00                | 0.00                | 0.00                |
| 9,100.00                   | 10.00       | 345.38  | 9,091.29        | 115.04 | -30.00 | -115.00           | 0.00                | 0.00                | 0.00                |
| 9,200.00                   | 10.00       | 345.38  | 9,189.77        | 131.85 | -34.38 | -131.81           | 0.00                | 0.00                | 0.00                |
| 9,271.24                   | 10.00       | 345.38  | 9,259.93        | 143.83 | -37.51 | -143.78           | 0.00                | 0.00                | 0.00                |
| Drop: 1.5°/100             |             |         |                 |        |        |                   |                     |                     |                     |
| 9,300.00                   | 9.57        | 345.38  | 9,288.27        | 148.56 | -38.74 | -148.51           | 1.50                | -1.50               | 0.00                |
| 9,400.00                   | 8.07        | 345.38  | 9,387.09        | 163.40 | -42.61 | -163.34           | 1.50                | -1.50               | 0.00                |
| 9,500.00                   | 6.57        | 345.38  | 9,486.27        | 175.74 | -45.82 | -175.67           | 1.50                | -1.50               | 0.00                |

# Planning Report

|           |                         |                              |                                              |
|-----------|-------------------------|------------------------------|----------------------------------------------|
| Database: | Compass 5000 GCR        | Local Co-ordinate Reference: | Well #1H                                     |
| Company:  | Matador Resources       | TVD Reference:               | GL3832.75+KB25 @ 3857.75usft (Patterson 203) |
| Project:  | Lea County, NM (NAD 27) | MD Reference:                | GL3832.75+KB25 @ 3857.75usft (Patterson 203) |
| Site:     | Cimarron 16-19-34       | North Reference:             | Grid                                         |
| Well:     | #1H                     | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1             |                              |                                              |
| Design:   | Plan #1 12-17-14        |                              |                                              |

| Planned Survey                           |                 |             |                       |              |              |                         |                         |                        |                       |  |
|------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)                    | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 9,600.00                                 | 5.07            | 345.38      | 9,585.75              | 185.55       | -48.38       | -185.48                 | 1.50                    | -1.50                  | 0.00                  |  |
| 9,700.00                                 | 3.57            | 345.38      | 9,685.46              | 192.85       | -50.29       | -192.78                 | 1.50                    | -1.50                  | 0.00                  |  |
| 9,800.00                                 | 2.07            | 345.38      | 9,785.34              | 197.61       | -51.53       | -197.54                 | 1.50                    | -1.50                  | 0.00                  |  |
| 9,900.00                                 | 0.57            | 345.38      | 9,885.31              | 199.85       | -52.11       | -199.77                 | 1.50                    | -1.50                  | 0.00                  |  |
| 9,938.19                                 | 0.00            | 0.00        | 9,923.50              | 200.03       | -52.16       | -199.96                 | 1.50                    | -1.50                  | 0.00                  |  |
| Hold Vertical - Vt Cimarron 16-19-34 #1H |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 10,000.00                                | 0.00            | 0.00        | 9,985.31              | 200.03       | -52.16       | -199.96                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,100.00                                | 0.00            | 0.00        | 10,085.31             | 200.03       | -52.16       | -199.96                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,138.19                                | 0.00            | 0.00        | 10,123.50             | 200.03       | -52.16       | -199.96                 | 0.00                    | 0.00                   | 0.00                  |  |
| KOP: Build 10°/100                       |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 10,150.00                                | 1.18            | 179.49      | 10,135.31             | 199.91       | -52.16       | -199.84                 | 10.00                   | 10.00                  | 0.00                  |  |
| 10,200.00                                | 6.18            | 179.49      | 10,185.19             | 196.70       | -52.13       | -196.63                 | 10.00                   | 10.00                  | 0.00                  |  |
| 10,250.00                                | 11.18           | 179.49      | 10,234.60             | 189.16       | -52.06       | -189.08                 | 10.00                   | 10.00                  | 0.00                  |  |
| 10,300.00                                | 16.18           | 179.49      | 10,283.16             | 177.33       | -51.96       | -177.26                 | 10.00                   | 10.00                  | 0.00                  |  |
| 10,350.00                                | 21.18           | 179.49      | 10,330.51             | 161.33       | -51.82       | -161.25                 | 10.00                   | 10.00                  | 0.00                  |  |
| 10,400.00                                | 26.18           | 179.49      | 10,376.29             | 141.25       | -51.64       | -141.18                 | 10.00                   | 10.00                  | 0.00                  |  |
| 10,450.00                                | 31.18           | 179.49      | 10,420.14             | 117.26       | -51.43       | -117.19                 | 10.00                   | 10.00                  | 0.00                  |  |
| 10,500.00                                | 36.18           | 179.49      | 10,461.74             | 89.55        | -51.18       | -89.47                  | 10.00                   | 10.00                  | 0.00                  |  |
| 10,550.00                                | 41.18           | 179.49      | 10,500.76             | 58.31        | -50.91       | -58.24                  | 10.00                   | 10.00                  | 0.00                  |  |
| 10,600.00                                | 46.18           | 179.49      | 10,536.90             | 23.79        | -50.60       | -23.72                  | 10.00                   | 10.00                  | 0.00                  |  |
| 10,650.00                                | 51.18           | 179.49      | 10,569.91             | -13.75       | -50.27       | 13.82                   | 10.00                   | 10.00                  | 0.00                  |  |
| 10,700.00                                | 56.18           | 179.49      | 10,599.51             | -54.02       | -49.91       | 54.09                   | 10.00                   | 10.00                  | 0.00                  |  |
| 10,750.00                                | 61.18           | 179.49      | 10,625.49             | -96.72       | -49.53       | 96.79                   | 10.00                   | 10.00                  | 0.00                  |  |
| 10,764.28                                | 62.61           | 179.49      | 10,632.22             | -109.32      | -49.42       | 109.38                  | 10.00                   | 10.00                  | 0.00                  |  |
| FPP Cimarron 16-19-34 #1H                |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 10,800.00                                | 66.18           | 179.49      | 10,647.66             | -141.52      | -49.14       | 141.59                  | 10.00                   | 10.00                  | 0.00                  |  |
| 10,850.00                                | 71.18           | 179.49      | 10,665.83             | -188.08      | -48.73       | 188.15                  | 10.00                   | 10.00                  | 0.00                  |  |
| 10,900.00                                | 76.18           | 179.49      | 10,679.87             | -236.05      | -48.30       | 236.12                  | 10.00                   | 10.00                  | 0.00                  |  |
| 10,950.00                                | 81.18           | 179.49      | 10,689.68             | -285.06      | -47.87       | 285.13                  | 10.00                   | 10.00                  | 0.00                  |  |
| 11,000.00                                | 86.18           | 179.49      | 10,695.19             | -334.74      | -47.43       | 334.81                  | 10.00                   | 10.00                  | 0.00                  |  |
| 11,028.20                                | 89.00           | 179.49      | 10,696.37             | -362.91      | -47.18       | 362.98                  | 10.00                   | 10.00                  | 0.00                  |  |
| LP: Hold 89° Inc, 179.49° Azm            |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 11,100.00                                | 89.00           | 179.49      | 10,697.62             | -434.70      | -46.54       | 434.76                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,200.00                                | 89.00           | 179.49      | 10,699.37             | -534.68      | -45.66       | 534.74                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,300.00                                | 89.00           | 179.49      | 10,701.11             | -634.66      | -44.77       | 634.72                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,400.00                                | 89.00           | 179.49      | 10,702.86             | -734.64      | -43.89       | 734.70                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,500.00                                | 89.00           | 179.49      | 10,704.60             | -834.62      | -43.00       | 834.68                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,600.00                                | 89.00           | 179.49      | 10,706.35             | -934.60      | -42.12       | 934.66                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,700.00                                | 89.00           | 179.49      | 10,708.09             | -1,034.58    | -41.23       | 1,034.64                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,800.00                                | 89.00           | 179.49      | 10,709.83             | -1,134.56    | -40.35       | 1,134.62                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,900.00                                | 89.00           | 179.49      | 10,711.58             | -1,234.55    | -39.46       | 1,234.60                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,000.00                                | 89.00           | 179.49      | 10,713.32             | -1,334.53    | -38.58       | 1,334.58                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,100.00                                | 89.00           | 179.49      | 10,715.07             | -1,434.51    | -37.70       | 1,434.56                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,200.00                                | 89.00           | 179.49      | 10,716.81             | -1,534.49    | -36.81       | 1,534.54                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,300.00                                | 89.00           | 179.49      | 10,718.56             | -1,634.47    | -35.93       | 1,634.52                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,400.00                                | 89.00           | 179.49      | 10,720.30             | -1,734.45    | -35.04       | 1,734.50                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,500.00                                | 89.00           | 179.49      | 10,722.04             | -1,834.43    | -34.16       | 1,834.48                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,600.00                                | 89.00           | 179.49      | 10,723.79             | -1,934.41    | -33.27       | 1,934.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,700.00                                | 89.00           | 179.49      | 10,725.53             | -2,034.39    | -32.39       | 2,034.44                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,800.00                                | 89.00           | 179.49      | 10,727.28             | -2,134.37    | -31.50       | 2,134.42                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,900.00                                | 89.00           | 179.49      | 10,729.02             | -2,234.35    | -30.62       | 2,234.39                | 0.00                    | 0.00                   | 0.00                  |  |

# Planning Report

|           |                         |                              |                                              |
|-----------|-------------------------|------------------------------|----------------------------------------------|
| Database: | Compass 5000 GCR        | Local Co-ordinate Reference: | Well #1H                                     |
| Company:  | Matador Resources       | TVD Reference:               | GL3832.75+KB25 @ 3857.75usft (Patterson 203) |
| Project:  | Lea County, NM (NAD 27) | MD Reference:                | GL3832.75+KB25 @ 3857.75usft (Patterson 203) |
| Site:     | Cimarron 16-19-34       | North Reference:             | Grid                                         |
| Well:     | #1H                     | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1             |                              |                                              |
| Design:   | Plan #1 12-17-14        |                              |                                              |

| Planned Survey                             |             |         |           |           |        |          |             |             |             |  |
|--------------------------------------------|-------------|---------|-----------|-----------|--------|----------|-------------|-------------|-------------|--|
| Measured                                   |             |         | Vertical  |           |        | Vertical | Dogleg      | Build       | Turn        |  |
| Depth                                      | Inclination | Azimuth | Depth     | +N/-S     | +E/-W  | Section  | Rate        | Rate        | Rate        |  |
| (usft)                                     | (°)         | (°)     | (usft)    | (usft)    | (usft) | (usft)   | (°/100usft) | (°/100usft) | (°/100usft) |  |
| 13,000.00                                  | 89.00       | 179.49  | 10,730.77 | -2,334.34 | -29.73 | 2,334.37 | 0.00        | 0.00        | 0.00        |  |
| 13,100.00                                  | 89.00       | 179.49  | 10,732.51 | -2,434.32 | -28.85 | 2,434.35 | 0.00        | 0.00        | 0.00        |  |
| 13,200.00                                  | 89.00       | 179.49  | 10,734.26 | -2,534.30 | -27.96 | 2,534.33 | 0.00        | 0.00        | 0.00        |  |
| 13,300.00                                  | 89.00       | 179.49  | 10,736.00 | -2,634.28 | -27.08 | 2,634.31 | 0.00        | 0.00        | 0.00        |  |
| 13,400.00                                  | 89.00       | 179.49  | 10,737.74 | -2,734.26 | -26.19 | 2,734.29 | 0.00        | 0.00        | 0.00        |  |
| 13,500.00                                  | 89.00       | 179.49  | 10,739.49 | -2,834.24 | -25.31 | 2,834.27 | 0.00        | 0.00        | 0.00        |  |
| 13,600.00                                  | 89.00       | 179.49  | 10,741.23 | -2,934.22 | -24.42 | 2,934.25 | 0.00        | 0.00        | 0.00        |  |
| 13,700.00                                  | 89.00       | 179.49  | 10,742.98 | -3,034.20 | -23.54 | 3,034.23 | 0.00        | 0.00        | 0.00        |  |
| 13,800.00                                  | 89.00       | 179.49  | 10,744.72 | -3,134.18 | -22.65 | 3,134.21 | 0.00        | 0.00        | 0.00        |  |
| 13,900.00                                  | 89.00       | 179.49  | 10,746.47 | -3,234.16 | -21.77 | 3,234.19 | 0.00        | 0.00        | 0.00        |  |
| 14,000.00                                  | 89.00       | 179.49  | 10,748.21 | -3,334.14 | -20.88 | 3,334.17 | 0.00        | 0.00        | 0.00        |  |
| 14,100.00                                  | 89.00       | 179.49  | 10,749.95 | -3,434.12 | -20.00 | 3,434.15 | 0.00        | 0.00        | 0.00        |  |
| 14,200.00                                  | 89.00       | 179.49  | 10,751.70 | -3,534.11 | -19.12 | 3,534.13 | 0.00        | 0.00        | 0.00        |  |
| 14,300.00                                  | 89.00       | 179.49  | 10,753.44 | -3,634.09 | -18.23 | 3,634.11 | 0.00        | 0.00        | 0.00        |  |
| 14,400.00                                  | 89.00       | 179.49  | 10,755.19 | -3,734.07 | -17.35 | 3,734.09 | 0.00        | 0.00        | 0.00        |  |
| 14,500.00                                  | 89.00       | 179.49  | 10,756.93 | -3,834.05 | -16.46 | 3,834.07 | 0.00        | 0.00        | 0.00        |  |
| 14,600.00                                  | 89.00       | 179.49  | 10,758.68 | -3,934.03 | -15.58 | 3,934.05 | 0.00        | 0.00        | 0.00        |  |
| 14,700.00                                  | 89.00       | 179.49  | 10,760.42 | -4,034.01 | -14.69 | 4,034.03 | 0.00        | 0.00        | 0.00        |  |
| 14,800.00                                  | 89.00       | 179.49  | 10,762.17 | -4,133.99 | -13.81 | 4,134.01 | 0.00        | 0.00        | 0.00        |  |
| 14,900.00                                  | 89.00       | 179.49  | 10,763.91 | -4,233.97 | -12.92 | 4,233.99 | 0.00        | 0.00        | 0.00        |  |
| 15,000.00                                  | 89.00       | 179.49  | 10,765.65 | -4,333.95 | -12.04 | 4,333.97 | 0.00        | 0.00        | 0.00        |  |
| 15,100.00                                  | 89.00       | 179.49  | 10,767.40 | -4,433.93 | -11.15 | 4,433.94 | 0.00        | 0.00        | 0.00        |  |
| 15,200.00                                  | 89.00       | 179.49  | 10,769.14 | -4,533.91 | -10.27 | 4,533.92 | 0.00        | 0.00        | 0.00        |  |
| 15,300.00                                  | 89.00       | 179.49  | 10,770.89 | -4,633.90 | -9.38  | 4,633.90 | 0.00        | 0.00        | 0.00        |  |
| 15,367.12                                  | 89.00       | 179.49  | 10,772.06 | -4,701.00 | -8.79  | 4,701.00 | 0.00        | 0.00        | 0.00        |  |
| LPP Cimarron 16-19-34 #1H                  |             |         |           |           |        |          |             |             |             |  |
| 15,400.00                                  | 89.00       | 179.49  | 10,772.63 | -4,733.88 | -8.50  | 4,733.88 | 0.00        | 0.00        | 0.00        |  |
| 15,500.00                                  | 89.00       | 179.49  | 10,774.38 | -4,833.86 | -7.61  | 4,833.86 | 0.00        | 0.00        | 0.00        |  |
| 15,587.36                                  | 89.00       | 179.49  | 10,775.90 | -4,921.20 | -6.84  | 4,921.20 | 0.00        | 0.00        | 0.00        |  |
| TD at 15587.36 - BHL Cimarron 16-19-34 #1H |             |         |           |           |        |          |             |             |             |  |

| Design Targets          |                                                                                                            |               |             |            |              |              |                 |                |                    |                     |
|-------------------------|------------------------------------------------------------------------------------------------------------|---------------|-------------|------------|--------------|--------------|-----------------|----------------|--------------------|---------------------|
| Target Name             | hit/miss target                                                                                            | Dip Angle (°) | Dip Dir (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude           | Longitude           |
| Vt Cimarron 16-19-34 #1 | - plan hits target center<br>- Point                                                                       | 0.00          | 0.00        | 9,923.50   | 200.03       | -52.16       | 607,336.03      | 738,766.84     | 32° 40' 2.16628 N  | 103° 33' 26.79501 W |
| FPP Cimarron 16-19-34   | - plan misses target center by 66.14usft at 10764.28usft MD (10632.22 TVD, -109.32 N, -49.42 E)<br>- Point | 0.00          | 0.01        | 10,691.50  | -80.00       | -50.00       | 607,056.00      | 738,769.00     | 32° 39' 59.39530 N | 103° 33' 26.79369 W |
| LPP Cimarron 16-19-34   | - plan misses target center by 0.22usft at 15367.11usft MD (10772.06 TVD, -4701.00 N, -8.79 E)<br>- Point  | 0.00          | 0.01        | 10,772.00  | -4,701.00    | -9.00        | 602,435.00      | 738,810.00     | 32° 39' 13.66855 N | 103° 33' 26.70915 W |
| BHL Cimarron 16-19-34   | - plan hits target center<br>- Rectangle (sides W100.00 H4,841.39 D0.00)                                   | 1.00          | 179.49      | 10,775.90  | -4,921.20    | -6.84        | 602,214.80      | 738,812.16     | 32° 39' 11.48957 N | 103° 33' 26.70271 W |

# Planning Report

|           |                         |                              |                                              |
|-----------|-------------------------|------------------------------|----------------------------------------------|
| Database: | Compass 5000 GCR        | Local Co-ordinate Reference: | Well #1H                                     |
| Company:  | Matador Resources       | TVD Reference:               | GL3832.75+KB25 @ 3857.75usft (Patterson 203) |
| Project:  | Lea County, NM (NAD 27) | MD Reference:                | GL3832.75+KB25 @ 3857.75usft (Patterson 203) |
| Site:     | Cimarron 16-19-34       | North Reference:             | Grid                                         |
| Well:     | #1H                     | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1             |                              |                                              |
| Design:   | Plan #1 12-17-14        |                              |                                              |

| Casing Points         |                       |         |                     |                   |  |
|-----------------------|-----------------------|---------|---------------------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name    | Casing Diameter (") | Hole Diameter (") |  |
| 1,900.00              | 1,900.00              | 13 3/8" | 13-3/8              | 17-1/2            |  |
| 5,800.00              | 5,800.00              | 9 5/8"  | 9-5/8               | 12-1/4            |  |

| Plan Annotations      |                       |                   |             |                               |  |
|-----------------------|-----------------------|-------------------|-------------|-------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |             | Comment                       |  |
|                       |                       | +N-S (usft)       | +E-W (usft) |                               |  |
| 8,083.00              | 8,083.00              | 0.00              | 0.00        | Build: 1.5"/100               |  |
| 8,749.95              | 8,746.57              | 56.20             | -14.65      | Hold: 10° Inc, 345.38° Azm    |  |
| 9,271.24              | 9,259.93              | 143.83            | -37.51      | Drop: 1.5"/100                |  |
| 9,938.19              | 9,923.50              | 200.03            | -52.16      | Hold Vertical                 |  |
| 10,138.19             | 10,123.50             | 200.03            | -52.16      | KOP: Build 10"/100            |  |
| 11,028.20             | 10,696.37             | -362.91           | -47.18      | LP: Hold 89° Inc, 179.49° Azm |  |
| 15,587.36             | 10,775.90             | -4,921.20         | -6.84       | TD at 15587.36                |  |