

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

NW NW SEC. 22 T4N R68W 6th P.M.

MLD 10

ORIGINAL WELLBORE

10 July, 2017

Plan: PROPOSAL #3

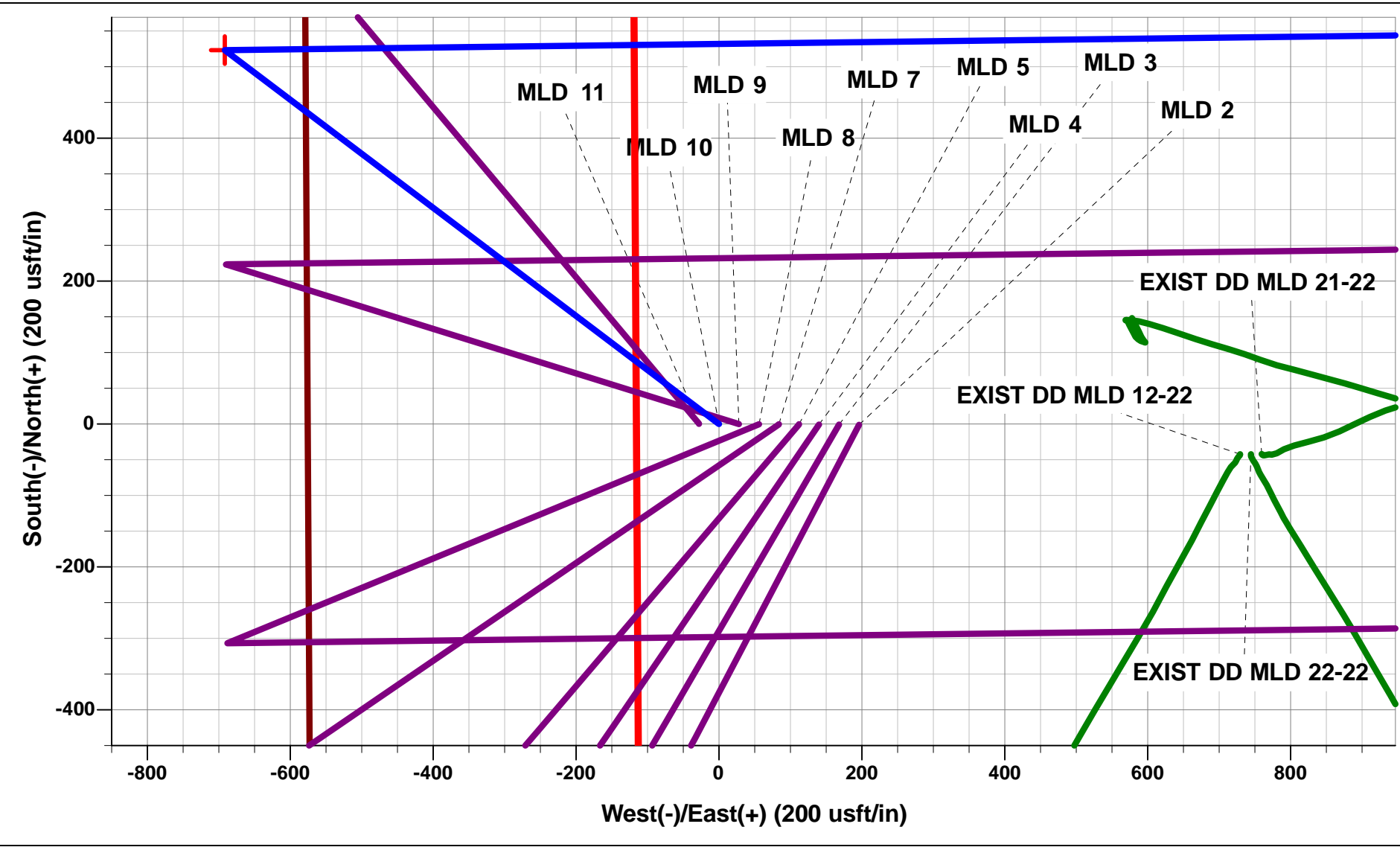




Project: WELD COUNTY, COLORADO (NAD 83)
Site: NW NW SEC. 22 T4N R68W 6th P.M.
Well: MLD 10
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #3

| ANNOTATIONS | | | | | | | | |
|-------------|---------|-------|--------|-------|--------|--------|--------|---|
| TVD | MD | Inc | Azi | +N/-S | +E/-W | VSect | Dep | Annotation |
| 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | SHL: 802ft FNL & 576ft FWL of Sec 22 |
| 1350.0 | 1350.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | START NUDGE (2°/100ft BUR) |
| 1875.1 | 1878.1 | 10.56 | 307.11 | 29.3 | -38.7 | -34.4 | 48.5 | EOB TO 10.56° INC |
| 6006.0 | 6080.2 | 10.56 | 307.11 | 494.0 | -653.0 | -580.1 | 818.8 | END OF TANGENT |
| 6531.1 | 6608.3 | 0.00 | 0.00 | 523.3 | -691.7 | -614.5 | 867.3 | EOD TO VERTICAL |
| 6561.1 | 6638.3 | 0.00 | 0.00 | 523.3 | -691.7 | -614.5 | 867.3 | KOP (10°/100ft BUR) |
| 7134.0 | 7538.2 | 90.00 | 89.28 | 530.4 | -118.8 | -45.9 | 1440.2 | HZ LP (P3): 270ft FNL & 460ft FWL of Sec 22 |
| 7134.0 | 11942.5 | 90.00 | 89.29 | 585.5 | 4285.1 | 4325.0 | 5844.5 | BHL (P3): 270ft FNL & 460ft FEL of Sec 22 |

| WELLBORE TARGET DETAILS (LAT/LONG) | | | | | | |
|------------------------------------|--------|-------|--------|-----------|-------------|--|
| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | |
| KOP - MLD 10 (P3) | 6561.1 | 523.3 | -691.7 | 40.305407 | -104.999248 | |
| HZ LP - MLD 10 (P3) | 7134.0 | 530.4 | -118.8 | 40.305427 | -104.997194 | |
| BHL - MLD 10 (P3) | 7134.0 | 585.5 | 4285.2 | 40.305577 | -104.981404 | |



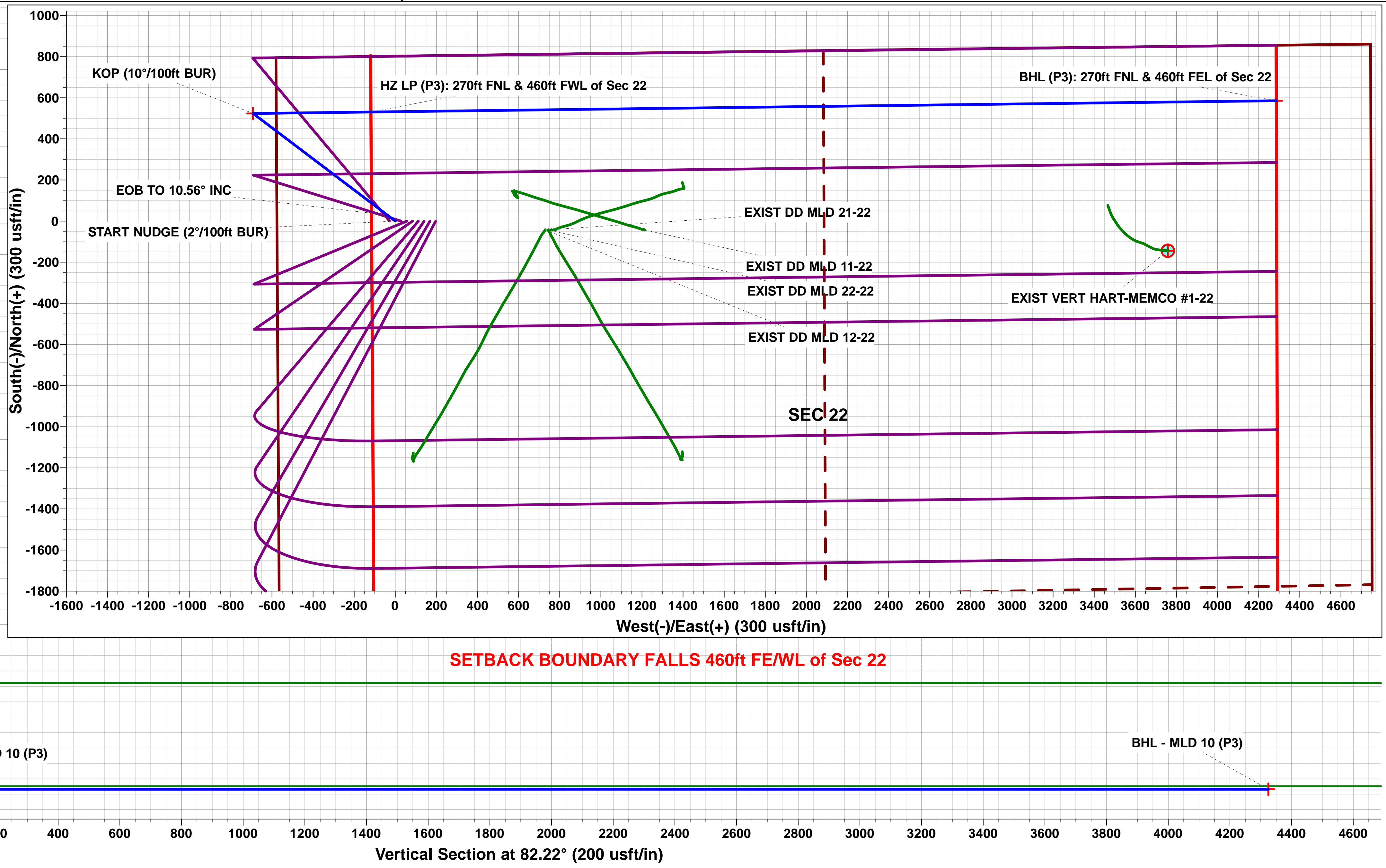
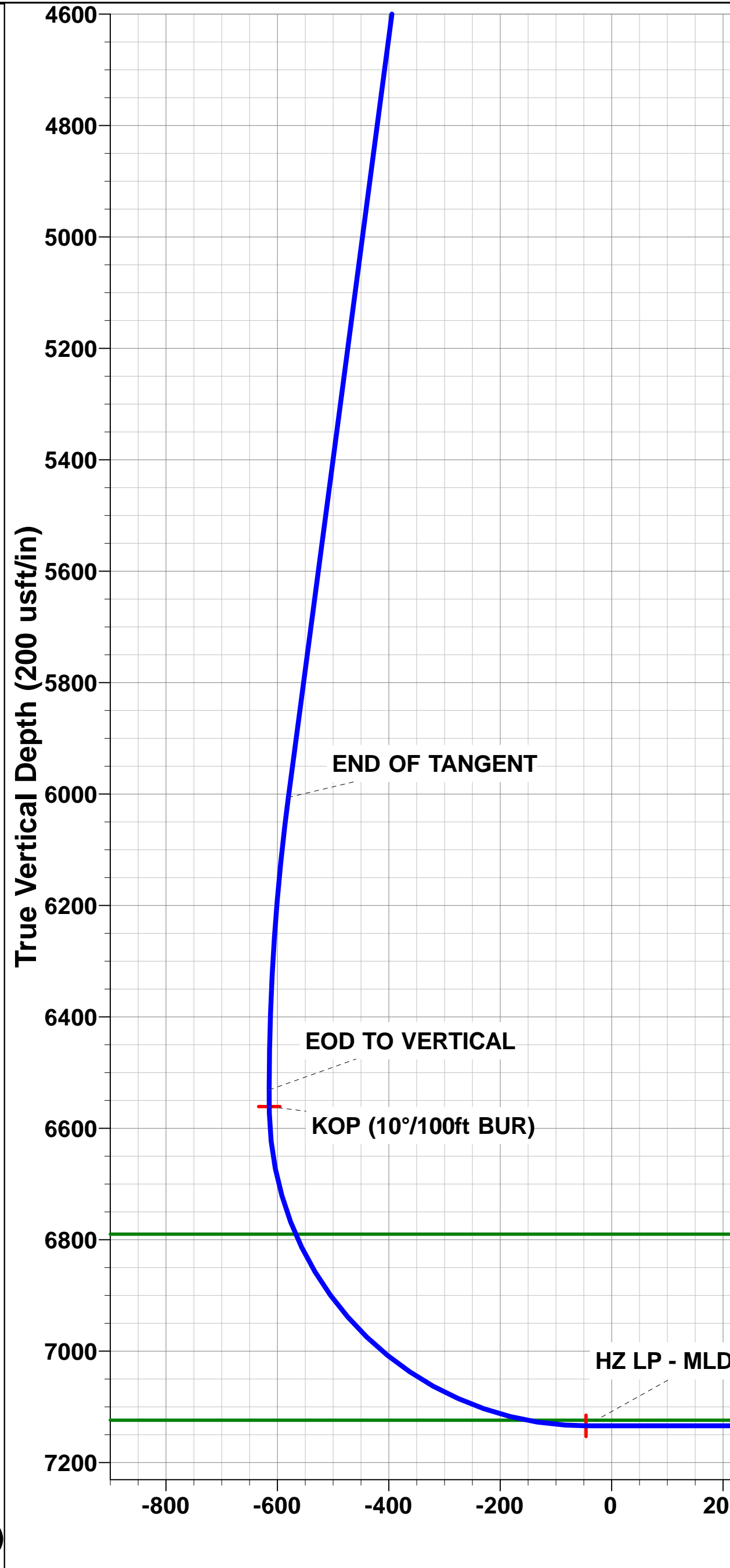
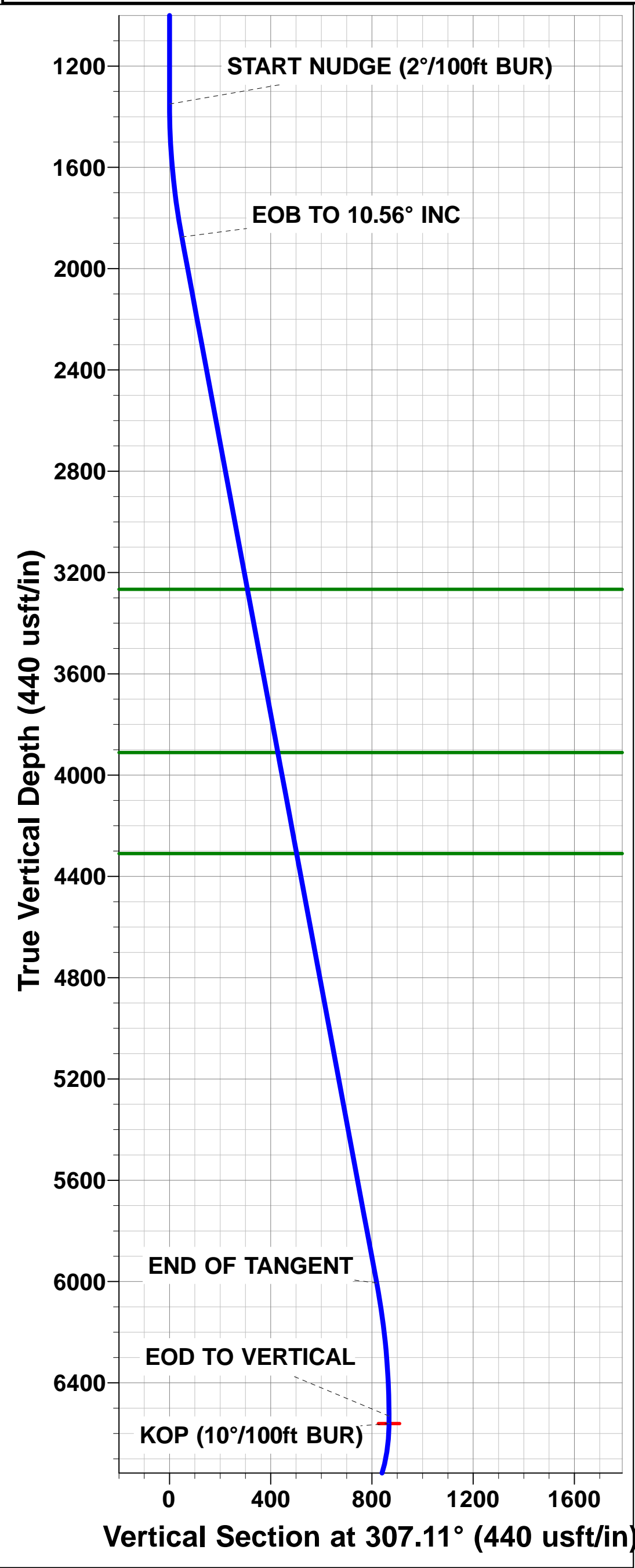
| PROPOSED LOCAL COORDINATES | | |
|--|--------|-----------|
| SHL: 802ft FNL & 576ft FWL of Sec 22 | | |
| HZ LP: 270ft FNL & 460ft FWL of Sec 22 | | |
| BHL: 270ft FNL & 460ft FEL of Sec 22 | | |
| FORMATION TOP DETAILS | | |
| TVDPPath | MDPath | Formation |
| 3266.0 | 3293.0 | PARKMAN |
| 3911.0 | 3949.1 | SUSSEX |
| 4310.0 | 4355.0 | SHANNON |
| 6790.0 | 6873.7 | NIORARA |
| 7124.0 | 7431.0 | CODELL |

T

M

Azimuths to True North
Magnetic North: 8.33°

Magnetic Field
Strength: 52322.3snT
Dip Angle: 66.74°
Date: 01/06/2017
Model: IGRF2015



Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 10 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft |
| Site: | NW NW SEC. 22 T4N R68W 6th P.M. | North Reference: | True |
| Well: | MLD 10 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #3 | | |

| | | | |
|--------------------|--------------------------------|----------------------|-----------------------------|
| 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 | NW NW SEC. 22 T4N R68W 6th P.M. | | |
| Site Position: | | Northing: | 1,350,393.79 usft |
| From: | Lat/Long | Easting: | 3,140,798.83 usft |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 1.10000ft |
| | | Latitude: | 40.294131 |
| | | Longitude: | -104.995243 |
| | | Grid Convergence: | 0.33 ° |

| | | | |
|-----------------------------|-------------|--------------|----------------------------|
| Well | MLD 10 | | |
| Well Position | +N-S | 3,584.8 usft | Northing: |
| | +E-W | -425.3 usft | Easting: |
| Position Uncertainty | | 0.0 usft | Wellhead Elevation: |
| | | | Latitude: |
| | | | Longitude: |
| | | | Ground Level: |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | ORIGINAL WELLBORE | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 01/06/2017 | 8.33 | 66.74 | 52,322 |

| | | | | |
|--------------------------|--------------------------------|--------------------|----------------------|----------------------|
| Design | PROPOSAL #3 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N-S (usft) | +E-W (usft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 82.22 |

| 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 | -4,900.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,350.0 | 0.00 | 0.00 | 1,350.0 | -3,550.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,878.1 | 10.56 | 307.11 | 1,875.1 | -3,024.9 | 29.3 | -38.7 | 2.00 | 2.00 | 0.00 | 307.11 | |
| 6,080.2 | 10.56 | 307.11 | 6,006.0 | 1,106.0 | 494.0 | -653.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,608.3 | 0.00 | 0.00 | 6,531.1 | 1,631.1 | 523.3 | -691.7 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 6,638.3 | 0.00 | 0.00 | 6,561.1 | 1,661.1 | 523.3 | -691.7 | 0.00 | 0.00 | 0.00 | 0.00 | KOP - MLD 10 (P3) |
| 7,538.2 | 90.00 | 89.28 | 7,134.0 | 2,234.0 | 530.4 | -118.8 | 10.00 | 10.00 | 9.92 | 89.28 | HZ LP - MLD 10 (P3) |
| 11,942.5 | 90.00 | 89.29 | 7,134.0 | 2,234.0 | 585.5 | 4,285.2 | 0.00 | 0.00 | 0.00 | 142.34 | BHL - MLD 10 (P3) |

| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 10 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft |
| Site: | NW NW SEC. 22 T4N R6W 6th P.M. | North Reference: | True |
| Well: | MLD 10 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #3 | | |

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: 802ft FNL & 576ft FWL of Sec 22 | | | | | | | | | | |
| 0.0 | 0.00 | 0.00 | 0.0 | 4,900.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 4,800.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 4,700.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 300.0 | 4,600.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 4,500.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 500.0 | 0.00 | 0.00 | 500.0 | 4,400.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 4,300.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 700.0 | 0.00 | 0.00 | 700.0 | 4,200.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 800.0 | 0.00 | 0.00 | 800.0 | 4,100.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 900.0 | 0.00 | 0.00 | 900.0 | 4,000.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 3,900.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 0.00 | 0.00 | 1,100.0 | 3,800.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 3,700.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 0.00 | 0.00 | 1,300.0 | 3,600.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| START NUDGE (2°/100ft BUR) | | | | | | | | | | |
| 1,350.0 | 0.00 | 0.00 | 1,350.0 | 3,550.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 1.00 | 307.11 | 1,400.0 | 3,500.00 | 0.3 | -0.3 | -0.3 | 2.00 | 2.00 | 0.00 |
| 1,500.0 | 3.00 | 307.11 | 1,499.9 | 3,400.07 | 2.4 | -3.1 | -2.8 | 2.00 | 2.00 | 0.00 |
| 1,600.0 | 5.00 | 307.11 | 1,599.7 | 3,300.32 | 6.6 | -8.7 | -7.7 | 2.00 | 2.00 | 0.00 |
| 1,700.0 | 7.00 | 307.11 | 1,699.1 | 3,200.87 | 12.9 | -17.0 | -15.1 | 2.00 | 2.00 | 0.00 |
| 1,800.0 | 9.00 | 307.11 | 1,798.2 | 3,101.85 | 21.3 | -28.1 | -25.0 | 2.00 | 2.00 | 0.00 |
| EOB TO 10.56° INC | | | | | | | | | | |
| 1,878.1 | 10.56 | 307.11 | 1,875.1 | 3,024.89 | 29.3 | -38.7 | -34.4 | 2.00 | 2.00 | 0.00 |
| 1,900.0 | 10.56 | 307.11 | 1,896.6 | 3,003.36 | 31.7 | -41.9 | -37.2 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 10.56 | 307.11 | 1,994.9 | 2,905.05 | 42.8 | -56.5 | -50.2 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 10.56 | 307.11 | 2,093.3 | 2,806.75 | 53.8 | -71.1 | -63.2 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 10.56 | 307.11 | 2,191.6 | 2,708.44 | 64.9 | -85.8 | -76.2 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 10.56 | 307.11 | 2,289.9 | 2,610.13 | 75.9 | -100.4 | -89.2 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 10.56 | 307.11 | 2,388.2 | 2,511.83 | 87.0 | -115.0 | -102.2 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 10.56 | 307.11 | 2,486.5 | 2,413.52 | 98.1 | -129.6 | -115.2 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 10.56 | 307.11 | 2,584.8 | 2,315.22 | 109.1 | -144.2 | -128.1 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 10.56 | 307.11 | 2,683.1 | 2,216.91 | 120.2 | -158.9 | -141.1 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 10.56 | 307.11 | 2,781.4 | 2,118.61 | 131.2 | -173.5 | -154.1 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 10.56 | 307.11 | 2,879.7 | 2,020.30 | 142.3 | -188.1 | -167.1 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 10.56 | 307.11 | 2,978.0 | 1,921.99 | 153.4 | -202.7 | -180.1 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 10.56 | 307.11 | 3,076.3 | 1,823.69 | 164.4 | -217.3 | -193.1 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 10.56 | 307.11 | 3,174.6 | 1,725.38 | 175.5 | -231.9 | -206.1 | 0.00 | 0.00 | 0.00 |
| PARKMAN | | | | | | | | | | |
| 3,293.0 | 10.56 | 307.11 | 3,266.0 | 1,634.00 | 185.7 | -245.5 | -218.1 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 10.56 | 307.11 | 3,272.9 | 1,627.08 | 186.5 | -246.6 | -219.0 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 10.56 | 307.11 | 3,371.2 | 1,528.77 | 197.6 | -261.2 | -232.0 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 10.56 | 307.11 | 3,469.5 | 1,430.47 | 208.6 | -275.8 | -245.0 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 10.56 | 307.11 | 3,567.8 | 1,332.16 | 219.7 | -290.4 | -258.0 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 10.56 | 307.11 | 3,666.1 | 1,233.85 | 230.8 | -305.0 | -271.0 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 10.56 | 307.11 | 3,764.5 | 1,135.55 | 241.8 | -319.7 | -284.0 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 10.56 | 307.11 | 3,862.8 | 1,037.24 | 252.9 | -334.3 | -297.0 | 0.00 | 0.00 | 0.00 |
| SUSSEX | | | | | | | | | | |
| 3,949.1 | 10.56 | 307.11 | 3,911.0 | 989.00 | 258.3 | -341.5 | -303.3 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 10.56 | 307.11 | 3,961.1 | 938.94 | 263.9 | -348.9 | -310.0 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 10.56 | 307.11 | 4,059.4 | 840.63 | 275.0 | -363.5 | -322.9 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 10.56 | 307.11 | 4,157.7 | 742.33 | 286.1 | -378.1 | -335.9 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 10.56 | 307.11 | 4,256.0 | 644.02 | 297.1 | -392.8 | -348.9 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|---------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 10 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft |
| Site: | NW NW SEC. 22 T4N R68W 6th P.M. | North Reference: | True |
| Well: | MLD 10 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #3 | | |

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) |
|--|------------|------------|---------------|--------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| SHANNON | | | | | | | | | | |
| 4,355.0 | 10.56 | 307.11 | 4,310.0 | 590.00 | 303.2 | -400.8 | -356.1 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 10.56 | 307.11 | 4,354.3 | 545.71 | 308.2 | -407.4 | -361.9 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 10.56 | 307.11 | 4,452.6 | 447.41 | 319.2 | -422.0 | -374.9 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 10.56 | 307.11 | 4,550.9 | 349.10 | 330.3 | -436.6 | -387.9 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 10.56 | 307.11 | 4,649.2 | 250.80 | 341.4 | -451.2 | -400.9 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 10.56 | 307.11 | 4,747.5 | 152.49 | 352.4 | -465.8 | -413.9 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 10.56 | 307.11 | 4,845.8 | 54.19 | 363.5 | -480.5 | -426.8 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 10.56 | 307.11 | 4,944.1 | -44.12 | 374.5 | -495.1 | -439.8 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 10.56 | 307.11 | 5,042.4 | -142.42 | 385.6 | -509.7 | -452.8 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 10.56 | 307.11 | 5,140.7 | -240.73 | 396.6 | -524.3 | -465.8 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 10.56 | 307.11 | 5,239.0 | -339.04 | 407.7 | -538.9 | -478.8 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 10.56 | 307.11 | 5,337.3 | -437.34 | 418.8 | -553.6 | -491.8 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 10.56 | 307.11 | 5,435.6 | -535.65 | 429.8 | -568.2 | -504.8 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 10.56 | 307.11 | 5,534.0 | -633.95 | 440.9 | -582.8 | -517.7 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 10.56 | 307.11 | 5,632.3 | -732.26 | 451.9 | -597.4 | -530.7 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 10.56 | 307.11 | 5,730.6 | -830.56 | 463.0 | -612.0 | -543.7 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 10.56 | 307.11 | 5,828.9 | -928.87 | 474.1 | -626.6 | -556.7 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 10.56 | 307.11 | 5,927.2 | -1,027.18 | 485.1 | -641.3 | -569.7 | 0.00 | 0.00 | 0.00 |
| END OF TANGENT | | | | | | | | | | |
| 6,080.2 | 10.56 | 307.11 | 6,006.0 | -1,106.02 | 494.0 | -653.0 | -580.1 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 10.17 | 307.11 | 6,025.5 | -1,125.49 | 496.1 | -655.8 | -582.6 | 2.00 | -2.00 | 0.00 |
| 6,200.0 | 8.17 | 307.11 | 6,124.2 | -1,224.21 | 505.7 | -668.5 | -593.9 | 2.00 | -2.00 | 0.00 |
| 6,300.0 | 6.17 | 307.11 | 6,223.4 | -1,323.43 | 513.3 | -678.5 | -602.8 | 2.00 | -2.00 | 0.00 |
| 6,400.0 | 4.17 | 307.11 | 6,323.0 | -1,423.02 | 518.7 | -685.7 | -609.1 | 2.00 | -2.00 | 0.00 |
| 6,500.0 | 2.17 | 307.11 | 6,422.9 | -1,522.86 | 522.0 | -690.1 | -613.0 | 2.00 | -2.00 | 0.00 |
| 6,600.0 | 0.17 | 307.11 | 6,522.8 | -1,622.83 | 523.3 | -691.7 | -614.5 | 2.00 | -2.00 | 0.00 |
| EOD TO VERTICAL | | | | | | | | | | |
| 6,608.3 | 0.00 | 0.00 | 6,531.1 | -1,631.13 | 523.3 | -691.7 | -614.5 | 1.99 | -1.99 | 0.00 |
| KOP (10°/100ft BUR) | | | | | | | | | | |
| 6,638.3 | 0.00 | 0.00 | 6,561.1 | -1,661.13 | 523.3 | -691.7 | -614.5 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 6.17 | 89.28 | 6,622.7 | -1,722.71 | 523.3 | -688.4 | -611.2 | 10.01 | 10.01 | 0.00 |
| 6,800.0 | 16.17 | 89.28 | 6,720.7 | -1,820.69 | 523.5 | -669.0 | -592.0 | 10.00 | 10.00 | 0.00 |
| NIOBRARA | | | | | | | | | | |
| 6,873.7 | 23.55 | 89.28 | 6,790.0 | -1,890.00 | 523.9 | -644.0 | -567.1 | 10.00 | 10.00 | 0.00 |
| 6,900.0 | 26.18 | 89.28 | 6,813.8 | -1,913.82 | 524.0 | -632.9 | -556.2 | 10.00 | 10.00 | 0.00 |
| 7,000.0 | 36.18 | 89.28 | 6,899.3 | -1,999.27 | 524.6 | -581.2 | -504.9 | 10.00 | 10.00 | 0.00 |
| 7,100.0 | 46.18 | 89.28 | 6,974.4 | -2,074.44 | 525.5 | -515.5 | -439.6 | 10.00 | 10.00 | 0.00 |
| 7,200.0 | 56.18 | 89.28 | 7,037.1 | -2,137.05 | 526.4 | -437.7 | -362.4 | 10.00 | 10.00 | 0.00 |
| 7,300.0 | 66.18 | 89.28 | 7,085.2 | -2,185.20 | 527.5 | -350.2 | -275.6 | 10.00 | 10.00 | 0.00 |
| 7,400.0 | 76.18 | 89.28 | 7,117.4 | -2,217.42 | 528.7 | -255.7 | -181.7 | 10.00 | 10.00 | 0.00 |
| CODELL | | | | | | | | | | |
| 7,431.0 | 79.28 | 89.28 | 7,124.0 | -2,224.00 | 529.1 | -225.4 | -151.7 | 10.00 | 10.00 | 0.00 |
| 7,500.0 | 86.18 | 89.28 | 7,132.7 | -2,232.73 | 530.0 | -157.0 | -83.8 | 10.00 | 10.00 | 0.00 |
| HZ LP (P3): 270ft FNL & 460ft FWL of Sec 22 | | | | | | | | | | |
| 7,538.2 | 90.00 | 89.28 | 7,134.0 | -2,234.00 | 530.4 | -118.8 | -45.9 | 10.00 | 10.00 | 0.00 |
| 7,600.0 | 90.00 | 89.28 | 7,134.0 | -2,234.00 | 531.2 | -57.0 | 15.4 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 90.00 | 89.28 | 7,134.0 | -2,233.99 | 532.5 | 43.0 | 114.7 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 90.00 | 89.28 | 7,134.0 | -2,233.99 | 533.7 | 143.0 | 213.9 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 90.00 | 89.28 | 7,134.0 | -2,233.99 | 535.0 | 243.0 | 313.1 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 90.00 | 89.28 | 7,134.0 | -2,233.99 | 536.2 | 343.0 | 412.4 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 90.00 | 89.28 | 7,134.0 | -2,233.98 | 537.5 | 442.9 | 511.6 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 90.00 | 89.28 | 7,134.0 | -2,233.98 | 538.7 | 542.9 | 610.9 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|---------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 10 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft |
| Site: | NW NW SEC. 22 T4N R68W 6th P.M. | North Reference: | True |
| Well: | MLD 10 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #3 | | |

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 | 89.28 | 7,134.0 | -2,233.98 | 540.0 | 642.9 | 710.1 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 90.00 | 89.28 | 7,134.0 | -2,233.98 | 541.2 | 742.9 | 809.3 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 542.5 | 842.9 | 908.6 | 0.00 | 0.00 | 0.00 |
| 8,600.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 543.7 | 942.9 | 1,007.8 | 0.00 | 0.00 | 0.00 |
| 8,700.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 545.0 | 1,042.9 | 1,107.1 | 0.00 | 0.00 | 0.00 |
| 8,800.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 546.2 | 1,142.9 | 1,206.3 | 0.00 | 0.00 | 0.00 |
| 8,900.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 547.5 | 1,242.9 | 1,305.5 | 0.00 | 0.00 | 0.00 |
| 9,000.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 548.7 | 1,342.9 | 1,404.8 | 0.00 | 0.00 | 0.00 |
| 9,100.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 550.0 | 1,442.9 | 1,504.0 | 0.00 | 0.00 | 0.00 |
| 9,200.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 551.2 | 1,542.9 | 1,603.3 | 0.00 | 0.00 | 0.00 |
| 9,300.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 552.5 | 1,642.8 | 1,702.5 | 0.00 | 0.00 | 0.00 |
| 9,400.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 553.7 | 1,742.8 | 1,801.8 | 0.00 | 0.00 | 0.00 |
| 9,500.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 555.0 | 1,842.8 | 1,901.0 | 0.00 | 0.00 | 0.00 |
| 9,600.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 556.2 | 1,942.8 | 2,000.2 | 0.00 | 0.00 | 0.00 |
| 9,700.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 557.5 | 2,042.8 | 2,099.5 | 0.00 | 0.00 | 0.00 |
| 9,800.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 558.7 | 2,142.8 | 2,198.7 | 0.00 | 0.00 | 0.00 |
| 9,900.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 560.0 | 2,242.8 | 2,298.0 | 0.00 | 0.00 | 0.00 |
| 10,000.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 561.2 | 2,342.8 | 2,397.2 | 0.00 | 0.00 | 0.00 |
| 10,100.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 562.5 | 2,442.8 | 2,496.4 | 0.00 | 0.00 | 0.00 |
| 10,200.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 563.7 | 2,542.8 | 2,595.7 | 0.00 | 0.00 | 0.00 |
| 10,300.0 | 90.00 | 89.28 | 7,134.0 | -2,233.96 | 565.0 | 2,642.8 | 2,694.9 | 0.00 | 0.00 | 0.00 |
| 10,400.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 566.2 | 2,742.8 | 2,794.2 | 0.00 | 0.00 | 0.00 |
| 10,500.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 567.5 | 2,842.8 | 2,893.4 | 0.00 | 0.00 | 0.00 |
| 10,600.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 568.7 | 2,942.7 | 2,992.6 | 0.00 | 0.00 | 0.00 |
| 10,700.0 | 90.00 | 89.28 | 7,134.0 | -2,233.97 | 570.0 | 3,042.7 | 3,091.9 | 0.00 | 0.00 | 0.00 |
| 10,800.0 | 90.00 | 89.29 | 7,134.0 | -2,233.97 | 571.2 | 3,142.7 | 3,191.1 | 0.00 | 0.00 | 0.00 |
| 10,900.0 | 90.00 | 89.29 | 7,134.0 | -2,233.97 | 572.5 | 3,242.7 | 3,290.4 | 0.00 | 0.00 | 0.00 |
| 11,000.0 | 90.00 | 89.29 | 7,134.0 | -2,233.97 | 573.7 | 3,342.7 | 3,389.6 | 0.00 | 0.00 | 0.00 |
| 11,100.0 | 90.00 | 89.29 | 7,134.0 | -2,233.98 | 574.9 | 3,442.7 | 3,488.8 | 0.00 | 0.00 | 0.00 |
| 11,200.0 | 90.00 | 89.29 | 7,134.0 | -2,233.98 | 576.2 | 3,542.7 | 3,588.1 | 0.00 | 0.00 | 0.00 |
| 11,300.0 | 90.00 | 89.29 | 7,134.0 | -2,233.98 | 577.4 | 3,642.7 | 3,687.3 | 0.00 | 0.00 | 0.00 |
| 11,400.0 | 90.00 | 89.29 | 7,134.0 | -2,233.98 | 578.7 | 3,742.7 | 3,786.6 | 0.00 | 0.00 | 0.00 |
| 11,500.0 | 90.00 | 89.29 | 7,134.0 | -2,233.99 | 579.9 | 3,842.7 | 3,885.8 | 0.00 | 0.00 | 0.00 |
| 11,600.0 | 90.00 | 89.29 | 7,134.0 | -2,233.99 | 581.2 | 3,942.7 | 3,985.1 | 0.00 | 0.00 | 0.00 |
| 11,700.0 | 90.00 | 89.29 | 7,134.0 | -2,233.99 | 582.4 | 4,042.7 | 4,084.3 | 0.00 | 0.00 | 0.00 |
| 11,800.0 | 90.00 | 89.29 | 7,134.0 | -2,234.00 | 583.7 | 4,142.7 | 4,183.5 | 0.00 | 0.00 | 0.00 |
| 11,900.0 | 90.00 | 89.29 | 7,134.0 | -2,234.00 | 584.9 | 4,242.6 | 4,282.8 | 0.00 | 0.00 | 0.00 |
| BHL (P3): 270ft FNL & 460ft FEL of Sec 22 | | | | | | | | | | |
| 11,942.5 | 90.00 | 89.29 | 7,134.0 | -2,234.00 | 585.5 | 4,285.1 | 4,325.0 | 0.00 | 0.00 | 0.00 |

Formations

| MD (usft) | TVD (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|--------------|---------------|----------|-----------|------------|-------------------------|
| 3,293.0 | 3,266.0 | PARKMAN | | 0.00 | |
| 3,949.1 | 3,911.0 | SUSSEX | | 0.00 | |
| 4,355.0 | 4,310.0 | SHANNON | | 0.00 | |
| 6,873.7 | 6,790.0 | NIOBRARA | | 0.00 | |
| 7,431.0 | 7,124.0 | CODELL | | 0.00 | |

| | | | |
|------------------|---------------------------------|-------------------------------------|---------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 10 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft |
| Site: | NW NW SEC. 22 T4N R68W 6th P.M. | North Reference: | True |
| Well: | MLD 10 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #3 | | |

Plan Annotations

| MD (usft) | TVD (usft) | Local Coordinates | | Comment |
|--------------|---------------|-------------------|-----------------|---|
| | | +N/-S (usft) | +E/-W (usft) | |
| 0.0 | 0.0 | 0.0 | 0.0 | SHL: 802ft FNL & 576ft FWL of Sec 22 |
| 1,350.0 | 1,350.0 | 0.0 | 0.0 | START NUDGE (2°/100ft BUR) |
| 1,878.1 | 1,875.1 | 29.3 | -38.7 | EOB TO 10.56° INC |
| 6,080.2 | 6,006.0 | 494.0 | -653.0 | END OF TANGENT |
| 6,608.3 | 6,531.1 | 523.3 | -691.7 | EOD TO VERTICAL |
| 6,638.3 | 6,561.1 | 523.3 | -691.7 | KOP (10°/100ft BUR) |
| 7,538.2 | 7,134.0 | 530.4 | -118.8 | HZ LP (P3): 270ft FNL & 460ft FWL of Sec 22 |
| 11,942.5 | 7,134.0 | 585.5 | 4,285.1 | BHL (P3): 270ft FNL & 460ft FEL of Sec 22 |