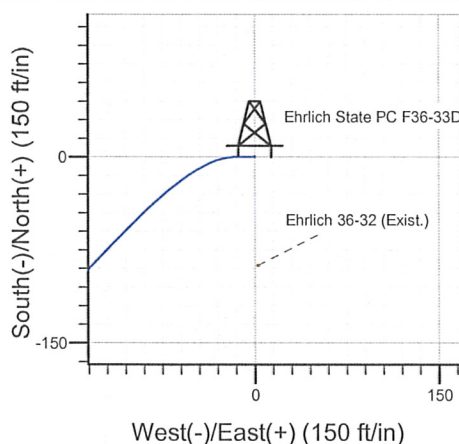
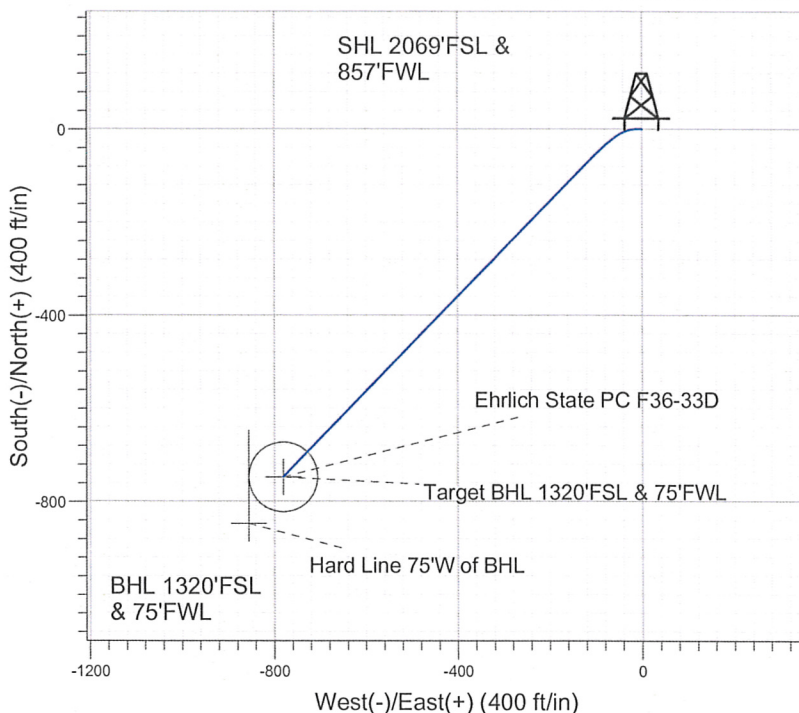
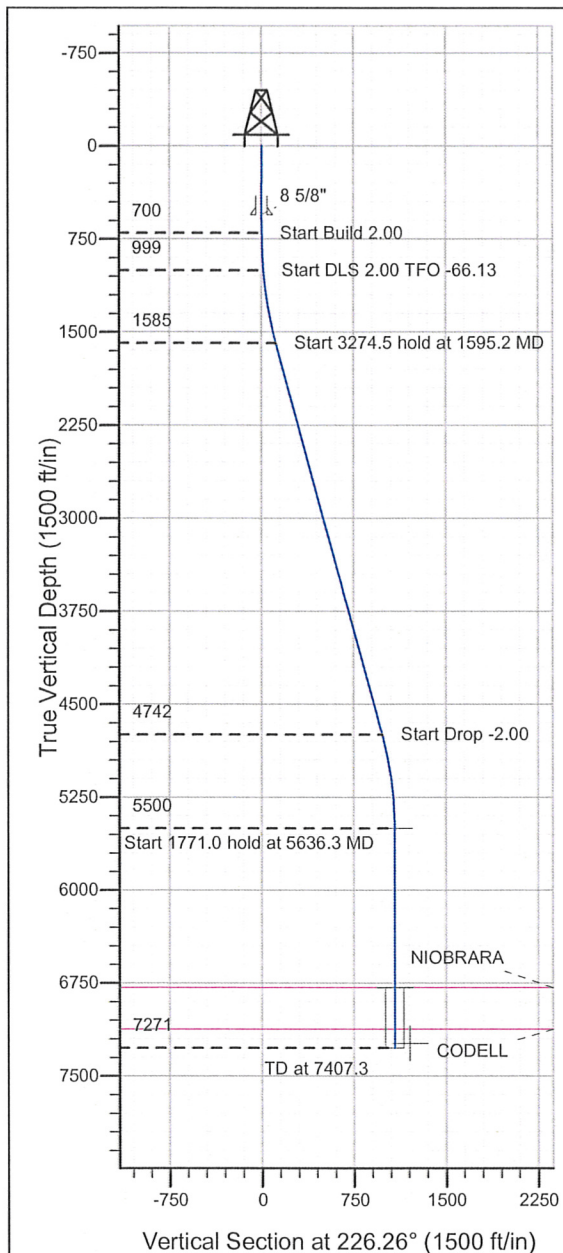


Well Name: **Ehrlich State PC F36-33D**
 Surface Location: Ehrlich State PC F36-33D Pad Sec.36-T5N-R65W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4728.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1373069.37 3245847.34 40° 21' 14.832 N 104° 37' 4.296 W
 Original Well Elev WELL @ 4741.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Ehrlich State PC F36-33D
 Noble Ehrlich State PC F36-33D Plan #1 (8-10-10)
 14:43, August 12 2010



Azimuths to True North
 Magnetic North: 8.94°
 Magnetic Field
 Strength: 53296.6snT
 Dip Angle: 67.10°
 Date: 12/31/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|---------------------------------|--------|--------|--------|-----------------|-------------------|-----------------------|
| Target BHL 1320'FSL & 75'FWL | 5500.0 | -746.8 | -780.4 | 40° 21' 7.452 N | 104° 37' 14.376 W | Point |
| Target Circle 1320'FSL & 75'FWL | 6786.0 | -746.8 | -780.4 | 40° 21' 7.452 N | 104° 37' 14.376 W | Circle (Radius: 75.0) |
| Hard Line 75'W of BHL | 7236.0 | -846.8 | -855.4 | 40° 21' 6.464 N | 104° 37' 15.344 W | Polygon |

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 | 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1000.0 | 6.00 | 270.00 | 999.5 | 0.0 | -15.7 | 2.00 | 270.00 | 11.3 | |
| 4 | 1595.2 | 15.33 | 224.48 | 1584.6 | -56.3 | -102.3 | 2.00 | -66.13 | 112.8 | |
| 5 | 4869.7 | 15.33 | 224.48 | 4742.5 | -674.1 | -709.0 | 0.00 | 0.00 | 978.3 | |
| 6 | 5636.3 | 0.00 | 0.00 | 5500.0 | -746.8 | -780.4 | 2.00 | 180.00 | 1080.2 | Target BHL 1320'FSL & 75'FWL |
| 7 | 7407.3 | 0.00 | 0.00 | 7271.0 | -746.8 | -780.4 | 0.00 | 0.00 | 1080.2 | |



Directional

**NOBLE ENERGY INC WELD
COUNTY CO**

SEC.36-T5N-R65W

Ehrlich State PC F36-33D Pad Sec.36-T5N-R65W

Ehrlich State PC F36-33D

Wellbore #1

Plan: Noble Ehrlich State PC F36-33D Plan #1 (8-10-10)

Standard Planning Report

12 August, 2010

| | | | |
|-----------|---|------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Ehrlich State PC F36-33D |
| Company: | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference: | WELL @ 4741.0ft (Original Well Elev) |
| Project: | SEC.36-T5N-R65W | MD Reference: | WELL @ 4741.0ft (Original Well Elev) |
| Site: | Ehrlich State PC F36-33D Pad Sec.36-T5N-R65W | North Reference: | True |
| Well: | Ehrlich State PC F36-33D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Noble Ehrlich State PC F36-33D Plan #1 (8-10) | | |

| | | | |
|-------------|--|---------------|-----------------------------|
| Project | SEC.36-T5N-R65W, Weld County, Colorado | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | Using Well Reference Point |
| Map Zone: | Colorado Northern Zone | | Using geodetic scale factor |

| | | | | | |
|-----------------------|--|--------------|----------------|-------------------|------------------|
| Site | Ehrlich State PC F36-33D Pad Sec.36-T5N-R65W | | | | |
| Site Position: | | Northing: | 1,373,069.39ft | Latitude: | 40° 21' 14.832 N |
| From: | Lat/Long | Easting: | 3,245,847.34ft | Longitude: | 104° 37' 4.296 W |
| Position Uncertainty: | 0.0 ft | Slot Radius: | " | Grid Convergence: | 0.57 ° |

| | | | | | | |
|----------------------|--------------------------|---------------------|-----------|-----------------|------------|------------------|
| Well | Ehrlich State PC F36-33D | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,373,069.37 ft | Latitude: | 40° 21' 14.832 N |
| | +E/-W | 0.0 ft | Easting: | 3,245,847.34 ft | Longitude: | 104° 37' 4.296 W |
| Position Uncertainty | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,728.0 ft | |

| | | | | | |
|-----------|-------------|-------------|-----------------|---------------|---------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF200510 | 12/31/2009 | 8.94 | 67.10 | 53,297 |

Design Noble Ehrlich State PC F36-33D Plan #1 (8-10-10)

Audit Notes:

Version: Phase: PROTOTYPE Tie On Depth: 0.0

| | | | | |
|-------------------|--------------------------|---------------|---------------|------------------|
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 226.26 |

Plan Sections

| 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 | |
| 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,000.0 | 6.00 | 270.00 | 999.5 | 0.0 | -15.7 | 2.00 | 2.00 | 0.00 | 270.00 | |
| 1,595.2 | 15.33 | 224.48 | 1,584.6 | -56.3 | -102.3 | 2.00 | 1.57 | -7.65 | -66.13 | |
| 4,869.7 | 15.33 | 224.48 | 4,742.5 | -674.1 | -709.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,636.3 | 0.00 | 0.00 | 5,500.0 | -746.8 | -780.4 | 2.00 | -2.00 | 0.00 | 180.00 | Target BHL 1320°F! |
| 7,407.3 | 0.00 | 0.00 | 7,271.0 | -746.8 | -780.4 | 0.00 | 0.00 | 0.00 | 0.00 | |

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.36-T5N-R65W
Site: Ehrlich State PC F36-33D Pad
Sec.36-T5N-R65W
Well: Ehrlich State PC F36-33D
Wellbore #: Wellbore #1
Design: Noble Ehrlich State PC F36-33D Plan #1 (8-10)

Local Co-ordinate Reference: Well Ehrlich State PC F36-33D
TVD Reference: WELL @ 4741.0ft (Original Well Elev)
MD Reference: WELL @ 4741.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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 |
| 550.0 | 0.00 | 0.00 | 550.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 8 5/8" | | | | | | | | | |
| 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 |
| 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 720.0 | 0.40 | 270.00 | 720.0 | 0.0 | -0.1 | 0.1 | 2.00 | 2.00 | 0.00 |
| 760.0 | 1.20 | 270.00 | 760.0 | 0.0 | -0.6 | 0.5 | 2.00 | 2.00 | 0.00 |
| 800.0 | 2.00 | 270.00 | 800.0 | 0.0 | -1.7 | 1.3 | 2.00 | 2.00 | 0.00 |
| 840.0 | 2.80 | 270.00 | 839.9 | 0.0 | -3.4 | 2.5 | 2.00 | 2.00 | 0.00 |
| 880.0 | 3.60 | 270.00 | 879.9 | 0.0 | -5.7 | 4.1 | 2.00 | 2.00 | 0.00 |
| 920.0 | 4.40 | 270.00 | 919.8 | 0.0 | -8.4 | 6.1 | 2.00 | 2.00 | 0.00 |
| 960.0 | 5.20 | 270.00 | 959.6 | 0.0 | -11.8 | 8.5 | 2.00 | 2.00 | 0.00 |
| 1,000.0 | 6.00 | 270.00 | 999.5 | 0.0 | -15.7 | 11.3 | 2.00 | 2.00 | 0.00 |
| 1,040.0 | 6.37 | 263.39 | 1,039.2 | -0.3 | -20.0 | 14.6 | 2.00 | 0.91 | -16.53 |
| 1,080.0 | 6.81 | 257.56 | 1,079.0 | -1.0 | -24.5 | 18.4 | 2.00 | 1.10 | -14.58 |
| 1,120.0 | 7.31 | 252.48 | 1,118.7 | -2.3 | -29.2 | 22.7 | 2.00 | 1.25 | -12.70 |
| 1,160.0 | 7.86 | 248.08 | 1,158.3 | -4.1 | -34.2 | 27.5 | 2.00 | 1.38 | -11.01 |
| 1,200.0 | 8.45 | 244.26 | 1,197.9 | -6.4 | -39.4 | 32.9 | 2.00 | 1.48 | -9.53 |
| 1,240.0 | 9.07 | 240.96 | 1,237.4 | -9.2 | -44.8 | 38.7 | 2.00 | 1.56 | -8.26 |
| 1,280.0 | 9.72 | 238.09 | 1,276.9 | -12.5 | -50.4 | 45.1 | 2.00 | 1.62 | -7.19 |
| 1,320.0 | 10.39 | 235.57 | 1,316.3 | -16.3 | -56.3 | 51.9 | 2.00 | 1.67 | -6.28 |
| 1,360.0 | 11.07 | 233.37 | 1,355.6 | -20.7 | -62.3 | 59.3 | 2.00 | 1.72 | -5.52 |
| 1,400.0 | 11.77 | 231.41 | 1,394.8 | -25.5 | -68.6 | 67.2 | 2.00 | 1.75 | -4.88 |
| 1,440.0 | 12.49 | 229.68 | 1,433.9 | -30.8 | -75.1 | 75.6 | 2.00 | 1.78 | -4.33 |
| 1,480.0 | 13.21 | 228.13 | 1,472.9 | -36.7 | -81.8 | 84.4 | 2.00 | 1.81 | -3.87 |
| 1,520.0 | 13.94 | 226.74 | 1,511.8 | -43.0 | -88.7 | 93.8 | 2.00 | 1.83 | -3.47 |
| 1,560.0 | 14.68 | 225.49 | 1,550.5 | -49.9 | -95.8 | 103.7 | 2.00 | 1.84 | -3.13 |
| 1,595.2 | 15.33 | 224.48 | 1,584.6 | -56.3 | -102.3 | 112.8 | 2.00 | 1.86 | -2.85 |
| 1,600.0 | 15.33 | 224.48 | 1,589.2 | -57.2 | -103.1 | 114.1 | 0.00 | 0.00 | 0.00 |
| 1,640.0 | 15.33 | 224.48 | 1,627.7 | -64.8 | -110.6 | 124.7 | 0.00 | 0.00 | 0.00 |
| 1,680.0 | 15.33 | 224.48 | 1,666.3 | -72.3 | -118.0 | 135.2 | 0.00 | 0.00 | 0.00 |
| 1,720.0 | 15.33 | 224.48 | 1,704.9 | -79.9 | -125.4 | 145.8 | 0.00 | 0.00 | 0.00 |
| 1,760.0 | 15.33 | 224.48 | 1,743.5 | -87.4 | -132.8 | 156.4 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 15.33 | 224.48 | 1,782.0 | -95.0 | -140.2 | 167.0 | 0.00 | 0.00 | 0.00 |
| 1,840.0 | 15.33 | 224.48 | 1,820.6 | -102.5 | -147.6 | 177.5 | 0.00 | 0.00 | 0.00 |
| 1,880.0 | 15.33 | 224.48 | 1,859.2 | -110.1 | -155.0 | 188.1 | 0.00 | 0.00 | 0.00 |
| 1,920.0 | 15.33 | 224.48 | 1,897.8 | -117.6 | -162.4 | 198.7 | 0.00 | 0.00 | 0.00 |

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.36-T5N-R65W
Site: Ehrlich State PC F36-33D Pad
Sec.36-T5N-R65W
Well: Ehrlich State PC F36-33D
Wellbore: Wellbore #1
Design: Noble Ehrlich State PC F36-33D Plan #1 (8-10)

Local Co-ordinate Reference: Well Ehrlich State PC F36-33D
TVD Reference: WELL @ 4741.0ft (Original Well Elev)
MD Reference: WELL @ 4741.0ft (Original Well Elev)
North Reference: True

Survey Calculation Method: Minimum Curvature

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) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 1,960.0 | 15.33 | 224.48 | 1,936.4 | -125.2 | -169.8 | 209.2 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 15.33 | 224.48 | 1,974.9 | -132.7 | -177.3 | 219.8 | 0.00 | 0.00 | 0.00 |
| 2,040.0 | 15.33 | 224.48 | 2,013.5 | -140.2 | -184.7 | 230.4 | 0.00 | 0.00 | 0.00 |
| 2,080.0 | 15.33 | 224.48 | 2,052.1 | -147.8 | -192.1 | 241.0 | 0.00 | 0.00 | 0.00 |
| 2,120.0 | 15.33 | 224.48 | 2,090.7 | -155.3 | -199.5 | 251.5 | 0.00 | 0.00 | 0.00 |
| 2,160.0 | 15.33 | 224.48 | 2,129.2 | -162.9 | -206.9 | 262.1 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 15.33 | 224.48 | 2,167.8 | -170.4 | -214.3 | 272.7 | 0.00 | 0.00 | 0.00 |
| 2,240.0 | 15.33 | 224.48 | 2,206.4 | -178.0 | -221.7 | 283.2 | 0.00 | 0.00 | 0.00 |
| 2,280.0 | 15.33 | 224.48 | 2,245.0 | -185.5 | -229.1 | 293.8 | 0.00 | 0.00 | 0.00 |
| 2,320.0 | 15.33 | 224.48 | 2,283.5 | -193.1 | -236.5 | 304.4 | 0.00 | 0.00 | 0.00 |
| 2,360.0 | 15.33 | 224.48 | 2,322.1 | -200.6 | -244.0 | 315.0 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 15.33 | 224.48 | 2,360.7 | -208.2 | -251.4 | 325.5 | 0.00 | 0.00 | 0.00 |
| 2,440.0 | 15.33 | 224.48 | 2,399.3 | -215.7 | -258.8 | 336.1 | 0.00 | 0.00 | 0.00 |
| 2,480.0 | 15.33 | 224.48 | 2,437.8 | -223.3 | -266.2 | 346.7 | 0.00 | 0.00 | 0.00 |
| 2,520.0 | 15.33 | 224.48 | 2,476.4 | -230.8 | -273.6 | 357.2 | 0.00 | 0.00 | 0.00 |
| 2,560.0 | 15.33 | 224.48 | 2,515.0 | -238.3 | -281.0 | 367.8 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 15.33 | 224.48 | 2,553.6 | -245.9 | -288.4 | 378.4 | 0.00 | 0.00 | 0.00 |
| 2,640.0 | 15.33 | 224.48 | 2,592.1 | -253.4 | -295.8 | 389.0 | 0.00 | 0.00 | 0.00 |
| 2,680.0 | 15.33 | 224.48 | 2,630.7 | -261.0 | -303.2 | 399.5 | 0.00 | 0.00 | 0.00 |
| 2,720.0 | 15.33 | 224.48 | 2,669.3 | -268.5 | -310.7 | 410.1 | 0.00 | 0.00 | 0.00 |
| 2,760.0 | 15.33 | 224.48 | 2,707.9 | -276.1 | -318.1 | 420.7 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 15.33 | 224.48 | 2,746.5 | -283.6 | -325.5 | 431.2 | 0.00 | 0.00 | 0.00 |
| 2,840.0 | 15.33 | 224.48 | 2,785.0 | -291.2 | -332.9 | 441.8 | 0.00 | 0.00 | 0.00 |
| 2,880.0 | 15.33 | 224.48 | 2,823.6 | -298.7 | -340.3 | 452.4 | 0.00 | 0.00 | 0.00 |
| 2,920.0 | 15.33 | 224.48 | 2,862.2 | -306.3 | -347.7 | 463.0 | 0.00 | 0.00 | 0.00 |
| 2,960.0 | 15.33 | 224.48 | 2,900.8 | -313.8 | -355.1 | 473.5 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 15.33 | 224.48 | 2,939.3 | -321.3 | -362.5 | 484.1 | 0.00 | 0.00 | 0.00 |
| 3,040.0 | 15.33 | 224.48 | 2,977.9 | -328.9 | -370.0 | 494.7 | 0.00 | 0.00 | 0.00 |
| 3,080.0 | 15.33 | 224.48 | 3,016.5 | -336.4 | -377.4 | 505.2 | 0.00 | 0.00 | 0.00 |
| 3,120.0 | 15.33 | 224.48 | 3,055.1 | -344.0 | -384.8 | 515.8 | 0.00 | 0.00 | 0.00 |
| 3,160.0 | 15.33 | 224.48 | 3,093.6 | -351.5 | -392.2 | 526.4 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 15.33 | 224.48 | 3,132.2 | -359.1 | -399.6 | 537.0 | 0.00 | 0.00 | 0.00 |
| 3,240.0 | 15.33 | 224.48 | 3,170.8 | -366.6 | -407.0 | 547.5 | 0.00 | 0.00 | 0.00 |
| 3,280.0 | 15.33 | 224.48 | 3,209.4 | -374.2 | -414.4 | 558.1 | 0.00 | 0.00 | 0.00 |
| 3,320.0 | 15.33 | 224.48 | 3,247.9 | -381.7 | -421.8 | 568.7 | 0.00 | 0.00 | 0.00 |
| 3,360.0 | 15.33 | 224.48 | 3,286.5 | -389.3 | -429.2 | 579.3 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 15.33 | 224.48 | 3,325.1 | -396.8 | -436.7 | 589.8 | 0.00 | 0.00 | 0.00 |
| 3,440.0 | 15.33 | 224.48 | 3,363.7 | -404.4 | -444.1 | 600.4 | 0.00 | 0.00 | 0.00 |
| 3,480.0 | 15.33 | 224.48 | 3,402.3 | -411.9 | -451.5 | 611.0 | 0.00 | 0.00 | 0.00 |
| 3,520.0 | 15.33 | 224.48 | 3,440.8 | -419.4 | -458.9 | 621.5 | 0.00 | 0.00 | 0.00 |
| 3,560.0 | 15.33 | 224.48 | 3,479.4 | -427.0 | -466.3 | 632.1 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 15.33 | 224.48 | 3,518.0 | -434.5 | -473.7 | 642.7 | 0.00 | 0.00 | 0.00 |
| 3,640.0 | 15.33 | 224.48 | 3,556.6 | -442.1 | -481.1 | 653.3 | 0.00 | 0.00 | 0.00 |
| 3,680.0 | 15.33 | 224.48 | 3,595.1 | -449.6 | -488.5 | 663.8 | 0.00 | 0.00 | 0.00 |
| 3,720.0 | 15.33 | 224.48 | 3,633.7 | -457.2 | -495.9 | 674.4 | 0.00 | 0.00 | 0.00 |
| 3,760.0 | 15.33 | 224.48 | 3,672.3 | -464.7 | -503.4 | 685.0 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 15.33 | 224.48 | 3,710.9 | -472.3 | -510.8 | 695.5 | 0.00 | 0.00 | 0.00 |
| 3,840.0 | 15.33 | 224.48 | 3,749.4 | -479.8 | -518.2 | 706.1 | 0.00 | 0.00 | 0.00 |
| 3,880.0 | 15.33 | 224.48 | 3,788.0 | -487.4 | -525.6 | 716.7 | 0.00 | 0.00 | 0.00 |
| 3,920.0 | 15.33 | 224.48 | 3,826.6 | -494.9 | -533.0 | 727.3 | 0.00 | 0.00 | 0.00 |
| 3,960.0 | 15.33 | 224.48 | 3,865.2 | -502.4 | -540.4 | 737.8 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 15.33 | 224.48 | 3,903.7 | -510.0 | -547.8 | 748.4 | 0.00 | 0.00 | 0.00 |
| 4,040.0 | 15.33 | 224.48 | 3,942.3 | -517.5 | -555.2 | 759.0 | 0.00 | 0.00 | 0.00 |

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.36-T5N-R65W
Site: Ehrlich State PC F36-33D Pad
Sec.36-T5N-R65W
Well: Ehrlich State PC F36-33D
Wellbore #: Wellbore #1
Design: Noble Ehrlich State PC F36-33D Plan #1 (8-10)

Local Co-ordinate Reference: Well Ehrlich State PC F36-33D
TVD Reference: WELL @ 4741.0ft (Original Well Elev)
MD Reference: WELL @ 4741.0ft (Original Well Elev)
North Reference: True

Survey Calculation Method: Minimum Curvature

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 | 15.33 | 224.48 | 3,980.9 | -525.1 | -562.6 | 769.5 | 0.00 | 0.00 | 0.00 |
| 4,120.0 | 15.33 | 224.48 | 4,019.5 | -532.6 | -570.1 | 780.1 | 0.00 | 0.00 | 0.00 |
| 4,160.0 | 15.33 | 224.48 | 4,058.1 | -540.2 | -577.5 | 790.7 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 15.33 | 224.48 | 4,096.6 | -547.7 | -584.9 | 801.3 | 0.00 | 0.00 | 0.00 |
| 4,240.0 | 15.33 | 224.48 | 4,135.2 | -555.3 | -592.3 | 811.8 | 0.00 | 0.00 | 0.00 |
| 4,280.0 | 15.33 | 224.48 | 4,173.8 | -562.8 | -599.7 | 822.4 | 0.00 | 0.00 | 0.00 |
| 4,320.0 | 15.33 | 224.48 | 4,212.4 | -570.4 | -607.1 | 833.0 | 0.00 | 0.00 | 0.00 |
| 4,360.0 | 15.33 | 224.48 | 4,250.9 | -577.9 | -614.5 | 843.5 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 15.33 | 224.48 | 4,289.5 | -585.5 | -621.9 | 854.1 | 0.00 | 0.00 | 0.00 |
| 4,440.0 | 15.33 | 224.48 | 4,328.1 | -593.0 | -629.3 | 864.7 | 0.00 | 0.00 | 0.00 |
| 4,480.0 | 15.33 | 224.48 | 4,366.7 | -600.5 | -636.8 | 875.3 | 0.00 | 0.00 | 0.00 |
| 4,520.0 | 15.33 | 224.48 | 4,405.2 | -608.1 | -644.2 | 885.8 | 0.00 | 0.00 | 0.00 |
| 4,560.0 | 15.33 | 224.48 | 4,443.8 | -615.6 | -651.6 | 896.4 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 15.33 | 224.48 | 4,482.4 | -623.2 | -659.0 | 907.0 | 0.00 | 0.00 | 0.00 |
| 4,640.0 | 15.33 | 224.48 | 4,521.0 | -630.7 | -666.4 | 917.5 | 0.00 | 0.00 | 0.00 |
| 4,680.0 | 15.33 | 224.48 | 4,559.5 | -638.3 | -673.8 | 928.1 | 0.00 | 0.00 | 0.00 |
| 4,720.0 | 15.33 | 224.48 | 4,598.1 | -645.8 | -681.2 | 938.7 | 0.00 | 0.00 | 0.00 |
| 4,760.0 | 15.33 | 224.48 | 4,636.7 | -653.4 | -688.6 | 949.3 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 15.33 | 224.48 | 4,675.3 | -660.9 | -696.1 | 959.8 | 0.00 | 0.00 | 0.00 |
| 4,840.0 | 15.33 | 224.48 | 4,713.8 | -668.5 | -703.5 | 970.4 | 0.00 | 0.00 | 0.00 |
| 4,869.7 | 15.33 | 224.48 | 4,742.5 | -674.1 | -709.0 | 978.3 | 0.00 | 0.00 | 0.00 |
| 4,880.0 | 15.13 | 224.48 | 4,752.4 | -676.0 | -710.9 | 981.0 | 2.00 | -2.00 | 0.00 |
| 4,920.0 | 14.33 | 224.48 | 4,791.1 | -683.2 | -718.0 | 991.1 | 2.00 | -2.00 | 0.00 |
| 4,960.0 | 13.53 | 224.48 | 4,829.9 | -690.1 | -724.7 | 1,000.7 | 2.00 | -2.00 | 0.00 |
| 5,000.0 | 12.73 | 224.48 | 4,868.9 | -696.6 | -731.1 | 1,009.8 | 2.00 | -2.00 | 0.00 |
| 5,040.0 | 11.93 | 224.48 | 4,908.0 | -702.7 | -737.1 | 1,018.4 | 2.00 | -2.00 | 0.00 |
| 5,080.0 | 11.13 | 224.48 | 4,947.2 | -708.4 | -742.7 | 1,026.3 | 2.00 | -2.00 | 0.00 |
| 5,120.0 | 10.33 | 224.48 | 4,986.5 | -713.7 | -747.9 | 1,033.8 | 2.00 | -2.00 | 0.00 |
| 5,160.0 | 9.53 | 224.48 | 5,025.9 | -718.6 | -752.7 | 1,040.7 | 2.00 | -2.00 | 0.00 |
| 5,200.0 | 8.73 | 224.48 | 5,065.4 | -723.1 | -757.2 | 1,047.0 | 2.00 | -2.00 | 0.00 |
| 5,240.0 | 7.93 | 224.48 | 5,104.9 | -727.3 | -761.2 | 1,052.8 | 2.00 | -2.00 | 0.00 |
| 5,280.0 | 7.13 | 224.48 | 5,144.6 | -731.0 | -764.9 | 1,058.0 | 2.00 | -2.00 | 0.00 |
| 5,320.0 | 6.33 | 224.48 | 5,184.3 | -734.4 | -768.2 | 1,062.7 | 2.00 | -2.00 | 0.00 |
| 5,360.0 | 5.53 | 224.48 | 5,224.1 | -737.3 | -771.1 | 1,066.9 | 2.00 | -2.00 | 0.00 |
| 5,400.0 | 4.73 | 224.48 | 5,263.9 | -739.9 | -773.6 | 1,070.4 | 2.00 | -2.00 | 0.00 |
| 5,440.0 | 3.93 | 224.48 | 5,303.8 | -742.0 | -775.7 | 1,073.4 | 2.00 | -2.00 | 0.00 |
| 5,480.0 | 3.13 | 224.48 | 5,343.8 | -743.8 | -777.4 | 1,075.9 | 2.00 | -2.00 | 0.00 |
| 5,520.0 | 2.33 | 224.48 | 5,383.7 | -745.1 | -778.8 | 1,077.8 | 2.00 | -2.00 | 0.00 |
| 5,560.0 | 1.53 | 224.48 | 5,423.7 | -746.1 | -779.7 | 1,079.2 | 2.00 | -2.00 | 0.00 |
| 5,600.0 | 0.73 | 224.48 | 5,463.7 | -746.6 | -780.3 | 1,079.9 | 2.00 | -2.00 | 0.00 |
| 5,636.3 | 0.00 | 0.00 | 5,500.0 | -746.8 | -780.4 | 1,080.2 | 2.00 | -2.00 | 0.00 |
| Target BHL 1320'FSL & 75'FWL | | | | | | | | | |
| 5,640.0 | 0.00 | 0.00 | 5,503.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 5,680.0 | 0.00 | 0.00 | 5,543.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 5,720.0 | 0.00 | 0.00 | 5,583.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 5,760.0 | 0.00 | 0.00 | 5,623.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 0.00 | 0.00 | 5,663.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 5,840.0 | 0.00 | 0.00 | 5,703.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 5,880.0 | 0.00 | 0.00 | 5,743.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 5,920.0 | 0.00 | 0.00 | 5,783.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 5,960.0 | 0.00 | 0.00 | 5,823.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 0.00 | 0.00 | 5,863.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,040.0 | 0.00 | 0.00 | 5,903.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.36-T5N-R65W
Site: Ehrlich State PC F36-33D Pad
Sec.36-T5N-R65W
Well: Ehrlich State PC F36-33D
Wellbore: Wellbore #1
Design: Noble Ehrlich State PC F36-33D Plan #1 (8-10)

Local Co-ordinate Reference: Well Ehrlich State PC F36-33D
TVD Reference: WELL @ 4741.0ft (Original Well Elev)
MD Reference: WELL @ 4741.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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) |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 6,080.0 | 0.00 | 0.00 | 5,943.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,120.0 | 0.00 | 0.00 | 5,983.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,160.0 | 0.00 | 0.00 | 6,023.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 0.00 | 0.00 | 6,063.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,240.0 | 0.00 | 0.00 | 6,103.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,280.0 | 0.00 | 0.00 | 6,143.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,320.0 | 0.00 | 0.00 | 6,183.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,360.0 | 0.00 | 0.00 | 6,223.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 0.00 | 0.00 | 6,263.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,440.0 | 0.00 | 0.00 | 6,303.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,480.0 | 0.00 | 0.00 | 6,343.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,520.0 | 0.00 | 0.00 | 6,383.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,560.0 | 0.00 | 0.00 | 6,423.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 0.00 | 0.00 | 6,463.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,640.0 | 0.00 | 0.00 | 6,503.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,680.0 | 0.00 | 0.00 | 6,543.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,720.0 | 0.00 | 0.00 | 6,583.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,760.0 | 0.00 | 0.00 | 6,623.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 0.00 | 0.00 | 6,663.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,840.0 | 0.00 | 0.00 | 6,703.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,880.0 | 0.00 | 0.00 | 6,743.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,920.0 | 0.00 | 0.00 | 6,783.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 6,922.3 | 0.00 | 0.00 | 6,786.0 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| NIOBRARA - Target Circle 1320'FSL & 75'FWL | | | | | | | | | |
| 6,960.0 | 0.00 | 0.00 | 6,823.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 0.00 | 0.00 | 6,863.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,040.0 | 0.00 | 0.00 | 6,903.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,080.0 | 0.00 | 0.00 | 6,943.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,120.0 | 0.00 | 0.00 | 6,983.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,160.0 | 0.00 | 0.00 | 7,023.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 0.00 | 0.00 | 7,063.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,240.0 | 0.00 | 0.00 | 7,103.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,257.3 | 0.00 | 0.00 | 7,121.0 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| CODELL | | | | | | | | | |
| 7,280.0 | 0.00 | 0.00 | 7,143.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,320.0 | 0.00 | 0.00 | 7,183.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,360.0 | 0.00 | 0.00 | 7,223.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,372.3 | 0.00 | 0.00 | 7,236.0 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| Hard Line 75'W of BHL | | | | | | | | | |
| 7,400.0 | 0.00 | 0.00 | 7,263.7 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |
| 7,407.3 | 0.00 | 0.00 | 7,271.0 | -746.8 | -780.4 | 1,080.2 | 0.00 | 0.00 | 0.00 |

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.36-T5N-R65W
Site: Ehrlich State PC F36-33D Pad
 Sec.36-T5N-R65W
Well: Ehrlich State PC F36-33D
Wellbore: Wellbore #1
Design: Noble Ehrlich State PC F36-33D Plan #1 (8-10)

Local Co-ordinate Reference: Well Ehrlich State PC F36-33D
TVD Reference: WELL @ 4741.0ft (Original Well Elev)
MD Reference: WELL @ 4741.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets
Target Name

| - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---|------------------|-----------------|-------------|---------------|---------------|------------------|-----------------|-----------------|-------------------|
| Hard Line 75'W of BH - plan misses by 125.0ft at 7372.3ft MD (7236.0 TVD, -746.8 N, -780.4 E) - Polygon | 0.00 | 0.00 | 7,236.0 | -846.8 | -855.4 | 1,372,214.14 | 3,245,000.44 | 40° 21' 6.464 N | 104° 37' 15.344 W |
| Point 1 | | | 7,236.0 | 0.0 | 0.0 | 1,372,214.14 | 3,245,000.44 | | |
| Point 2 | | | 7,236.0 | 200.0 | 0.0 | 1,372,414.13 | 3,244,998.45 | | |
| Target BHL 1320'FSL - plan hits target - Point | 0.00 | 0.00 | 5,500.0 | -746.8 | -780.4 | 1,372,314.88 | 3,245,074.43 | 40° 21' 7.452 N | 104° 37' 14.376 W |
| Target Circle 1320'FS - plan hits target - Circle (radius 75.0) | 0.00 | 0.00 | 6,786.0 | -746.8 | -780.4 | 1,372,314.88 | 3,245,074.43 | 40° 21' 7.452 N | 104° 37' 14.376 W |

Casing Points

| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (") | Hole Diameter (") |
|---------------------------|---------------------------|--------|---------------------------|-------------------------|
| 550.0 | 550.0 | 8 5/8" | 8-5/8 | 12-1/4 |

Formations

| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---------------------------|---------------------------|---------|-----------|------------|-------------------------|
| 6,922.3 | 6,786.0 | NIORARA | | 0.00 | |
| 7,257.3 | 7,121.0 | CODELL | | 0.00 | |