

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

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

MLD 9

ORIGINAL WELLBORE

01 June, 2017

Plan: PROPOSAL #2

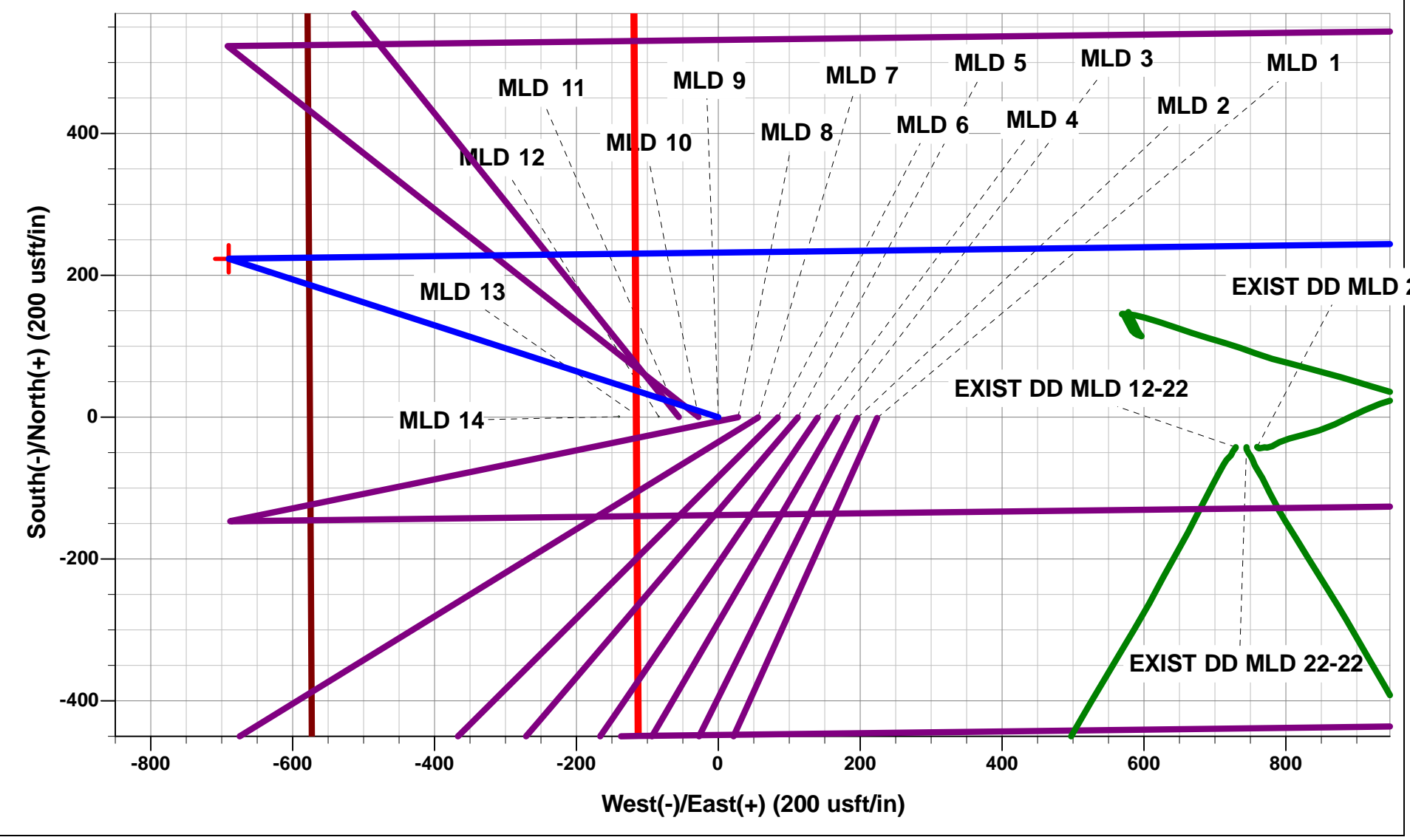




Project: WELD COUNTY, COLORADO (NAD 83)
Site: SW SW SEC. 22 T4N R68W 6th P.M.
Well: MLD 9
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

| ANNOTATIONS | | | | | | | | |
|-------------|---------|-------|--------|-------|--------|--------|--------|----------------------------|
| TVD | MD | Inc | Azi | +N/-S | +E/-W | VSect | Dep | Annotation |
| 1450.0 | 1450.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | START NUDGE (2°/100ft BUR) |
| 1947.7 | 1950.2 | 10.00 | 287.94 | 13.4 | -41.4 | -40.5 | 43.6 | EOB TO 10° INC |
| 5565.4 | 5623.8 | 10.00 | 287.94 | 210.0 | -648.6 | -633.2 | 681.7 | END OF TANGENT |
| 6063.1 | 6124.0 | 0.00 | 287.94 | 223.4 | -690.0 | -673.6 | 725.3 | EOD TO VERTICAL |
| 6336.1 | 6397.0 | 0.00 | 0.00 | 223.4 | -690.0 | -673.6 | 725.3 | KOP (10°/100ft BUR) |
| 6909.0 | 7296.9 | 90.00 | 89.28 | 230.6 | -117.2 | -101.6 | 1298.1 | HZ LP - MLD 9 (P2) |
| 6909.0 | 11700.5 | 90.00 | 89.30 | 285.3 | 4286.1 | 4295.5 | 5701.7 | BHL - MLD 9 (P2) |

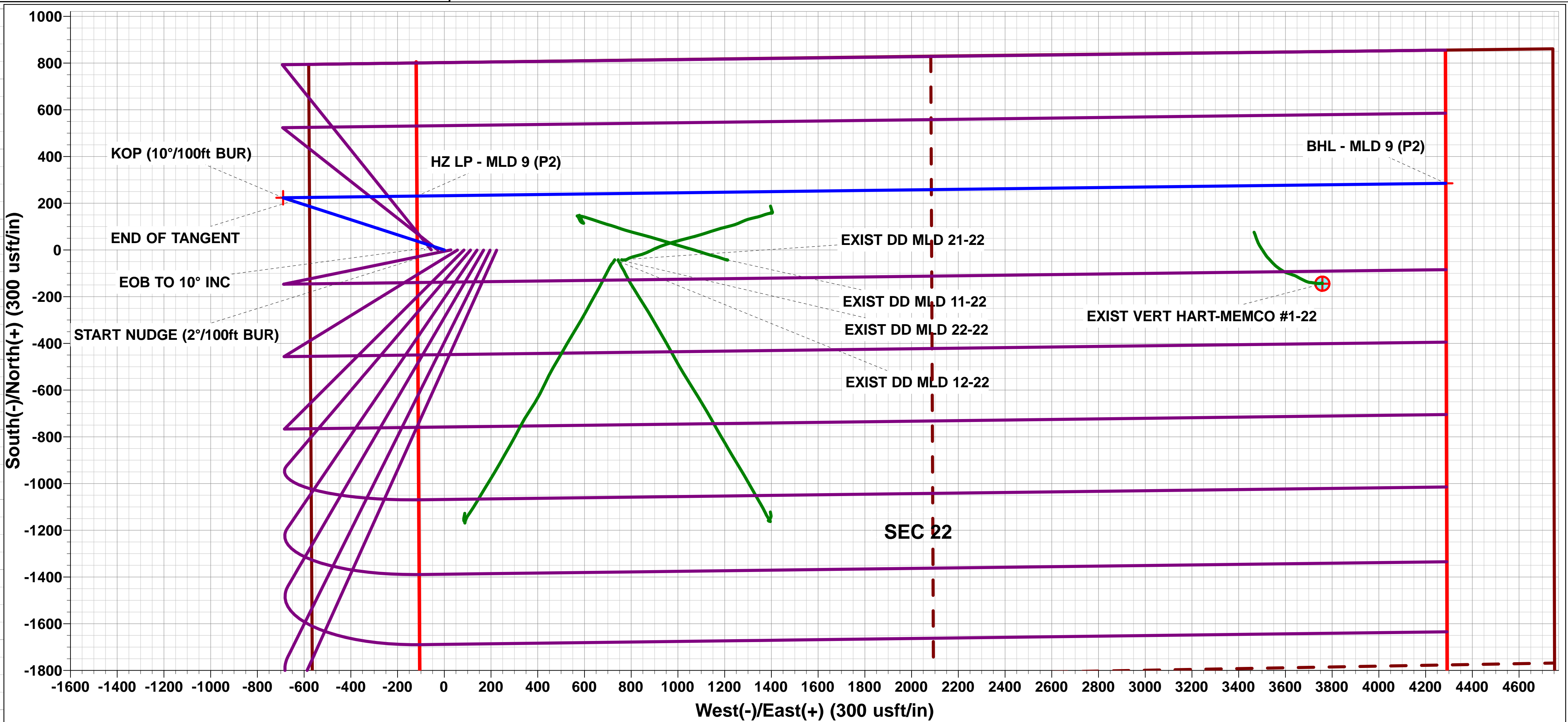
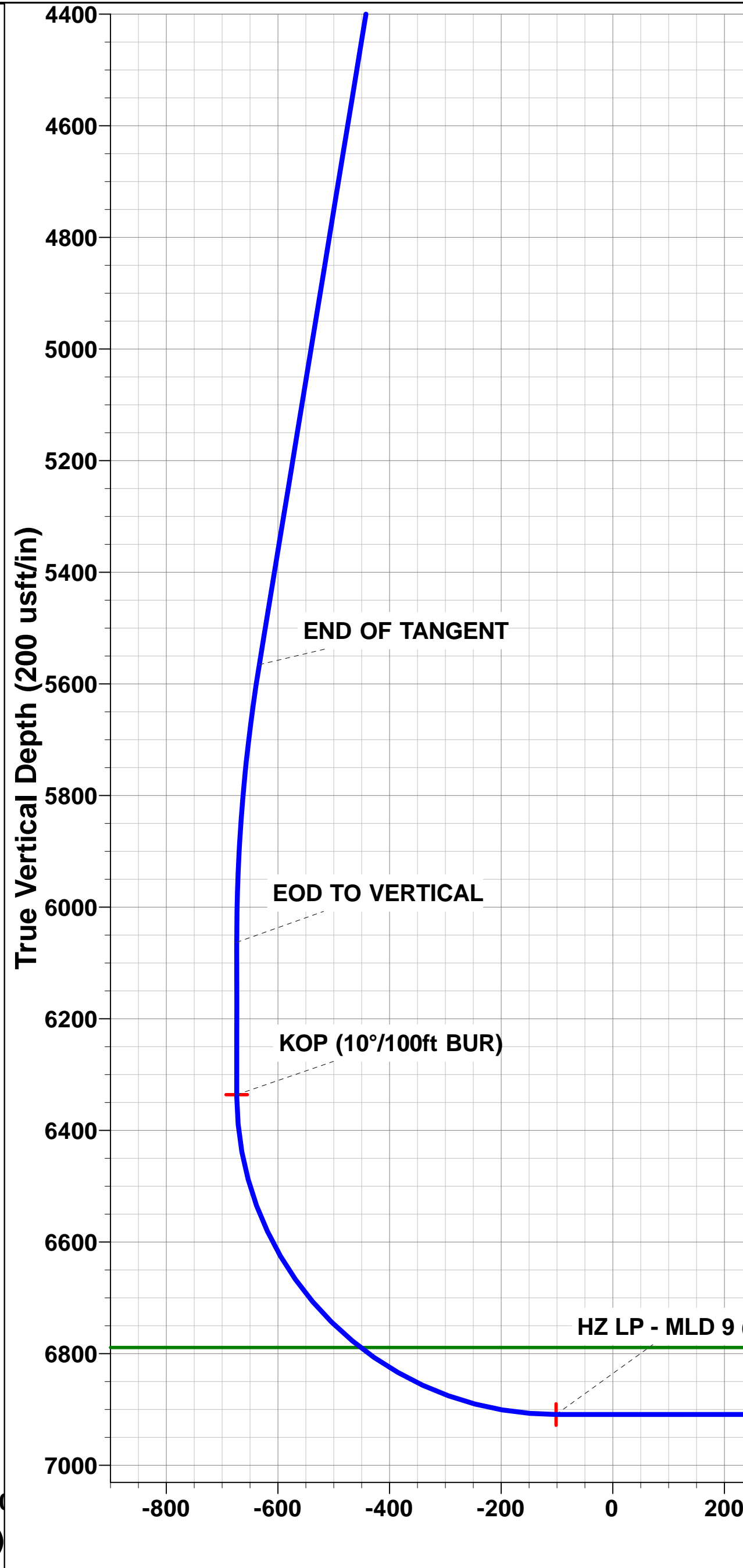
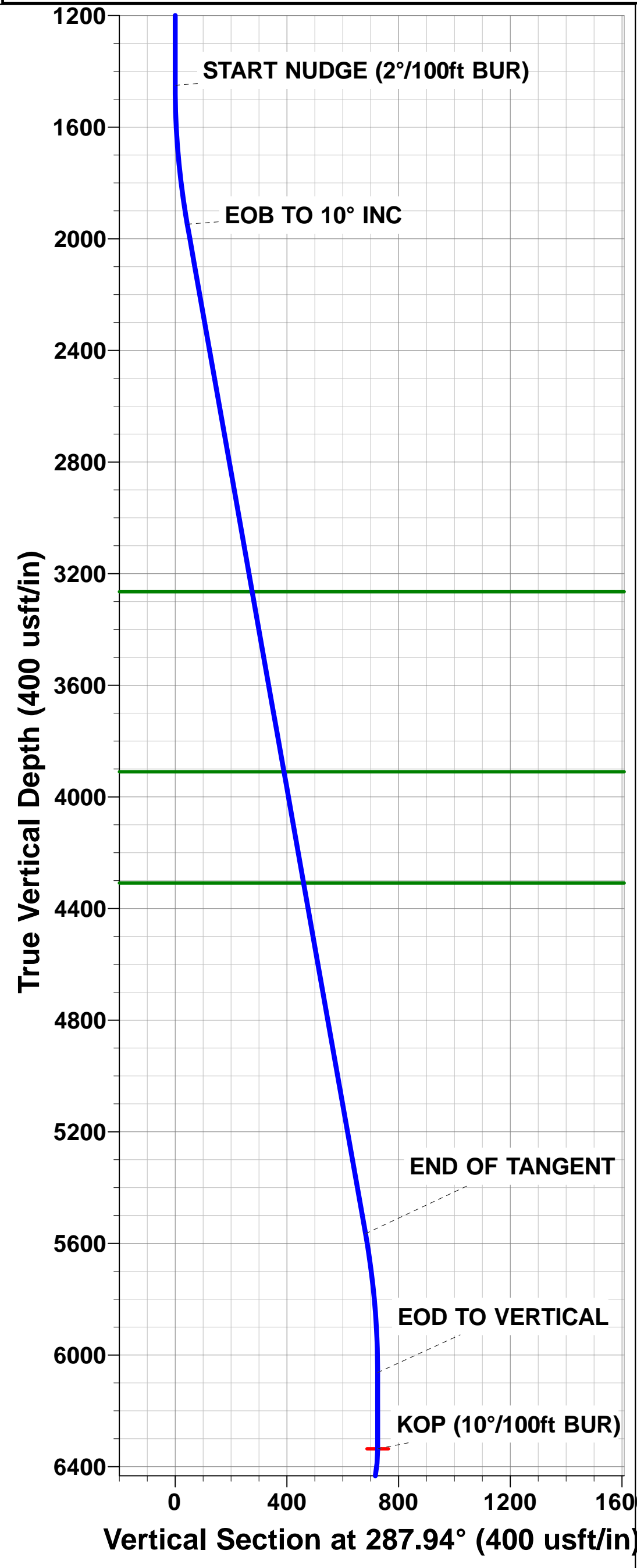
| WELLBORE TARGET DETAILS (LAT/LONG) | | | | | |
|------------------------------------|--------|-------|--------|-----------|-------------|
| Name | TVD | +N/-S | +E/-W | Latitude | Longitude |
| KOP - MLD 9 (P2) | 6336.1 | 223.4 | -690.0 | 40.304584 | -104.999242 |
| HZ LP - MLD 9 (P2) | 6909.0 | 230.6 | -117.1 | 40.304604 | -104.997188 |
| BHL - MLD 9 (P2) | 6909.0 | 285.3 | 4286.1 | 40.304753 | -104.981401 |



| FORMATION TOP DETAILS | | |
|-----------------------|--------|-----------|
| TVDPath | MDPath | Formation |
| 3265.0 | 3287.9 | PARKMAN |
| 3910.0 | 3942.8 | SUSSEX |
| 4309.0 | 4348.0 | SHANNON |
| 6789.0 | 6919.3 | NIobrara |

Azimuths to True North
Magnetic North: 8.33°

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



SETBACK BOUNDARY FALLS 460ft FE/WL of Sec 22

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|--|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 9 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Site: | SW SW SEC. 22 T4N R68W 6th P.M. | North Reference: | True |
| Well: | MLD 9 | 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 SW SEC. 22 T4N R68W 6th P.M. | | |
| Site Position: | | Northing: | 1,350,393.80 usft |
| From: | Lat/Long | Easting: | 3,140,798.83 usft |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 1.10000 ft |
| | | Latitude: | 40.294131 |
| | | Longitude: | -104.995243 |
| | | Grid Convergence: | 0.33 ° |

| | | | |
|-----------------------------|-------------|----------------------------|------------------------------------|
| Well | MLD 9 | | |
| Well Position | +N-S | 3,584.8 usft | Northing: 1,353,975.92 usft |
| | +E-W | -425.3 usft | Easting: 3,140,353.10 usft |
| Position Uncertainty | 0.0 usft | Wellhead Elevation: | usft |
| | | Latitude: | 40.303971 |
| | | Longitude: | -104.996768 |
| | | Ground Level: | 4,876.0 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| 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 #2 | | | | |
| 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 | 86.19 | |

| 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 | -4,900.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,450.0 | 0.00 | 0.00 | 1,450.0 | -3,450.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,950.2 | 10.00 | 287.94 | 1,947.6 | -2,952.4 | 13.4 | -41.4 | 2.00 | 2.00 | 0.00 | 287.94 | |
| 5,623.8 | 10.00 | 287.94 | 5,565.5 | 665.5 | 210.0 | -648.6 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,124.0 | 0.00 | 0.00 | 6,063.1 | 1,163.1 | 223.4 | -690.0 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 6,397.0 | 0.00 | 0.00 | 6,336.1 | 1,436.1 | 223.4 | -690.0 | 0.00 | 0.00 | 0.00 | 0.00 | KOP - MLD 9 (P2) |
| 7,296.9 | 90.00 | 89.28 | 6,909.0 | 2,009.0 | 230.6 | -117.1 | 10.00 | 10.00 | 9.92 | 89.28 | HZ LP - MLD 9 (P2) |
| 11,700.5 | 90.00 | 89.30 | 6,909.0 | 2,009.0 | 285.3 | 4,286.1 | 0.00 | 0.00 | 0.00 | 90.81 | BHL - MLD 9 (P2) |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|--|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 9 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Site: | SW SW SEC. 22 T4N R68W 6th P.M. | North Reference: | True |
| Well: | MLD 9 | 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) |
|-----------------------------------|------------|------------|---------------|--------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| 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 |
| 1,400.0 | 0.00 | 0.00 | 1,400.0 | 3,500.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| START NUDGE (2°/100ft BUR) | | | | | | | | | | |
| 1,450.0 | 0.00 | 0.00 | 1,450.0 | 3,450.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 1.00 | 287.94 | 1,500.0 | 3,400.00 | 0.1 | -0.4 | -0.4 | 2.00 | 2.00 | 0.00 |
| 1,600.0 | 3.00 | 287.94 | 1,599.9 | 3,300.07 | 1.2 | -3.7 | -3.6 | 2.00 | 2.00 | 0.00 |
| 1,700.0 | 5.00 | 287.94 | 1,699.7 | 3,200.32 | 3.4 | -10.4 | -10.1 | 2.00 | 2.00 | 0.00 |
| 1,800.0 | 7.00 | 287.94 | 1,799.1 | 3,100.87 | 6.6 | -20.3 | -19.8 | 2.00 | 2.00 | 0.00 |
| 1,900.0 | 9.00 | 287.94 | 1,898.2 | 3,001.85 | 10.9 | -33.6 | -32.8 | 2.00 | 2.00 | 0.00 |
| EOB TO 10° INC | | | | | | | | | | |
| 1,950.2 | 10.00 | 287.94 | 1,947.7 | 2,952.34 | 13.4 | -41.4 | -40.5 | 2.00 | 2.00 | 0.00 |
| 2,000.0 | 10.00 | 287.94 | 1,996.7 | 2,903.29 | 16.1 | -49.7 | -48.5 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 10.00 | 287.94 | 2,095.2 | 2,804.82 | 21.4 | -66.2 | -64.6 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 10.00 | 287.94 | 2,193.7 | 2,706.34 | 26.8 | -82.7 | -80.8 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 10.00 | 287.94 | 2,292.1 | 2,607.86 | 32.1 | -99.2 | -96.9 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 10.00 | 287.94 | 2,390.6 | 2,509.38 | 37.5 | -115.8 | -113.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 10.00 | 287.94 | 2,489.1 | 2,410.90 | 42.8 | -132.3 | -129.2 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 10.00 | 287.94 | 2,587.6 | 2,312.42 | 48.2 | -148.8 | -145.3 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 10.00 | 287.94 | 2,686.1 | 2,213.94 | 53.5 | -165.4 | -161.4 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 10.00 | 287.94 | 2,784.5 | 2,115.46 | 58.9 | -181.9 | -177.6 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 10.00 | 287.94 | 2,883.0 | 2,016.98 | 64.2 | -198.4 | -193.7 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 10.00 | 287.94 | 2,981.5 | 1,918.50 | 69.6 | -214.9 | -209.8 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 10.00 | 287.94 | 3,080.0 | 1,820.02 | 74.9 | -231.5 | -226.0 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 10.00 | 287.94 | 3,178.5 | 1,721.54 | 80.3 | -248.0 | -242.1 | 0.00 | 0.00 | 0.00 |
| PARKMAN | | | | | | | | | | |
| 3,287.9 | 10.00 | 287.94 | 3,265.0 | 1,635.00 | 85.0 | -262.5 | -256.3 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 10.00 | 287.94 | 3,276.9 | 1,623.06 | 85.6 | -264.5 | -258.2 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 10.00 | 287.94 | 3,375.4 | 1,524.58 | 91.0 | -281.0 | -274.4 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 10.00 | 287.94 | 3,473.9 | 1,426.10 | 96.3 | -297.6 | -290.5 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 10.00 | 287.94 | 3,572.4 | 1,327.62 | 101.7 | -314.1 | -306.6 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 10.00 | 287.94 | 3,670.9 | 1,229.14 | 107.0 | -330.6 | -322.8 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 10.00 | 287.94 | 3,769.3 | 1,130.66 | 112.4 | -347.1 | -338.9 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 10.00 | 287.94 | 3,867.8 | 1,032.18 | 117.7 | -363.7 | -355.1 | 0.00 | 0.00 | 0.00 |
| SUSSEX | | | | | | | | | | |
| 3,942.8 | 10.00 | 287.94 | 3,910.0 | 990.00 | 120.0 | -370.8 | -362.0 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 10.00 | 287.94 | 3,966.3 | 933.70 | 123.1 | -380.2 | -371.2 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 10.00 | 287.94 | 4,064.8 | 835.22 | 128.4 | -396.7 | -387.3 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 10.00 | 287.94 | 4,163.3 | 736.74 | 133.8 | -413.3 | -403.5 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 10.00 | 287.94 | 4,261.7 | 638.26 | 139.1 | -429.8 | -419.6 | 0.00 | 0.00 | 0.00 |
| SHANNON | | | | | | | | | | |
| 4,348.0 | 10.00 | 287.94 | 4,309.0 | 591.00 | 141.7 | -437.7 | -427.3 | 0.00 | 0.00 | 0.00 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|--|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 9 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Site: | SW SW SEC. 22 T4N R68W 6th P.M. | North Reference: | True |
| Well: | MLD 9 | 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 | 10.00 | 287.94 | 4,360.2 | 539.78 | 144.5 | -446.3 | -435.7 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 10.00 | 287.94 | 4,458.7 | 441.30 | 149.9 | -462.8 | -451.9 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 10.00 | 287.94 | 4,557.2 | 342.82 | 155.2 | -479.4 | -468.0 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 10.00 | 287.94 | 4,655.7 | 244.34 | 160.6 | -495.9 | -484.1 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 10.00 | 287.94 | 4,754.1 | 145.86 | 165.9 | -512.4 | -500.3 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 10.00 | 287.94 | 4,852.6 | 47.38 | 171.3 | -528.9 | -516.4 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 10.00 | 287.94 | 4,951.1 | -51.10 | 176.6 | -545.5 | -532.5 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 10.00 | 287.94 | 5,049.6 | -149.57 | 182.0 | -562.0 | -548.7 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 10.00 | 287.94 | 5,148.1 | -248.05 | 187.3 | -578.5 | -564.8 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 10.00 | 287.94 | 5,246.5 | -346.53 | 192.7 | -595.0 | -580.9 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 10.00 | 287.94 | 5,345.0 | -445.01 | 198.0 | -611.6 | -597.1 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 10.00 | 287.94 | 5,443.5 | -543.49 | 203.4 | -628.1 | -613.2 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 10.00 | 287.94 | 5,542.0 | -641.97 | 208.7 | -644.6 | -629.3 | 0.00 | 0.00 | 0.00 |
| END OF TANGENT | | | | | | | | | | |
| 5,623.8 | 10.00 | 287.94 | 5,565.4 | -665.41 | 210.0 | -648.6 | -633.2 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 8.48 | 287.94 | 5,640.6 | -740.62 | 213.8 | -660.2 | -644.5 | 2.00 | -2.00 | 0.00 |
| 5,800.0 | 6.48 | 287.94 | 5,739.8 | -839.76 | 217.8 | -672.6 | -656.6 | 2.00 | -2.00 | 0.00 |
| 5,900.0 | 4.48 | 287.94 | 5,839.3 | -939.30 | 220.7 | -681.7 | -665.5 | 2.00 | -2.00 | 0.00 |
| 6,000.0 | 2.48 | 287.94 | 5,939.1 | -1,039.11 | 222.6 | -687.4 | -671.1 | 2.00 | -2.00 | 0.00 |
| 6,100.0 | 0.48 | 287.94 | 6,039.1 | -1,139.07 | 223.4 | -689.9 | -673.5 | 2.00 | -2.00 | 0.00 |
| EOD TO VERTICAL | | | | | | | | | | |
| 6,124.0 | 0.00 | 287.94 | 6,063.1 | -1,163.07 | 223.4 | -690.0 | -673.6 | 2.00 | -2.00 | 0.00 |
| 6,200.0 | 0.00 | 0.00 | 6,139.1 | -1,239.07 | 223.4 | -690.0 | -673.6 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 0.00 | 0.00 | 6,239.1 | -1,339.07 | 223.4 | -690.0 | -673.6 | 0.00 | 0.00 | 0.00 |
| KOP (10°/100ft BUR) | | | | | | | | | | |
| 6,397.0 | 0.00 | 0.00 | 6,336.1 | -1,436.07 | 223.4 | -690.0 | -673.6 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 0.30 | 89.28 | 6,339.1 | -1,439.07 | 223.4 | -690.0 | -673.6 | 9.91 | 9.91 | 0.00 |
| 6,500.0 | 10.30 | 89.28 | 6,438.5 | -1,538.52 | 223.5 | -680.8 | -664.4 | 10.00 | 10.00 | 0.00 |
| 6,600.0 | 20.30 | 89.28 | 6,534.9 | -1,634.85 | 223.8 | -654.4 | -638.1 | 10.00 | 10.00 | 0.00 |
| 6,700.0 | 30.30 | 89.28 | 6,625.1 | -1,725.15 | 224.4 | -611.7 | -595.5 | 10.00 | 10.00 | 0.00 |
| 6,800.0 | 40.30 | 89.28 | 6,706.7 | -1,806.66 | 225.1 | -554.0 | -537.9 | 10.00 | 10.00 | 0.00 |
| 6,900.0 | 50.30 | 89.28 | 6,776.9 | -1,876.90 | 226.0 | -483.0 | -467.0 | 10.00 | 10.00 | 0.00 |
| NIORARA | | | | | | | | | | |
| 6,919.3 | 52.24 | 89.28 | 6,789.0 | -1,889.00 | 226.2 | -468.0 | -451.9 | 10.00 | 10.00 | 0.00 |
| 7,000.0 | 60.30 | 89.28 | 6,833.8 | -1,933.76 | 227.0 | -400.9 | -385.0 | 10.00 | 10.00 | 0.00 |
| 7,100.0 | 70.30 | 89.28 | 6,875.5 | -1,975.48 | 228.2 | -310.2 | -294.4 | 10.00 | 10.00 | 0.00 |
| 7,200.0 | 80.31 | 89.28 | 6,900.8 | -2,000.82 | 229.4 | -213.6 | -197.9 | 10.00 | 10.00 | 0.00 |
| HZ LP - MLD 9 (P2) | | | | | | | | | | |
| 7,296.9 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 230.6 | -117.2 | -101.6 | 10.00 | 10.00 | 0.00 |
| 7,300.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 230.7 | -114.1 | -98.5 | 0.12 | 0.12 | 0.00 |
| 7,400.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 231.9 | -14.1 | 1.3 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 233.2 | 85.9 | 101.2 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 234.4 | 185.9 | 201.1 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 235.7 | 285.9 | 300.9 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 236.9 | 385.9 | 400.8 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 238.2 | 485.9 | 500.6 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 239.4 | 585.9 | 600.5 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 240.7 | 685.9 | 700.3 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 242.0 | 785.8 | 800.2 | 0.00 | 0.00 | 0.00 |
| 8,300.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 243.2 | 885.8 | 900.0 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 244.5 | 985.8 | 999.9 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 245.7 | 1,085.8 | 1,099.7 | 0.00 | 0.00 | 0.00 |
| 8,600.0 | 90.00 | 89.28 | 6,909.0 | -2,009.00 | 247.0 | 1,185.8 | 1,199.6 | 0.00 | 0.00 | 0.00 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|--|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 9 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Site: | SW SW SEC. 22 T4N R68W 6th P.M. | North Reference: | True |
| Well: | MLD 9 | 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) |
| 8,700.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 248.2 | 1,285.8 | 1,299.5 | 0.00 | 0.00 | 0.00 |
| 8,800.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 249.4 | 1,385.8 | 1,399.3 | 0.00 | 0.00 | 0.00 |
| 8,900.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 250.7 | 1,485.8 | 1,499.2 | 0.00 | 0.00 | 0.00 |
| 9,000.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 251.9 | 1,585.8 | 1,599.0 | 0.00 | 0.00 | 0.00 |
| 9,100.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 253.2 | 1,685.8 | 1,698.9 | 0.00 | 0.00 | 0.00 |
| 9,200.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 254.4 | 1,785.8 | 1,798.7 | 0.00 | 0.00 | 0.00 |
| 9,300.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 255.7 | 1,885.8 | 1,898.6 | 0.00 | 0.00 | 0.00 |
| 9,400.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 256.9 | 1,985.8 | 1,998.4 | 0.00 | 0.00 | 0.00 |
| 9,500.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 258.2 | 2,085.7 | 2,098.3 | 0.00 | 0.00 | 0.00 |
| 9,600.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 259.4 | 2,185.7 | 2,198.1 | 0.00 | 0.00 | 0.00 |
| 9,700.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 260.6 | 2,285.7 | 2,298.0 | 0.00 | 0.00 | 0.00 |
| 9,800.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 261.9 | 2,385.7 | 2,397.8 | 0.00 | 0.00 | 0.00 |
| 9,900.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 263.1 | 2,485.7 | 2,497.7 | 0.00 | 0.00 | 0.00 |
| 10,000.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 264.4 | 2,585.7 | 2,597.6 | 0.00 | 0.00 | 0.00 |
| 10,100.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 265.6 | 2,685.7 | 2,697.4 | 0.00 | 0.00 | 0.00 |
| 10,200.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 266.8 | 2,785.7 | 2,797.3 | 0.00 | 0.00 | 0.00 |
| 10,300.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 268.1 | 2,885.7 | 2,897.1 | 0.00 | 0.00 | 0.00 |
| 10,400.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 269.3 | 2,985.7 | 2,997.0 | 0.00 | 0.00 | 0.00 |
| 10,500.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 270.5 | 3,085.7 | 3,096.8 | 0.00 | 0.00 | 0.00 |
| 10,600.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 271.8 | 3,185.7 | 3,196.7 | 0.00 | 0.00 | 0.00 |
| 10,700.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 273.0 | 3,285.7 | 3,296.5 | 0.00 | 0.00 | 0.00 |
| 10,800.0 | 90.00 | 89.29 | 6,909.0 | -2,009.00 | 274.2 | 3,385.6 | 3,396.4 | 0.00 | 0.00 | 0.00 |
| 10,900.0 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 275.4 | 3,485.6 | 3,496.2 | 0.00 | 0.00 | 0.00 |
| 11,000.0 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 276.7 | 3,585.6 | 3,596.1 | 0.00 | 0.00 | 0.00 |
| 11,100.0 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 277.9 | 3,685.6 | 3,695.9 | 0.00 | 0.00 | 0.00 |
| 11,200.0 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 279.1 | 3,785.6 | 3,795.8 | 0.00 | 0.00 | 0.00 |
| 11,300.0 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 280.4 | 3,885.6 | 3,895.7 | 0.00 | 0.00 | 0.00 |
| 11,400.0 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 281.6 | 3,985.6 | 3,995.5 | 0.00 | 0.00 | 0.00 |
| 11,500.0 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 282.8 | 4,085.6 | 4,095.4 | 0.00 | 0.00 | 0.00 |
| 11,600.0 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 284.0 | 4,185.6 | 4,195.2 | 0.00 | 0.00 | 0.00 |
| 11,700.0 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 285.3 | 4,285.6 | 4,295.1 | 0.00 | 0.00 | 0.00 |
| BHL - MLD 9 (P2) | | | | | | | | | | |
| 11,700.5 | 90.00 | 89.30 | 6,909.0 | -2,009.00 | 285.3 | 4,286.1 | 4,295.5 | 0.10 | 0.00 | 0.10 |

| Formations | | | | | | |
|--------------|---------------|----------|-----------|------------|-------------------------|--|
| MD (usft) | TVD (usft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 3,287.9 | 3,265.0 | PARKMAN | | 0.00 | | |
| 3,942.8 | 3,910.0 | SUSSEX | | 0.00 | | |
| 4,348.0 | 4,309.0 | SHANNON | | 0.00 | | |
| 6,919.3 | 6,789.0 | NIOBRARA | | 0.00 | | |

| | | | |
|------------------|---------------------------------|-------------------------------------|--|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well MLD 9 |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 4900.0usft (Original Well Elev) |
| Site: | SW SW SEC. 22 T4N R68W 6th P.M. | North Reference: | True |
| Well: | MLD 9 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #2 | | |

Plan Annotations

| MD (usft) | TVD (usft) | Local Coordinates | | Comment |
|--------------|---------------|-------------------|-----------------|----------------------------|
| | | +N/-S (usft) | +E/-W (usft) | |
| 1,450.0 | 1,450.0 | 0.0 | 0.0 | START NUDGE (2°/100ft BUR) |
| 1,950.2 | 1,947.7 | 13.4 | -41.4 | EOB TO 10° INC |
| 5,623.8 | 5,565.4 | 210.0 | -648.6 | END OF TANGENT |
| 6,124.0 | 6,063.1 | 223.4 | -690.0 | EOD TO VERTICAL |
| 6,397.0 | 6,336.1 | 223.4 | -690.0 | KOP (10°/100ft BUR) |
| 7,296.9 | 6,909.0 | 230.6 | -117.2 | HZ LP - MLD 9 (P2) |
| 11,700.5 | 6,909.0 | 285.3 | 4,286.1 | BHL - MLD 9 (P2) |