



## **NOBLE ENERGY INC WELD COUNTY CO**

**SEC.3-T4N-R65W  
Romero Pad Sec.3-T4N-R65W  
Romero G03-29D 03-16-09**

**Romero G03-29D**

**Plan: Romero G03-29D Plan #1**

## **Standard Planning Report**

**16 March, 2009**



|                  |                                 |                                     |                                      |
|------------------|---------------------------------|-------------------------------------|--------------------------------------|
| <b>Database:</b> | EDM den0-adp01 Server Data      | <b>Local Co-ordinate Reference:</b> | Well Romero G03-29D 03-16-09         |
| <b>Company:</b>  | NOBLE ENERGY INC WELD COUNTY CO | <b>TVD Reference:</b>               | WELL @ 4683.0ft (Original Well Elev) |
| <b>Project:</b>  | SEC.3-T4N-R65W                  | <b>MD Reference:</b>                | WELL @ 4683.0ft (Original Well Elev) |
| <b>Site:</b>     | Romero Pad Sec.3-T4N-R65W       | <b>North Reference:</b>             | True                                 |
| <b>Well:</b>     | Romero G03-29D 03-16-09         | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Wellbore:</b> | Romero G03-29D                  |                                     |                                      |
| <b>Design:</b>   | Romero G03-29D Plan #1          |                                     |                                      |

|                    |                           |                      |                             |
|--------------------|---------------------------|----------------------|-----------------------------|
| <b>Project</b>     | SEC.3-T4N-R65W            |                      |                             |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level              |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      | Using Well Reference Point  |
| <b>Map Zone:</b>   | Colorado Northern Zone    |                      | Using geodetic scale factor |

|                              |                           |                          |                   |
|------------------------------|---------------------------|--------------------------|-------------------|
| <b>Site</b>                  | Romero Pad Sec.3-T4N-R65W |                          |                   |
| <b>Site Position:</b>        |                           | <b>Northing:</b>         | 1,370,337.64 ft   |
| <b>From:</b>                 | Lat/Long                  | <b>Easting:</b>          | 3,235,048.17 ft   |
| <b>Position Uncertainty:</b> | 0.0 ft                    | <b>Slot Radius:</b>      | "                 |
|                              |                           | <b>Latitude:</b>         | 40° 20' 48.876 N  |
|                              |                           | <b>Longitude:</b>        | 104° 39' 24.120 W |
|                              |                           | <b>Grid Convergence:</b> | 0.54 °            |

|                             |                         |                            |                                  |
|-----------------------------|-------------------------|----------------------------|----------------------------------|
| <b>Well</b>                 | Romero G03-29D 03-16-09 |                            |                                  |
| <b>Well Position</b>        | <b>+N/-S</b>            | 0.0 ft                     | <b>Northing:</b> 1,370,337.64 ft |
|                             | <b>+E/-W</b>            | 0.0 ft                     | <b>Easting:</b> 3,235,048.17 ft  |
| <b>Position Uncertainty</b> | 0.0 ft                  | <b>Wellhead Elevation:</b> | ft                               |
|                             |                         | <b>Latitude:</b>           | 40° 20' 48.876 N                 |
|                             |                         | <b>Longitude:</b>          | 104° 39' 24.120 W                |
|                             |                         | <b>Ground Level:</b>       | 4,670.0 ft                       |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Romero G03-29D    |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF200510        | 3/16/2009          | 9.07                   | 67.11                | 53,371                     |

|                          |                              |                   |                      |                      |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| <b>Design</b>            | Romero G03-29D Plan #1       |                   |                      |                      |
| <b>Audit Notes:</b>      |                              |                   |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                | PROTOTYPE         | <b>Tie On Depth:</b> | 0.0                  |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b>    | <b>Direction (°)</b> |
|                          | 0.0                          | 0.0               | 0.0                  | 46.55                |

| <b>Plan Sections</b> |                 |             |                     |            |            |                       |                      |                     |         |                 |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|-----------------|
| Measured Depth (ft)  | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target          |
| 0.0                  | 0.00            | 0.00        | 0.0                 | 0.0        | 0.0        | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 1,400.0              | 0.00            | 0.00        | 1,400.0             | 0.0        | 0.0        | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 2,124.7              | 14.49           | 46.55       | 2,117.0             | 62.7       | 66.2       | 2.00                  | 2.00                 | 0.00                | 46.55   |                 |
| 5,188.2              | 14.49           | 46.55       | 5,083.0             | 590.0      | 622.8      | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 5,912.9              | 0.00            | 0.00        | 5,800.0             | 652.7      | 689.0      | 2.00                  | -2.00                | 0.00                | 180.00  | TARGET BHL 75°F |
| 7,308.9              | 0.00            | 0.00        | 7,196.0             | 652.7      | 689.0      | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |



|           |                                 |                              |                                      |
|-----------|---------------------------------|------------------------------|--------------------------------------|
| Database: | EDM den0-adp01 Server Data      | Local Co-ordinate Reference: | Well Romero G03-29D 03-16-09         |
| Company:  | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference:               | WELL @ 4683.0ft (Original Well Elev) |
| Project:  | SEC.3-T4N-R65W                  | MD Reference:                | WELL @ 4683.0ft (Original Well Elev) |
| Site:     | Romero Pad Sec.3-T4N-R65W       | North Reference:             | True                                 |
| Well:     | Romero G03-29D 03-16-09         | Survey Calculation Method:   | Minimum Curvature                    |
| Wellbore: | Romero G03-29D                  |                              |                                      |
| Design:   | Romero G03-29D Plan #1          |                              |                                      |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 0.0                 | 0.00            | 0.00        | 0.0                 | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 40.0                | 0.00            | 0.00        | 40.0                | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 80.0                | 0.00            | 0.00        | 80.0                | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 120.0               | 0.00            | 0.00        | 120.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 160.0               | 0.00            | 0.00        | 160.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 200.0               | 0.00            | 0.00        | 200.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 240.0               | 0.00            | 0.00        | 240.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 280.0               | 0.00            | 0.00        | 280.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 320.0               | 0.00            | 0.00        | 320.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 360.0               | 0.00            | 0.00        | 360.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 400.0               | 0.00            | 0.00        | 400.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 440.0               | 0.00            | 0.00        | 440.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 480.0               | 0.00            | 0.00        | 480.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 520.0               | 0.00            | 0.00        | 520.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 560.0               | 0.00            | 0.00        | 560.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 600.0               | 0.00            | 0.00        | 600.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 640.0               | 0.00            | 0.00        | 640.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 680.0               | 0.00            | 0.00        | 680.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 720.0               | 0.00            | 0.00        | 720.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 760.0               | 0.00            | 0.00        | 760.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 800.0               | 0.00            | 0.00        | 800.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 840.0               | 0.00            | 0.00        | 840.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 880.0               | 0.00            | 0.00        | 880.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 920.0               | 0.00            | 0.00        | 920.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 960.0               | 0.00            | 0.00        | 960.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,000.0             | 0.00            | 0.00        | 1,000.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,040.0             | 0.00            | 0.00        | 1,040.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,080.0             | 0.00            | 0.00        | 1,080.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,120.0             | 0.00            | 0.00        | 1,120.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,160.0             | 0.00            | 0.00        | 1,160.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,200.0             | 0.00            | 0.00        | 1,200.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,240.0             | 0.00            | 0.00        | 1,240.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,280.0             | 0.00            | 0.00        | 1,280.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,320.0             | 0.00            | 0.00        | 1,320.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,360.0             | 0.00            | 0.00        | 1,360.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,400.0             | 0.00            | 0.00        | 1,400.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,440.0             | 0.80            | 46.55       | 1,440.0             | 0.2        | 0.2        | 0.3                   | 2.00                  | 2.00                 | 0.00                |
| 1,480.0             | 1.60            | 46.55       | 1,480.0             | 0.8        | 0.8        | 1.1                   | 2.00                  | 2.00                 | 0.00                |
| 1,520.0             | 2.40            | 46.55       | 1,520.0             | 1.7        | 1.8        | 2.5                   | 2.00                  | 2.00                 | 0.00                |
| 1,560.0             | 3.20            | 46.55       | 1,559.9             | 3.1        | 3.2        | 4.5                   | 2.00                  | 2.00                 | 0.00                |
| 1,600.0             | 4.00            | 46.55       | 1,599.8             | 4.8        | 5.1        | 7.0                   | 2.00                  | 2.00                 | 0.00                |
| 1,640.0             | 4.80            | 46.55       | 1,639.7             | 6.9        | 7.3        | 10.0                  | 2.00                  | 2.00                 | 0.00                |
| 1,680.0             | 5.60            | 46.55       | 1,679.6             | 9.4        | 9.9        | 13.7                  | 2.00                  | 2.00                 | 0.00                |
| 1,720.0             | 6.40            | 46.55       | 1,719.3             | 12.3       | 13.0       | 17.9                  | 2.00                  | 2.00                 | 0.00                |
| 1,760.0             | 7.20            | 46.55       | 1,759.1             | 15.5       | 16.4       | 22.6                  | 2.00                  | 2.00                 | 0.00                |
| 1,800.0             | 8.00            | 46.55       | 1,798.7             | 19.2       | 20.2       | 27.9                  | 2.00                  | 2.00                 | 0.00                |
| 1,840.0             | 8.80            | 46.55       | 1,838.3             | 23.2       | 24.5       | 33.7                  | 2.00                  | 2.00                 | 0.00                |
| 1,880.0             | 9.60            | 46.55       | 1,877.8             | 27.6       | 29.1       | 40.1                  | 2.00                  | 2.00                 | 0.00                |
| 1,920.0             | 10.40           | 46.55       | 1,917.1             | 32.4       | 34.2       | 47.1                  | 2.00                  | 2.00                 | 0.00                |
| 1,960.0             | 11.20           | 46.55       | 1,956.4             | 37.5       | 39.6       | 54.6                  | 2.00                  | 2.00                 | 0.00                |
| 2,000.0             | 12.00           | 46.55       | 1,995.6             | 43.1       | 45.4       | 62.6                  | 2.00                  | 2.00                 | 0.00                |
| 2,040.0             | 12.80           | 46.55       | 2,034.7             | 49.0       | 51.7       | 71.2                  | 2.00                  | 2.00                 | 0.00                |
| 2,080.0             | 13.60           | 46.55       | 2,073.6             | 55.2       | 58.3       | 80.3                  | 2.00                  | 2.00                 | 0.00                |
| 2,120.0             | 14.40           | 46.55       | 2,112.4             | 61.9       | 65.3       | 90.0                  | 2.00                  | 2.00                 | 0.00                |



|           |                                 |                              |                                      |
|-----------|---------------------------------|------------------------------|--------------------------------------|
| Database: | EDM den0-adp01 Server Data      | Local Co-ordinate Reference: | Well Romero G03-29D 03-16-09         |
| Company:  | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference:               | WELL @ 4683.0ft (Original Well Elev) |
| Project:  | SEC.3-T4N-R65W                  | MD Reference:                | WELL @ 4683.0ft (Original Well Elev) |
| Site:     | Romero Pad Sec.3-T4N-R65W       | North Reference:             | True                                 |
| Well:     | Romero G03-29D 03-16-09         | Survey Calculation Method:   | Minimum Curvature                    |
| Wellbore: | Romero G03-29D                  |                              |                                      |
| Design:   | Romero G03-29D Plan #1          |                              |                                      |

| Planned Survey      |                 |             |                     |            |            |                       |                       |                      |                     |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 2,124.7             | 14.49           | 46.55       | 2,117.0             | 62.7       | 66.2       | 91.2                  | 2.00                  | 2.00                 | 0.00                |
| 2,160.0             | 14.49           | 46.55       | 2,151.2             | 68.8       | 72.6       | 100.0                 | 0.00                  | 0.00                 | 0.00                |
| 2,200.0             | 14.49           | 46.55       | 2,189.9             | 75.7       | 79.9       | 110.0                 | 0.00                  | 0.00                 | 0.00                |
| 2,240.0             | 14.49           | 46.55       | 2,228.6             | 82.5       | 87.1       | 120.0                 | 0.00                  | 0.00                 | 0.00                |
| 2,280.0             | 14.49           | 46.55       | 2,267.4             | 89.4       | 94.4       | 130.0                 | 0.00                  | 0.00                 | 0.00                |
| 2,320.0             | 14.49           | 46.55       | 2,306.1             | 96.3       | 101.7      | 140.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,360.0             | 14.49           | 46.55       | 2,344.8             | 103.2      | 108.9      | 150.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,400.0             | 14.49           | 46.55       | 2,383.5             | 110.1      | 116.2      | 160.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,440.0             | 14.49           | 46.55       | 2,422.3             | 117.0      | 123.5      | 170.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,480.0             | 14.49           | 46.55       | 2,461.0             | 123.9      | 130.7      | 180.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,512.0             | 14.49           | 46.55       | 2,492.0             | 129.4      | 136.6      | 188.1                 | 0.00                  | 0.00                 | 0.00                |
| PIERRE SILT         |                 |             |                     |            |            |                       |                       |                      |                     |
| 2,520.0             | 14.49           | 46.55       | 2,499.7             | 130.7      | 138.0      | 190.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,560.0             | 14.49           | 46.55       | 2,538.4             | 137.6      | 145.3      | 200.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,600.0             | 14.49           | 46.55       | 2,577.2             | 144.5      | 152.6      | 210.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,640.0             | 14.49           | 46.55       | 2,615.9             | 151.4      | 159.8      | 220.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,680.0             | 14.49           | 46.55       | 2,654.6             | 158.3      | 167.1      | 230.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,720.0             | 14.49           | 46.55       | 2,693.3             | 165.2      | 174.4      | 240.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,760.0             | 14.49           | 46.55       | 2,732.1             | 172.1      | 181.6      | 250.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,800.0             | 14.49           | 46.55       | 2,770.8             | 178.9      | 188.9      | 260.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,840.0             | 14.49           | 46.55       | 2,809.5             | 185.8      | 196.2      | 270.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,880.0             | 14.49           | 46.55       | 2,848.3             | 192.7      | 203.4      | 280.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,920.0             | 14.49           | 46.55       | 2,887.0             | 199.6      | 210.7      | 290.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,960.0             | 14.49           | 46.55       | 2,925.7             | 206.5      | 218.0      | 300.2                 | 0.00                  | 0.00                 | 0.00                |
| 3,000.0             | 14.49           | 46.55       | 2,964.4             | 213.4      | 225.2      | 310.2                 | 0.00                  | 0.00                 | 0.00                |
| 3,040.0             | 14.49           | 46.55       | 3,003.2             | 220.2      | 232.5      | 320.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,080.0             | 14.49           | 46.55       | 3,041.9             | 227.1      | 239.8      | 330.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,120.0             | 14.49           | 46.55       | 3,080.6             | 234.0      | 247.0      | 340.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,160.0             | 14.49           | 46.55       | 3,119.3             | 240.9      | 254.3      | 350.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,200.0             | 14.49           | 46.55       | 3,158.1             | 247.8      | 261.6      | 360.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,240.0             | 14.49           | 46.55       | 3,196.8             | 254.7      | 268.8      | 370.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,280.0             | 14.49           | 46.55       | 3,235.5             | 261.6      | 276.1      | 380.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,320.0             | 14.49           | 46.55       | 3,274.3             | 268.4      | 283.4      | 390.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,360.0             | 14.49           | 46.55       | 3,313.0             | 275.3      | 290.6      | 400.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,400.0             | 14.49           | 46.55       | 3,351.7             | 282.2      | 297.9      | 410.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,440.0             | 14.49           | 46.55       | 3,390.4             | 289.1      | 305.2      | 420.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,480.0             | 14.49           | 46.55       | 3,429.2             | 296.0      | 312.4      | 430.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,520.0             | 14.49           | 46.55       | 3,467.9             | 302.9      | 319.7      | 440.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,560.0             | 14.49           | 46.55       | 3,506.6             | 309.8      | 327.0      | 450.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,600.0             | 14.49           | 46.55       | 3,545.3             | 316.6      | 334.2      | 460.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,638.9             | 14.49           | 46.55       | 3,583.0             | 323.3      | 341.3      | 470.2                 | 0.00                  | 0.00                 | 0.00                |
| PARKMAN             |                 |             |                     |            |            |                       |                       |                      |                     |
| 3,640.0             | 14.49           | 46.55       | 3,584.1             | 323.5      | 341.5      | 470.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,680.0             | 14.49           | 46.55       | 3,622.8             | 330.4      | 348.8      | 480.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,720.0             | 14.49           | 46.55       | 3,661.5             | 337.3      | 356.1      | 490.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,760.0             | 14.49           | 46.55       | 3,700.2             | 344.2      | 363.3      | 500.5                 | 0.00                  | 0.00                 | 0.00                |
| 3,800.0             | 14.49           | 46.55       | 3,739.0             | 351.1      | 370.6      | 510.5                 | 0.00                  | 0.00                 | 0.00                |
| 3,840.0             | 14.49           | 46.55       | 3,777.7             | 357.9      | 377.9      | 520.5                 | 0.00                  | 0.00                 | 0.00                |
| 3,880.0             | 14.49           | 46.55       | 3,816.4             | 364.8      | 385.1      | 530.5                 | 0.00                  | 0.00                 | 0.00                |
| 3,920.0             | 14.49           | 46.55       | 3,855.2             | 371.7      | 392.4      | 540.5                 | 0.00                  | 0.00                 | 0.00                |
| 3,960.0             | 14.49           | 46.55       | 3,893.9             | 378.6      | 399.7      | 550.5                 | 0.00                  | 0.00                 | 0.00                |
| 4,000.0             | 14.49           | 46.55       | 3,932.6             | 385.5      | 406.9      | 560.5                 | 0.00                  | 0.00                 | 0.00                |
| 4,040.0             | 14.49           | 46.55       | 3,971.3             | 392.4      | 414.2      | 570.5                 | 0.00                  | 0.00                 | 0.00                |



|           |                                 |                              |                                      |
|-----------|---------------------------------|------------------------------|--------------------------------------|
| Database: | EDM den0-adp01 Server Data      | Local Co-ordinate Reference: | Well Romero G03-29D 03-16-09         |
| Company:  | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference:               | WELL @ 4683.0ft (Original Well Elev) |
| Project:  | SEC.3-T4N-R65W                  | MD Reference:                | WELL @ 4683.0ft (Original Well Elev) |
| Site:     | Romero Pad Sec.3-T4N-R65W       | North Reference:             | True                                 |
| Well:     | Romero G03-29D 03-16-09         | Survey Calculation Method:   | Minimum Curvature                    |
| Wellbore: | Romero G03-29D                  |                              |                                      |
| Design:   | Romero G03-29D Plan #1          |                              |                                      |

Planned Survey

| Measured Depth (ft)                | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 4,080.0                            | 14.49           | 46.55       | 4,010.1             | 399.3      | 421.5      | 580.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,120.0                            | 14.49           | 46.55       | 4,048.8             | 406.1      | 428.7      | 590.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,160.0                            | 14.49           | 46.55       | 4,087.5             | 413.0      | 436.0      | 600.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,200.0                            | 14.49           | 46.55       | 4,126.2             | 419.9      | 443.3      | 610.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,240.0                            | 14.49           | 46.55       | 4,165.0             | 426.8      | 450.5      | 620.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,280.0                            | 14.49           | 46.55       | 4,203.7             | 433.7      | 457.8      | 630.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,320.0                            | 14.49           | 46.55       | 4,242.4             | 440.6      | 465.1      | 640.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,360.0                            | 14.49           | 46.55       | 4,281.2             | 447.5      | 472.3      | 650.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,392.9                            | 14.49           | 46.55       | 4,313.0             | 453.1      | 478.3      | 658.9                 | 0.00                  | 0.00                 | 0.00                |
| <b>SUSSEX</b>                      |                 |             |                     |            |            |                       |                       |                      |                     |
| 4,400.0                            | 14.49           | 46.55       | 4,319.9             | 454.3      | 479.6      | 660.6                 | 0.00                  | 0.00                 | 0.00                |
| 4,440.0                            | 14.49           | 46.55       | 4,358.6             | 461.2      | 486.9      | 670.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,480.0                            | 14.49           | 46.55       | 4,397.3             | 468.1      | 494.1      | 680.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,520.0                            | 14.49           | 46.55       | 4,436.1             | 475.0      | 501.4      | 690.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,560.0                            | 14.49           | 46.55       | 4,474.8             | 481.9      | 508.7      | 700.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,600.0                            | 14.49           | 46.55       | 4,513.5             | 488.8      | 515.9      | 710.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,640.0                            | 14.49           | 46.55       | 4,552.2             | 495.6      | 523.2      | 720.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,680.0                            | 14.49           | 46.55       | 4,591.0             | 502.5      | 530.5      | 730.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,720.0                            | 14.49           | 46.55       | 4,629.7             | 509.4      | 537.8      | 740.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,760.0                            | 14.49           | 46.55       | 4,668.4             | 516.3      | 545.0      | 750.7                 | 0.00                  | 0.00                 | 0.00                |
| 4,800.0                            | 14.49           | 46.55       | 4,707.1             | 523.2      | 552.3      | 760.8                 | 0.00                  | 0.00                 | 0.00                |
| 4,840.0                            | 14.49           | 46.55       | 4,745.9             | 530.1      | 559.6      | 770.8                 | 0.00                  | 0.00                 | 0.00                |
| 4,880.0                            | 14.49           | 46.55       | 4,784.6             | 537.0      | 566.8      | 780.8                 | 0.00                  | 0.00                 | 0.00                |
| 4,920.0                            | 14.49           | 46.55       | 4,823.3             | 543.8      | 574.1      | 790.8                 | 0.00                  | 0.00                 | 0.00                |
| 4,944.4                            | 14.49           | 46.55       | 4,847.0             | 548.0      | 578.5      | 796.9                 | 0.00                  | 0.00                 | 0.00                |
| <b>SHANNON</b>                     |                 |             |                     |            |            |                       |                       |                      |                     |
| 4,960.0                            | 14.49           | 46.55       | 4,862.1             | 550.7      | 581.4      | 800.8                 | 0.00                  | 0.00                 | 0.00                |
| 5,000.0                            | 14.49           | 46.55       | 4,900.8             | 557.6      | 588.6      | 810.8                 | 0.00                  | 0.00                 | 0.00                |
| 5,040.0                            | 14.49           | 46.55       | 4,939.5             | 564.5      | 595.9      | 820.8                 | 0.00                  | 0.00                 | 0.00                |
| 5,080.0                            | 14.49           | 46.55       | 4,978.2             | 571.4      | 603.2      | 830.8                 | 0.00                  | 0.00                 | 0.00                |
| 5,120.0                            | 14.49           | 46.55       | 5,017.0             | 578.3      | 610.4      | 840.8                 | 0.00                  | 0.00                 | 0.00                |
| 5,160.0                            | 14.49           | 46.55       | 5,055.7             | 585.2      | 617.7      | 850.9                 | 0.00                  | 0.00                 | 0.00                |
| 5,188.2                            | 14.49           | 46.55       | 5,083.0             | 590.0      | 622.8      | 857.9                 | 0.00                  | 0.00                 | 0.00                |
| 5,200.0                            | 14.26           | 46.55       | 5,094.4             | 592.0      | 624.9      | 860.8                 | 2.00                  | -2.00                | 0.00                |
| 5,240.0                            | 13.46           | 46.55       | 5,133.3             | 598.6      | 631.9      | 870.4                 | 2.00                  | -2.00                | 0.00                |
| 5,280.0                            | 12.66           | 46.55       | 5,172.2             | 604.8      | 638.5      | 879.5                 | 2.00                  | -2.00                | 0.00                |
| 5,320.0                            | 11.86           | 46.55       | 5,211.3             | 610.7      | 644.6      | 888.0                 | 2.00                  | -2.00                | 0.00                |
| 5,360.0                            | 11.06           | 46.55       | 5,250.5             | 616.1      | 650.4      | 895.9                 | 2.00                  | -2.00                | 0.00                |
| 5,400.0                            | 10.26           | 46.55       | 5,289.8             | 621.2      | 655.8      | 903.3                 | 2.00                  | -2.00                | 0.00                |
| 5,440.0                            | 9.46            | 46.55       | 5,329.2             | 625.9      | 660.7      | 910.1                 | 2.00                  | -2.00                | 0.00                |
| 5,480.0                            | 8.66            | 46.55       | 5,368.7             | 630.3      | 665.3      | 916.4                 | 2.00                  | -2.00                | 0.00                |
| 5,520.0                            | 7.86            | 46.55       | 5,408.3             | 634.2      | 669.5      | 922.2                 | 2.00                  | -2.00                | 0.00                |
| 5,560.0                            | 7.06            | 46.55       | 5,448.0             | 637.8      | 673.3      | 927.4                 | 2.00                  | -2.00                | 0.00                |
| 5,600.0                            | 6.26            | 46.55       | 5,487.7             | 641.0      | 676.6      | 932.0                 | 2.00                  | -2.00                | 0.00                |
| 5,640.0                            | 5.46            | 46.55       | 5,527.5             | 643.8      | 679.6      | 936.1                 | 2.00                  | -2.00                | 0.00                |
| 5,680.0                            | 4.66            | 46.55       | 5,567.3             | 646.2      | 682.1      | 939.6                 | 2.00                  | -2.00                | 0.00                |
| 5,720.0                            | 3.86            | 46.55       | 5,607.2             | 648.2      | 684.3      | 942.6                 | 2.00                  | -2.00                | 0.00                |
| 5,760.0                            | 3.06            | 46.55       | 5,647.2             | 649.9      | 686.1      | 945.0                 | 2.00                  | -2.00                | 0.00                |
| 5,800.0                            | 2.26            | 46.55       | 5,687.1             | 651.2      | 687.4      | 946.9                 | 2.00                  | -2.00                | 0.00                |
| 5,840.0                            | 1.46            | 46.55       | 5,727.1             | 652.1      | 688.3      | 948.2                 | 2.00                  | -2.00                | 0.00                |
| 5,880.0                            | 0.66            | 46.55       | 5,767.1             | 652.6      | 688.9      | 948.9                 | 2.00                  | -2.00                | 0.00                |
| 5,912.9                            | 0.00            | 0.00        | 5,800.0             | 652.7      | 689.0      | 949.1                 | 2.00                  | -2.00                | 0.00                |
| <b>TARGET BHL 75'FSL, 1305'FWL</b> |                 |             |                     |            |            |                       |                       |                      |                     |



|           |                                 |                              |                                      |
|-----------|---------------------------------|------------------------------|--------------------------------------|
| Database: | EDM den0-adp01 Server Data      | Local Co-ordinate Reference: | Well Romero G03-29D 03-16-09         |
| Company:  | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference:               | WELL @ 4683.0ft (Original Well Elev) |
| Project:  | SEC.3-T4N-R65W                  | MD Reference:                | WELL @ 4683.0ft (Original Well Elev) |
| Site:     | Romero Pad Sec.3-T4N-R65W       | North Reference:             | True                                 |
| Well:     | Romero G03-29D 03-16-09         | Survey Calculation Method:   | Minimum Curvature                    |
| Wellbore: | Romero G03-29D                  |                              |                                      |
| Design:   | Romero G03-29D Plan #1          |                              |                                      |

**Planned Survey**

| Measured Depth (ft)                 | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|-------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 5,920.0                             | 0.00            | 0.00        | 5,807.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 5,960.0                             | 0.00            | 0.00        | 5,847.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,000.0                             | 0.00            | 0.00        | 5,887.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,040.0                             | 0.00            | 0.00        | 5,927.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,080.0                             | 0.00            | 0.00        | 5,967.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,088.9                             | 0.00            | 0.00        | 5,976.0             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| <b>TEEPPE BUTTES</b>                |                 |             |                     |            |            |                       |                       |                      |                     |
| 6,120.0                             | 0.00            | 0.00        | 6,007.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,160.0                             | 0.00            | 0.00        | 6,047.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,200.0                             | 0.00            | 0.00        | 6,087.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,240.0                             | 0.00            | 0.00        | 6,127.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,280.0                             | 0.00            | 0.00        | 6,167.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,320.0                             | 0.00            | 0.00        | 6,207.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,360.0                             | 0.00            | 0.00        | 6,247.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,400.0                             | 0.00            | 0.00        | 6,287.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,440.0                             | 0.00            | 0.00        | 6,327.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,480.0                             | 0.00            | 0.00        | 6,367.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,520.0                             | 0.00            | 0.00        | 6,407.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,560.0                             | 0.00            | 0.00        | 6,447.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,600.0                             | 0.00            | 0.00        | 6,487.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,640.0                             | 0.00            | 0.00        | 6,527.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,680.0                             | 0.00            | 0.00        | 6,567.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,720.0                             | 0.00            | 0.00        | 6,607.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,760.0                             | 0.00            | 0.00        | 6,647.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,800.0                             | 0.00            | 0.00        | 6,687.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,839.9                             | 0.00            | 0.00        | 6,727.0             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| <b>NIOBRARA</b>                     |                 |             |                     |            |            |                       |                       |                      |                     |
| 6,840.0                             | 0.00            | 0.00        | 6,727.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,880.0                             | 0.00            | 0.00        | 6,767.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,920.0                             | 0.00            | 0.00        | 6,807.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 6,960.0                             | 0.00            | 0.00        | 6,847.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 7,000.0                             | 0.00            | 0.00        | 6,887.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 7,040.0                             | 0.00            | 0.00        | 6,927.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 7,080.0                             | 0.00            | 0.00        | 6,967.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 7,120.0                             | 0.00            | 0.00        | 7,007.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 7,134.9                             | 0.00            | 0.00        | 7,022.0             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| <b>FT HAYS</b>                      |                 |             |                     |            |            |                       |                       |                      |                     |
| 7,158.9                             | 0.00            | 0.00        | 7,046.0             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| <b>CODELL</b>                       |                 |             |                     |            |            |                       |                       |                      |                     |
| 7,160.0                             | 0.00            | 0.00        | 7,047.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 7,200.0                             | 0.00            | 0.00        | 7,087.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 7,240.0                             | 0.00            | 0.00        | 7,127.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 7,280.0                             | 0.00            | 0.00        | 7,167.1             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| 7,308.9                             | 0.00            | 0.00        | 7,196.0             | 652.7      | 689.0      | 949.1                 | 0.00                  | 0.00                 | 0.00                |
| <b>HARDLINE 75'S OF G03-29D BHL</b> |                 |             |                     |            |            |                       |                       |                      |                     |



|           |                                 |                              |                                      |
|-----------|---------------------------------|------------------------------|--------------------------------------|
| Database: | EDM den0-adp01 Server Data      | Local Co-ordinate Reference: | Well Romero G03-29D 03-16-09         |
| Company:  | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference:               | WELL @ 4683.0ft (Original Well Elev) |
| Project:  | SEC.3-T4N-R65W                  | MD Reference:                | WELL @ 4683.0ft (Original Well Elev) |
| Site:     | Romero Pad Sec.3-T4N-R65W       | North Reference:             | True                                 |
| Well:     | Romero G03-29D 03-16-09         | Survey Calculation Method:   | Minimum Curvature                    |
| Wellbore: | Romero G03-29D                  |                              |                                      |
| Design:   | Romero G03-29D Plan #1          |                              |                                      |

#### Targets

| Target Name  | Dip Angle<br>(°) | Dip Dir.<br>(°) | TVD<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Northing<br>(ft) | Easting<br>(ft) | Latitude         | Longitude         |
|--|------------------|-----------------|-------------|---------------|---------------|------------------|-----------------|------------------|-------------------|
| - hit/miss target  |                  |                 |             |               |               |                  |                 |                  |                   |
| - Shape  |                  |                 |             |               |               |                  |                 |                  |                   |
| TARGET BHL 75'FSL  | 0.00             | 0.00            | 5,800.0     | 652.7         | 689.0         | 1,370,996.84     | 3,235,730.92    | 40° 20' 55.326 N | 104° 39' 15.221 W |
| - plan hits target center  |                  |                 |             |               |               |                  |                 |                  |                   |
| - Point  |                  |                 |             |               |               |                  |                 |                  |                   |
| HARDLINE 75'S OF C   | 0.00             | 0.00            | 7,196.0     | 577.7         | 589.0         | 1,370,920.89     | 3,235,631.62    | 40° 20' 54.584 N | 104° 39' 16.513 W |
| - plan misses target center by 125.0ft at 7308.9ft MD (7196.0 TVD, 652.7 N, 689.0 E) |                  |                 |             |               |               |                  |                 |                  |                   |
| - Polygon  |                  |                 |             |               |               |                  |                 |                  |                   |
| Point 1  |                  |                 | 7,196.0     | 0.0           | 0.0           | 1,370,920.89     | 3,235,631.62    |                  |                   |
| Point 2  |                  |                 | 7,196.0     | 0.0           | 200.0         | 1,370,922.79     | 3,235,831.60    |                  |                   |

#### Formations

| Measured<br>Depth<br>(ft) | Vertical<br>Depth<br>(ft) | Name          | Lithology | Dip<br>(°) | Dip<br>Direction<br>(°) |
|---------------------------|---------------------------|---------------|-----------|------------|-------------------------|
| 2,512.0                   | 2,492.0                   | PIERRE SILT   |           | 0.00       |                         |
| 3,638.9                   | 3,583.0                   | PARKMAN       |           | 0.00       |                         |
| 4,392.9                   | 4,313.0                   | SUSSEX        |           | 0.00       |                         |
| 4,944.4                   | 4,847.0                   | SHANNON       |           | 0.00       |                         |
| 6,088.9                   | 5,976.0                   | TEEPEE BUTTES |           | 0.00       |                         |
| 6,839.9                   | 6,727.0                   | NIOBRARA      |           | 0.00       |                         |
| 7,134.9                   | 7,022.0                   | FT HAYS       |           | 0.00       |                         |
| 7,158.9                   | 7,046.0                   | CODELL        |           | 0.00       |                         |

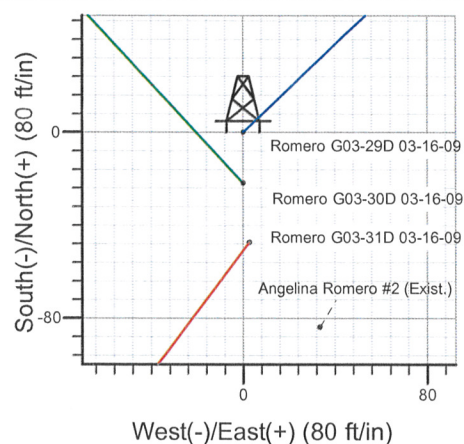
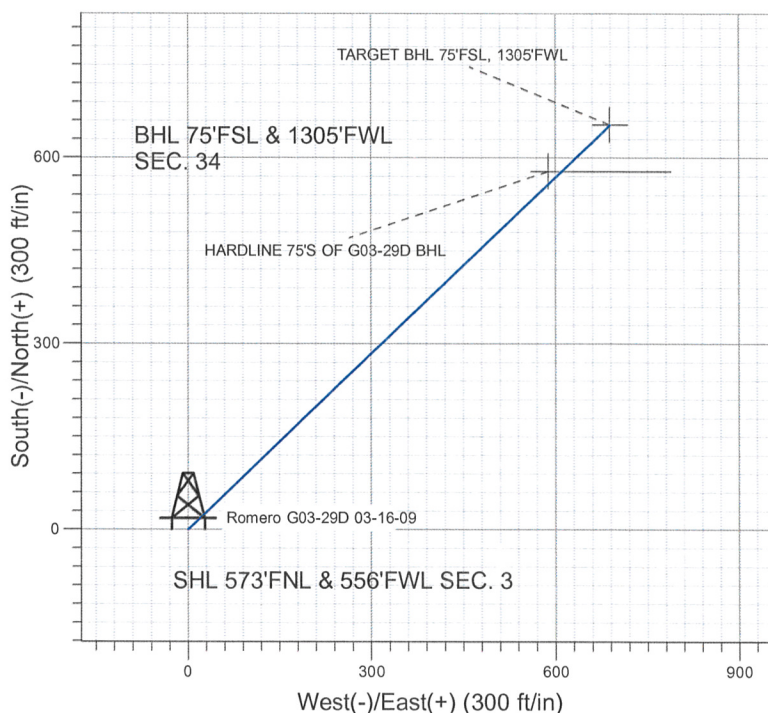
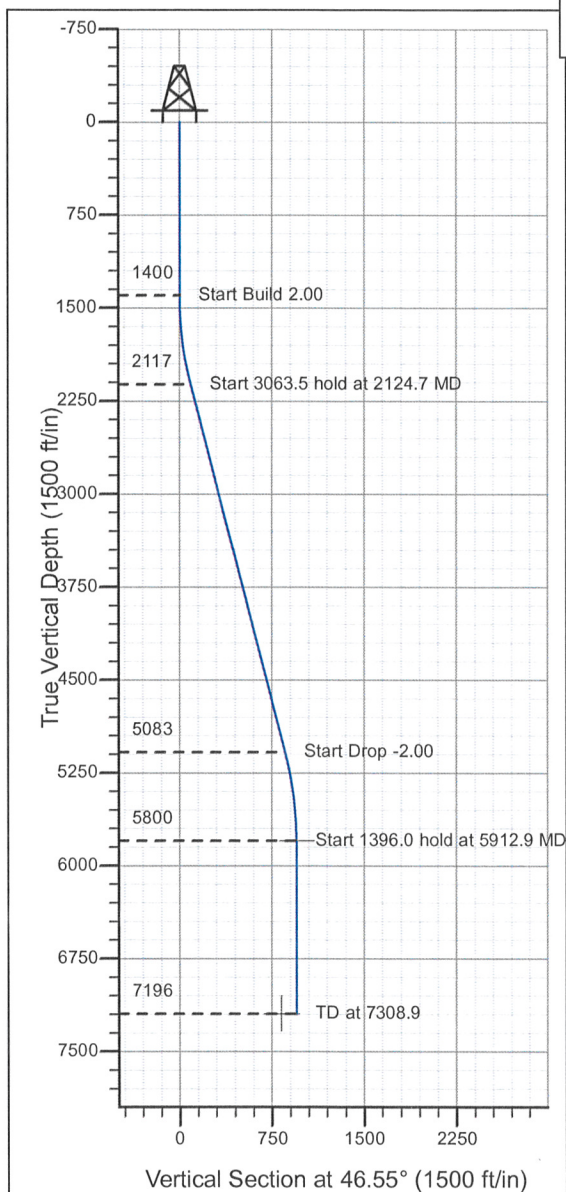
Well Name: Romero G03-29D 03-16-09

Surface Location: Romero Pad Sec.3-T4N-R65W  
North American Datum 1983 . US State Plane 1983 . Colorado Northern Zone

Ground Elevation: 4670.0

| Ground Elevation: 4679.0                                |          |            |            |                  |                   |
|---|----------|------------|------------|------------------|-------------------|
| +N/-S+E/-W  | Northing | Easting    | Latitude   | Longitude        | Slot              |
| 0.0   | 0.0      | 1370337.64 | 3235048.17 | 40° 20' 48.876 N | 104° 39' 24.120 W |
| Original Well Elev WELL @ 4683.0ft (Original Well Elev) |          |            |            |                  |                   |

**NOBLE ENERGY INC WELD COUNTY CO**



Romero Pad Sec.3-T4N-R65W  
Romero G03-29D 03-16-09  
Romero G03-29D Plan #1  
12:01, March 16 2009



Azimuths to True North  
Magnetic North: 9.07°

Magnetic Field  
Strength: 53371.4snT  
Dip Angle: 67.11°  
Date: 3/16/2009  
Model: IGRF200510

## WELLBORE TARGET DETAILS (LAT/LONG)

| Name                         | TVD    | +N/-S | +E/-W | Latitude         | Longitude         | Shape<br>Point<br>Polygon |
|------------------------------|--------|-------|-------|------------------|-------------------|---------------------------|
| TARGET BHL 75°FSL, 1305°FWL  | 5800.0 | 652.7 | 689.0 | 40° 20' 55.326 N | 104° 39' 15.221 W |                           |
| HARDLINE 75°S OF G03-29D BHL | 7196.0 | 577.7 | 589.0 | 40° 20' 54.584 N | 104° 39' 16.513 W |                           |

## SECTION DETAILS

| Sec | MD     | Inc   | Azi   | TVD    | +N/-S | +E/-W | DLeg | TFace  | VSec  | Target                      |
|-----|--------|-------|-------|--------|-------|-------|------|--------|-------|-----------------------------|
| 1   | 0.0    | 0.00  | 0.00  | 0.0    | 0.0   | 0.0   | 0.00 | 0.00   | 0.0   |                             |
| 2   | 1400.0 | 0.00  | 0.00  | 1400.0 | 0.0   | 0.0   | 0.00 | 0.00   | 0.0   |                             |
| 3   | 2124.7 | 14.49 | 46.55 | 2117.0 | 62.7  | 66.2  | 2.00 | 46.55  | 91.2  |                             |
| 4   | 5188.2 | 14.49 | 46.55 | 5083.0 | 590.0 | 622.8 | 0.00 | 0.00   | 857.9 |                             |
| 5   | 5912.9 | 0.00  | 0.00  | 5800.0 | 652.7 | 689.0 | 2.00 | 180.00 | 949.1 | TARGET BHL 75°FSL, 1305°FWL |
| 6   | 7308.9 | 0.00  | 0.00  | 7196.0 | 652.7 | 689.0 | 0.00 | 0.00   | 949.1 |                             |





## **Directional**

# **NOBLE ENERGY INC WELD COUNTY CO**

**SEC.3-T4N-R65W**

**Romero Pad Sec.3-T4N-R65W**

**Romero G03-29D 03-16-09**

**Romero G03-29D**

**Romero G03-29D Plan #1**

## **Anticollision Report**

16 March, 2009



|                           |                                 |                                     |                                      |
|---------------------------|---------------------------------|-------------------------------------|--------------------------------------|
| <b>Company:</b>           | NOBLE ENERGY INC WELD COUNTY CO | <b>Local Co-ordinate Reference:</b> | Well Romero G03-29D 03-16-09         |
| <b>Project:</b>           | SEC.3-T4N-R65W                  | <b>TVD Reference:</b>               | WELL @ 4683.0ft (Original Well Elev) |
| <b>Reference Site:</b>    | Romero Pad Sec.3-T4N-R65W       | <b>MD Reference:</b>                | WELL @ 4683.0ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.0ft                           | <b>North Reference:</b>             | True                                 |
| <b>Reference Well:</b>    | Romero G03-29D 03-16-09         | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Well Error:</b>        | 0.0ft                           | <b>Output errors are at</b>         | 2.00 sigma                           |
| <b>Reference Wellbore</b> | Romero G03-29D                  | <b>Database:</b>                    | EDM den0-adp01 Server Data           |
| <b>Reference Design:</b>  | Romero G03-29D Plan #1          | <b>Offset TVD Reference:</b>        | Offset Datum                         |

|                                     |   |                       |                     |
|-------------------------------------|---|-----------------------|---------------------|
| <b>Reference</b>                    | Romero G03-29D Plan #1  |                       |                     |
| <b>Filter type:</b>                 | NO GLOBAL FILTER: Using user defined selection & filtering criteria |                       |                     |
| <b>Interpolation Method:</b>        | MD Interval 100.0ft   | <b>Error Model:</b>   | ISCWSA              |
| <b>Depth Range:</b>                 | Unlimited   | <b>Scan Method:</b>   | Closest Approach 3D |
| <b>Results Limited by:</b>          | Maximum center-center distance of 2,000.0ft                         | <b>Error Surface:</b> | Elliptical Conic    |
| <b>Warning Levels Evaluated at:</b> | 2.00 Sigma  |                       |                     |

|                            |                |                                      |                  |                    |
|----------------------------|----------------|--------------------------------------|------------------|--------------------|
| <b>Survey Tool Program</b> | Date 3/16/2009 |                                      |                  |                    |
| <b>From (ft)</b>           | <b>To (ft)</b> | <b>Survey (Wellbore)</b>             | <b>Tool Name</b> | <b>Description</b> |
| 0.0                        | 7,308.9        | Romero G03-29D Plan #1 (Romero G03-2 | MWD              | MWD - Standard     |

|   |                                      |                                   |                                      |                                       |                          |                |
|---|--------------------------------------|-----------------------------------|--------------------------------------|---------------------------------------|--------------------------|----------------|
| <b>Summary</b>                                    |                                      |                                   |                                      |                                       |                          |                |
| <b>Site Name</b>                                  | <b>Reference Measured Depth (ft)</b> | <b>Offset Measured Depth (ft)</b> | <b>Distance Between Centres (ft)</b> | <b>Distance Between Ellipses (ft)</b> | <b>Separation Factor</b> | <b>Warning</b> |
| Offset Well - Wellbore - Design                   |                                      |                                   |                                      |                                       |                          |                |
| Romero Pad Sec.3-T4N-R65W                         |                                      |                                   |                                      |                                       |                          |                |
| Romero G03-30D 03-16-09 - Romero G03-30D - Romero | 1,400.0                              | 1,400.0                           | 21.9                                 | 15.8                                  | 3.602                    | CC, ES         |
| Romero G03-30D 03-16-09 - Romero G03-30D - Romero | 1,500.0                              | 1,500.0                           | 23.1                                 | 16.6                                  | 3.546                    | SF             |

|   |                            |                                   |                            |                        |                    |                              |                               |                   |                                |                              |                   |
|---|----------------------------|-----------------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|--------------------------------|------------------------------|-------------------|
| <b>Offset Design</b>  |                            |                                   |                            |                        |                    |                              |                               |                   |                                |                              |                   |
| Romero Pad Sec.3-T4N-R65W - Romero G03-30D 03-16-09 - Romero G03-30D - Romero G03-30D Plan #1 |                            |                                   |                            |                        |                    |                              |                               |                   |                                |                              |                   |
| Survey Program: 0-MWD   |                            |                                   |                            |                        |                    |                              |                               |                   |                                |                              |                   |
| Reference   |                            |                                   |                            |                        |                    |                              |                               |                   |                                |                              |                   |
| <b>Measured Depth (ft)</b>  | <b>Vertical Depth (ft)</b> | <b>Offset Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>                |                              | <b>Warning</b>    |
|   |                            |                                   |                            | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b>    | <b>Between Ellipses (ft)</b> |                   |
|   |                            |                                   |                            |                        |                    |                              |                               |                   | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b>     |                   |
| 0.0   | 0.0                        | 0.0                               | 0.0                        | 0.0                    | 0.0                | 180.00                       | -21.9                         | 0.0               | 21.9                           |                              |                   |
| 100.0   | 100.0                      | 100.0                             | 100.0                      | 0.1                    | 0.1                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 21.6                         | 0.22 97.250       |
| 200.0   | 200.0                      | 200.0                             | 200.0                      | 0.3                    | 0.3                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 21.2                         | 0.67 32.417       |
| 300.0   | 300.0                      | 300.0                             | 300.0                      | 0.6                    | 0.6                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 20.7                         | 1.12 19.450       |
| 400.0   | 400.0                      | 400.0                             | 400.0                      | 0.8                    | 0.8                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 20.3                         | 1.57 13.893       |
| 500.0   | 500.0                      | 500.0                             | 500.0                      | 1.0                    | 1.0                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 19.8                         | 2.02 10.806       |
| 600.0   | 600.0                      | 600.0                             | 600.0                      | 1.2                    | 1.2                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 19.4                         | 2.47 8.841        |
| 700.0   | 700.0                      | 700.0                             | 700.0                      | 1.5                    | 1.5                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 18.9                         | 2.92 7.481        |
| 800.0   | 800.0                      | 800.0                             | 800.0                      | 1.7                    | 1.7                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 18.5                         | 3.37 6.483        |
| 900.0   | 900.0                      | 900.0                             | 900.0                      | 1.9                    | 1.9                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 18.0                         | 3.82 5.721        |
| 1,000.0   | 1,000.0                    | 1,000.0                           | 1,000.0                    | 2.1                    | 2.1                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 17.6                         | 4.27 5.118        |
| 1,100.0   | 1,100.0                    | 1,100.0                           | 1,100.0                    | 2.4                    | 2.4                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 17.1                         | 4.72 4.631        |
| 1,200.0   | 1,200.0                    | 1,200.0                           | 1,200.0                    | 2.6                    | 2.6                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 16.7                         | 5.17 4.228        |
| 1,300.0   | 1,300.0                    | 1,300.0                           | 1,300.0                    | 2.8                    | 2.8                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 16.2                         | 5.62 3.890        |
| 1,400.0   | 1,400.0                    | 1,400.0                           | 1,400.0                    | 3.0                    | 3.0                | 180.00                       | -21.9                         | 0.0               | 21.9                           | 15.8                         | 6.07 3.602 CC, ES |
| 1,500.0   | 1,500.0                    | 1,500.0                           | 1,500.0                    | 3.3                    | 3.3                | 136.58                       | -21.9                         | 0.0               | 23.1                           | 16.6                         | 6.51 3.546 SF     |
| 1,600.0   | 1,599.8                    | 1,599.8                           | 1,599.8                    | 3.5                    | 3.5                | 144.14                       | -21.9                         | 0.0               | 27.1                           | 20.2                         | 6.95 3.904        |
| 1,700.0   | 1,699.5                    | 1,699.5                           | 1,699.5                    | 3.7                    | 3.7                | 152.56                       | -21.9                         | 0.0               | 34.6                           | 27.2                         | 7.38 4.684        |
| 1,800.0   | 1,798.7                    | 1,798.7                           | 1,798.7                    | 3.9                    | 3.9                | 159.52                       | -21.9                         | 0.0               | 45.8                           | 37.9                         | 7.81 5.862        |
| 1,900.0   | 1,897.5                    | 1,898.0                           | 1,898.0                    | 4.2                    | 4.2                | 166.19                       | -20.6                         | -1.1              | 60.2                           | 52.0                         | 8.21 7.334        |
| 2,000.0   | 1,995.6                    | 1,996.5                           | 1,996.3                    | 4.5                    | 4.4                | 173.15                       | -16.9                         | -4.6              | 78.1                           | 69.5                         | 8.61 9.078        |
| 2,100.0   | 2,093.1                    | 2,093.7                           | 2,093.2                    | 4.8                    | 4.6                | 179.51                       | -10.8                         | -10.3             | 100.0                          | 91.0                         | 8.99 11.120       |
| 2,200.0   | 2,189.9                    | 2,189.8                           | 2,188.6                    | 5.2                    | 4.8                | -174.97                      | -2.5                          | -18.0             | 125.3                          | 115.8                        | 9.44 13.278       |
| 2,300.0   | 2,286.7                    | 2,285.0                           | 2,282.7                    | 5.6                    | 5.1                | -170.12                      | 8.1                           | -27.9             | 151.9                          | 141.9                        | 9.92 15.311       |
| 2,400.0   | 2,383.5                    | 2,379.1                           | 2,375.1                    | 6.0                    | 5.3                | -165.73                      | 20.8                          | -39.7             | 179.9                          | 169.5                        | 10.44 17.234      |

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

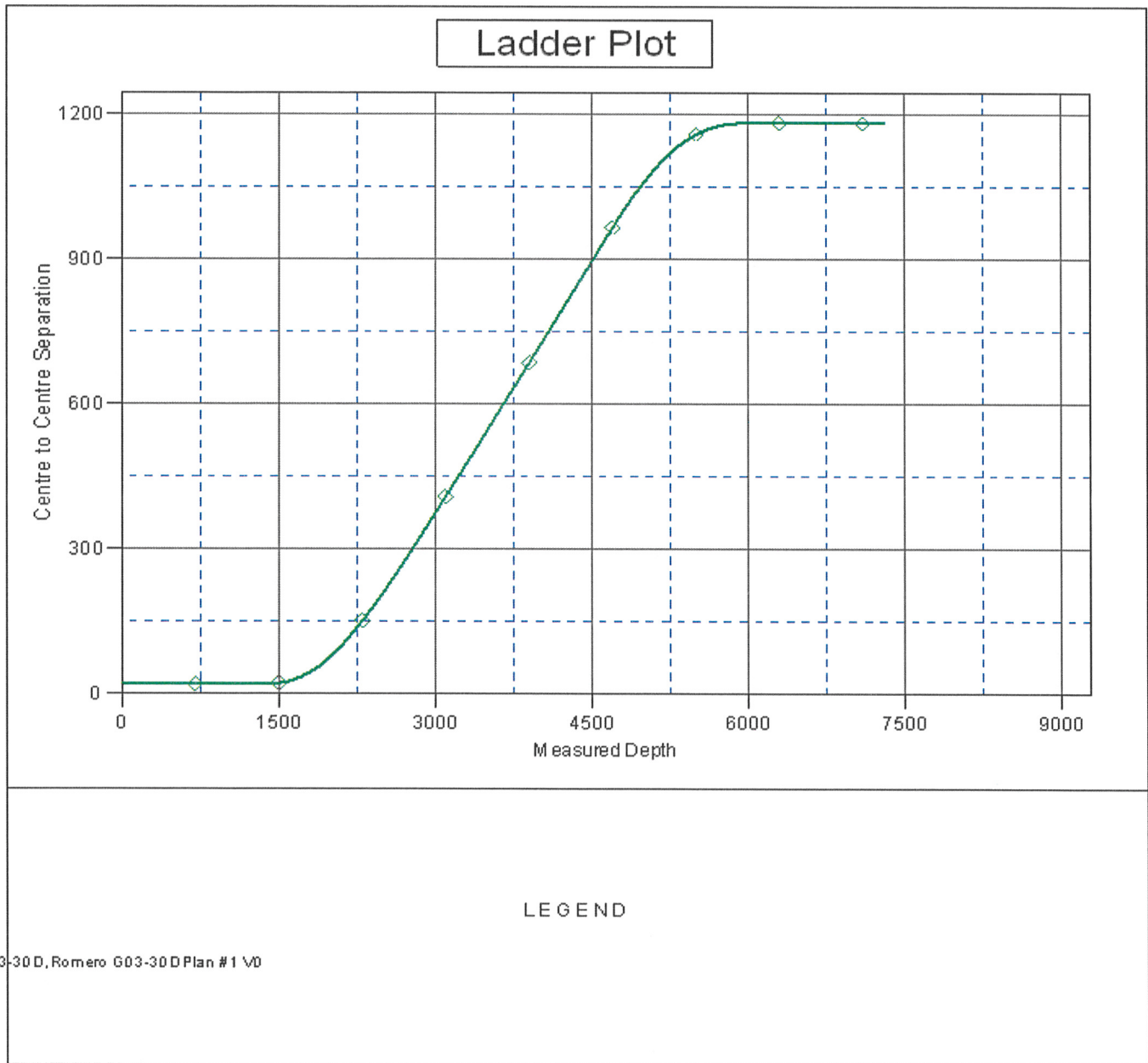


|                           |                                 |                                     |                                      |
|---------------------------|---------------------------------|-------------------------------------|--------------------------------------|
| <b>Company:</b>           | NOBLE ENERGY INC WELD COUNTY CO | <b>Local Co-ordinate Reference:</b> | Well Romero G03-29D 03-16-09         |
| <b>Project:</b>           | SEC.3-T4N-R65W                  | <b>TVD Reference:</b>               | WELL @ 4683.0ft (Original Well Elev) |
| <b>Reference Site:</b>    | Romero Pad Sec.3-T4N-R65W       | <b>MD Reference:</b>                | WELL @ 4683.0ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.0ft                           | <b>North Reference:</b>             | True                                 |
| <b>Reference Well:</b>    | Romero G03-29D 03-16-09         | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Well Error:</b>        | 0.0ft                           | <b>Output errors are at</b>         | 2.00 sigma                           |
| <b>Reference Wellbore</b> | Romero G03-29D                  | <b>Database:</b>                    | EDM den0-adp01 Server Data           |
| <b>Reference Design:</b>  | Romero G03-29D Plan #1          | <b>Offset TVD Reference:</b>        | Offset Datum                         |

| Offset Design Romero Pad Sec.3-T4N-R65W - Romero G03-30D 03-16-09 - Romero G03-30D - Romero G03-30D Pl |                           |                           |                           |                   |                |                             |   |               |                            |                             |                               |                      |         | Offset Site Error: | 0.0 ft |
|--|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|-------------------------------|----------------------|---------|--------------------|--------|
| Survey Program: 0-MWD  |                           |                           |                           |                   |                |                             |   |               |                            |                             |                               |                      |         | Offset Well Error: | 0.0 ft |
| Reference  |                           | Offset                    |                           | Semi Major Axis   |                | Highside<br>Toolface<br>(°) | Distance                                |               | Between<br>Centres<br>(ft) | Between<br>Ellipses<br>(ft) | Minimum<br>Separation<br>(ft) | Separation<br>Factor | Warning |                    |        |
| Measured<br>Depth<br>(ft)  | Vertical<br>Depth<br>(ft) | Measured<br>Depth<br>(ft) | Vertical<br>Depth<br>(ft) | Reference<br>(ft) | Offset<br>(ft) |                             | Offset Wellbore Centre<br>+N/-S<br>(ft) | +E/-W<br>(ft) |                            |                             |                               |                      |         |                    |        |
| 2,500.0  | 2,480.4                   | 2,472.0                   | 2,465.8                   | 6.4               | 5.6            | -161.72                     | 35.6                                    | -53.5         | 209.5                      | 198.6                       | 11.00                         | 19.054               |         |                    |        |
| 2,600.0  | 2,577.2                   | 2,563.8                   | 2,554.8                   | 6.9               | 5.9            | -158.04                     | 52.2                                    | -69.0         | 241.0                      | 229.4                       | 11.60                         | 20.781               |         |                    |        |
| 2,700.0  | 2,674.0                   | 2,657.3                   | 2,645.1                   | 7.3               | 6.3            | -154.90                     | 70.0                                    | -85.5         | 273.7                      | 261.4                       | 12.24                         | 22.353               |         |                    |        |
| 2,800.0  | 2,770.8                   | 2,750.9                   | 2,735.5                   | 7.8               | 6.6            | -152.43                     | 87.7                                    | -102.0        | 306.9                      | 294.0                       | 12.90                         | 23.785               |         |                    |        |
| 2,900.0  | 2,867.6                   | 2,844.5                   | 2,825.8                   | 8.3               | 7.0            | -150.44                     | 105.5                                   | -118.6        | 340.6                      | 327.0                       | 13.58                         | 25.072               |         |                    |        |
| 3,000.0  | 2,964.4                   | 2,938.0                   | 2,916.2                   | 8.7               | 7.4            | -148.80                     | 123.3                                   | -135.1        | 374.5                      | 360.3                       | 14.28                         | 26.231               |         |                    |        |
| 3,100.0  | 3,061.3                   | 3,031.6                   | 3,006.6                   | 9.2               | 7.9            | -147.44                     | 141.0                                   | -151.6        | 408.7                      | 393.8                       | 14.99                         | 27.275               |         |                    |        |
| 3,200.0  | 3,158.1                   | 3,125.1                   | 3,096.9                   | 9.7               | 8.3            | -146.28                     | 158.8                                   | -168.2        | 443.1                      | 427.4                       | 15.70                         | 28.218               |         |                    |        |
| 3,300.0  | 3,254.9                   | 3,218.7                   | 3,187.3                   | 10.2              | 8.7            | -145.29                     | 176.5                                   | -184.7        | 477.6                      | 461.2                       | 16.43                         | 29.071               |         |                    |        |
| 3,400.0  | 3,351.7                   | 3,312.3                   | 3,277.6                   | 10.7              | 9.2            | -144.43                     | 194.3                                   | -201.3        | 512.2                      | 495.1                       | 17.16                         | 29.845               |         |                    |        |
| 3,500.0  | 3,448.5                   | 3,405.8                   | 3,368.0                   | 11.2              | 9.6            | -143.68                     | 212.1                                   | -217.8        | 546.9                      | 529.0                       | 17.90                         | 30.549               |         |                    |        |
| 3,600.0  | 3,545.3                   | 3,499.4                   | 3,458.3                   | 11.7              | 10.1           | -143.02                     | 229.8                                   | -234.3        | 581.7                      | 563.1                       | 18.65                         | 31.191               |         |                    |        |
| 3,700.0  | 3,642.2                   | 3,592.9                   | 3,548.7                   | 12.2              | 10.5           | -142.44                     | 247.6                                   | -250.9        | 616.5                      | 597.1                       | 19.40                         | 31.778               |         |                    |        |
| 3,800.0  | 3,739.0                   | 3,686.5                   | 3,639.1                   | 12.7              | 11.0           | -141.92                     | 265.4                                   | -267.4        | 651.4                      | 631.3                       | 20.16                         | 32.317               |         |                    |        |
| 3,900.0  | 3,835.8                   | 3,780.1                   | 3,729.4                   | 13.2              | 11.5           | -141.45                     | 283.1                                   | -283.9        | 686.4                      | 665.4                       | 20.92                         | 32.812               |         |                    |        |
| 4,000.0  | 3,932.6                   | 3,873.6                   | 3,819.8                   | 13.7              | 12.0           | -141.02                     | 300.9                                   | -300.5        | 721.3                      | 699.6                       | 21.68                         | 33.268               |         |                    |        |
| 4,100.0  | 4,029.4                   | 3,967.2                   | 3,910.1                   | 14.2              | 12.4           | -140.63                     | 318.6                                   | -317.0        | 756.3                      | 733.9                       | 22.45                         | 33.690               |         |                    |        |
| 4,200.0  | 4,126.2                   | 4,060.7                   | 4,000.5                   | 14.7              | 12.9           | -140.28                     | 336.4                                   | -333.5        | 791.4                      | 768.1                       | 23.22                         | 34.081               |         |                    |        |
| 4,300.0  | 4,223.1                   | 4,154.3                   | 4,090.8                   | 15.2              | 13.4           | -139.96                     | 354.2                                   | -350.1        | 826.4                      | 802.4                       | 23.99                         | 34.444               |         |                    |        |
| 4,400.0  | 4,319.9                   | 4,247.9                   | 4,181.2                   | 15.7              | 13.9           | -139.67                     | 371.9                                   | -366.6        | 861.5                      | 836.7                       | 24.77                         | 34.782               |         |                    |        |
| 4,500.0  | 4,416.7                   | 4,341.4                   | 4,271.6                   | 16.2              | 14.4           | -139.39                     | 389.7                                   | -383.2        | 896.6                      | 871.0                       | 25.55                         | 35.097               |         |                    |        |
| 4,600.0  | 4,513.5                   | 4,435.0                   | 4,361.9                   | 16.8              | 14.8           | -139.14                     | 407.5                                   | -399.7        | 931.7                      | 905.3                       | 26.32                         | 35.391               |         |                    |        |
| 4,700.0  | 4,610.3                   | 4,528.5                   | 4,452.3                   | 17.3              | 15.3           | -138.91                     | 425.2                                   | -416.2        | 966.8                      | 939.7                       | 27.11                         | 35.667               |         |                    |        |
| 4,800.0  | 4,707.1                   | 4,627.3                   | 4,557.5                   | 17.8              | 15.8           | -138.74                     | 446.2                                   | -435.7        | 1,000.8                    | 972.9                       | 27.91                         | 35.857               |         |                    |        |
| 4,900.0  | 4,804.0                   | 4,769.6                   | 4,687.4                   | 18.3              | 16.3           | -138.81                     | 464.0                                   | -452.4        | 1,032.3                    | 1,003.6                     | 28.66                         | 36.020               |         |                    |        |
| 5,000.0  | 4,900.8                   | 4,893.8                   | 4,810.0                   | 18.8              | 16.6           | -139.12                     | 478.4                                   | -465.7        | 1,061.2                    | 1,031.8                     | 29.37                         | 36.136               |         |                    |        |
| 5,100.0  | 4,997.6                   | 5,019.5                   | 4,934.9                   | 19.3              | 16.9           | -139.63                     | 488.9                                   | -475.5        | 1,087.5                    | 1,057.5                     | 30.02                         | 36.223               |         |                    |        |
| 5,200.0  | 5,094.4                   | 5,146.3                   | 5,061.3                   | 19.8              | 17.2           | -140.39                     | 495.4                                   | -481.6        | 1,111.3                    | 1,080.6                     | 30.63                         | 36.275               |         |                    |        |
| 5,300.0  | 5,191.8                   | 5,274.2                   | 5,189.2                   | 20.2              | 17.4           | -141.47                     | 497.9                                   | -483.9        | 1,130.8                    | 1,099.6                     | 31.21                         | 36.233               |         |                    |        |
| 5,400.0  | 5,289.8                   | 5,374.8                   | 5,289.8                   | 20.6              | 17.5           | -142.28                     | 497.9                                   | -483.9        | 1,146.3                    | 1,114.6                     | 31.71                         | 36.155               |         |                    |        |
| 5,500.0  | 5,388.5                   | 5,473.5                   | 5,388.5                   | 20.9              | 17.7           | -142.92                     | 497.9                                   | -483.9        | 1,159.2                    | 1,127.0                     | 32.16                         | 36.041               |         |                    |        |
| 5,600.0  | 5,487.7                   | 5,572.7                   | 5,487.7                   | 21.1              | 17.8           | -143.41                     | 497.9                                   | -483.9        | 1,169.3                    | 1,136.7                     | 32.58                         | 35.889               |         |                    |        |
| 5,700.0  | 5,587.3                   | 5,672.3                   | 5,587.3                   | 21.3              | 18.0           | -143.77                     | 497.9                                   | -483.9        | 1,176.7                    | 1,143.7                     | 32.96                         | 35.701               |         |                    |        |
| 5,800.0  | 5,687.1                   | 5,772.1                   | 5,687.1                   | 21.5              | 18.1           | -143.98                     | 497.9                                   | -483.9        | 1,181.3                    | 1,148.0                     | 33.30                         | 35.474               |         |                    |        |
| 5,900.0  | 5,787.1                   | 5,872.1                   | 5,787.1                   | 21.7              | 18.3           | -144.07                     | 497.9                                   | -483.9        | 1,183.1                    | 1,149.5                     | 33.60                         | 35.208               |         |                    |        |
| 6,000.0  | 5,887.1                   | 5,972.1                   | 5,887.1                   | 21.8              | 18.4           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,149.2                     | 33.91                         | 34.889               |         |                    |        |
| 6,100.0  | 5,987.1                   | 6,072.1                   | 5,987.1                   | 21.9              | 18.6           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,148.9                     | 34.23                         | 34.559               |         |                    |        |
| 6,200.0  | 6,087.1                   | 6,172.1                   | 6,087.1                   | 22.0              | 18.7           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,148.5                     | 34.56                         | 34.232               |         |                    |        |
| 6,300.0  | 6,187.1                   | 6,272.1                   | 6,187.1                   | 22.2              | 18.9           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,148.2                     | 34.89                         | 33.909               |         |                    |        |
| 6,400.0  | 6,287.1                   | 6,372.1                   | 6,287.1                   | 22.3              | 19.0           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,147.9                     | 35.22                         | 33.589               |         |                    |        |
| 6,500.0  | 6,387.1                   | 6,472.1                   | 6,387.1                   | 22.4              | 19.2           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,147.5                     | 35.56                         | 33.273               |         |                    |        |
| 6,600.0  | 6,487.1                   | 6,572.1                   | 6,487.1                   | 22.6              | 19.4           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,147.2                     | 35.89                         | 32.961               |         |                    |        |
| 6,700.0  | 6,587.1                   | 6,672.1                   | 6,587.1                   | 22.7              | 19.5           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,146.9                     | 36.23                         | 32.652               |         |                    |        |
| 6,800.0  | 6,687.1                   | 6,772.1                   | 6,687.1                   | 22.8              | 19.7           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,146.5                     | 36.58                         | 32.347               |         |                    |        |
| 6,900.0  | 6,787.1                   | 6,872.1                   | 6,787.1                   | 23.0              | 19.9           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,146.2                     | 36.92                         | 32.045               |         |                    |        |
| 7,000.0  | 6,887.1                   | 6,972.1                   | 6,887.1                   | 23.1              | 20.0           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,145.8                     | 37.27                         | 31.747               |         |                    |        |
| 7,100.0  | 6,987.1                   | 7,072.1                   | 6,987.1                   | 23.3              | 20.2           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,145.5                     | 37.61                         | 31.453               |         |                    |        |
| 7,200.0  | 7,087.1                   | 7,172.1                   | 7,087.1                   | 23.4              | 20.4           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,145.1                     | 37.97                         | 31.162               |         |                    |        |
| 7,300.0  | 7,187.1                   | 7,272.1                   | 7,187.1                   | 23.5              | 20.5           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,144.8                     | 38.32                         | 30.875               |         |                    |        |
| 7,308.9  | 7,196.0                   | 7,281.0                   | 7,196.0                   | 23.6              | 20.5           | -97.52                      | 497.9                                   | -483.9        | 1,183.1                    | 1,144.7                     | 38.35                         | 30.850               |         |                    |        |

|                    |                                 |                              |                                      |
|--------------------|---------------------------------|------------------------------|--------------------------------------|
| Company:           | NOBLE ENERGY INC WELD COUNTY CO | Local Co-ordinate Reference: | Well Romero G03-29D 03-16-09         |
| Project:           | SEC.3-T4N-R65W                  | TVD Reference:               | WELL @ 4683.0ft (Original Well Elev) |
| Reference Site:    | Romero Pad Sec.3-T4N-R65W       | MD Reference:                | WELL @ 4683.0ft (Original Well Elev) |
| Site Error:        | 0.0ft                           | North Reference:             | True                                 |
| Reference Well:    | Romero G03-29D 03-16-09         | Survey Calculation Method:   | Minimum Curvature                    |
| Well Error:        | 0.0ft                           | Output errors are at         | 2.00 sigma                           |
| Reference Wellbore | Romero G03-29D                  | Database:                    | EDM den0-adp01 Server Data           |
| Reference Design:  | Romero G03-29D Plan #1          | Offset TVD Reference:        | Offset Datum                         |

Reference Depths are relative to WELL @ 4683.0ft (Original Well Elev) Coordinates are relative to: Romero G03-29D 03-16-09  
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone  
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.54°

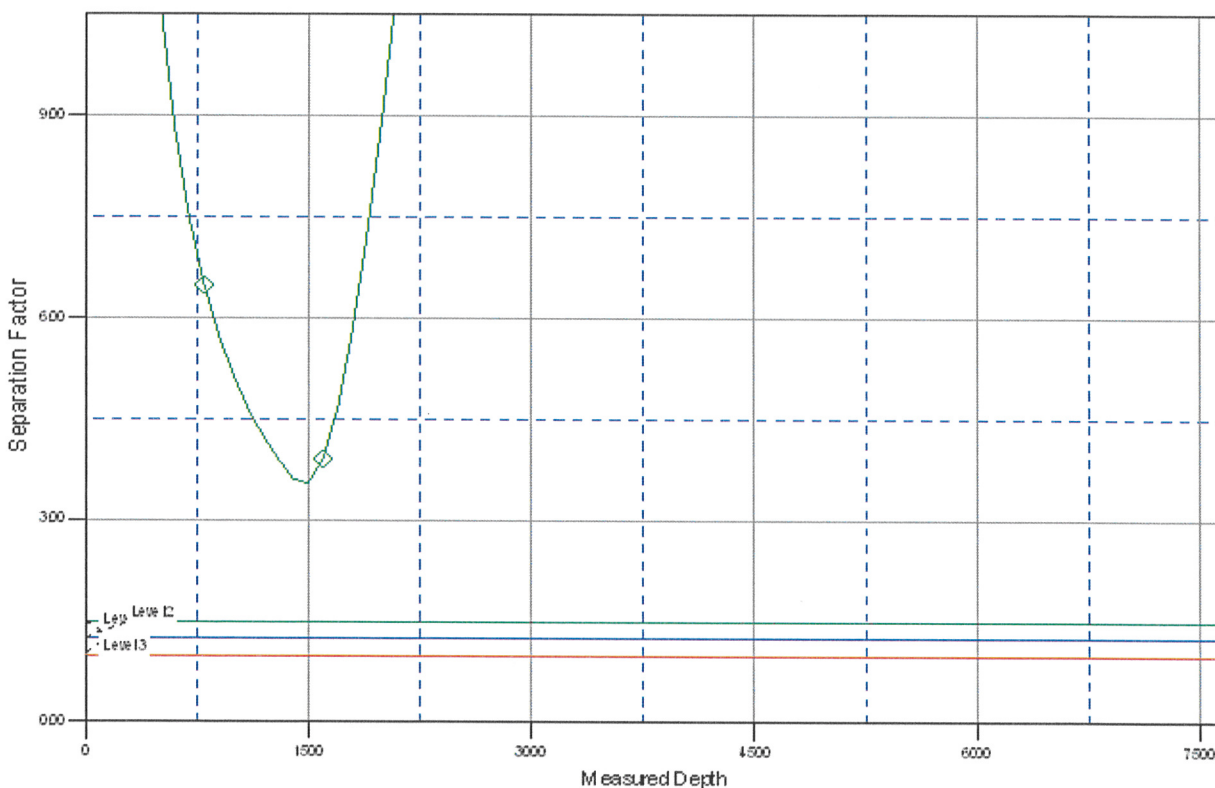




|                           |                                 |                                     |                                      |
|---------------------------|---------------------------------|-------------------------------------|--------------------------------------|
| <b>Company:</b>           | NOBLE ENERGY INC WELD COUNTY CO | <b>Local Co-ordinate Reference:</b> | Well Romero G03-29D 03-16-09         |
| <b>Project:</b>           | SEC.3-T4N-R65W                  | <b>TVD Reference:</b>               | WELL @ 4683.0ft (Original Well Elev) |
| <b>Reference Site:</b>    | Romero Pad Sec.3-T4N-R65W       | <b>MD Reference:</b>                | WELL @ 4683.0ft (Original Well Elev) |
| <b>Site Error:</b>        | 0.0ft                           | <b>North Reference:</b>             | True                                 |
| <b>Reference Well:</b>    | Romero G03-29D 03-16-09         | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Well Error:</b>        | 0.0ft                           | <b>Output errors are at</b>         | 2.00 sigma                           |
| <b>Reference Wellbore</b> | Romero G03-29D                  | <b>Database:</b>                    | EDM den0-adp01 Server Data           |
| <b>Reference Design:</b>  | Romero G03-29D Plan #1          | <b>Offset TVD Reference:</b>        | Offset Datum                         |

Reference Depths are relative to WELL @ 4683.0ft (Original Well Elev) Coordinates are relative to: Romero G03-29D 03-16-09  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W °  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.54°

### Separation Factor Plot



### LEGEND

03-30 D, Romero G03-30 D Plan #1 \0