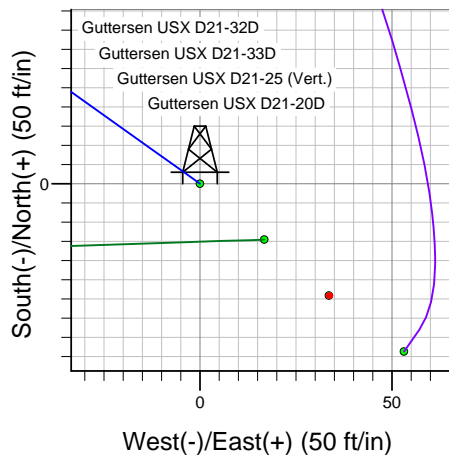
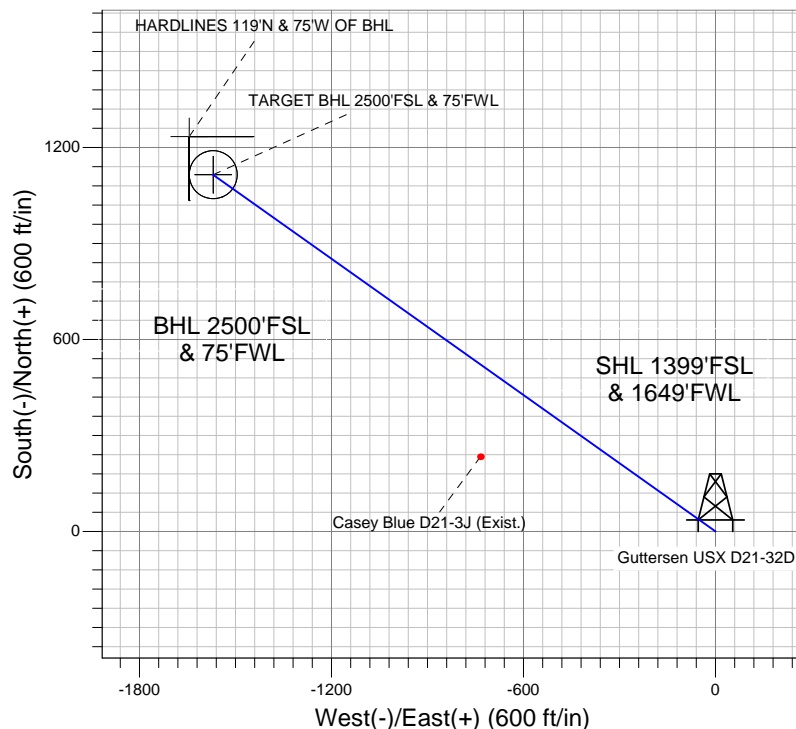
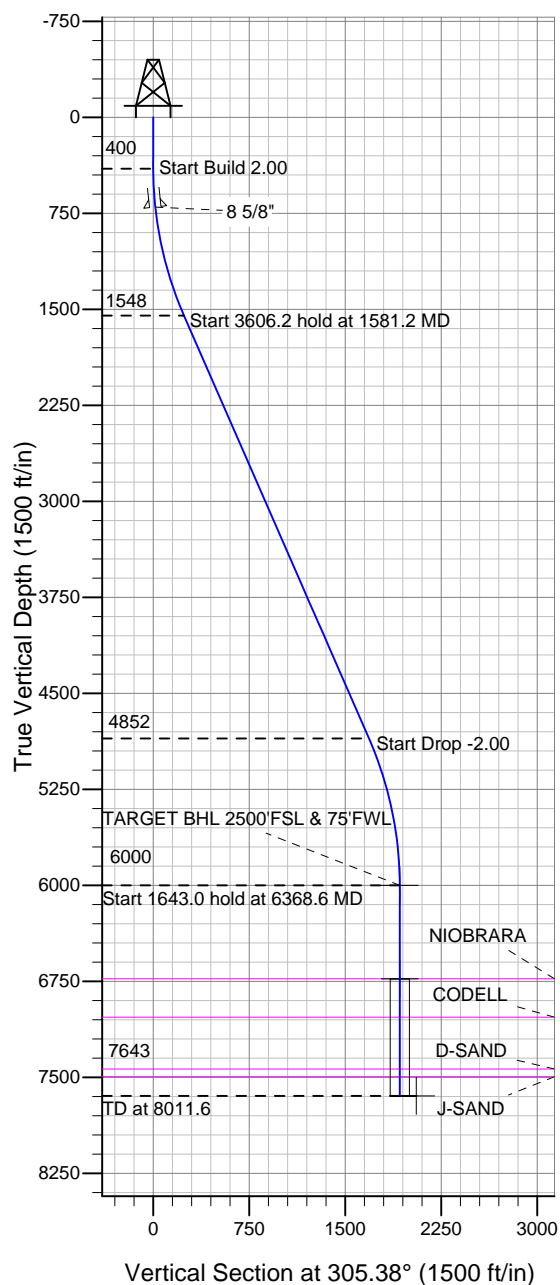


Well Name: Gutteresen USX D21-32D

Surface Location: Gutteresen USX D21-32D Pad Sec.21-T3N-R64W
North American Datum 1983, US State Plane 1983 Colorado Northern Zone
Ground Elevation: 4820.0

| | | | | | | |
|-------|-------|--------------------|--------------------------------------|-----------|-------------|------|
| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Slot |
| 0.0 | 0.0 | 1319844.91 | 3262593.85 | 40.207550 | -104.559800 | |
| | | Original Well Elev | WELL @ 4833.0ft (Original Well Elev) | | | |

NOBLE ENERGY INC WELD COUNTY CO



Gutteresen USX D21-32D Pad Sec.21-T3N-R64W
Gutteresen USX D21-32D
Noble Gutteresen USX D21-32D Plan #2 (1-24-12)
11:22, January 24 2012



Azimuths to True North
Magnetic North: 8.65°
Magnetic Field
Strength: 52988.0snT
Dip Angle: 66.91°
Date: 1/24/2012
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|---------------------------------|--------|--------|---------|-----------|-------------|-----------------------|
| TARGET BHL 2500'FSL & 75'FWL | 6000.0 | 1114.8 | -1569.7 | 40.210610 | -104.565420 | Point |
| TARGET CIRCLE 2500'FSL & 75'FWL | 6728.0 | 1114.8 | -1569.7 | 40.210610 | -104.565420 | Circle (Radius: 75.0) |
| HARDLINES 119°N & 75°W OF BHL | 7643.0 | 1233.8 | -1644.7 | 40.210937 | -104.565689 | 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 | 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1581.2 | 23.62 | 305.38 | 1548.0 | 139.0 | -195.7 | 2.00 | 305.38 | 240.1 | |
| 4 | 5187.4 | 23.62 | 305.38 | 4852.0 | 975.8 | -1373.9 | 0.00 | 0.00 | 1685.2 | |
| 5 | 6368.6 | 0.00 | 0.00 | 6000.0 | 1114.8 | -1569.7 | 2.00 | 180.00 | 1925.3 | TARGET BHL 2500'FSL & 75'FWL |
| 6 | 8011.6 | 0.00 | 0.00 | 7643.0 | 1114.8 | -1569.7 | 0.00 | 0.00 | 1925.3 | |



NOBLE ENERGY INC WELD COUNTY CO

SEC.21-T3N-R64W

Guttersen USX D21-32D Pad Sec.21-T3N-R64W

Guttersen USX D21-32D

Wellbore #1

Plan: Noble Guttersen USX D21-32D Plan #2 (1-24-12)

Standard Planning Report

24 January, 2012



| | | | |
|------------------|---|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Guttersen USX D21-32D |
| Company: | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Project: | SEC.21-T3N-R64W | MD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Site: | Guttersen USX D21-32D Pad Sec.21-T3N-R64W | North Reference: | True |
| Well: | Guttersen USX D21-32D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Noble Guttersen USX D21-32D Plan #2 (1-24-12) | | |

| | | | |
|--------------------|----------------------------------|----------------------|-----------------------------|
| Project | SEC.21-T3N-R64W, Weld County, CO | | |
| 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 | | | | | | Guttersen USX D21-32D Pad Sec.21-T3N-R64W | | | | | | | | | | | |
| Site Position: | | | | | | Northing: | | | 1,319,830.53ft | | | Latitude: | | | 40.207510 | | |
| From: | | | Lat/Long | | | Easting: | | | 3,262,610.76ft | | | Longitude: | | | -104.559740 | | |
| Position Uncertainty: | | | 0.0 ft | | | Slot Radius: | | | " | | | Grid Convergence: | | | 0.61 ° | | |

| Well | Guttersen USX D21-32D | | | | | |
|----------------------|-----------------------|----------|---------------------|-----------------|---------------|-------------|
| Well Position | +N/-S | 14.6 ft | Northing: | 1,319,844.91 ft | Latitude: | 40.207550 |
| | +E/-W | -16.8 ft | Easting: | 3,262,593.85 ft | Longitude: | -104.559800 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,820.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 1/24/2012 | 8.66 | 66.91 | 52,988 |

| | | | | |
|--------------------------|---|-------------------|----------------------|----------------------|
| Design | Noble Guttersen USX D21-32D Plan #2 (1-24-12) | | | |
| 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 | 305.38 |

| 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 | |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,581.2 | 23.62 | 305.38 | 1,548.0 | 139.0 | -195.7 | 2.00 | 2.00 | 0.00 | 305.38 | |
| 5,187.4 | 23.62 | 305.38 | 4,852.0 | 975.8 | -1,373.9 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,368.6 | 0.00 | 0.00 | 6,000.0 | 1,114.8 | -1,569.7 | 2.00 | -2.00 | 0.00 | 180.00 | TARGET BHL 250C |
| 8,011.6 | 0.00 | 0.00 | 7,643.0 | 1,114.8 | -1,569.7 | 0.00 | 0.00 | 0.00 | 0.00 | |

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Guttersen USX D21-32D |
| Company: | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Project: | SEC.21-T3N-R64W | MD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Site: | Guttersen USX D21-32D Pad Sec.21-T3N-R64W | North Reference: | True |
| Well: | Guttersen USX D21-32D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Noble Guttersen USX D21-32D Plan #2 (1-24-' | | |

| 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 | 0.80 | 305.38 | 440.0 | 0.2 | -0.2 | 0.3 | 2.00 | 2.00 | 0.00 |
| 480.0 | 1.60 | 305.38 | 480.0 | 0.6 | -0.9 | 1.1 | 2.00 | 2.00 | 0.00 |
| 520.0 | 2.40 | 305.38 | 520.0 | 1.5 | -2.0 | 2.5 | 2.00 | 2.00 | 0.00 |
| 560.0 | 3.20 | 305.38 | 559.9 | 2.6 | -3.6 | 4.5 | 2.00 | 2.00 | 0.00 |
| 600.0 | 4.00 | 305.38 | 599.8 | 4.0 | -5.7 | 7.0 | 2.00 | 2.00 | 0.00 |
| 640.0 | 4.80 | 305.38 | 639.7 | 5.8 | -8.2 | 10.0 | 2.00 | 2.00 | 0.00 |
| 680.0 | 5.60 | 305.38 | 679.6 | 7.9 | -11.1 | 13.7 | 2.00 | 2.00 | 0.00 |
| 700.6 | 6.01 | 305.38 | 700.0 | 9.1 | -12.8 | 15.8 | 2.00 | 2.00 | 0.00 |
| 8 5/8" | | | | | | | | | |
| 720.0 | 6.40 | 305.38 | 719.3 | 10.3 | -14.6 | 17.9 | 2.00 | 2.00 | 0.00 |
| 760.0 | 7.20 | 305.38 | 759.1 | 13.1 | -18.4 | 22.6 | 2.00 | 2.00 | 0.00 |
| 800.0 | 8.00 | 305.38 | 798.7 | 16.1 | -22.7 | 27.9 | 2.00 | 2.00 | 0.00 |
| 840.0 | 8.80 | 305.38 | 838.3 | 19.5 | -27.5 | 33.7 | 2.00 | 2.00 | 0.00 |
| 880.0 | 9.60 | 305.38 | 877.8 | 23.2 | -32.7 | 40.1 | 2.00 | 2.00 | 0.00 |
| 920.0 | 10.40 | 305.38 | 917.1 | 27.3 | -38.4 | 47.1 | 2.00 | 2.00 | 0.00 |
| 960.0 | 11.20 | 305.38 | 956.4 | 31.6 | -44.5 | 54.6 | 2.00 | 2.00 | 0.00 |
| 1,000.0 | 12.00 | 305.38 | 995.6 | 36.2 | -51.0 | 62.6 | 2.00 | 2.00 | 0.00 |
| 1,040.0 | 12.80 | 305.38 | 1,034.7 | 41.2 | -58.0 | 71.2 | 2.00 | 2.00 | 0.00 |
| 1,080.0 | 13.60 | 305.38 | 1,073.6 | 46.5 | -65.5 | 80.3 | 2.00 | 2.00 | 0.00 |
| 1,120.0 | 14.40 | 305.38 | 1,112.4 | 52.1 | -73.4 | 90.0 | 2.00 | 2.00 | 0.00 |
| 1,160.0 | 15.20 | 305.38 | 1,151.1 | 58.0 | -81.7 | 100.2 | 2.00 | 2.00 | 0.00 |
| 1,200.0 | 16.00 | 305.38 | 1,189.6 | 64.3 | -90.5 | 111.0 | 2.00 | 2.00 | 0.00 |
| 1,240.0 | 16.80 | 305.38 | 1,228.0 | 70.8 | -99.7 | 122.3 | 2.00 | 2.00 | 0.00 |
| 1,280.0 | 17.60 | 305.38 | 1,266.2 | 77.6 | -109.3 | 134.1 | 2.00 | 2.00 | 0.00 |
| 1,320.0 | 18.40 | 305.38 | 1,304.3 | 84.8 | -119.4 | 146.5 | 2.00 | 2.00 | 0.00 |
| 1,360.0 | 19.20 | 305.38 | 1,342.1 | 92.3 | -129.9 | 159.3 | 2.00 | 2.00 | 0.00 |
| 1,400.0 | 20.00 | 305.38 | 1,379.8 | 100.0 | -140.9 | 172.8 | 2.00 | 2.00 | 0.00 |
| 1,440.0 | 20.80 | 305.38 | 1,417.3 | 108.1 | -152.2 | 186.7 | 2.00 | 2.00 | 0.00 |
| 1,480.0 | 21.60 | 305.38 | 1,454.6 | 116.5 | -164.0 | 201.2 | 2.00 | 2.00 | 0.00 |
| 1,520.0 | 22.40 | 305.38 | 1,491.7 | 125.2 | -176.2 | 216.2 | 2.00 | 2.00 | 0.00 |
| 1,560.0 | 23.20 | 305.38 | 1,528.6 | 134.1 | -188.9 | 231.7 | 2.00 | 2.00 | 0.00 |
| 1,581.2 | 23.62 | 305.38 | 1,548.0 | 139.0 | -195.7 | 240.1 | 2.00 | 2.00 | 0.00 |
| 1,600.0 | 23.62 | 305.38 | 1,565.2 | 143.4 | -201.9 | 247.6 | 0.00 | 0.00 | 0.00 |
| 1,640.0 | 23.62 | 305.38 | 1,601.9 | 152.7 | -214.9 | 263.6 | 0.00 | 0.00 | 0.00 |
| 1,680.0 | 23.62 | 305.38 | 1,638.5 | 161.9 | -228.0 | 279.7 | 0.00 | 0.00 | 0.00 |
| 1,720.0 | 23.62 | 305.38 | 1,675.2 | 171.2 | -241.1 | 295.7 | 0.00 | 0.00 | 0.00 |
| 1,760.0 | 23.62 | 305.38 | 1,711.8 | 180.5 | -254.2 | 311.7 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 23.62 | 305.38 | 1,748.5 | 189.8 | -267.2 | 327.8 | 0.00 | 0.00 | 0.00 |
| 1,840.0 | 23.62 | 305.38 | 1,785.1 | 199.1 | -280.3 | 343.8 | 0.00 | 0.00 | 0.00 |
| 1,880.0 | 23.62 | 305.38 | 1,821.8 | 208.4 | -293.4 | 359.8 | 0.00 | 0.00 | 0.00 |
| 1,920.0 | 23.62 | 305.38 | 1,858.4 | 217.6 | -306.4 | 375.9 | 0.00 | 0.00 | 0.00 |
| 1,960.0 | 23.62 | 305.38 | 1,895.1 | 226.9 | -319.5 | 391.9 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Guttersen USX D21-32D |
| Company: | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Project: | SEC.21-T3N-R64W | MD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Site: | Guttersen USX D21-32D Pad Sec.21-T3N-R64W | North Reference: | True |
| Well: | Guttersen USX D21-32D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Noble Guttersen USX D21-32D Plan #2 (1-24-' | | |

| 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) | |
| 2,000.0 | 23.62 | 305.38 | 1,931.7 | 236.2 | -332.6 | 407.9 | 0.00 | 0.00 | 0.00 | |
| 2,040.0 | 23.62 | 305.38 | 1,968.4 | 245.5 | -345.6 | 423.9 | 0.00 | 0.00 | 0.00 | |
| 2,080.0 | 23.62 | 305.38 | 2,005.0 | 254.8 | -358.7 | 440.0 | 0.00 | 0.00 | 0.00 | |
| 2,120.0 | 23.62 | 305.38 | 2,041.7 | 264.0 | -371.8 | 456.0 | 0.00 | 0.00 | 0.00 | |
| 2,160.0 | 23.62 | 305.38 | 2,078.3 | 273.3 | -384.8 | 472.0 | 0.00 | 0.00 | 0.00 | |
| 2,200.0 | 23.62 | 305.38 | 2,115.0 | 282.6 | -397.9 | 488.1 | 0.00 | 0.00 | 0.00 | |
| 2,240.0 | 23.62 | 305.38 | 2,151.6 | 291.9 | -411.0 | 504.1 | 0.00 | 0.00 | 0.00 | |
| 2,280.0 | 23.62 | 305.38 | 2,188.3 | 301.2 | -424.0 | 520.1 | 0.00 | 0.00 | 0.00 | |
| 2,320.0 | 23.62 | 305.38 | 2,224.9 | 310.5 | -437.1 | 536.1 | 0.00 | 0.00 | 0.00 | |
| 2,360.0 | 23.62 | 305.38 | 2,261.5 | 319.7 | -450.2 | 552.2 | 0.00 | 0.00 | 0.00 | |
| 2,400.0 | 23.62 | 305.38 | 2,298.2 | 329.0 | -463.3 | 568.2 | 0.00 | 0.00 | 0.00 | |
| 2,440.0 | 23.62 | 305.38 | 2,334.8 | 338.3 | -476.3 | 584.2 | 0.00 | 0.00 | 0.00 | |
| 2,480.0 | 23.62 | 305.38 | 2,371.5 | 347.6 | -489.4 | 600.3 | 0.00 | 0.00 | 0.00 | |
| 2,520.0 | 23.62 | 305.38 | 2,408.1 | 356.9 | -502.5 | 616.3 | 0.00 | 0.00 | 0.00 | |
| 2,560.0 | 23.62 | 305.38 | 2,444.8 | 366.1 | -515.5 | 632.3 | 0.00 | 0.00 | 0.00 | |
| 2,600.0 | 23.62 | 305.38 | 2,481.4 | 375.4 | -528.6 | 648.3 | 0.00 | 0.00 | 0.00 | |
| 2,640.0 | 23.62 | 305.38 | 2,518.1 | 384.7 | -541.7 | 664.4 | 0.00 | 0.00 | 0.00 | |
| 2,680.0 | 23.62 | 305.38 | 2,554.7 | 394.0 | -554.7 | 680.4 | 0.00 | 0.00 | 0.00 | |
| 2,720.0 | 23.62 | 305.38 | 2,591.4 | 403.3 | -567.8 | 696.4 | 0.00 | 0.00 | 0.00 | |
| 2,760.0 | 23.62 | 305.38 | 2,628.0 | 412.6 | -580.9 | 712.5 | 0.00 | 0.00 | 0.00 | |
| 2,800.0 | 23.62 | 305.38 | 2,664.7 | 421.8 | -593.9 | 728.5 | 0.00 | 0.00 | 0.00 | |
| 2,840.0 | 23.62 | 305.38 | 2,701.3 | 431.1 | -607.0 | 744.5 | 0.00 | 0.00 | 0.00 | |
| 2,880.0 | 23.62 | 305.38 | 2,738.0 | 440.4 | -620.1 | 760.6 | 0.00 | 0.00 | 0.00 | |
| 2,920.0 | 23.62 | 305.38 | 2,774.6 | 449.7 | -633.1 | 776.6 | 0.00 | 0.00 | 0.00 | |
| 2,960.0 | 23.62 | 305.38 | 2,811.3 | 459.0 | -646.2 | 792.6 | 0.00 | 0.00 | 0.00 | |
| 3,000.0 | 23.62 | 305.38 | 2,847.9 | 468.2 | -659.3 | 808.6 | 0.00 | 0.00 | 0.00 | |
| 3,040.0 | 23.62 | 305.38 | 2,884.6 | 477.5 | -672.4 | 824.7 | 0.00 | 0.00 | 0.00 | |
| 3,080.0 | 23.62 | 305.38 | 2,921.2 | 486.8 | -685.4 | 840.7 | 0.00 | 0.00 | 0.00 | |
| 3,120.0 | 23.62 | 305.38 | 2,957.9 | 496.1 | -698.5 | 856.7 | 0.00 | 0.00 | 0.00 | |
| 3,160.0 | 23.62 | 305.38 | 2,994.5 | 505.4 | -711.6 | 872.8 | 0.00 | 0.00 | 0.00 | |
| 3,200.0 | 23.62 | 305.38 | 3,031.2 | 514.6 | -724.6 | 888.8 | 0.00 | 0.00 | 0.00 | |
| 3,240.0 | 23.62 | 305.38 | 3,067.8 | 523.9 | -737.7 | 904.8 | 0.00 | 0.00 | 0.00 | |
| 3,280.0 | 23.62 | 305.38 | 3,104.4 | 533.2 | -750.8 | 920.8 | 0.00 | 0.00 | 0.00 | |
| 3,320.0 | 23.62 | 305.38 | 3,141.1 | 542.5 | -763.8 | 936.9 | 0.00 | 0.00 | 0.00 | |
| 3,360.0 | 23.62 | 305.38 | 3,177.7 | 551.8 | -776.9 | 952.9 | 0.00 | 0.00 | 0.00 | |
| 3,400.0 | 23.62 | 305.38 | 3,214.4 | 561.1 | -790.0 | 968.9 | 0.00 | 0.00 | 0.00 | |
| 3,440.0 | 23.62 | 305.38 | 3,251.0 | 570.3 | -803.0 | 985.0 | 0.00 | 0.00 | 0.00 | |
| 3,480.0 | 23.62 | 305.38 | 3,287.7 | 579.6 | -816.1 | 1,001.0 | 0.00 | 0.00 | 0.00 | |
| 3,520.0 | 23.62 | 305.38 | 3,324.3 | 588.9 | -829.2 | 1,017.0 | 0.00 | 0.00 | 0.00 | |
| 3,560.0 | 23.62 | 305.38 | 3,361.0 | 598.2 | -842.2 | 1,033.1 | 0.00 | 0.00 | 0.00 | |
| 3,600.0 | 23.62 | 305.38 | 3,397.6 | 607.5 | -855.3 | 1,049.1 | 0.00 | 0.00 | 0.00 | |
| 3,640.0 | 23.62 | 305.38 | 3,434.3 | 616.7 | -868.4 | 1,065.1 | 0.00 | 0.00 | 0.00 | |
| 3,680.0 | 23.62 | 305.38 | 3,470.9 | 626.0 | -881.4 | 1,081.1 | 0.00 | 0.00 | 0.00 | |
| 3,720.0 | 23.62 | 305.38 | 3,507.6 | 635.3 | -894.5 | 1,097.2 | 0.00 | 0.00 | 0.00 | |
| 3,760.0 | 23.62 | 305.38 | 3,544.2 | 644.6 | -907.6 | 1,113.2 | 0.00 | 0.00 | 0.00 | |
| 3,800.0 | 23.62 | 305.38 | 3,580.9 | 653.9 | -920.7 | 1,129.2 | 0.00 | 0.00 | 0.00 | |
| 3,840.0 | 23.62 | 305.38 | 3,617.5 | 663.2 | -933.7 | 1,145.3 | 0.00 | 0.00 | 0.00 | |
| 3,880.0 | 23.62 | 305.38 | 3,654.2 | 672.4 | -946.8 | 1,161.3 | 0.00 | 0.00 | 0.00 | |
| 3,920.0 | 23.62 | 305.38 | 3,690.8 | 681.7 | -959.9 | 1,177.3 | 0.00 | 0.00 | 0.00 | |
| 3,960.0 | 23.62 | 305.38 | 3,727.5 | 691.0 | -972.9 | 1,193.3 | 0.00 | 0.00 | 0.00 | |
| 4,000.0 | 23.62 | 305.38 | 3,764.1 | 700.3 | -986.0 | 1,209.4 | 0.00 | 0.00 | 0.00 | |
| 4,040.0 | 23.62 | 305.38 | 3,800.8 | 709.6 | -999.1 | 1,225.4 | 0.00 | 0.00 | 0.00 | |
| 4,080.0 | 23.62 | 305.38 | 3,837.4 | 718.8 | -1,012.1 | 1,241.4 | 0.00 | 0.00 | 0.00 | |

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Guttersen USX D21-32D |
| Company: | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Project: | SEC.21-T3N-R64W | MD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Site: | Guttersen USX D21-32D Pad Sec.21-T3N-R64W | North Reference: | True |
| Well: | Guttersen USX D21-32D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Noble Guttersen USX D21-32D Plan #2 (1-24-' | | |

| 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) |
| 4,120.0 | 23.62 | 305.38 | 3,874.1 | 728.1 | -1,025.2 | 1,257.5 | 0.00 | 0.00 | 0.00 |
| 4,160.0 | 23.62 | 305.38 | 3,910.7 | 737.4 | -1,038.3 | 1,273.5 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 23.62 | 305.38 | 3,947.3 | 746.7 | -1,051.3 | 1,289.5 | 0.00 | 0.00 | 0.00 |
| 4,240.0 | 23.62 | 305.38 | 3,984.0 | 756.0 | -1,064.4 | 1,305.5 | 0.00 | 0.00 | 0.00 |
| 4,280.0 | 23.62 | 305.38 | 4,020.6 | 765.3 | -1,077.5 | 1,321.6 | 0.00 | 0.00 | 0.00 |
| 4,320.0 | 23.62 | 305.38 | 4,057.3 | 774.5 | -1,090.5 | 1,337.6 | 0.00 | 0.00 | 0.00 |
| 4,360.0 | 23.62 | 305.38 | 4,093.9 | 783.8 | -1,103.6 | 1,353.6 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 23.62 | 305.38 | 4,130.6 | 793.1 | -1,116.7 | 1,369.7 | 0.00 | 0.00 | 0.00 |
| 4,440.0 | 23.62 | 305.38 | 4,167.2 | 802.4 | -1,129.8 | 1,385.7 | 0.00 | 0.00 | 0.00 |
| 4,480.0 | 23.62 | 305.38 | 4,203.9 | 811.7 | -1,142.8 | 1,401.7 | 0.00 | 0.00 | 0.00 |
| 4,520.0 | 23.62 | 305.38 | 4,240.5 | 820.9 | -1,155.9 | 1,417.8 | 0.00 | 0.00 | 0.00 |
| 4,560.0 | 23.62 | 305.38 | 4,277.2 | 830.2 | -1,169.0 | 1,433.8 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 23.62 | 305.38 | 4,313.8 | 839.5 | -1,182.0 | 1,449.8 | 0.00 | 0.00 | 0.00 |
| 4,640.0 | 23.62 | 305.38 | 4,350.5 | 848.8 | -1,195.1 | 1,465.8 | 0.00 | 0.00 | 0.00 |
| 4,680.0 | 23.62 | 305.38 | 4,387.1 | 858.1 | -1,208.2 | 1,481.9 | 0.00 | 0.00 | 0.00 |
| 4,720.0 | 23.62 | 305.38 | 4,423.8 | 867.4 | -1,221.2 | 1,497.9 | 0.00 | 0.00 | 0.00 |
| 4,760.0 | 23.62 | 305.38 | 4,460.4 | 876.6 | -1,234.3 | 1,513.9 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 23.62 | 305.38 | 4,497.1 | 885.9 | -1,247.4 | 1,530.0 | 0.00 | 0.00 | 0.00 |
| 4,840.0 | 23.62 | 305.38 | 4,533.7 | 895.2 | -1,260.4 | 1,546.0 | 0.00 | 0.00 | 0.00 |
| 4,880.0 | 23.62 | 305.38 | 4,570.4 | 904.5 | -1,273.5 | 1,562.0 | 0.00 | 0.00 | 0.00 |
| 4,920.0 | 23.62 | 305.38 | 4,607.0 | 913.8 | -1,286.6 | 1,578.0 | 0.00 | 0.00 | 0.00 |
| 4,960.0 | 23.62 | 305.38 | 4,643.7 | 923.0 | -1,299.6 | 1,594.1 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 23.62 | 305.38 | 4,680.3 | 932.3 | -1,312.7 | 1,610.1 | 0.00 | 0.00 | 0.00 |
| 5,040.0 | 23.62 | 305.38 | 4,717.0 | 941.6 | -1,325.8 | 1,626.1 | 0.00 | 0.00 | 0.00 |
| 5,080.0 | 23.62 | 305.38 | 4,753.6 | 950.9 | -1,338.8 | 1,642.2 | 0.00 | 0.00 | 0.00 |
| 5,120.0 | 23.62 | 305.38 | 4,790.2 | 960.2 | -1,351.9 | 1,658.2 | 0.00 | 0.00 | 0.00 |
| 5,160.0 | 23.62 | 305.38 | 4,826.9 | 969.5 | -1,365.0 | 1,674.2 | 0.00 | 0.00 | 0.00 |
| 5,187.4 | 23.62 | 305.38 | 4,852.0 | 975.8 | -1,373.9 | 1,685.2 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 23.37 | 305.38 | 4,863.6 | 978.7 | -1,378.0 | 1,690.2 | 2.00 | -2.00 | 0.00 |
| 5,240.0 | 22.57 | 305.38 | 4,900.4 | 987.8 | -1,390.8 | 1,705.8 | 2.00 | -2.00 | 0.00 |
| 5,280.0 | 21.77 | 305.38 | 4,937.4 | 996.5 | -1,403.1 | 1,720.9 | 2.00 | -2.00 | 0.00 |
| 5,320.0 | 20.97 | 305.38 | 4,974.7 | 1,004.9 | -1,415.0 | 1,735.5 | 2.00 | -2.00 | 0.00 |
| 5,360.0 | 20.17 | 305.38 | 5,012.1 | 1,013.1 | -1,426.4 | 1,749.6 | 2.00 | -2.00 | 0.00 |
| 5,400.0 | 19.37 | 305.38 | 5,049.8 | 1,020.9 | -1,437.4 | 1,763.1 | 2.00 | -2.00 | 0.00 |
| 5,440.0 | 18.57 | 305.38 | 5,087.6 | 1,028.4 | -1,448.0 | 1,776.1 | 2.00 | -2.00 | 0.00 |
| 5,480.0 | 17.77 | 305.38 | 5,125.6 | 1,035.7 | -1,458.2 | 1,788.6 | 2.00 | -2.00 | 0.00 |
| 5,520.0 | 16.97 | 305.38 | 5,163.8 | 1,042.6 | -1,468.0 | 1,800.5 | 2.00 | -2.00 | 0.00 |
| 5,560.0 | 16.17 | 305.38 | 5,202.1 | 1,049.2 | -1,477.3 | 1,811.9 | 2.00 | -2.00 | 0.00 |
| 5,600.0 | 15.37 | 305.38 | 5,240.6 | 1,055.5 | -1,486.1 | 1,822.8 | 2.00 | -2.00 | 0.00 |
| 5,640.0 | 14.57 | 305.38 | 5,279.2 | 1,061.5 | -1,494.5 | 1,833.1 | 2.00 | -2.00 | 0.00 |
| 5,680.0 | 13.77 | 305.38 | 5,318.0 | 1,067.1 | -1,502.5 | 1,842.9 | 2.00 | -2.00 | 0.00 |
| 5,720.0 | 12.97 | 305.38 | 5,356.9 | 1,072.5 | -1,510.1 | 1,852.2 | 2.00 | -2.00 | 0.00 |
| 5,760.0 | 12.17 | 305.38 | 5,396.0 | 1,077.5 | -1,517.2 | 1,860.9 | 2.00 | -2.00 | 0.00 |
| 5,800.0 | 11.37 | 305.38 | 5,435.1 | 1,082.3 | -1,523.8 | 1,869.0 | 2.00 | -2.00 | 0.00 |
| 5,840.0 | 10.57 | 305.38 | 5,474.4 | 1,086.7 | -1,530.0 | 1,876.7 | 2.00 | -2.00 | 0.00 |
| 5,880.0 | 9.77 | 305.38 | 5,513.8 | 1,090.8 | -1,535.8 | 1,883.7 | 2.00 | -2.00 | 0.00 |
| 5,920.0 | 8.97 | 305.38 | 5,553.2 | 1,094.5 | -1,541.1 | 1,890.2 | 2.00 | -2.00 | 0.00 |
| 5,960.0 | 8.17 | 305.38 | 5,592.8 | 1,098.0 | -1,546.0 | 1,896.2 | 2.00 | -2.00 | 0.00 |
| 6,000.0 | 7.37 | 305.38 | 5,632.4 | 1,101.1 | -1,550.4 | 1,901.6 | 2.00 | -2.00 | 0.00 |
| 6,040.0 | 6.57 | 305.38 | 5,672.1 | 1,103.9 | -1,554.3 | 1,906.5 | 2.00 | -2.00 | 0.00 |
| 6,080.0 | 5.77 | 305.38 | 5,711.9 | 1,106.4 | -1,557.8 | 1,910.8 | 2.00 | -2.00 | 0.00 |
| 6,120.0 | 4.97 | 305.38 | 5,751.7 | 1,108.6 | -1,560.9 | 1,914.5 | 2.00 | -2.00 | 0.00 |
| 6,160.0 | 4.17 | 305.38 | 5,791.6 | 1,110.4 | -1,563.5 | 1,917.7 | 2.00 | -2.00 | 0.00 |

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Guttersen USX D21-32D |
| Company: | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Project: | SEC.21-T3N-R64W | MD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Site: | Guttersen USX D21-32D Pad Sec.21-T3N-R64W | North Reference: | True |
| Well: | Guttersen USX D21-32D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Noble Guttersen USX D21-32D Plan #2 (1-24-' | | |

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) |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 6,200.0 | 3.37 | 305.38 | 5,831.5 | 1,112.0 | -1,565.6 | 1,920.3 | 2.00 | -2.00 | 0.00 |
| 6,240.0 | 2.57 | 305.38 | 5,871.5 | 1,113.2 | -1,567.3 | 1,922.4 | 2.00 | -2.00 | 0.00 |
| 6,280.0 | 1.77 | 305.38 | 5,911.4 | 1,114.0 | -1,568.6 | 1,923.9 | 2.00 | -2.00 | 0.00 |
| 6,320.0 | 0.97 | 305.38 | 5,951.4 | 1,114.6 | -1,569.3 | 1,924.9 | 2.00 | -2.00 | 0.00 |
| 6,360.0 | 0.17 | 305.38 | 5,991.4 | 1,114.8 | -1,569.7 | 1,925.3 | 2.00 | -2.00 | 0.00 |
| 6,368.6 | 0.00 | 0.00 | 6,000.0 | 1,114.8 | -1,569.7 | 1,925.3 | 2.00 | -2.00 | 0.00 |
| TARGET BHL 2500'FSL & 75'FWL | | | | | | | | | |
| 6,400.0 | 0.00 | 0.00 | 6,031.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,440.0 | 0.00 | 0.00 | 6,071.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,480.0 | 0.00 | 0.00 | 6,111.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,520.0 | 0.00 | 0.00 | 6,151.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,560.0 | 0.00 | 0.00 | 6,191.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 0.00 | 0.00 | 6,231.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,640.0 | 0.00 | 0.00 | 6,271.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,680.0 | 0.00 | 0.00 | 6,311.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,720.0 | 0.00 | 0.00 | 6,351.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,760.0 | 0.00 | 0.00 | 6,391.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 0.00 | 0.00 | 6,431.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,840.0 | 0.00 | 0.00 | 6,471.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,880.0 | 0.00 | 0.00 | 6,511.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,920.0 | 0.00 | 0.00 | 6,551.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 6,960.0 | 0.00 | 0.00 | 6,591.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 0.00 | 0.00 | 6,631.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,040.0 | 0.00 | 0.00 | 6,671.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,080.0 | 0.00 | 0.00 | 6,711.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,096.6 | 0.00 | 0.00 | 6,728.0 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| NIOBRARA - TARGET CIRCLE 2500'FSL & 75'FWL | | | | | | | | | |
| 7,120.0 | 0.00 | 0.00 | 6,751.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,160.0 | 0.00 | 0.00 | 6,791.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 0.00 | 0.00 | 6,831.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,240.0 | 0.00 | 0.00 | 6,871.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,280.0 | 0.00 | 0.00 | 6,911.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,320.0 | 0.00 | 0.00 | 6,951.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,360.0 | 0.00 | 0.00 | 6,991.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,396.6 | 0.00 | 0.00 | 7,028.0 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| CODELL | | | | | | | | | |
| 7,400.0 | 0.00 | 0.00 | 7,031.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,440.0 | 0.00 | 0.00 | 7,071.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,480.0 | 0.00 | 0.00 | 7,111.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,520.0 | 0.00 | 0.00 | 7,151.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,560.0 | 0.00 | 0.00 | 7,191.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 0.00 | 0.00 | 7,231.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,640.0 | 0.00 | 0.00 | 7,271.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,680.0 | 0.00 | 0.00 | 7,311.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,720.0 | 0.00 | 0.00 | 7,351.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,760.0 | 0.00 | 0.00 | 7,391.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 0.00 | 0.00 | 7,431.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,801.6 | 0.00 | 0.00 | 7,433.0 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| D-SAND | | | | | | | | | |
| 7,840.0 | 0.00 | 0.00 | 7,471.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| 7,861.6 | 0.00 | 0.00 | 7,493.0 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 |
| J-SAND | | | | | | | | | |

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Guttersen USX D21-32D |
| Company: | NOBLE ENERGY INC WELD COUNTY CO | TVD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Project: | SEC.21-T3N-R64W | MD Reference: | WELL @ 4833.0ft (Original Well Elev) |
| Site: | Guttersen USX D21-32D Pad Sec.21-T3N-R64W | North Reference: | True |
| Well: | Guttersen USX D21-32D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Noble Guttersen USX D21-32D Plan #2 (1-24-1 | | |

| 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) | |
| 7,880.0 | 0.00 | 0.00 | 7,511.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 | |
| 7,920.0 | 0.00 | 0.00 | 7,551.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 | |
| 7,960.0 | 0.00 | 0.00 | 7,591.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 | |
| 8,000.0 | 0.00 | 0.00 | 7,631.4 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 | |
| 8,011.6 | 0.00 | 0.00 | 7,643.0 | 1,114.8 | -1,569.7 | 1,925.3 | 0.00 | 0.00 | 0.00 | |
| HARDLINES 119°N & 75°W OF BHL | | | | | | | | | | |

| Targets | | | | | | | | | | |
|-------------------------------|---|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| Target Name | - hit/miss target | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| HARDLINES 119°N & 75°W OF BHL | - plan misses target center by 140.7ft at 8011.6ft MD (7643.0 TVD, 1114.8 N, -1569.7 E) | 0.00 | 0.00 | 7,643.0 | 1,233.8 | -1,644.7 | 1,321,061.16 | 3,260,936.24 | 40.210937 | -104.565689 |
| - Polygon | | | | | | | | | | |
| Point 1 | | | | 7,643.0 | 0.0 | 0.0 | 1,321,061.16 | 3,260,936.24 | | |
| Point 2 | | | | 7,643.0 | -200.0 | 0.0 | 1,320,861.18 | 3,260,938.36 | | |
| Point 3 | | | | 7,643.0 | 0.0 | 0.0 | 1,321,061.16 | 3,260,936.24 | | |
| Point 4 | | | | 7,643.0 | 0.0 | 200.0 | 1,321,063.28 | 3,261,136.22 | | |
| TARGET CIRCLE 250' RADIUS | - plan hits target center | 0.00 | 0.00 | 6,728.0 | 1,114.8 | -1,569.7 | 1,320,942.98 | 3,261,012.52 | 40.210610 | -104.565420 |
| - Circle (radius 75.0) | | | | | | | | | | |
| TARGET BHL 2500' FIDUCIAL | - plan hits target center | 0.00 | 0.00 | 6,000.0 | 1,114.8 | -1,569.7 | 1,320,942.98 | 3,261,012.52 | 40.210610 | -104.565420 |
| - Point | | | | | | | | | | |

| Casing Points | | | | | | |
|---------------------|---------------------|--------|---------------------|-------------------|--|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (") | Hole Diameter (") | | |
| 700.6 | 700.0 | 8 5/8" | 8-5/8 | 12-1/4 | | |

| Formations | | | | | | |
|---------------------|---------------------|----------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 7,096.6 | 6,728.0 | NIOBRARA | | 0.00 | | |
| 7,396.6 | 7,028.0 | CODELL | | 0.00 | | |
| 7,801.6 | 7,433.0 | D-SAND | | 0.00 | | |
| 7,861.6 | 7,493.0 | J-SAND | | 0.00 | | |