

BISON OIL & GAS II, LLC

WELD COUNTY, COLORADO (NAD 83)

NW NE SEC. 13 T8N R62W 6th P.M.

FREEMAN 8-62 13-24-2

ORIGINAL WELLBORE

29 August, 2018

Plan: PROPOSAL #1





Project: WELD COUNTY, COLORADO (NAD 83)
Site: NW NE SEC. 13 T8N R62W 6th P.M.
Well: FREEMAN 8-62 13-24-2
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

| ANNOTATIONS | | | | | | | | | | |
|-------------|----------|-------|--------|----------|----------|---------|----------|---------------------------------------|--|--|
| TVD | MD | Inc | Azi | +N/-S | +E/-W | VSec | Dep | Annotation | | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | SHL: 560ft FNL & 2435ft FEL of Sec 13 | | |
| 200.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | START NUDGE (2°/100ft BUR) | | |
| 867.31 | 873.50 | 13.47 | 292.21 | 29.79 | -72.96 | -20.85 | 78.80 | EOB TO 13.47° INC | | |
| 5567.43 | 5706.56 | 13.47 | 292.21 | 455.41 | -1115.19 | -318.68 | 1204.60 | END OF TANGENT | | |
| 6234.74 | 6380.06 | 0.00 | 0.00 | 485.20 | -1188.15 | -339.53 | 1283.40 | EOD TO VERTICAL | | |
| 6334.74 | 6480.06 | 0.00 | 0.00 | 485.20 | -1188.15 | -339.53 | 1283.40 | KOP (10°/100ft BUR) | | |
| 6907.70 | 7380.07 | 90.00 | 179.92 | -87.76 | -1187.35 | 229.22 | 1856.36 | BPI: 650ft FNL & 1600ft FWL of Sec 13 | | |
| 6907.70 | 16731.62 | 90.00 | 179.92 | -9439.31 | -1174.48 | 9512.02 | 11207.92 | EPI: 600ft FSL & 1600ft FWL of Sec 24 | | |
| 6907.70 | 17031.46 | 90.00 | 179.87 | -9739.14 | -1173.94 | 9809.64 | 11507.76 | BHL: 300ft FSL & 1600ft FWL of Sec 24 | | |

PROPOSED LOCAL COORDINATES:

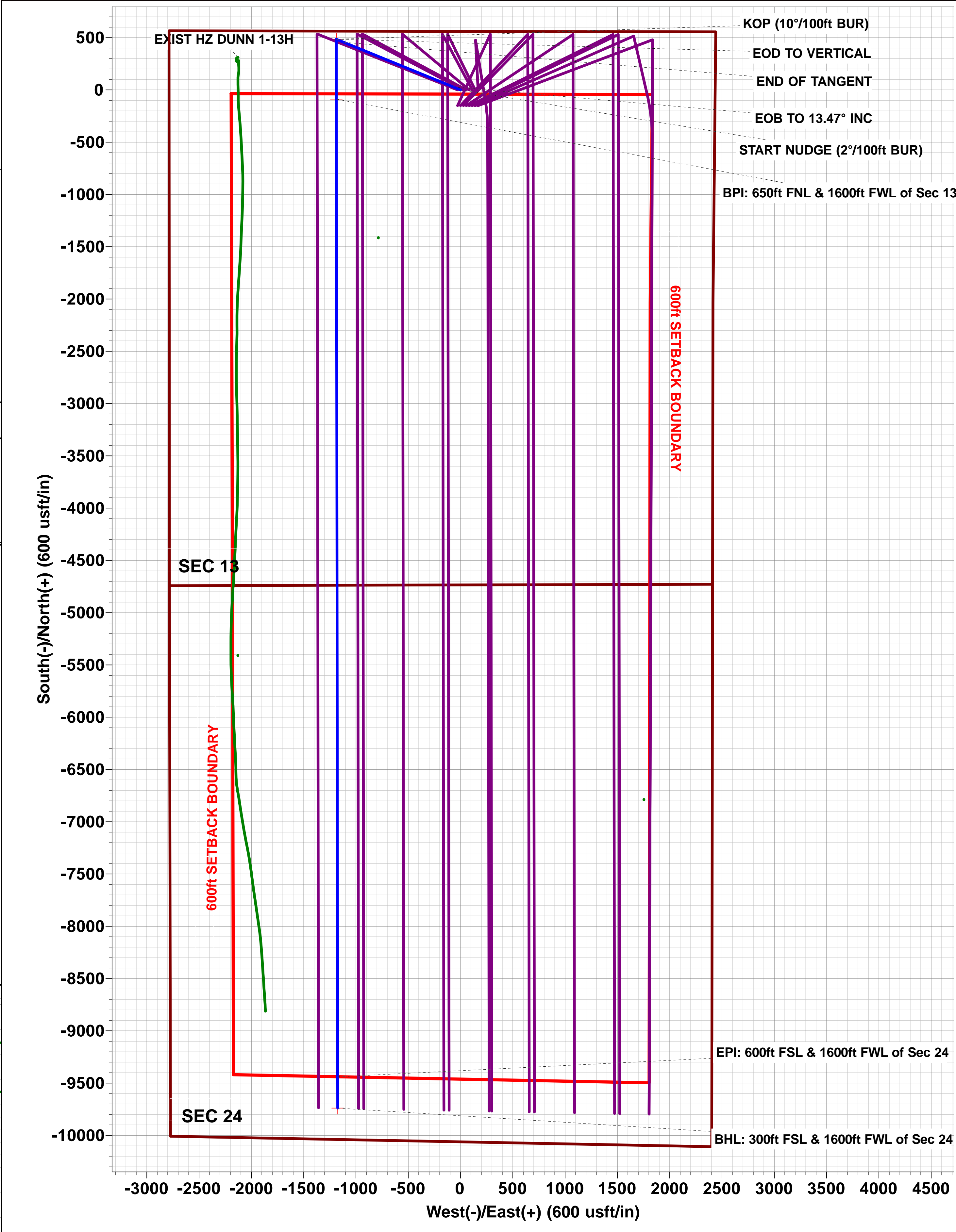
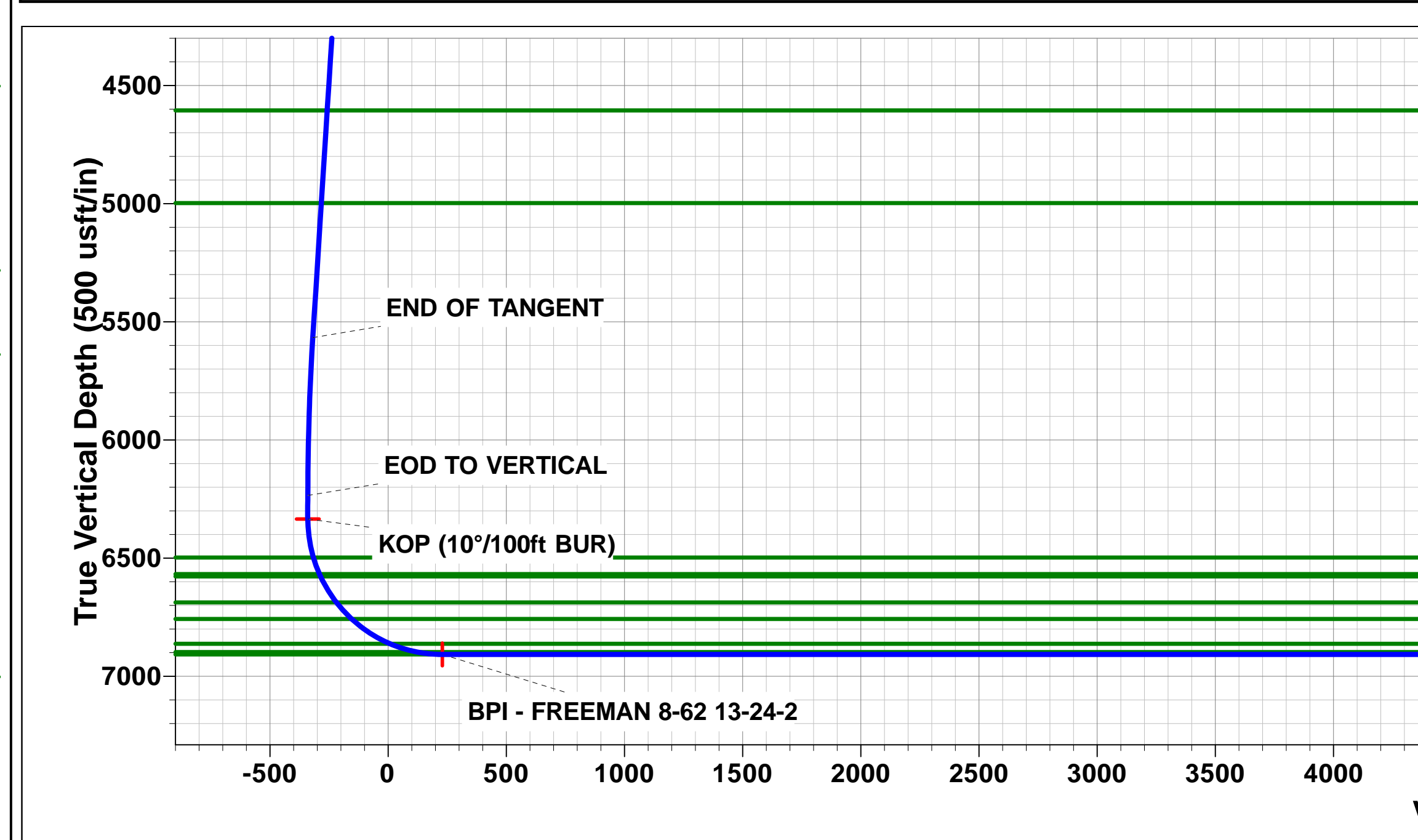
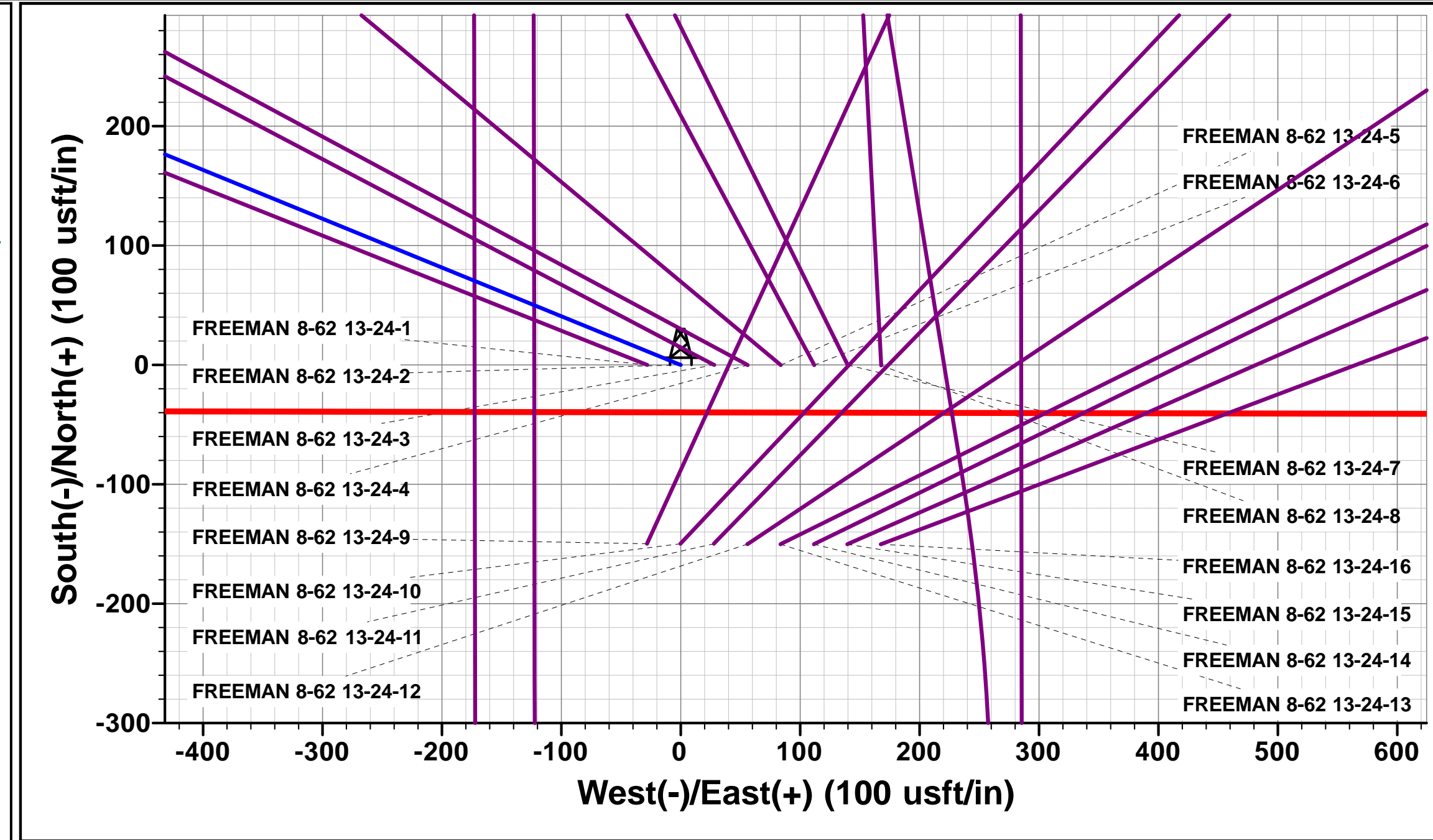
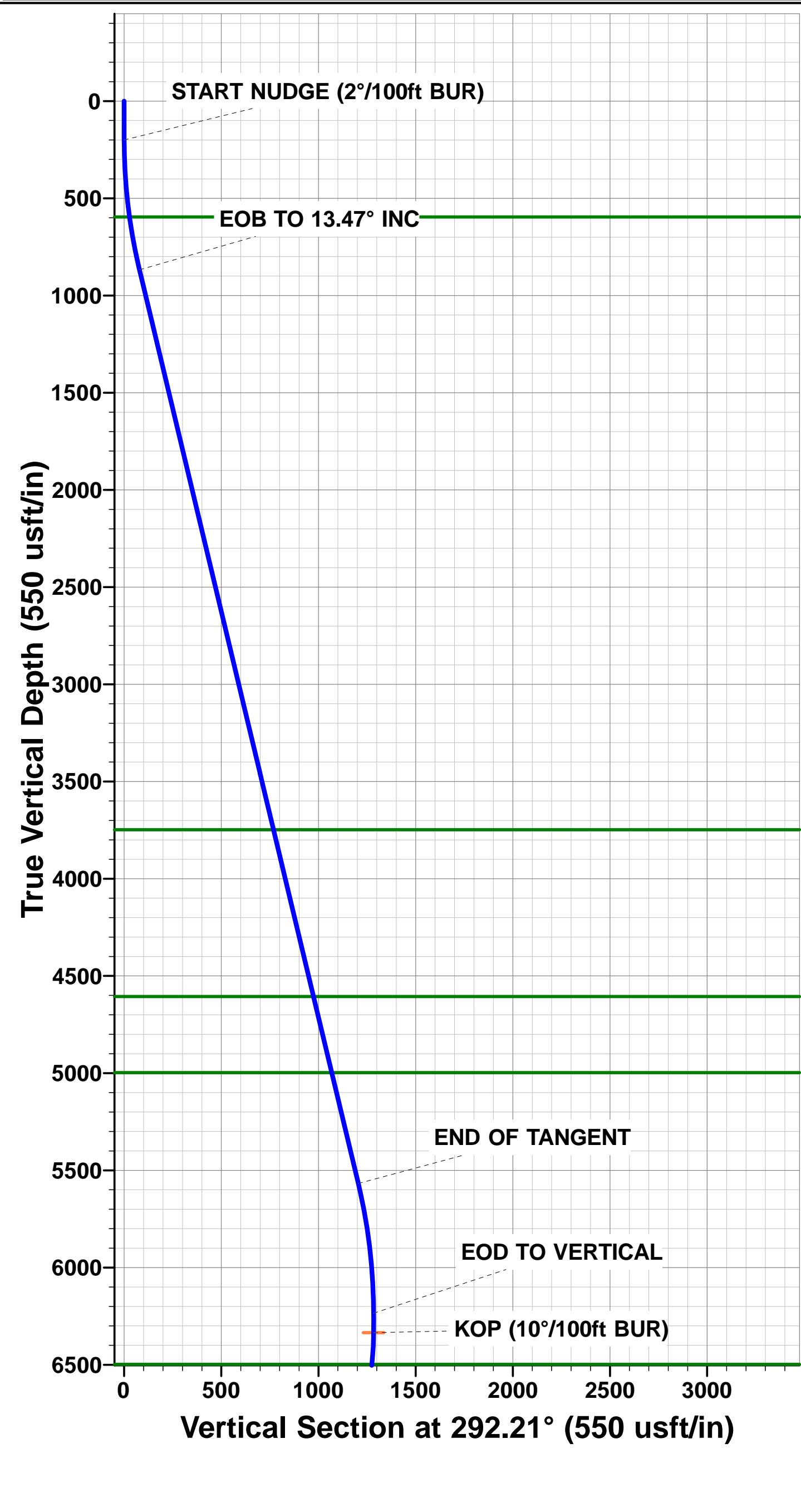
SHL: 560ft FNL & 2435ft FEL Sec 13

BPI: 650ft FNL & 1600ft FWL Sec 13

EPI: 600ft FSL & 1600ft FWL Sec 24

BHL: 300ft FSL & 1600ft FWL of Sec 24

| WELLBORE TARGET DETAILS (LAT/LONG) | | | | | |
|------------------------------------|---------|----------|----------|-----------|-------------|
| Name | TVD | +N/-S | +E/-W | Latitude | Longitude |
| KOP - FREEMAN 8-62 13-24-2 | 6334.74 | 485.20 | -1188.15 | 40.668623 | -104.271369 |
| BPI - FREEMAN 8-62 13-24-2 | 6907.70 | -87.76 | -1187.35 | 40.667050 | -104.271366 |
| EPI - FREEMAN 8-62 13-24-2 | 6907.70 | -9439.31 | -1174.48 | 40.641382 | -104.271318 |
| BHL - FREEMAN 8-62 13-24-2 | 6907.70 | -9739.14 | -1173.94 | 40.640559 | -104.271316 |



Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|---|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well FREEMAN 8-62 13-24-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Site: | NW NE SEC. 13 T8N R62W 6th P.M. | North Reference: | True |
| Well: | FREEMAN 8-62 13-24-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #1 | | |

| | | | |
|--------------------|--------------------------------|----------------------|-----------------------------|
| 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 NE SEC. 13 T8N R62W 6th P.M. | | |
| Site Position: | | Northing: | 1,488,314.17 usft |
| From: | Lat/Long | Easting: | 3,341,986.38 usft |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 1.10000ft |
| | | Latitude: | 40.667291 |
| | | Longitude: | -104.267187 |
| | | Grid Convergence: | 0.80 ° |

| | | | |
|-----------------------------|----------------------|----------------------------|------------------------------------|
| Well | FREEMAN 8-62 13-24-2 | | |
| Well Position | +N/-S | -0.01 usft | Northing: 1,488,314.54 usfi |
| | +E/-W | 28.02 usft | Easting: 3,342,014.40 usfi |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | usfi |
| | | Latitude: | 40.667291 |
| | | Longitude: | -104.267086 |
| | | Ground Level: | 5,002.70 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | ORIGINAL WELLBORE | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 29/08/2018 | 7.84 | 67.11 | 52,443 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| Design | PROPOSAL #1 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 6,907.70 | 0.00 | 0.00 | 186.87 |

| 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 |
| 0.00 | 0.00 | 0.00 | 0.00 | -5,027.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 200.00 | 0.00 | 0.00 | 200.00 | -4,827.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 873.50 | 13.47 | 292.21 | 867.31 | -4,160.39 | 29.79 | -72.96 | 2.00 | 2.00 | 0.00 | 292.21 | |
| 5,706.56 | 13.47 | 292.21 | 5,567.43 | 539.73 | 455.41 | -1,115.19 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,380.06 | 0.00 | 0.00 | 6,234.74 | 1,207.04 | 485.20 | -1,188.15 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 6,480.06 | 0.00 | 0.00 | 6,334.74 | 1,307.04 | 485.20 | -1,188.15 | 0.00 | 0.00 | 0.00 | 0.00 | KOP - FREEMAN 8 |
| 7,380.07 | 90.00 | 179.92 | 6,907.70 | 1,880.00 | -87.76 | -1,187.35 | 10.00 | 10.00 | 19.99 | 179.92 | BPI - FREEMAN 8- |
| 16,731.62 | 90.00 | 179.92 | 6,907.70 | 1,880.00 | -9,439.31 | -1,174.48 | 0.00 | 0.00 | 0.00 | 103.13 | EPI - FREEMAN 8- |
| 17,031.46 | 90.00 | 179.87 | 6,907.70 | 1,880.00 | -9,739.14 | -1,173.94 | 0.02 | 0.00 | -0.02 | -89.33 | BHL - FREEMAN 8 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|---|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well FREEMAN 8-62 13-24-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Site: | NW NE SEC. 13 T8N R62W 6th P.M. | North Reference: | True |
| Well: | FREEMAN 8-62 13-24-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #1 | | |

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: 560ft FNL & 2435ft FEL of Sec 13 | | | | | | | | | | |
| 0.00 | 0.00 | 0.00 | 0.00 | 5,027.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.00 | 0.00 | 0.00 | 100.00 | 4,927.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| START NUDGE (2°/100ft BUR) | | | | | | | | | | |
| 200.00 | 0.00 | 0.00 | 200.00 | 4,827.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 300.00 | 2.00 | 292.21 | 299.98 | 4,727.72 | 0.66 | -1.62 | -0.46 | 2.00 | 2.00 | 0.00 |
| 400.00 | 4.00 | 292.21 | 399.84 | 4,627.86 | 2.64 | -6.46 | -1.85 | 2.00 | 2.00 | 0.00 |
| 500.00 | 6.00 | 292.21 | 499.45 | 4,528.25 | 5.93 | -14.53 | -4.15 | 2.00 | 2.00 | 0.00 |
| PIERRE SHALE (BASE OF FOX HILLS) | | | | | | | | | | |
| 596.97 | 7.94 | 292.21 | 595.70 | 4,432.00 | 10.38 | -25.42 | -7.26 | 2.00 | 2.00 | 0.00 |
| 600.00 | 8.00 | 292.21 | 598.70 | 4,429.00 | 10.54 | -25.81 | -7.38 | 2.00 | 2.00 | 0.00 |
| 700.00 | 10.00 | 292.21 | 697.47 | 4,330.23 | 16.45 | -40.29 | -11.51 | 2.00 | 2.00 | 0.00 |
| 800.00 | 12.00 | 292.21 | 795.62 | 4,232.08 | 23.67 | -57.96 | -16.56 | 2.00 | 2.00 | 0.00 |
| EOB TO 13.47° INC | | | | | | | | | | |
| 873.50 | 13.47 | 292.21 | 867.31 | 4,160.39 | 29.79 | -72.96 | -20.85 | 2.00 | 2.00 | 0.00 |
| 900.00 | 13.47 | 292.21 | 893.08 | 4,134.62 | 32.13 | -78.67 | -22.48 | 0.00 | 0.00 | 0.00 |
| 1,000.00 | 13.47 | 292.21 | 990.33 | 4,037.37 | 40.93 | -100.24 | -28.64 | 0.00 | 0.00 | 0.00 |
| 1,100.00 | 13.47 | 292.21 | 1,087.58 | 3,940.12 | 49.74 | -121.80 | -34.81 | 0.00 | 0.00 | 0.00 |
| 1,200.00 | 13.47 | 292.21 | 1,184.83 | 3,842.87 | 58.55 | -143.36 | -40.97 | 0.00 | 0.00 | 0.00 |
| 1,300.00 | 13.47 | 292.21 | 1,282.08 | 3,745.62 | 67.35 | -164.93 | -47.13 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 13.47 | 292.21 | 1,379.33 | 3,648.37 | 76.16 | -186.49 | -53.29 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 13.47 | 292.21 | 1,476.58 | 3,551.12 | 84.96 | -208.06 | -59.45 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 13.47 | 292.21 | 1,573.83 | 3,453.87 | 93.77 | -229.62 | -65.62 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 13.47 | 292.21 | 1,671.08 | 3,356.62 | 102.58 | -251.19 | -71.78 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 13.47 | 292.21 | 1,768.33 | 3,259.37 | 111.38 | -272.75 | -77.94 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 13.47 | 292.21 | 1,865.58 | 3,162.12 | 120.19 | -294.32 | -84.10 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 13.47 | 292.21 | 1,962.83 | 3,064.87 | 129.00 | -315.88 | -90.27 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 13.47 | 292.21 | 2,060.07 | 2,967.63 | 137.80 | -337.45 | -96.43 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 13.47 | 292.21 | 2,157.32 | 2,870.38 | 146.61 | -359.01 | -102.59 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 13.47 | 292.21 | 2,254.57 | 2,773.13 | 155.41 | -380.58 | -108.75 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 13.47 | 292.21 | 2,351.82 | 2,675.88 | 164.22 | -402.14 | -114.92 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 13.47 | 292.21 | 2,449.07 | 2,578.63 | 173.03 | -423.71 | -121.08 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 13.47 | 292.21 | 2,546.32 | 2,481.38 | 181.83 | -445.27 | -127.24 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 13.47 | 292.21 | 2,643.57 | 2,384.13 | 190.64 | -466.84 | -133.40 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 13.47 | 292.21 | 2,740.82 | 2,286.88 | 199.45 | -488.40 | -139.57 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 13.47 | 292.21 | 2,838.07 | 2,189.63 | 208.25 | -509.97 | -145.73 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 13.47 | 292.21 | 2,935.32 | 2,092.38 | 217.06 | -531.53 | -151.89 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 13.47 | 292.21 | 3,032.57 | 1,995.13 | 225.87 | -553.10 | -158.05 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 13.47 | 292.21 | 3,129.82 | 1,897.88 | 234.67 | -574.66 | -164.21 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 13.47 | 292.21 | 3,227.07 | 1,800.63 | 243.48 | -596.22 | -170.38 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 13.47 | 292.21 | 3,324.31 | 1,703.39 | 252.28 | -617.79 | -176.54 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 13.47 | 292.21 | 3,421.56 | 1,606.14 | 261.09 | -639.35 | -182.70 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 13.47 | 292.21 | 3,518.81 | 1,508.89 | 269.90 | -660.92 | -188.86 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 13.47 | 292.21 | 3,616.06 | 1,411.64 | 278.70 | -682.48 | -195.03 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 13.47 | 292.21 | 3,713.31 | 1,314.39 | 287.51 | -704.05 | -201.19 | 0.00 | 0.00 | 0.00 |
| PARKMAN | | | | | | | | | | |
| 3,835.36 | 13.47 | 292.21 | 3,747.70 | 1,280.00 | 290.62 | -711.67 | -203.37 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 13.47 | 292.21 | 3,810.56 | 1,217.14 | 296.32 | -725.61 | -207.35 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 13.47 | 292.21 | 3,907.81 | 1,119.89 | 305.12 | -747.18 | -213.51 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 13.47 | 292.21 | 4,005.06 | 1,022.64 | 313.93 | -768.74 | -219.68 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 13.47 | 292.21 | 4,102.31 | 925.39 | 322.73 | -790.31 | -225.84 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 13.47 | 292.21 | 4,199.56 | 828.14 | 331.54 | -811.87 | -232.00 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 13.47 | 292.21 | 4,296.81 | 730.89 | 340.35 | -833.44 | -238.16 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 13.47 | 292.21 | 4,394.06 | 633.64 | 349.15 | -855.00 | -244.32 | 0.00 | 0.00 | 0.00 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|---|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well FREEMAN 8-62 13-24-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Site: | NW NE SEC. 13 T8N R62W 6th P.M. | North Reference: | True |
| Well: | FREEMAN 8-62 13-24-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #1 | | |

| 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) |
| 4,600.00 | 13.47 | 292.21 | 4,491.31 | 536.39 | 357.96 | -876.57 | -250.49 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 13.47 | 292.21 | 4,588.55 | 439.15 | 366.77 | -898.13 | -256.65 | 0.00 | 0.00 | 0.00 |
| SUSSEX | | | | | | | | | | |
| 4,717.63 | 13.47 | 292.21 | 4,605.70 | 422.00 | 368.32 | -901.93 | -257.74 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 13.47 | 292.21 | 4,685.80 | 341.90 | 375.57 | -919.70 | -262.81 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 13.47 | 292.21 | 4,783.05 | 244.65 | 384.38 | -941.26 | -268.97 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 13.47 | 292.21 | 4,880.30 | 147.40 | 393.19 | -962.83 | -275.14 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 13.47 | 292.21 | 4,977.55 | 50.15 | 401.99 | -984.39 | -281.30 | 0.00 | 0.00 | 0.00 |
| SHANNON | | | | | | | | | | |
| 5,120.72 | 13.47 | 292.21 | 4,997.70 | 30.00 | 403.82 | -988.86 | -282.58 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 13.47 | 292.21 | 5,074.80 | -47.10 | 410.80 | -1,005.96 | -287.46 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 13.47 | 292.21 | 5,172.05 | -144.35 | 419.60 | -1,027.52 | -293.62 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 13.47 | 292.21 | 5,269.30 | -241.60 | 428.41 | -1,049.08 | -299.79 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 13.47 | 292.21 | 5,366.55 | -338.85 | 437.22 | -1,070.65 | -305.95 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 13.47 | 292.21 | 5,463.80 | -436.10 | 446.02 | -1,092.21 | -312.11 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 13.47 | 292.21 | 5,561.05 | -533.35 | 454.83 | -1,113.78 | -318.27 | 0.00 | 0.00 | 0.00 |
| END OF TANGENT | | | | | | | | | | |
| 5,706.56 | 13.47 | 292.21 | 5,567.43 | -539.73 | 455.41 | -1,115.19 | -318.68 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 11.60 | 292.21 | 5,658.63 | -630.93 | 463.07 | -1,133.97 | -324.04 | 2.00 | -2.00 | 0.00 |
| 5,900.00 | 9.60 | 292.21 | 5,756.92 | -729.22 | 470.03 | -1,151.00 | -328.91 | 2.00 | -2.00 | 0.00 |
| 6,000.00 | 7.60 | 292.21 | 5,855.79 | -828.09 | 475.68 | -1,164.84 | -332.87 | 2.00 | -2.00 | 0.00 |
| 6,100.00 | 5.60 | 292.21 | 5,955.12 | -927.42 | 480.03 | -1,175.49 | -335.91 | 2.00 | -2.00 | 0.00 |
| 6,200.00 | 3.60 | 292.21 | 6,054.80 | -1,027.10 | 483.06 | -1,182.91 | -338.03 | 2.00 | -2.00 | 0.00 |
| 6,300.00 | 1.60 | 292.21 | 6,154.69 | -1,126.99 | 484.78 | -1,187.11 | -339.23 | 2.00 | -2.00 | 0.00 |
| EOD TO VERTICAL | | | | | | | | | | |
| 6,380.06 | 0.00 | 0.00 | 6,234.74 | -1,207.04 | 485.20 | -1,188.15 | -339.53 | 2.00 | -2.00 | 0.00 |
| 6,400.00 | 0.00 | 0.00 | 6,254.68 | -1,226.98 | 485.20 | -1,188.15 | -339.53 | 0.00 | 0.00 | 0.00 |
| KOP (10°/100ft BUR) | | | | | | | | | | |
| 6,480.06 | 0.00 | 0.00 | 6,334.74 | -1,307.04 | 485.20 | -1,188.15 | -339.53 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 1.99 | 179.92 | 6,354.67 | -1,326.97 | 484.85 | -1,188.15 | -339.18 | 10.00 | 10.00 | 0.00 |
| 6,600.00 | 11.99 | 179.92 | 6,453.80 | -1,426.10 | 472.69 | -1,188.13 | -327.11 | 10.00 | 10.00 | 0.00 |
| SHARON SPRINGS SHALE | | | | | | | | | | |
| 6,645.30 | 16.52 | 179.92 | 6,497.70 | -1,470.00 | 461.54 | -1,188.12 | -316.04 | 10.00 | 10.00 | 0.00 |
| 6,700.00 | 21.99 | 179.92 | 6,549.32 | -1,521.62 | 443.50 | -1,188.09 | -298.13 | 10.00 | 10.00 | 0.00 |
| NIORARA FORMATION | | | | | | | | | | |
| 6,719.97 | 23.99 | 179.92 | 6,567.70 | -1,540.00 | 435.70 | -1,188.08 | -290.39 | 10.00 | 10.00 | 0.00 |
| NIORARA A CHALK | | | | | | | | | | |
| 6,730.96 | 25.09 | 179.92 | 6,577.70 | -1,550.00 | 431.14 | -1,188.07 | -285.86 | 10.00 | 10.00 | 0.00 |
| 6,800.00 | 31.99 | 179.92 | 6,638.31 | -1,610.61 | 398.17 | -1,188.03 | -253.14 | 10.00 | 10.00 | 0.00 |
| NIORARA B CHALK | | | | | | | | | | |
| 6,860.33 | 38.03 | 179.92 | 6,687.70 | -1,660.00 | 363.57 | -1,187.98 | -218.79 | 10.00 | 10.00 | 0.00 |
| 6,900.00 | 41.99 | 179.92 | 6,718.08 | -1,690.38 | 338.07 | -1,187.94 | -193.48 | 10.00 | 10.00 | 0.00 |
| NIORARA C CHALK | | | | | | | | | | |
| 6,955.85 | 47.58 | 179.92 | 6,757.70 | -1,730.00 | 298.75 | -1,187.89 | -154.44 | 10.00 | 10.00 | 0.00 |
| 7,000.00 | 51.99 | 179.92 | 6,786.20 | -1,758.50 | 265.04 | -1,187.84 | -120.98 | 10.00 | 10.00 | 0.00 |
| 7,100.00 | 61.99 | 179.92 | 6,840.60 | -1,812.90 | 181.28 | -1,187.72 | -37.84 | 10.00 | 10.00 | 0.00 |
| FT HAYS | | | | | | | | | | |
| 7,151.47 | 67.14 | 179.92 | 6,862.70 | -1,835.00 | 134.82 | -1,187.66 | 8.28 | 10.00 | 10.00 | 0.00 |
| 7,200.00 | 71.99 | 179.92 | 6,879.64 | -1,851.94 | 89.36 | -1,187.60 | 53.41 | 10.00 | 10.00 | 0.00 |
| CODELL | | | | | | | | | | |
| 7,272.86 | 79.28 | 179.92 | 6,897.70 | -1,870.00 | 18.82 | -1,187.50 | 123.43 | 10.00 | 10.00 | 0.00 |
| 7,300.00 | 81.99 | 179.92 | 6,902.12 | -1,874.42 | -7.96 | -1,187.46 | 150.00 | 10.00 | 10.00 | 0.00 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|---|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well FREEMAN 8-62 13-24-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Site: | NW NE SEC. 13 T8N R62W 6th P.M. | North Reference: | True |
| Well: | FREEMAN 8-62 13-24-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #1 | | |

| 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) |
| BPI: 650ft FNL & 1600ft FWL of Sec 13 - CODELL LP | | | | | | | | | | |
| 7,380.07 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -87.76 | -1,187.35 | 229.22 | 10.00 | 10.00 | 0.00 |
| 7,400.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -107.69 | -1,187.32 | 249.01 | 0.00 | 0.00 | 0.00 |
| 7,500.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -207.69 | -1,187.18 | 348.27 | 0.00 | 0.00 | 0.00 |
| 7,600.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -307.69 | -1,187.04 | 447.54 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -407.69 | -1,186.90 | 546.80 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -507.69 | -1,186.76 | 646.07 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -607.69 | -1,186.62 | 745.33 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -707.69 | -1,186.48 | 844.60 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -807.69 | -1,186.34 | 943.86 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -907.69 | -1,186.20 | 1,043.13 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -1,007.69 | -1,186.06 | 1,142.39 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -1,107.69 | -1,185.92 | 1,241.66 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -1,207.69 | -1,185.78 | 1,340.92 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -1,307.69 | -1,185.65 | 1,440.18 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -1,407.69 | -1,185.51 | 1,539.45 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -1,507.69 | -1,185.37 | 1,638.71 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -1,607.69 | -1,185.23 | 1,737.98 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -1,707.69 | -1,185.09 | 1,837.24 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -1,807.69 | -1,184.95 | 1,936.51 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -1,907.69 | -1,184.81 | 2,035.77 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,007.69 | -1,184.67 | 2,135.04 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,107.69 | -1,184.53 | 2,234.30 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,207.69 | -1,184.39 | 2,333.57 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,307.69 | -1,184.25 | 2,432.83 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,407.69 | -1,184.12 | 2,532.10 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,507.69 | -1,183.98 | 2,631.36 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,607.69 | -1,183.84 | 2,730.62 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,707.69 | -1,183.70 | 2,829.89 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,807.69 | -1,183.56 | 2,929.15 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -2,907.69 | -1,183.42 | 3,028.42 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,007.69 | -1,183.28 | 3,127.68 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,107.69 | -1,183.15 | 3,226.95 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,207.69 | -1,183.01 | 3,326.21 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,307.69 | -1,182.87 | 3,425.48 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,407.69 | -1,182.73 | 3,524.74 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,507.69 | -1,182.59 | 3,624.01 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,607.69 | -1,182.45 | 3,723.27 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,707.69 | -1,182.32 | 3,822.54 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,807.69 | -1,182.18 | 3,921.80 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -3,907.69 | -1,182.04 | 4,021.07 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,007.69 | -1,181.90 | 4,120.33 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,107.69 | -1,181.76 | 4,219.60 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,207.69 | -1,181.63 | 4,318.86 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,307.69 | -1,181.49 | 4,418.12 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,407.69 | -1,181.35 | 4,517.39 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,507.69 | -1,181.21 | 4,616.65 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,607.69 | -1,181.08 | 4,715.92 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,707.69 | -1,180.94 | 4,815.18 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,807.69 | -1,180.80 | 4,914.45 | 0.00 | 0.00 | 0.00 |
| 12,200.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -4,907.69 | -1,180.66 | 5,013.71 | 0.00 | 0.00 | 0.00 |
| 12,300.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,007.69 | -1,180.52 | 5,112.98 | 0.00 | 0.00 | 0.00 |
| 12,400.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,107.69 | -1,180.39 | 5,212.24 | 0.00 | 0.00 | 0.00 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|---|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well FREEMAN 8-62 13-24-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Site: | NW NE SEC. 13 T8N R62W 6th P.M. | North Reference: | True |
| Well: | FREEMAN 8-62 13-24-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #1 | | |

| 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) |
| 12,500.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,207.69 | -1,180.25 | 5,311.51 | 0.00 | 0.00 | 0.00 |
| 12,600.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,307.69 | -1,180.11 | 5,410.77 | 0.00 | 0.00 | 0.00 |
| 12,700.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,407.69 | -1,179.98 | 5,510.04 | 0.00 | 0.00 | 0.00 |
| 12,800.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,507.69 | -1,179.84 | 5,609.30 | 0.00 | 0.00 | 0.00 |
| 12,900.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,607.69 | -1,179.70 | 5,708.57 | 0.00 | 0.00 | 0.00 |
| 13,000.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,707.69 | -1,179.56 | 5,807.83 | 0.00 | 0.00 | 0.00 |
| 13,100.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,807.69 | -1,179.43 | 5,907.10 | 0.00 | 0.00 | 0.00 |
| 13,200.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -5,907.69 | -1,179.29 | 6,006.36 | 0.00 | 0.00 | 0.00 |
| 13,300.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,007.69 | -1,179.15 | 6,105.63 | 0.00 | 0.00 | 0.00 |
| 13,400.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,107.69 | -1,179.02 | 6,204.89 | 0.00 | 0.00 | 0.00 |
| 13,500.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,207.69 | -1,178.88 | 6,304.16 | 0.00 | 0.00 | 0.00 |
| 13,600.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,307.69 | -1,178.74 | 6,403.42 | 0.00 | 0.00 | 0.00 |
| 13,700.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,407.69 | -1,178.60 | 6,502.69 | 0.00 | 0.00 | 0.00 |
| 13,800.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,507.69 | -1,178.47 | 6,601.95 | 0.00 | 0.00 | 0.00 |
| 13,900.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,607.69 | -1,178.33 | 6,701.22 | 0.00 | 0.00 | 0.00 |
| 14,000.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,707.69 | -1,178.19 | 6,800.48 | 0.00 | 0.00 | 0.00 |
| 14,100.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,807.69 | -1,178.06 | 6,899.75 | 0.00 | 0.00 | 0.00 |
| 14,200.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -6,907.69 | -1,177.92 | 6,999.01 | 0.00 | 0.00 | 0.00 |
| 14,300.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,007.69 | -1,177.78 | 7,098.28 | 0.00 | 0.00 | 0.00 |
| 14,400.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,107.69 | -1,177.65 | 7,197.54 | 0.00 | 0.00 | 0.00 |
| 14,500.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,207.69 | -1,177.51 | 7,296.81 | 0.00 | 0.00 | 0.00 |
| 14,600.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,307.69 | -1,177.37 | 7,396.07 | 0.00 | 0.00 | 0.00 |
| 14,700.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,407.69 | -1,177.24 | 7,495.33 | 0.00 | 0.00 | 0.00 |
| 14,800.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,507.69 | -1,177.10 | 7,594.60 | 0.00 | 0.00 | 0.00 |
| 14,900.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,607.69 | -1,176.97 | 7,693.86 | 0.00 | 0.00 | 0.00 |
| 15,000.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,707.69 | -1,176.83 | 7,793.13 | 0.00 | 0.00 | 0.00 |
| 15,100.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,807.69 | -1,176.69 | 7,892.39 | 0.00 | 0.00 | 0.00 |
| 15,200.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -7,907.69 | -1,176.56 | 7,991.66 | 0.00 | 0.00 | 0.00 |
| 15,300.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -8,007.69 | -1,176.42 | 8,090.92 | 0.00 | 0.00 | 0.00 |
| 15,400.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -8,107.69 | -1,176.29 | 8,190.19 | 0.00 | 0.00 | 0.00 |
| 15,500.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -8,207.69 | -1,176.15 | 8,289.45 | 0.00 | 0.00 | 0.00 |
| 15,600.00 | 90.00 | 179.92 | 6,907.69 | -1,879.99 | -8,307.69 | -1,176.01 | 8,388.72 | 0.00 | 0.00 | 0.00 |
| 15,700.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -8,407.69 | -1,175.88 | 8,487.98 | 0.00 | 0.00 | 0.00 |
| 15,800.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -8,507.69 | -1,175.74 | 8,587.25 | 0.00 | 0.00 | 0.00 |
| 15,900.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -8,607.69 | -1,175.61 | 8,686.51 | 0.00 | 0.00 | 0.00 |
| 16,000.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -8,707.69 | -1,175.47 | 8,785.78 | 0.00 | 0.00 | 0.00 |
| 16,100.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -8,807.69 | -1,175.33 | 8,885.04 | 0.00 | 0.00 | 0.00 |
| 16,200.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -8,907.69 | -1,175.20 | 8,984.31 | 0.00 | 0.00 | 0.00 |
| 16,300.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -9,007.69 | -1,175.06 | 9,083.57 | 0.00 | 0.00 | 0.00 |
| 16,400.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -9,107.69 | -1,174.93 | 9,182.84 | 0.00 | 0.00 | 0.00 |
| 16,500.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -9,207.69 | -1,174.79 | 9,282.10 | 0.00 | 0.00 | 0.00 |
| 16,600.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -9,307.69 | -1,174.66 | 9,381.37 | 0.00 | 0.00 | 0.00 |
| 16,700.00 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -9,407.69 | -1,174.52 | 9,480.63 | 0.00 | 0.00 | 0.00 |
| EPI: 600ft FSL & 1600ft FWL of Sec 24 | | | | | | | | | | |
| 16,731.62 | 90.00 | 179.92 | 6,907.70 | -1,880.00 | -9,439.31 | -1,174.48 | 9,512.02 | 0.00 | 0.00 | 0.00 |
| 16,800.00 | 90.00 | 179.91 | 6,907.70 | -1,880.00 | -9,507.69 | -1,174.38 | 9,579.90 | 0.02 | 0.00 | -0.02 |
| 16,900.00 | 90.00 | 179.89 | 6,907.70 | -1,880.00 | -9,607.69 | -1,174.21 | 9,679.16 | 0.02 | 0.00 | -0.02 |
| 17,000.00 | 90.00 | 179.88 | 6,907.70 | -1,880.00 | -9,707.69 | -1,174.01 | 9,778.42 | 0.02 | 0.00 | -0.02 |
| BHL: 300ft FSL & 1600ft FWL of Sec 24 | | | | | | | | | | |
| 17,031.46 | 90.00 | 179.87 | 6,907.70 | -1,880.00 | -9,739.14 | -1,173.94 | 9,809.64 | 0.02 | 0.00 | -0.02 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|---|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well FREEMAN 8-62 13-24-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB-EST @ 5027.70usft (Original Well Elev) |
| Site: | NW NE SEC. 13 T8N R62W 6th P.M. | North Reference: | True |
| Well: | FREEMAN 8-62 13-24-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #1 | | |

| Formations | | | | | |
|--------------|---------------|------------------------------|-----------|------------|-------------------------|
| MD (usft) | TVD (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
| 596.97 | 595.70 | PIERRE SHALE (BASE OF FOX HI | | | |
| 3,835.36 | 3,747.70 | PARKMAN | | | |
| 4,717.63 | 4,605.70 | SUSSEX | | | |
| 5,120.72 | 4,997.70 | SHANNON | | | |
| 6,645.30 | 6,497.70 | SHARON SPRINGS SHALE | | | |
| 6,719.97 | 6,567.70 | NIOBRARA FORMATION | | | |
| 6,730.96 | 6,577.70 | NIOBRARA A CHALK | | | |
| 6,860.33 | 6,687.70 | NIOBRARA B CHALK | | | |
| 6,955.85 | 6,757.70 | NIOBRARA C CHALK | | | |
| 7,151.47 | 6,862.70 | FT HAYS | | | |
| 7,272.86 | 6,897.70 | CODELL | | | |
| 7,380.07 | 6,907.70 | CODELL LP | | | |

| Plan Annotations | | | | |
|------------------|---------------|-------------------|-----------------|---------------------------------------|
| MD (usft) | TVD (usft) | Local Coordinates | | Comment |
| | | +N/-S (usft) | +E/-W (usft) | |
| 0.00 | 0.00 | 0.00 | 0.00 | SHL: 560ft FNL & 2435ft FEL of Sec 13 |
| 200.00 | 200.00 | 0.00 | 0.00 | START NUDGE (2°/100ft BUR) |
| 873.50 | 867.31 | 29.79 | -72.96 | EOB TO 13.47° INC |
| 5,706.56 | 5,567.43 | 455.41 | -1,115.19 | END OF TANGENT |
| 6,380.06 | 6,234.74 | 485.20 | -1,188.15 | EOD TO VERTICAL |
| 6,480.06 | 6,334.74 | 485.20 | -1,188.15 | KOP (10°/100ft BUR) |
| 7,380.07 | 6,907.70 | -87.76 | -1,187.35 | BPI: 650ft FNL & 1600ft FWL of Sec 13 |
| 16,731.62 | 6,907.70 | -9,439.31 | -1,174.48 | EPI: 600ft FSL & 1600ft FWL of Sec 24 |
| 17,031.46 | 6,907.70 | -9,739.14 | -1,173.94 | BHL: 300ft FSL & 1600ft FWL of Sec 24 |