

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

SW NE SEC. 5 T6N R67W 6th P.M.

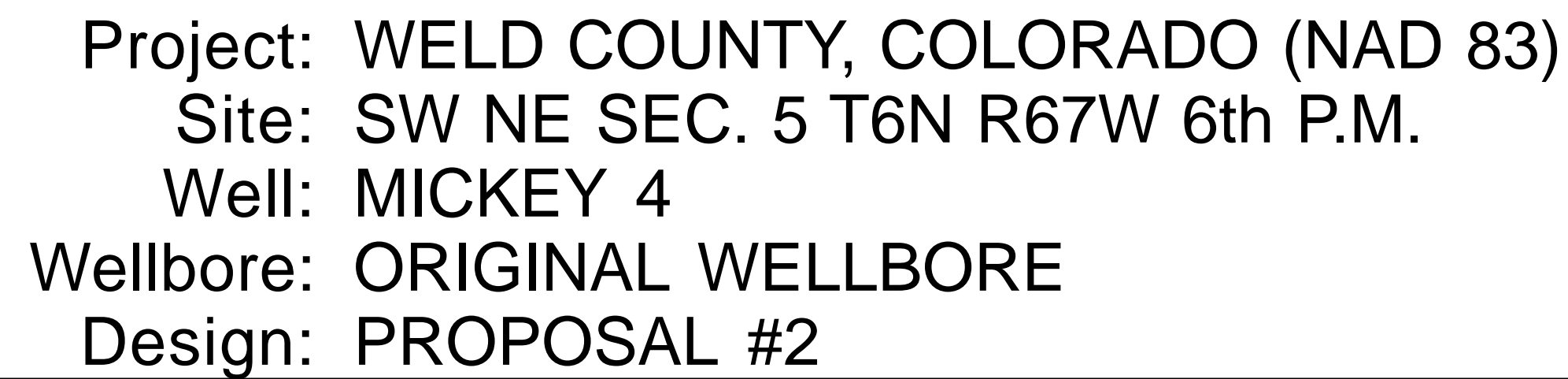
MICKEY 4

ORIGINAL WELLBORE

07 October, 2016

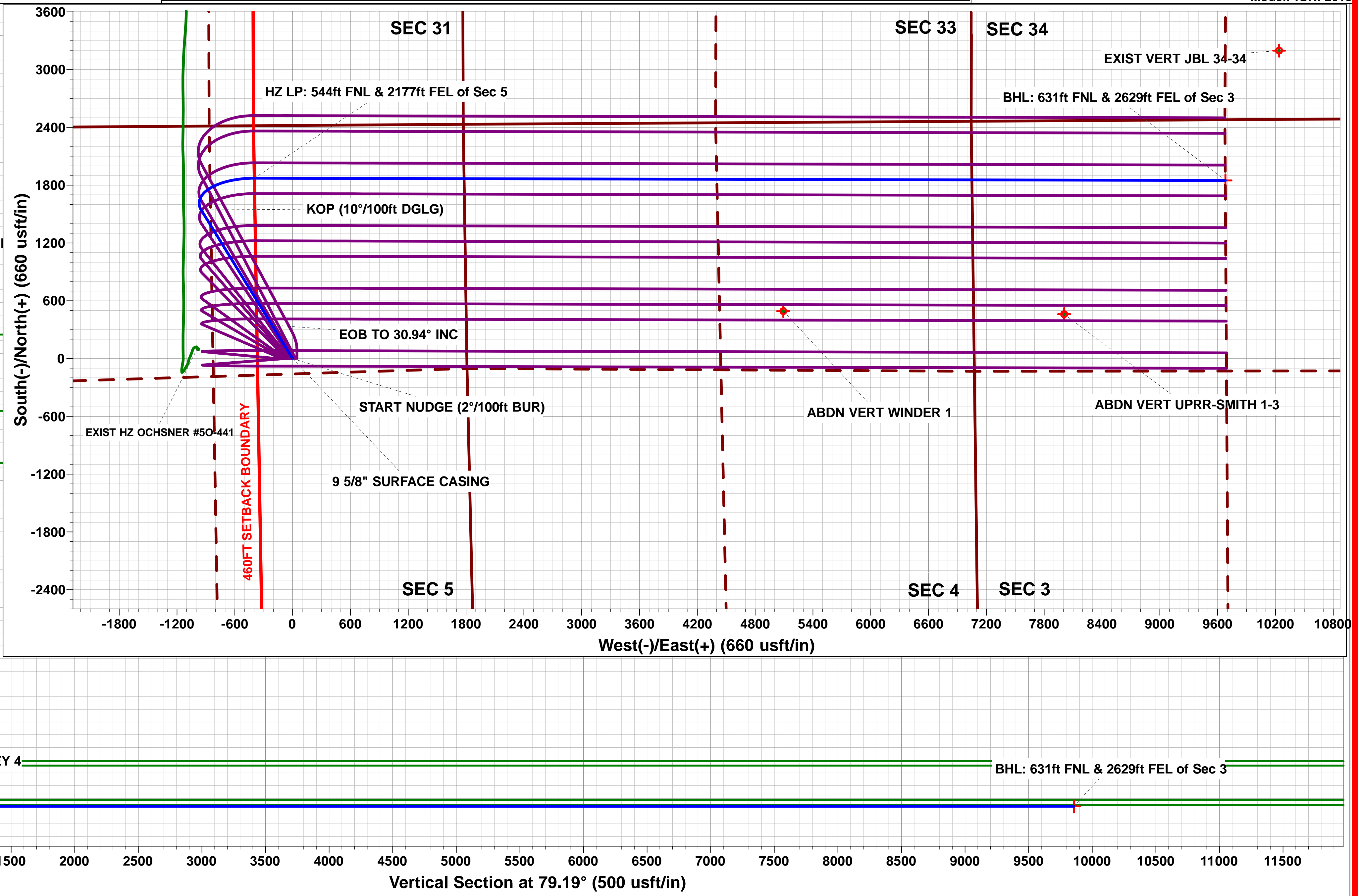
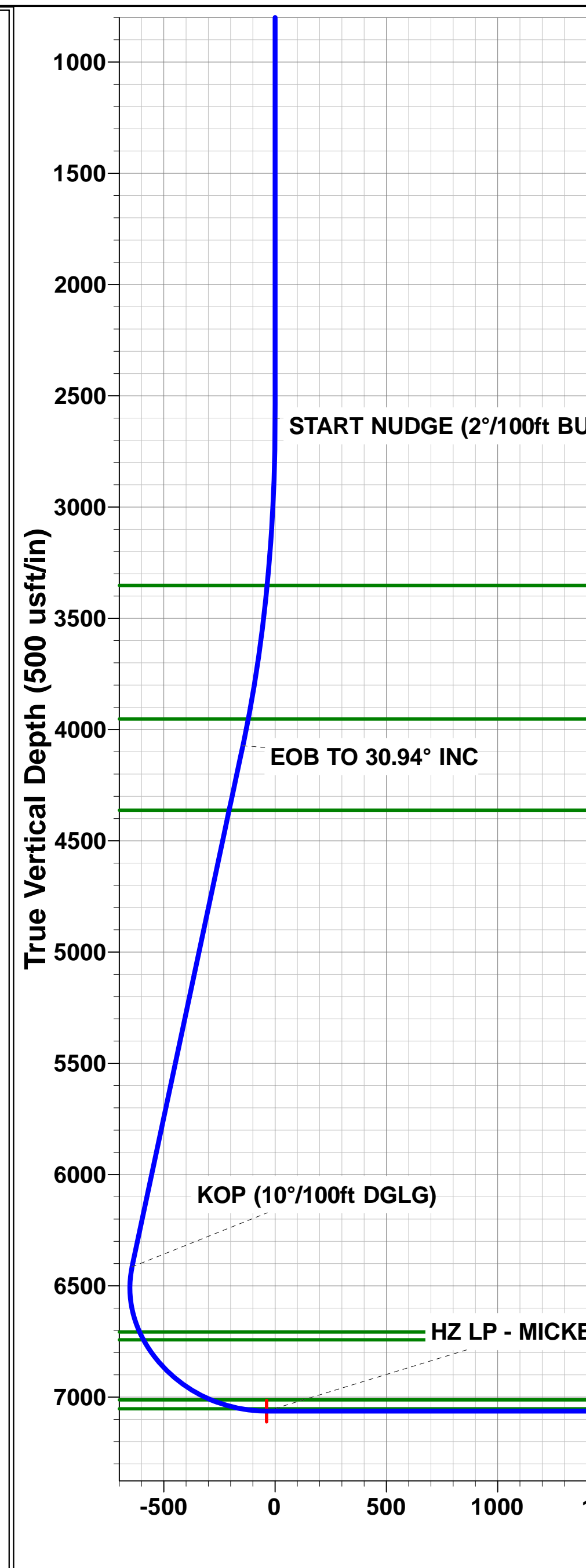
Plan: PROPOSAL #2





PROPOSED LOCAL COORDINATES
 SHL: 2419ft FNL & 1813ft FEL of Sec 5
 LP: 544ft FNL & 2177ft FEL of Sec 5
 BHL: 631ft FNL & 2629ft FEL of Sec 3

Azimuths to True North
 Magnetic North: 8.39°
 Magnetic Field Strength: 52533.3nT
 Dip Angle: 66.95°
 Date: 11/08/2016
 Model: IGRF2015



Planning Report



| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MICKEY 4 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4896.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4896.0usft |
| Site: | SW NE SEC. 5 T6N R67W 6th P.M. | North Reference: | True |
| Well: | MICKEY 4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #2 | | |

| | | | |
|--------------------|--------------------------------|----------------------|-----------------------------|
| Project | WELD COUNTY, COLORADO (NAD 83) | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | Using geodetic scale factor |

| | | | |
|------------------------------|--------------------------------|--------------------------|-------------------|
| Site | SW NE SEC. 5 T6N R67W 6th P.M. | | |
| Site Position: | | Northing: | 1,431,152.83 usft |
| From: | Lat/Long | Easting: | 3,162,171.69 usft |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 1.10000ft |
| | | Latitude: | 40.515451 |
| | | Longitude: | -104.916720 |
| | | Grid Convergence: | 0.38 ° |

| | | | |
|-----------------------------|--------------|----------------------------|------------------|
| Well | MICKEY 4 | | |
| Well Position | +N/-S | 346.0 usft | Northing: |
| | +E/-W | 655.1 usft | Easting: |
| Position Uncertainty | 0.0 usft | Wellhead Elevation: | usft |
| | | Latitude: | 40.516401 |
| | | Longitude: | -104.914364 |
| | | Ground Level: | 4,880.0 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | ORIGINAL WELLBORE | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 11/08/2016 | 8.39 | 66.95 | 52,533 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| Design | PROPOSAL #2 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 3.0 | 0.0 | 0.0 | 79.19 |

| Plan Sections | | | | | | | | | | | |
|----------------------|---------|---------|----------------|-----------|--------------|--------------|------------------------|-----------------------|----------------------|---------|------------------|
| MD (usft) | Inc (°) | Azi (°) | Vertical Depth | SS (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100usf) | Turn Rate (°/100usf) | TFO (°) | Target |
| 0.0 | 0.00 | 0.00 | 0.0 | -4,896.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,600.0 | 0.00 | 0.00 | 2,600.0 | -2,296.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 4,147.0 | 30.94 | 328.41 | 4,072.9 | -823.1 | 347.2 | -213.5 | 2.00 | 2.00 | 0.00 | 328.41 | |
| 6,877.1 | 30.94 | 328.41 | 6,414.6 | 1,518.6 | 1,542.9 | -948.8 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,934.0 | 90.00 | 90.13 | 7,063.0 | 2,167.0 | 1,872.2 | -396.5 | 10.00 | 5.59 | 11.52 | 117.93 | HZ LP - MICKEY 4 |
| 18,011.1 | 90.00 | 90.14 | 7,063.0 | 2,167.0 | 1,848.6 | 9,680.7 | 0.00 | 0.00 | 0.00 | 90.00 | BHL - MICKEY 4 |

| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MICKEY 4 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4896.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4896.0usft |
| Site: | SW NE SEC. 5 T6N R67W 6th P.M. | North Reference: | True |
| Well: | MICKEY 4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #2 | | |

Planned Survey

| MD (usft) | Inc (°) | Azi (°) | TVD (usft) | SS (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|--|------------|------------|---------------|--------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| SHL: 2419ft FNL & 1813ft FEL of Sec 5 | | | | | | | | | | |
| 0.0 | 0.00 | 0.00 | 0.0 | 4,896.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 4,796.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 4,696.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 300.0 | 4,596.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 4,496.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 500.0 | 0.00 | 0.00 | 500.0 | 4,396.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 4,296.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 700.0 | 0.00 | 0.00 | 700.0 | 4,196.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 800.0 | 0.00 | 0.00 | 800.0 | 4,096.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 900.0 | 0.00 | 0.00 | 900.0 | 3,996.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 3,896.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 0.00 | 0.00 | 1,100.0 | 3,796.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 3,696.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 0.00 | 0.00 | 1,300.0 | 3,596.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 0.00 | 0.00 | 1,400.0 | 3,496.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 3,396.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 9 5/8" SURFACE CASING | | | | | | | | | | |
| 1,600.0 | 0.00 | 0.00 | 1,600.0 | 3,296.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 0.00 | 0.00 | 1,700.0 | 3,196.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 0.00 | 0.00 | 1,800.0 | 3,096.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 0.00 | 0.00 | 1,900.0 | 2,996.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 0.00 | 0.00 | 2,000.0 | 2,896.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 0.00 | 0.00 | 2,100.0 | 2,796.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 0.00 | 0.00 | 2,200.0 | 2,696.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 0.00 | 0.00 | 2,300.0 | 2,596.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 0.00 | 0.00 | 2,400.0 | 2,496.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 0.00 | 0.00 | 2,500.0 | 2,396.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| START NUDGE (2°/100ft BUR) | | | | | | | | | | |
| 2,600.0 | 0.00 | 0.00 | 2,600.0 | 2,296.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 2.00 | 328.41 | 2,700.0 | 2,196.02 | 1.5 | -0.9 | -0.6 | 2.00 | 2.00 | 0.00 |
| 2,800.0 | 4.00 | 328.41 | 2,799.8 | 2,096.16 | 5.9 | -3.7 | -2.5 | 2.00 | 2.00 | 0.00 |
| 2,900.0 | 6.00 | 328.41 | 2,899.5 | 1,996.55 | 13.4 | -8.2 | -5.6 | 2.00 | 2.00 | 0.00 |
| 3,000.0 | 8.00 | 328.41 | 2,998.7 | 1,897.30 | 23.7 | -14.6 | -9.9 | 2.00 | 2.00 | 0.00 |
| 3,100.0 | 10.00 | 328.41 | 3,097.5 | 1,798.53 | 37.1 | -22.8 | -15.4 | 2.00 | 2.00 | 0.00 |
| 3,200.0 | 12.00 | 328.41 | 3,195.6 | 1,700.38 | 53.3 | -32.8 | -22.2 | 2.00 | 2.00 | 0.00 |
| 3,300.0 | 14.00 | 328.41 | 3,293.1 | 1,602.94 | 72.5 | -44.6 | -30.2 | 2.00 | 2.00 | 0.00 |
| PARKMAN | | | | | | | | | | |
| 3,362.0 | 15.24 | 328.41 | 3,353.0 | 1,543.00 | 85.8 | -52.8 | -35.7 | 2.00 | 2.00 | 0.00 |
| 3,400.0 | 16.00 | 328.41 | 3,389.6 | 1,506.36 | 94.5 | -58.1 | -39.4 | 2.00 | 2.00 | 0.00 |
| 3,500.0 | 18.00 | 328.41 | 3,485.3 | 1,410.73 | 119.4 | -73.4 | -49.7 | 2.00 | 2.00 | 0.00 |
| 3,600.0 | 20.00 | 328.41 | 3,579.8 | 1,316.18 | 147.2 | -90.5 | -61.3 | 2.00 | 2.00 | 0.00 |
| 3,700.0 | 22.00 | 328.41 | 3,673.2 | 1,222.83 | 177.7 | -109.3 | -74.0 | 2.00 | 2.00 | 0.00 |
| 3,800.0 | 24.00 | 328.41 | 3,765.2 | 1,130.79 | 211.0 | -129.7 | -87.9 | 2.00 | 2.00 | 0.00 |
| 3,900.0 | 26.00 | 328.41 | 3,855.8 | 1,040.16 | 247.0 | -151.9 | -102.9 | 2.00 | 2.00 | 0.00 |
| 4,000.0 | 28.00 | 328.41 | 3,944.9 | 951.06 | 285.6 | -175.7 | -119.0 | 2.00 | 2.00 | 0.00 |
| SUSSEX | | | | | | | | | | |
| 4,009.1 | 28.18 | 328.41 | 3,953.0 | 943.00 | 289.3 | -177.9 | -120.5 | 2.00 | 2.00 | 0.00 |
| 4,100.0 | 30.00 | 328.41 | 4,032.4 | 863.61 | 326.9 | -201.1 | -136.2 | 2.00 | 2.00 | 0.00 |
| EOB TO 30.94° INC | | | | | | | | | | |
| 4,147.0 | 30.94 | 328.41 | 4,072.9 | 823.10 | 347.2 | -213.5 | -144.6 | 2.00 | 2.00 | 0.00 |
| 4,200.0 | 30.94 | 328.41 | 4,118.4 | 777.64 | 370.4 | -227.8 | -154.3 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 30.94 | 328.41 | 4,204.1 | 691.87 | 414.2 | -254.7 | -172.5 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MICKEY 4 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4896.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4896.0usft |
| Site: | SW NE SEC. 5 T6N R67W 6th P.M. | North Reference: | True |
| Well: | MICKEY 4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #2 | | |

Planned Survey

| MD (usft) | Inc (°) | Azi (°) | TVD (usft) | SS (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|--------------|---------------|----------------|------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| 4,400.0 | 30.94 | 328.41 | 4,289.9 | 606.10 | 458.0 | -281.7 | -190.8 | 0.00 | 0.00 | 0.00 |
| SHANNON | | | | | | | | | | |
| 4,485.2 | 30.94 | 328.41 | 4,363.0 | 533.00 | 495.4 | -304.6 | -206.3 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 30.94 | 328.41 | 4,375.7 | 520.33 | 501.8 | -308.6 | -209.0 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 30.94 | 328.41 | 4,461.4 | 434.56 | 545.6 | -335.5 | -227.2 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 30.94 | 328.41 | 4,547.2 | 348.78 | 589.4 | -362.5 | -245.5 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 30.94 | 328.41 | 4,633.0 | 263.01 | 633.2 | -389.4 | -263.7 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 30.94 | 328.41 | 4,718.8 | 177.24 | 677.0 | -416.3 | -282.0 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 30.94 | 328.41 | 4,804.5 | 91.47 | 720.8 | -443.3 | -300.2 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 30.94 | 328.41 | 4,890.3 | 5.70 | 764.6 | -470.2 | -318.4 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 30.94 | 328.41 | 4,976.1 | -80.07 | 808.4 | -497.1 | -336.7 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 30.94 | 328.41 | 5,061.8 | -165.84 | 852.2 | -524.1 | -354.9 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 30.94 | 328.41 | 5,147.6 | -251.61 | 896.0 | -551.0 | -373.2 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 30.94 | 328.41 | 5,233.4 | -337.38 | 939.8 | -577.9 | -391.4 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 30.94 | 328.41 | 5,319.2 | -423.15 | 983.6 | -604.9 | -409.6 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 30.94 | 328.41 | 5,404.9 | -508.92 | 1,027.4 | -631.8 | -427.9 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 30.94 | 328.41 | 5,490.7 | -594.69 | 1,071.2 | -658.7 | -446.1 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 30.94 | 328.41 | 5,576.5 | -680.46 | 1,115.0 | -685.7 | -464.4 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 30.94 | 328.41 | 5,662.2 | -766.23 | 1,158.8 | -712.6 | -482.6 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 30.94 | 328.41 | 5,748.0 | -852.01 | 1,202.6 | -739.5 | -500.8 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 30.94 | 328.41 | 5,833.8 | -937.78 | 1,246.3 | -766.5 | -519.1 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 30.94 | 328.41 | 5,919.5 | -1,023.55 | 1,290.1 | -793.4 | -537.3 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 30.94 | 328.41 | 6,005.3 | -1,109.32 | 1,333.9 | -820.3 | -555.6 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 30.94 | 328.41 | 6,091.1 | -1,195.09 | 1,377.7 | -847.3 | -573.8 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 30.94 | 328.41 | 6,176.9 | -1,280.86 | 1,421.5 | -874.2 | -592.0 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 30.94 | 328.41 | 6,262.6 | -1,366.63 | 1,465.3 | -901.1 | -610.3 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 30.94 | 328.41 | 6,348.4 | -1,452.40 | 1,509.1 | -928.1 | -628.5 | 0.00 | 0.00 | 0.00 |
| KOP (10°/100ft DGLG) | | | | | | | | | | |
| 6,877.1 | 30.94 | 328.41 | 6,414.5 | -1,518.53 | 1,542.9 | -948.8 | -642.6 | 0.00 | 0.00 | 0.00 |
| 6,900.0 | 29.93 | 332.46 | 6,434.3 | -1,538.28 | 1,553.0 | -954.6 | -646.3 | 9.98 | -4.41 | 17.68 |
| 7,000.0 | 27.21 | 352.68 | 6,522.3 | -1,626.30 | 1,597.9 | -969.0 | -652.1 | 10.00 | -2.72 | 20.22 |
| 7,100.0 | 27.75 | 14.42 | 6,611.2 | -1,715.24 | 1,643.2 | -966.1 | -640.8 | 10.00 | 0.54 | 21.74 |
| 7,200.0 | 31.38 | 33.41 | 6,698.4 | -1,802.39 | 1,687.6 | -946.0 | -612.6 | 10.00 | 3.63 | 18.99 |
| SHARON SPRINGS | | | | | | | | | | |
| 7,211.3 | 31.94 | 35.27 | 6,708.0 | -1,812.00 | 1,692.5 | -942.6 | -608.4 | 10.00 | 5.01 | 16.49 |
| NIOBRARA | | | | | | | | | | |
| 7,253.1 | 34.25 | 41.65 | 6,743.0 | -1,847.00 | 1,710.3 | -928.4 | -591.1 | 10.00 | 5.53 | 15.27 |
| 7,300.0 | 37.20 | 47.92 | 6,781.1 | -1,885.12 | 1,729.7 | -909.1 | -568.5 | 10.00 | 6.27 | 13.36 |
| 7,400.0 | 44.34 | 58.68 | 6,856.9 | -1,960.90 | 1,768.2 | -856.7 | -509.8 | 10.00 | 7.14 | 10.76 |
| 7,500.0 | 52.26 | 66.89 | 6,923.4 | -2,027.44 | 1,802.0 | -790.3 | -438.3 | 10.00 | 7.92 | 8.21 |
| 7,600.0 | 60.63 | 73.46 | 6,978.7 | -2,082.70 | 1,830.0 | -712.0 | -356.1 | 10.00 | 8.37 | 6.57 |
| FORT HAYS | | | | | | | | | | |
| 7,678.3 | 67.38 | 77.87 | 7,013.0 | -2,117.00 | 1,847.3 | -643.8 | -285.9 | 10.00 | 8.63 | 5.63 |
| 7,700.0 | 69.28 | 79.01 | 7,021.0 | -2,125.02 | 1,851.4 | -624.1 | -265.7 | 10.00 | 8.72 | 5.26 |
| 7,800.0 | 78.09 | 83.96 | 7,049.1 | -2,153.10 | 1,865.5 | -529.2 | -169.9 | 10.00 | 8.81 | 4.94 |
| CODELL | | | | | | | | | | |
| 7,820.4 | 79.89 | 84.92 | 7,053.0 | -2,157.00 | 1,867.4 | -509.3 | -150.0 | 10.00 | 8.86 | 4.71 |
| 7,900.0 | 86.97 | 88.59 | 7,062.1 | -2,166.10 | 1,871.9 | -430.4 | -71.7 | 10.00 | 8.89 | 4.61 |
| HZ LP: 544ft FNL & 2177ft FEL of Sec 5 | | | | | | | | | | |
| 7,934.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,872.2 | -396.5 | -38.2 | 10.00 | 8.91 | 4.55 |
| 8,000.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,872.1 | -330.5 | 26.6 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,871.9 | -230.5 | 124.7 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,871.6 | -130.5 | 222.9 | 0.00 | 0.00 | 0.00 |

Planning Report



| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MICKEY 4 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4896.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4896.0usft |
| Site: | SW NE SEC. 5 T6N R67W 6th P.M. | North Reference: | True |
| Well: | MICKEY 4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #2 | | |

| Planned Survey | | | | | | | | | | |
|----------------|------------|------------|---------------|--------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| MD (usft) | Inc (°) | Azi (°) | TVD (usft) | SS (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 8,300.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,871.4 | -30.5 | 321.1 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,871.2 | 69.5 | 419.3 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,870.9 | 169.5 | 517.5 | 0.00 | 0.00 | 0.00 |
| 8,600.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,870.7 | 269.5 | 615.7 | 0.00 | 0.00 | 0.00 |
| 8,700.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,870.5 | 369.5 | 713.8 | 0.00 | 0.00 | 0.00 |
| 8,800.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,870.2 | 469.5 | 812.0 | 0.00 | 0.00 | 0.00 |
| 8,900.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,870.0 | 569.5 | 910.2 | 0.00 | 0.00 | 0.00 |
| 9,000.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,869.8 | 669.5 | 1,008.4 | 0.00 | 0.00 | 0.00 |
| 9,100.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,869.5 | 769.5 | 1,106.6 | 0.00 | 0.00 | 0.00 |
| 9,200.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,869.3 | 869.5 | 1,204.7 | 0.00 | 0.00 | 0.00 |
| 9,300.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,869.1 | 969.5 | 1,302.9 | 0.00 | 0.00 | 0.00 |
| 9,400.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,868.8 | 1,069.5 | 1,401.1 | 0.00 | 0.00 | 0.00 |
| 9,500.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,868.6 | 1,169.5 | 1,499.3 | 0.00 | 0.00 | 0.00 |
| 9,600.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,868.4 | 1,269.5 | 1,597.5 | 0.00 | 0.00 | 0.00 |
| 9,700.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,868.1 | 1,369.5 | 1,695.6 | 0.00 | 0.00 | 0.00 |
| 9,800.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,867.9 | 1,469.5 | 1,793.8 | 0.00 | 0.00 | 0.00 |
| 9,900.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,867.7 | 1,569.5 | 1,892.0 | 0.00 | 0.00 | 0.00 |
| 10,000.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,867.4 | 1,669.5 | 1,990.2 | 0.00 | 0.00 | 0.00 |
| 10,100.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,867.2 | 1,769.5 | 2,088.4 | 0.00 | 0.00 | 0.00 |
| 10,200.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,867.0 | 1,869.5 | 2,186.6 | 0.00 | 0.00 | 0.00 |
| 10,300.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,866.7 | 1,969.5 | 2,284.7 | 0.00 | 0.00 | 0.00 |
| 10,400.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,866.5 | 2,069.5 | 2,382.9 | 0.00 | 0.00 | 0.00 |
| 10,500.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,866.3 | 2,169.5 | 2,481.1 | 0.00 | 0.00 | 0.00 |
| 10,600.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,866.0 | 2,269.5 | 2,579.3 | 0.00 | 0.00 | 0.00 |
| 10,700.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,865.8 | 2,369.5 | 2,677.5 | 0.00 | 0.00 | 0.00 |
| 10,800.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,865.6 | 2,469.5 | 2,775.6 | 0.00 | 0.00 | 0.00 |
| 10,900.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,865.3 | 2,569.5 | 2,873.8 | 0.00 | 0.00 | 0.00 |
| 11,000.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,865.1 | 2,669.5 | 2,972.0 | 0.00 | 0.00 | 0.00 |
| 11,100.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,864.9 | 2,769.5 | 3,070.2 | 0.00 | 0.00 | 0.00 |
| 11,200.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,864.6 | 2,869.5 | 3,168.4 | 0.00 | 0.00 | 0.00 |
| 11,300.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,864.4 | 2,969.5 | 3,266.5 | 0.00 | 0.00 | 0.00 |
| 11,400.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,864.2 | 3,069.5 | 3,364.7 | 0.00 | 0.00 | 0.00 |
| 11,500.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,863.9 | 3,169.5 | 3,462.9 | 0.00 | 0.00 | 0.00 |
| 11,600.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,863.7 | 3,269.5 | 3,561.1 | 0.00 | 0.00 | 0.00 |
| 11,700.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,863.5 | 3,369.5 | 3,659.3 | 0.00 | 0.00 | 0.00 |
| 11,800.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,863.2 | 3,469.5 | 3,757.5 | 0.00 | 0.00 | 0.00 |
| 11,900.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,863.0 | 3,569.5 | 3,855.6 | 0.00 | 0.00 | 0.00 |
| 12,000.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,862.8 | 3,669.5 | 3,953.8 | 0.00 | 0.00 | 0.00 |
| 12,100.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,862.5 | 3,769.5 | 4,052.0 | 0.00 | 0.00 | 0.00 |
| 12,200.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,862.3 | 3,869.5 | 4,150.2 | 0.00 | 0.00 | 0.00 |
| 12,300.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,862.1 | 3,969.5 | 4,248.4 | 0.00 | 0.00 | 0.00 |
| 12,400.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,861.8 | 4,069.5 | 4,346.5 | 0.00 | 0.00 | 0.00 |
| 12,500.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,861.6 | 4,169.5 | 4,444.7 | 0.00 | 0.00 | 0.00 |
| 12,600.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,861.4 | 4,269.5 | 4,542.9 | 0.00 | 0.00 | 0.00 |
| 12,700.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,861.1 | 4,369.5 | 4,641.1 | 0.00 | 0.00 | 0.00 |
| 12,800.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,860.9 | 4,469.5 | 4,739.3 | 0.00 | 0.00 | 0.00 |
| 12,900.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,860.7 | 4,569.5 | 4,837.4 | 0.00 | 0.00 | 0.00 |
| 13,000.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,860.4 | 4,669.5 | 4,935.6 | 0.00 | 0.00 | 0.00 |
| 13,100.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,860.2 | 4,769.5 | 5,033.8 | 0.00 | 0.00 | 0.00 |
| 13,200.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,860.0 | 4,869.5 | 5,132.0 | 0.00 | 0.00 | 0.00 |
| 13,300.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,859.7 | 4,969.5 | 5,230.2 | 0.00 | 0.00 | 0.00 |
| 13,400.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,859.5 | 5,069.5 | 5,328.3 | 0.00 | 0.00 | 0.00 |
| 13,500.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,859.3 | 5,169.5 | 5,426.5 | 0.00 | 0.00 | 0.00 |
| 13,600.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,859.0 | 5,269.5 | 5,524.7 | 0.00 | 0.00 | 0.00 |

Planning Report



| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MICKEY 4 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4896.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4896.0usft |
| Site: | SW NE SEC. 5 T6N R67W 6th P.M. | North Reference: | True |
| Well: | MICKEY 4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #2 | | |

| Planned Survey | | | | | | | | | | |
|---|--------------|--------------|----------------|------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| MD (usft) | Inc (°) | Azi (°) | TVD (usft) | SS (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 13,700.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,858.8 | 5,369.5 | 5,622.9 | 0.00 | 0.00 | 0.00 |
| 13,800.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,858.6 | 5,469.5 | 5,721.1 | 0.00 | 0.00 | 0.00 |
| 13,900.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,858.3 | 5,569.5 | 5,819.2 | 0.00 | 0.00 | 0.00 |
| 14,000.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,858.1 | 5,669.5 | 5,917.4 | 0.00 | 0.00 | 0.00 |
| 14,100.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,857.9 | 5,769.5 | 6,015.6 | 0.00 | 0.00 | 0.00 |
| 14,200.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,857.6 | 5,869.5 | 6,113.8 | 0.00 | 0.00 | 0.00 |
| 14,300.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,857.4 | 5,969.5 | 6,212.0 | 0.00 | 0.00 | 0.00 |
| 14,400.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,857.2 | 6,069.5 | 6,310.2 | 0.00 | 0.00 | 0.00 |
| 14,500.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,856.9 | 6,169.5 | 6,408.3 | 0.00 | 0.00 | 0.00 |
| 14,600.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,856.7 | 6,269.5 | 6,506.5 | 0.00 | 0.00 | 0.00 |
| 14,700.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,856.5 | 6,369.5 | 6,604.7 | 0.00 | 0.00 | 0.00 |
| 14,800.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,856.2 | 6,469.5 | 6,702.9 | 0.00 | 0.00 | 0.00 |
| 14,900.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,856.0 | 6,569.5 | 6,801.1 | 0.00 | 0.00 | 0.00 |
| 15,000.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,855.7 | 6,669.5 | 6,899.2 | 0.00 | 0.00 | 0.00 |
| 15,100.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,855.5 | 6,769.5 | 6,997.4 | 0.00 | 0.00 | 0.00 |
| 15,200.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,855.3 | 6,869.5 | 7,095.6 | 0.00 | 0.00 | 0.00 |
| 15,300.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,855.0 | 6,969.5 | 7,193.8 | 0.00 | 0.00 | 0.00 |
| 15,400.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,854.8 | 7,069.5 | 7,292.0 | 0.00 | 0.00 | 0.00 |
| 15,500.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,854.6 | 7,169.5 | 7,390.1 | 0.00 | 0.00 | 0.00 |
| 15,600.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,854.3 | 7,269.5 | 7,488.3 | 0.00 | 0.00 | 0.00 |
| 15,700.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,854.1 | 7,369.5 | 7,586.5 | 0.00 | 0.00 | 0.00 |
| 15,800.0 | 90.00 | 90.13 | 7,063.0 | -2,167.00 | 1,853.9 | 7,469.5 | 7,684.7 | 0.00 | 0.00 | 0.00 |
| 15,900.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,853.6 | 7,569.5 | 7,782.9 | 0.00 | 0.00 | 0.00 |
| 16,000.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,853.4 | 7,669.5 | 7,881.0 | 0.00 | 0.00 | 0.00 |
| 16,100.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,853.2 | 7,769.5 | 7,979.2 | 0.00 | 0.00 | 0.00 |
| 16,200.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,852.9 | 7,869.5 | 8,077.4 | 0.00 | 0.00 | 0.00 |
| 16,300.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,852.7 | 7,969.5 | 8,175.6 | 0.00 | 0.00 | 0.00 |
| 16,400.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,852.4 | 8,069.5 | 8,273.8 | 0.00 | 0.00 | 0.00 |
| 16,500.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,852.2 | 8,169.5 | 8,371.9 | 0.00 | 0.00 | 0.00 |
| 16,600.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,852.0 | 8,269.5 | 8,470.1 | 0.00 | 0.00 | 0.00 |
| 16,700.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,851.7 | 8,369.5 | 8,568.3 | 0.00 | 0.00 | 0.00 |
| 16,800.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,851.5 | 8,469.5 | 8,666.5 | 0.00 | 0.00 | 0.00 |
| 16,900.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,851.3 | 8,569.5 | 8,764.7 | 0.00 | 0.00 | 0.00 |
| 17,000.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,851.0 | 8,669.5 | 8,862.8 | 0.00 | 0.00 | 0.00 |
| 17,100.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,850.8 | 8,769.5 | 8,961.0 | 0.00 | 0.00 | 0.00 |
| 17,200.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,850.6 | 8,869.5 | 9,059.2 | 0.00 | 0.00 | 0.00 |
| 17,300.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,850.3 | 8,969.5 | 9,157.4 | 0.00 | 0.00 | 0.00 |
| 17,400.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,850.1 | 9,069.5 | 9,255.6 | 0.00 | 0.00 | 0.00 |
| 17,500.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,849.9 | 9,169.5 | 9,353.8 | 0.00 | 0.00 | 0.00 |
| 17,600.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,849.6 | 9,269.5 | 9,451.9 | 0.00 | 0.00 | 0.00 |
| 17,700.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,849.4 | 9,369.5 | 9,550.1 | 0.00 | 0.00 | 0.00 |
| 17,800.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,849.1 | 9,469.5 | 9,648.3 | 0.00 | 0.00 | 0.00 |
| 17,900.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,848.9 | 9,569.5 | 9,746.5 | 0.00 | 0.00 | 0.00 |
| 18,000.0 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,848.7 | 9,669.5 | 9,844.7 | 0.00 | 0.00 | 0.00 |
| BHL: 631ft FNL & 2629ft FEL of Sec 3 | | | | | | | | | | |
| 18,011.1 | 90.00 | 90.14 | 7,063.0 | -2,167.00 | 1,848.6 | 9,680.6 | 9,855.6 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MICKEY 4 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4896.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4896.0usft |
| Site: | SW NE SEC. 5 T6N R67W 6th P.M. | North Reference: | True |
| Well: | MICKEY 4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #2 | | |

| Formations | | | | | | |
|--------------|---------------|----------------|-----------|------------|-------------------------|--|
| MD (usft) | TVD (usft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 3,362.0 | 3,353.0 | PARKMAN | | | | |
| 4,009.1 | 3,953.0 | SUSSEX | | | | |
| 4,485.2 | 4,363.0 | SHANNON | | | | |
| 7,211.3 | 6,708.0 | SHARON SPRINGS | | | | |
| 7,253.1 | 6,743.0 | NIOBRARA | | | | |
| 7,678.3 | 7,013.0 | FORT HAYS | | | | |
| 7,820.4 | 7,053.0 | CODELL | | | | |

| Plan Annotations | | | | |
|------------------|---------------|-------------------|-----------------|--|
| MD (usft) | TVD (usft) | Local Coordinates | | Comment |
| | | +N/-S (usft) | +E/-W (usft) | |
| 0.0 | 0.0 | 0.0 | 0.0 | SHL: 2419ft FNL & 1813ft FEL of Sec 5 |
| 1,600.0 | 1,600.0 | 0.0 | 0.0 | 9 5/8" SURFACE CASING |
| 2,600.0 | 2,600.0 | 0.0 | 0.0 | START NUDGE (2°/100ft BUR) |
| 4,147.0 | 4,072.9 | 347.2 | -213.5 | EOB TO 30.94° INC |
| 6,877.1 | 6,414.5 | 1,542.9 | -948.8 | KOP (10°/100ft DGLG) |
| 7,934.0 | 7,063.0 | 1,872.2 | -396.5 | HZ LP: 544ft FNL & 2177ft FEL of Sec 5 |
| 18,011.1 | 7,063.0 | 1,848.6 | 9,680.6 | BHL: 631ft FNL & 2629ft FEL of Sec 3 |