

BISON OIL & GAS II, LLC

WELD COUNTY, COLORADO (NAD 83)

SE SE SEC. 14 T8N R60W 6th P.M.

BOOMSLANG FED 8-60 14B-13-18-2

ORIGINAL WELLBORE

21 July, 2019

Plan: PROPOSAL #4



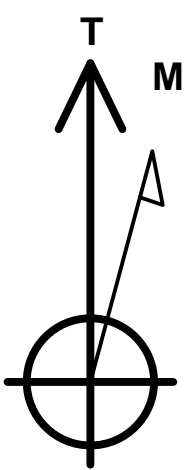
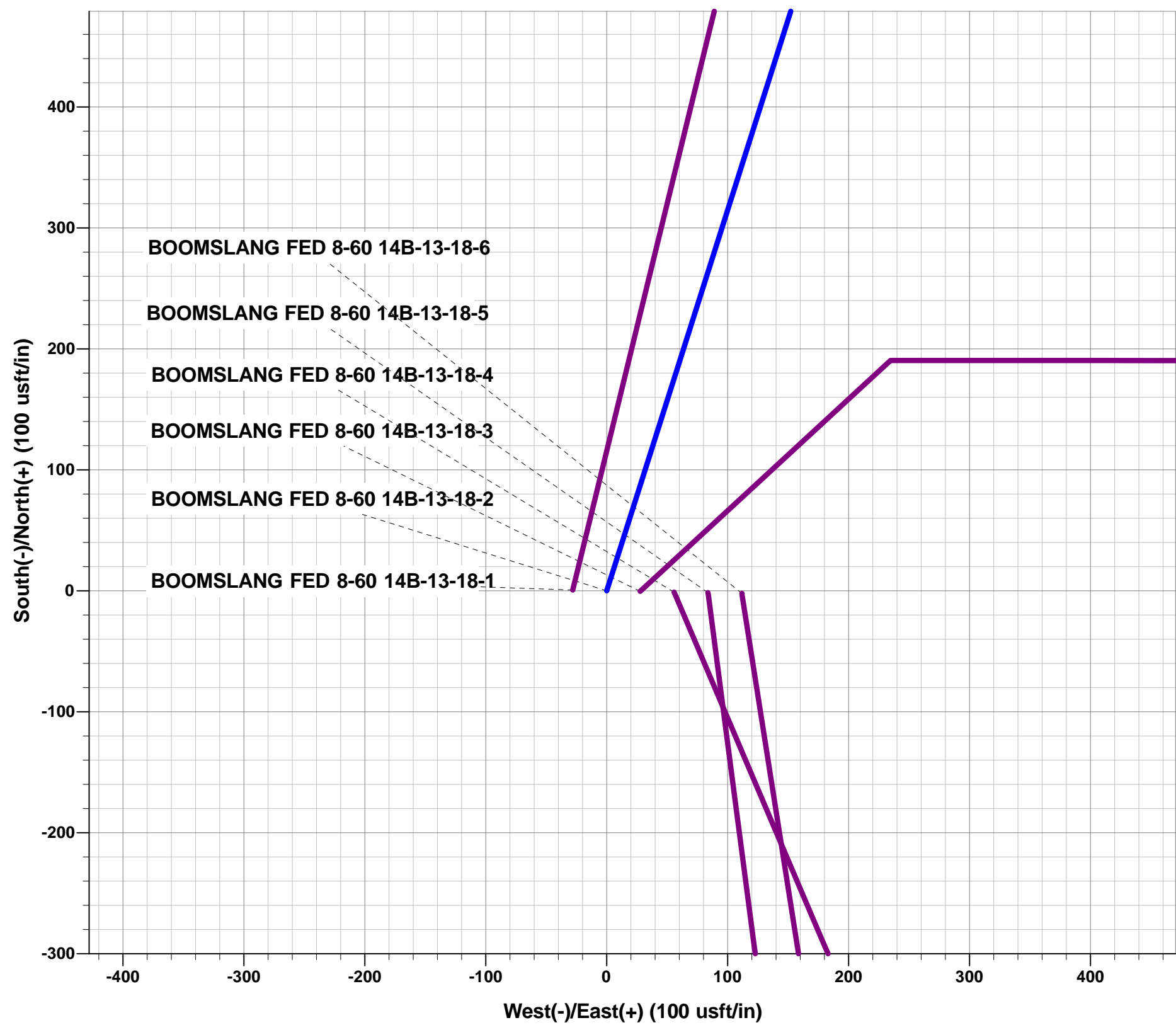
Project: WELD COUNTY, COLORADO (NAD 83)
Site: SE SE SEC. 14 T8N R60W 6th P.M.
Well: BOOMSLANG FED 8-60 14B-13-18-2
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #4

ANNOTATIONS

| TVD | MD | Inc | Azi | +N/-S | +E/-W | VSect | Dep | Annotation |
|---------|----------|-------|-------|--------|---------|---------|---------|--|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | SHL: 1313ft FSL & 504ft FEL of Sec 14 |
| 500.00 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | START NUDGE (2°/100ft BUR) |
| 1095.62 | 1100.00 | 12.00 | 17.63 | 59.66 | 18.96 | 24.32 | 62.60 | EOB TO 12° INC |
| 4333.54 | 4410.25 | 12.00 | 17.63 | 715.59 | 227.37 | 291.65 | 750.84 | END OF TANGENT |
| 4929.16 | 5010.25 | 0.00 | 0.00 | 775.25 | 246.33 | 315.97 | 813.44 | EOD TO VERTICAL |
| 5630.54 | 5711.63 | 0.00 | 0.00 | 775.25 | 246.33 | 315.97 | 813.44 | KOP (10°/100ft BUR) |
| 6203.50 | 6611.64 | 90.00 | 90.03 | 774.95 | 819.29 | 886.52 | 1386.41 | BPI: 2084ft FSL & 300ft FWL of Sec 13 |
| 6203.49 | 8954.94 | 90.00 | 90.03 | 773.73 | 3162.59 | 3219.95 | 3729.71 | ENTER COC 77278 |
| 6203.49 | 11635.44 | 90.00 | 90.03 | 772.42 | 5843.09 | 5889.17 | 6410.21 | EXIT COC 77278 |
| 6203.50 | 14156.70 | 90.00 | 90.03 | 771.25 | 8364.35 | 8399.83 | 8931.47 | EPI: 2104ft FSL & 2557ft FWL of Sec 18 |
| 6203.50 | 14168.37 | 90.00 | 90.38 | 771.21 | 8376.02 | 8411.45 | 8943.14 | EOT TO 90.38° AZ |
| 6203.50 | 14214.69 | 90.00 | 90.38 | 770.91 | 8422.34 | 8457.55 | 8989.46 | BHL: 2105ft FSL & 2615ft FWL of Sec 18 |

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude |
|---|---------|--------|---------|-----------|-------------|
| KOP - BOOMSLANG FED 8-60 14B-13-18-2 (P4) | 5630.54 | 775.25 | 246.33 | 40.660998 | -104.049475 |
| BPI - BOOMSLANG FED 8-60 14B-13-18-2 (P4) | 6203.50 | 774.95 | 819.29 | 40.660997 | -104.047410 |
| EPI - BOOMSLANG FED 8-60 14B-13-18-2 (P4) | 6203.50 | 771.25 | 8364.35 | 40.660983 | -104.020215 |
| BHL - BOOMSLANG FED 8-60 14B-13-18-2 (P4) | 6203.50 | 770.91 | 8422.34 | 40.660982 | -104.020006 |



Azimuths to True North
Magnetic North: 7.63°

Magnetic Field
Strength: 52371.0snT
Dip Angle: 67.11°
Date: 11/06/2019
Model: IGRF2015

FORMATION TOP DETAILS

| TVDPath | MDPath | Formation |
|---------|---------|----------------------------|
| 467.80 | 468.50 | PIERRE SH (BASE FOX HILLS) |
| 3197.80 | 3249.86 | PARKMAN |
| 3917.80 | 3985.94 | SUSSEX |
| 4657.80 | 4739.19 | SHANNON |
| 6012.80 | 6131.06 | SHARON SPRINGS SHALE |
| 6072.80 | 6217.97 | NIOBRARA FORMATION |
| 6082.80 | 6234.01 | NIOBRARA A CHALK |
| 6172.80 | 6425.40 | NIOBRARA B CHALK |
| 6202.80 | 6611.64 | NIOBRARA B LP |

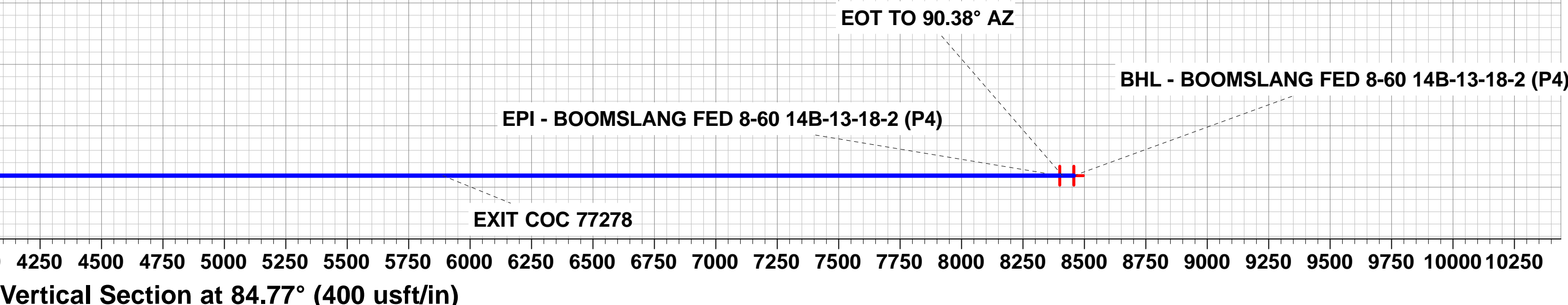
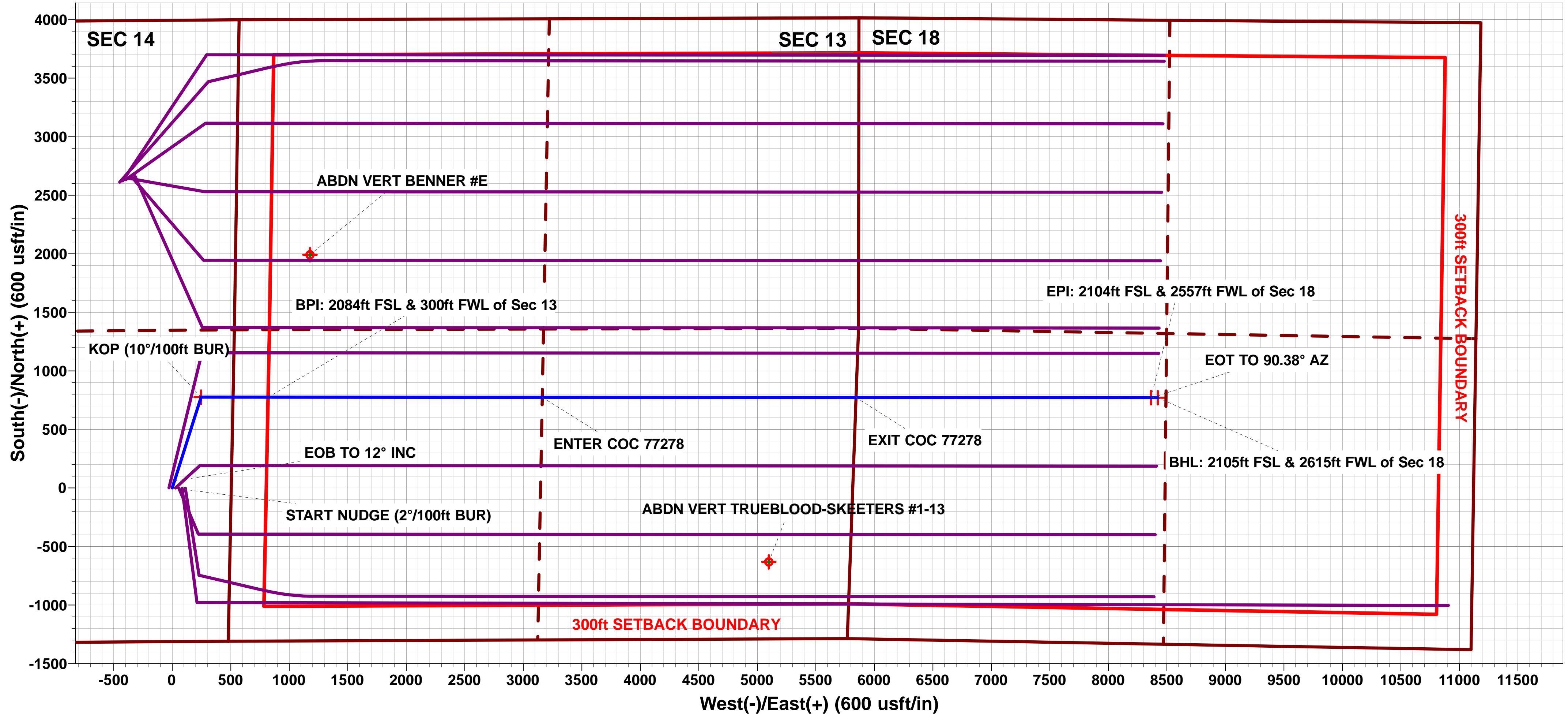
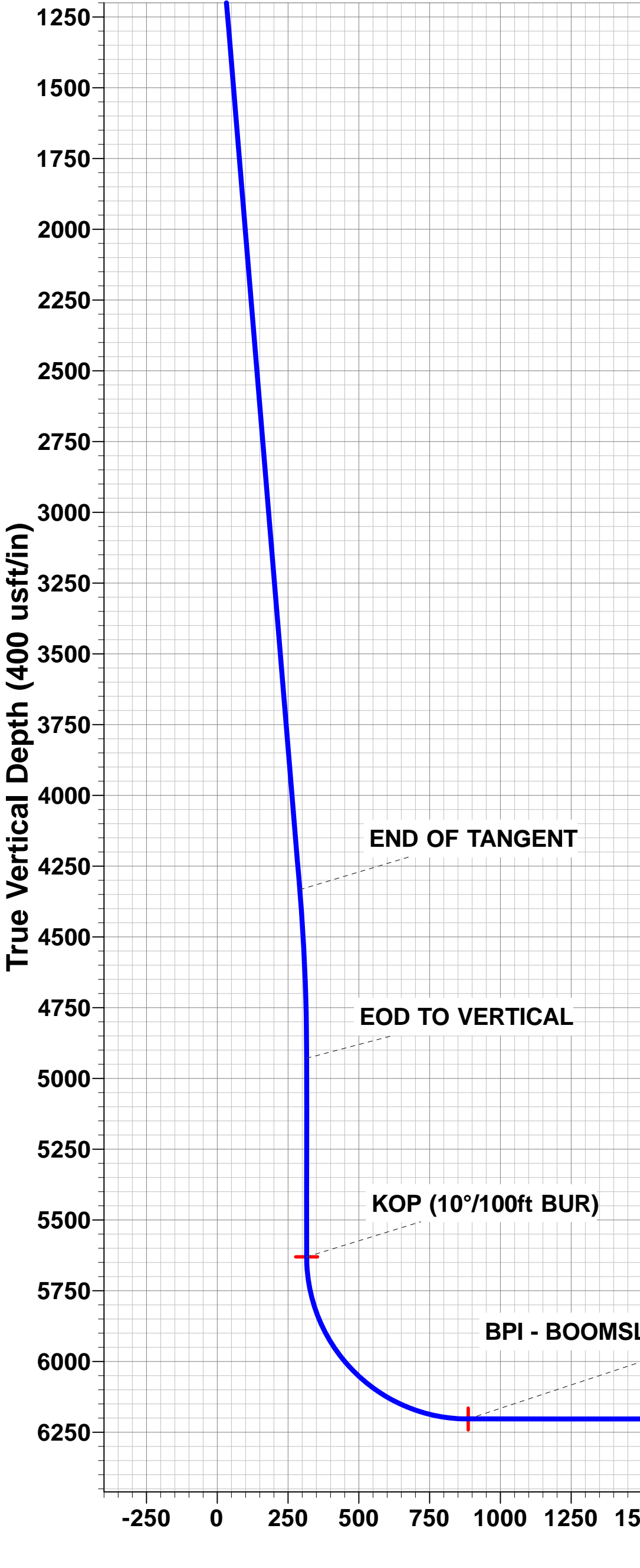
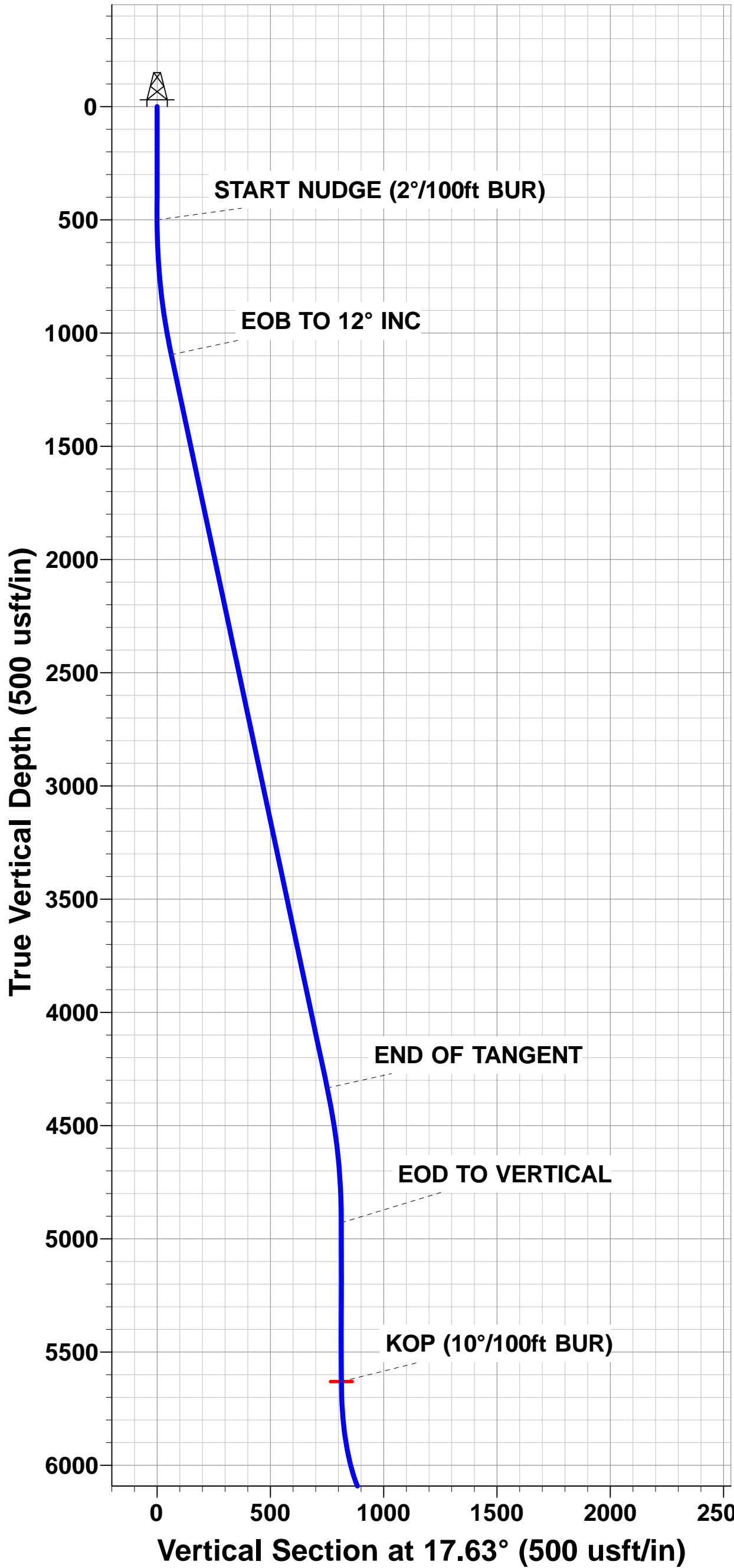
PROPOSED LOCAL COORDINATES:

SHL:1313ft FSL & 504ft FEL of Sec 14

BEGIN PROD INT: 2084ft FSL & 300ft FWL of Sec 13

END PROD INTERVAL: 2104ft FSL & 2557ft FWL of Sec 18

BHL: 2105ft FSL & 2615ft FWL of Sec 18



Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well BOOMSLANG FED 8-60 14B-13-18-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB 25' @ 4918.50usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB 25' @ 4918.50usft |
| Site: | SE SE SEC. 14 T8N R60W 6th P.M. | North Reference: | True |
| Well: | BOOMSLANG FED 8-60 14B-13-18-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #4 | | |

| | | | |
|--------------------|--------------------------------|----------------------|-----------------------------|
| 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 | SE SE SEC. 14 T8N R60W 6th P.M. | | | | |
| Site Position: | | Northing: | 1,486,231.70 usft | Latitude: | 40.659078 |
| From: | Lat/Long | Easting: | 3,402,151.68 usft | Longitude: | -104.050458 |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 1.10000ft | Grid Convergence: | 0.94 ° |

| | | | | | | |
|----------------------|--------------------------------|-------------|---------------------|-------------------|---------------|---------------|
| Well | BOOMSLANG FED 8-60 14B-13-18-2 | | | | | |
| Well Position | +N/-S | -75.79 usft | Northing: | 1,486,156.35 usft | Latitude: | 40.658870 |
| | +E/-W | 26.36 usft | Easting: | 3,402,179.27 usft | Longitude: | -104.050363 |
| Position Uncertainty | | 0.00 usft | Wellhead Elevation: | usft | Ground Level: | 4,893.50 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | ORIGINAL WELLBORE | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 11/06/2019 | 7.63 | 67.11 | 52,371 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| Design | PROPOSAL #4 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 6,203.50 | 0.00 | 0.00 | 84.77 |

| 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 | -4,918.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 500.00 | 0.00 | 0.00 | 500.00 | -4,418.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,100.00 | 12.00 | 17.63 | 1,095.62 | -3,822.88 | 59.66 | 18.96 | 2.00 | 2.00 | 0.00 | 17.63 | |
| 4,410.25 | 12.00 | 17.63 | 4,333.54 | -584.96 | 715.59 | 227.37 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,010.25 | 0.00 | 0.00 | 4,929.16 | 10.66 | 775.25 | 246.33 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 5,711.63 | 0.00 | 0.00 | 5,630.54 | 712.04 | 775.25 | 246.33 | 0.00 | 0.00 | 0.00 | 0.00 | KOP - BOOMSLANG |
| 6,611.64 | 90.00 | 90.03 | 6,203.50 | 1,285.00 | 774.95 | 819.29 | 10.00 | 10.00 | 10.00 | 90.03 | BPI - BOOMSLANG |
| 14,156.70 | 90.00 | 90.03 | 6,203.50 | 1,285.00 | 771.25 | 8,364.35 | 0.00 | 0.00 | 0.00 | -95.04 | EPI - BOOMSLANG |
| 14,168.37 | 90.00 | 90.38 | 6,203.50 | 1,285.00 | 771.21 | 8,376.02 | 3.00 | 0.00 | 3.00 | 89.96 | |
| 14,214.69 | 90.00 | 90.38 | 6,203.50 | 1,285.00 | 770.91 | 8,422.34 | 0.00 | 0.00 | 0.00 | 0.00 | BHL - BOOMSLANG |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well BOOMSLANG FED 8-60 14B-13-18-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB 25' @ 4918.50usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB 25' @ 4918.50usft |
| Site: | SE SE SEC. 14 T8N R60W 6th P.M. | North Reference: | True |
| Well: | BOOMSLANG FED 8-60 14B-13-18-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #4 | | |

| 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: 1313ft FSL & 504ft FEL of Sec 14 | | | | | | | | | | |
| 0.00 | 0.00 | 0.00 | 0.00 | 4,918.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.00 | 0.00 | 0.00 | 100.00 | 4,818.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 4,718.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 300.00 | 0.00 | 0.00 | 300.00 | 4,618.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 400.00 | 0.00 | 0.00 | 400.00 | 4,518.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| PIERRE SHALE (BASE FOX HILLS) | | | | | | | | | | |
| 468.50 | 0.00 | 0.00 | 468.50 | 4,450.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| START NUDGE (2°/100ft BUR) | | | | | | | | | | |
| 500.00 | 0.00 | 0.00 | 500.00 | 4,418.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 600.00 | 2.00 | 17.63 | 599.98 | 4,318.52 | 1.66 | 0.53 | 0.68 | 2.00 | 2.00 | 0.00 |
| 700.00 | 4.00 | 17.63 | 699.84 | 4,218.66 | 6.65 | 2.11 | 2.71 | 2.00 | 2.00 | 0.00 |
| 800.00 | 6.00 | 17.63 | 799.45 | 4,119.05 | 14.96 | 4.75 | 6.10 | 2.00 | 2.00 | 0.00 |
| 900.00 | 8.00 | 17.63 | 898.70 | 4,019.80 | 26.57 | 8.44 | 10.83 | 2.00 | 2.00 | 0.00 |
| 1,000.00 | 10.00 | 17.63 | 997.47 | 3,921.03 | 41.48 | 13.18 | 16.91 | 2.00 | 2.00 | 0.00 |
| EOB TO 12° INC | | | | | | | | | | |
| 1,100.00 | 12.00 | 17.63 | 1,095.62 | 3,822.88 | 59.66 | 18.96 | 24.32 | 2.00 | 2.00 | 0.00 |
| 1,200.00 | 12.00 | 17.63 | 1,193.44 | 3,725.06 | 79.48 | 25.25 | 32.39 | 0.00 | 0.00 | 0.00 |
| 1,300.00 | 12.00 | 17.63 | 1,291.25 | 3,627.25 | 99.29 | 31.55 | 40.47 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 12.00 | 17.63 | 1,389.07 | 3,529.43 | 119.11 | 37.85 | 48.54 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 12.00 | 17.63 | 1,486.88 | 3,431.62 | 138.92 | 44.14 | 56.62 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 12.00 | 17.63 | 1,584.70 | 3,333.80 | 158.74 | 50.44 | 64.70 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 12.00 | 17.63 | 1,682.51 | 3,235.99 | 178.55 | 56.73 | 72.77 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 12.00 | 17.63 | 1,780.33 | 3,138.17 | 198.37 | 63.03 | 80.85 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 12.00 | 17.63 | 1,878.14 | 3,040.36 | 218.18 | 69.33 | 88.92 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 12.00 | 17.63 | 1,975.96 | 2,942.54 | 238.00 | 75.62 | 97.00 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 12.00 | 17.63 | 2,073.77 | 2,844.73 | 257.81 | 81.92 | 105.08 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 12.00 | 17.63 | 2,171.59 | 2,746.91 | 277.63 | 88.21 | 113.15 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 12.00 | 17.63 | 2,269.40 | 2,649.10 | 297.44 | 94.51 | 121.23 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 12.00 | 17.63 | 2,367.22 | 2,551.28 | 317.26 | 100.81 | 129.30 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 12.00 | 17.63 | 2,465.03 | 2,453.47 | 337.07 | 107.10 | 137.38 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 12.00 | 17.63 | 2,562.84 | 2,355.66 | 356.89 | 113.40 | 145.46 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 12.00 | 17.63 | 2,660.66 | 2,257.84 | 376.70 | 119.69 | 153.53 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 12.00 | 17.63 | 2,758.47 | 2,160.03 | 396.52 | 125.99 | 161.61 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 12.00 | 17.63 | 2,856.29 | 2,062.21 | 416.33 | 132.28 | 169.68 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 12.00 | 17.63 | 2,954.10 | 1,964.40 | 436.15 | 138.58 | 177.76 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 12.00 | 17.63 | 3,051.92 | 1,866.58 | 455.96 | 144.88 | 185.84 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 12.00 | 17.63 | 3,149.73 | 1,768.77 | 475.78 | 151.17 | 193.91 | 0.00 | 0.00 | 0.00 |
| PARKMAN | | | | | | | | | | |
| 3,249.86 | 12.00 | 17.63 | 3,198.50 | 1,720.00 | 485.66 | 154.31 | 197.94 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 12.00 | 17.63 | 3,247.55 | 1,670.95 | 495.59 | 157.47 | 201.99 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 12.00 | 17.63 | 3,345.36 | 1,573.14 | 515.41 | 163.76 | 210.06 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 12.00 | 17.63 | 3,443.18 | 1,475.32 | 535.22 | 170.06 | 218.14 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 12.00 | 17.63 | 3,540.99 | 1,377.51 | 555.04 | 176.36 | 226.21 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 12.00 | 17.63 | 3,638.81 | 1,279.69 | 574.85 | 182.65 | 234.29 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 12.00 | 17.63 | 3,736.62 | 1,181.88 | 594.67 | 188.95 | 242.37 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 12.00 | 17.63 | 3,834.44 | 1,084.06 | 614.48 | 195.24 | 250.44 | 0.00 | 0.00 | 0.00 |
| SUSSEX | | | | | | | | | | |
| 3,985.94 | 12.00 | 17.63 | 3,918.50 | 1,000.00 | 631.51 | 200.66 | 257.38 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 12.00 | 17.63 | 3,932.25 | 986.25 | 634.30 | 201.54 | 258.52 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 12.00 | 17.63 | 4,030.07 | 888.43 | 654.11 | 207.84 | 266.59 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 12.00 | 17.63 | 4,127.88 | 790.62 | 673.93 | 214.13 | 274.67 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 12.00 | 17.63 | 4,225.70 | 692.80 | 693.74 | 220.43 | 282.75 | 0.00 | 0.00 | 0.00 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|-------------------------------------|
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| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB 25' @ 4918.50usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB 25' @ 4918.50usft |
| Site: | SE SE SEC. 14 T8N R60W 6th P.M. | North Reference: | True |
| Well: | BOOMSLANG FED 8-60 14B-13-18-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #4 | | |

| 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) |
| 4,400.00 | 12.00 | 17.63 | 4,323.51 | 594.99 | 713.56 | 226.72 | 290.82 | 0.00 | 0.00 | 0.00 |
| END OF TANGENT | | | | | | | | | | |
| 4,410.25 | 12.00 | 17.63 | 4,333.54 | 584.96 | 715.59 | 227.37 | 291.65 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 10.20 | 17.63 | 4,421.60 | 496.90 | 732.06 | 232.60 | 298.36 | 2.00 | -2.00 | 0.00 |
| 4,600.00 | 8.20 | 17.63 | 4,520.31 | 398.19 | 747.30 | 237.45 | 304.58 | 2.00 | -2.00 | 0.00 |
| 4,700.00 | 6.20 | 17.63 | 4,619.52 | 298.98 | 759.26 | 241.24 | 309.45 | 2.00 | -2.00 | 0.00 |
| SHANNON | | | | | | | | | | |
| 4,739.19 | 5.42 | 17.63 | 4,658.50 | 260.00 | 763.04 | 242.45 | 310.99 | 2.00 | -2.00 | 0.00 |
| 4,800.00 | 4.20 | 17.63 | 4,719.10 | 199.40 | 767.90 | 243.99 | 312.97 | 2.00 | -2.00 | 0.00 |
| 4,900.00 | 2.20 | 17.63 | 4,818.94 | 99.56 | 773.23 | 245.68 | 315.14 | 2.00 | -2.00 | 0.00 |
| 5,000.00 | 0.20 | 17.63 | 4,918.91 | -0.41 | 775.23 | 246.32 | 315.96 | 2.00 | -2.00 | 0.00 |
| EOD TO VERTICAL | | | | | | | | | | |
| 5,010.25 | 0.00 | 0.00 | 4,929.16 | -10.66 | 775.25 | 246.33 | 315.97 | 2.00 | -2.00 | 0.00 |
| 5,100.00 | 0.00 | 0.00 | 5,018.91 | -100.41 | 775.25 | 246.33 | 315.97 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 0.00 | 0.00 | 5,118.91 | -200.41 | 775.25 | 246.33 | 315.97 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 0.00 | 0.00 | 5,218.91 | -300.41 | 775.25 | 246.33 | 315.97 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 0.00 | 0.00 | 5,318.91 | -400.41 | 775.25 | 246.33 | 315.97 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 0.00 | 0.00 | 5,418.91 | -500.41 | 775.25 | 246.33 | 315.97 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 0.00 | 0.00 | 5,518.91 | -600.41 | 775.25 | 246.33 | 315.97 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 0.00 | 0.00 | 5,618.91 | -700.41 | 775.25 | 246.33 | 315.97 | 0.00 | 0.00 | 0.00 |
| KOP (10°/100ft BUR) | | | | | | | | | | |
| 5,711.63 | 0.00 | 0.00 | 5,630.54 | -712.04 | 775.25 | 246.33 | 315.97 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 8.84 | 90.03 | 5,718.56 | -800.06 | 775.25 | 253.13 | 322.74 | 10.00 | 10.00 | 0.00 |
| 5,900.00 | 18.84 | 90.03 | 5,815.53 | -897.03 | 775.24 | 277.01 | 346.52 | 10.00 | 10.00 | 0.00 |
| 6,000.00 | 28.84 | 90.03 | 5,906.89 | -988.39 | 775.21 | 317.38 | 386.72 | 10.00 | 10.00 | 0.00 |
| 6,100.00 | 38.84 | 90.03 | 5,989.85 | -1,071.35 | 775.18 | 372.99 | 442.09 | 10.00 | 10.00 | 0.00 |
| SHARON SPRINGS SHALE | | | | | | | | | | |
| 6,131.06 | 41.94 | 90.03 | 6,013.50 | -1,095.00 | 775.17 | 393.11 | 462.13 | 10.00 | 10.00 | 0.00 |
| 6,200.00 | 48.84 | 90.03 | 6,061.89 | -1,143.39 | 775.15 | 442.16 | 510.98 | 10.00 | 10.00 | 0.00 |
| NIOBRARA FORMATION | | | | | | | | | | |
| 6,217.97 | 50.63 | 90.03 | 6,073.50 | -1,155.00 | 775.14 | 455.87 | 524.63 | 10.00 | 10.00 | 0.00 |
| NIOBRARA A CHALK | | | | | | | | | | |
| 6,234.01 | 52.24 | 90.03 | 6,083.50 | -1,165.00 | 775.13 | 468.42 | 537.12 | 10.00 | 10.00 | 0.00 |
| 6,300.00 | 58.84 | 90.03 | 6,120.82 | -1,202.32 | 775.10 | 522.79 | 591.27 | 10.00 | 10.00 | 0.00 |
| 6,400.00 | 68.84 | 90.03 | 6,164.86 | -1,246.36 | 775.06 | 612.43 | 680.53 | 10.00 | 10.00 | 0.00 |
| NIOBRARA B CHALK | | | | | | | | | | |
| 6,425.40 | 71.38 | 90.03 | 6,173.50 | -1,255.00 | 775.04 | 636.32 | 704.32 | 10.00 | 10.00 | 0.00 |
| 6,500.00 | 78.84 | 90.03 | 6,192.66 | -1,274.16 | 775.01 | 708.36 | 776.05 | 10.00 | 10.00 | 0.00 |
| 6,600.00 | 88.84 | 90.03 | 6,203.38 | -1,284.88 | 774.95 | 807.65 | 874.93 | 10.00 | 10.00 | 0.00 |
| BPI: 2084ft FSL & 300ft FWL of Sec 13 - NIOBRARA B LP | | | | | | | | | | |
| 6,611.64 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.95 | 819.29 | 886.52 | 10.00 | 10.00 | 0.00 |
| 6,700.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.90 | 907.65 | 974.51 | 0.00 | 0.00 | 0.00 |
| 6,800.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.85 | 1,007.65 | 1,074.09 | 0.00 | 0.00 | 0.00 |
| 6,900.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.79 | 1,107.65 | 1,173.66 | 0.00 | 0.00 | 0.00 |
| 7,000.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.74 | 1,207.65 | 1,273.24 | 0.00 | 0.00 | 0.00 |
| 7,100.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.69 | 1,307.65 | 1,372.82 | 0.00 | 0.00 | 0.00 |
| 7,200.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.64 | 1,407.65 | 1,472.40 | 0.00 | 0.00 | 0.00 |
| 7,300.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.58 | 1,507.65 | 1,571.98 | 0.00 | 0.00 | 0.00 |
| 7,400.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.53 | 1,607.65 | 1,671.56 | 0.00 | 0.00 | 0.00 |
| 7,500.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.48 | 1,707.65 | 1,771.14 | 0.00 | 0.00 | 0.00 |
| 7,600.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.43 | 1,807.65 | 1,870.72 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.38 | 1,907.65 | 1,970.30 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.32 | 2,007.65 | 2,069.88 | 0.00 | 0.00 | 0.00 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well BOOMSLANG FED 8-60 14B-13-18-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB 25' @ 4918.50usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB 25' @ 4918.50usft |
| Site: | SE SE SEC. 14 T8N R60W 6th P.M. | North Reference: | True |
| Well: | BOOMSLANG FED 8-60 14B-13-18-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #4 | | |

| 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) |
| 7,900.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.27 | 2,107.65 | 2,169.45 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.22 | 2,207.65 | 2,269.03 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.17 | 2,307.65 | 2,368.61 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.12 | 2,407.65 | 2,468.19 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 774.07 | 2,507.65 | 2,567.77 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 774.01 | 2,607.65 | 2,667.35 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.96 | 2,707.65 | 2,766.93 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.91 | 2,807.65 | 2,866.51 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.86 | 2,907.65 | 2,966.09 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.81 | 3,007.65 | 3,065.67 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.76 | 3,107.65 | 3,165.24 | 0.00 | 0.00 | 0.00 |
| ENTER COC 77278 | | | | | | | | | | |
| 8,954.94 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.73 | 3,162.59 | 3,219.95 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.71 | 3,207.65 | 3,264.82 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.66 | 3,307.65 | 3,364.40 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.61 | 3,407.65 | 3,463.98 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.56 | 3,507.65 | 3,563.56 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.51 | 3,607.65 | 3,663.14 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.46 | 3,707.65 | 3,762.72 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.41 | 3,807.65 | 3,862.30 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.36 | 3,907.65 | 3,961.88 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.31 | 4,007.65 | 4,061.46 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.26 | 4,107.65 | 4,161.04 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.21 | 4,207.65 | 4,260.62 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.16 | 4,307.65 | 4,360.19 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.11 | 4,407.65 | 4,459.77 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.06 | 4,507.65 | 4,559.35 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 773.01 | 4,607.65 | 4,658.93 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.96 | 4,707.65 | 4,758.51 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.92 | 4,807.65 | 4,858.09 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.87 | 4,907.65 | 4,957.67 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.82 | 5,007.65 | 5,057.25 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.77 | 5,107.65 | 5,156.83 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.72 | 5,207.65 | 5,256.41 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.67 | 5,307.65 | 5,355.99 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.63 | 5,407.65 | 5,455.57 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.58 | 5,507.65 | 5,555.15 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.53 | 5,607.65 | 5,654.72 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.48 | 5,707.65 | 5,754.30 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.43 | 5,807.65 | 5,853.88 | 0.00 | 0.00 | 0.00 |
| EXIT COC 77278 | | | | | | | | | | |
| 11,635.44 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.42 | 5,843.09 | 5,889.17 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.39 | 5,907.65 | 5,953.46 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.34 | 6,007.65 | 6,053.04 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.29 | 6,107.65 | 6,152.62 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.25 | 6,207.65 | 6,252.20 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.20 | 6,307.65 | 6,351.78 | 0.00 | 0.00 | 0.00 |
| 12,200.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.15 | 6,407.65 | 6,451.36 | 0.00 | 0.00 | 0.00 |
| 12,300.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.10 | 6,507.65 | 6,550.94 | 0.00 | 0.00 | 0.00 |
| 12,400.00 | 90.00 | 90.03 | 6,203.49 | -1,284.99 | 772.06 | 6,607.65 | 6,650.52 | 0.00 | 0.00 | 0.00 |
| 12,500.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 772.01 | 6,707.65 | 6,750.10 | 0.00 | 0.00 | 0.00 |
| 12,600.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.96 | 6,807.65 | 6,849.68 | 0.00 | 0.00 | 0.00 |
| 12,700.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.92 | 6,907.65 | 6,949.26 | 0.00 | 0.00 | 0.00 |
| 12,800.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.87 | 7,007.65 | 7,048.84 | 0.00 | 0.00 | 0.00 |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well BOOMSLANG FED 8-60 14B-13-18-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB 25' @ 4918.50usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB 25' @ 4918.50usft |
| Site: | SE SE SEC. 14 T8N R60W 6th P.M. | North Reference: | True |
| Well: | BOOMSLANG FED 8-60 14B-13-18-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #4 | | |

| 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) |
| 12,900.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.83 | 7,107.65 | 7,148.42 | 0.00 | 0.00 | 0.00 |
| 13,000.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.78 | 7,207.65 | 7,248.00 | 0.00 | 0.00 | 0.00 |
| 13,100.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.73 | 7,307.65 | 7,347.58 | 0.00 | 0.00 | 0.00 |
| 13,200.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.69 | 7,407.65 | 7,447.15 | 0.00 | 0.00 | 0.00 |
| 13,300.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.64 | 7,507.65 | 7,546.73 | 0.00 | 0.00 | 0.00 |
| 13,400.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.60 | 7,607.65 | 7,646.31 | 0.00 | 0.00 | 0.00 |
| 13,500.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.55 | 7,707.65 | 7,745.89 | 0.00 | 0.00 | 0.00 |
| 13,600.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.51 | 7,807.65 | 7,845.47 | 0.00 | 0.00 | 0.00 |
| 13,700.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.46 | 7,907.65 | 7,945.05 | 0.00 | 0.00 | 0.00 |
| 13,800.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.41 | 8,007.65 | 8,044.63 | 0.00 | 0.00 | 0.00 |
| 13,900.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.37 | 8,107.65 | 8,144.21 | 0.00 | 0.00 | 0.00 |
| 14,000.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.32 | 8,207.65 | 8,243.79 | 0.00 | 0.00 | 0.00 |
| 14,100.00 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.28 | 8,307.65 | 8,343.37 | 0.00 | 0.00 | 0.00 |
| EPI: 2104ft FSL & 2557ft FWL of Sec 18 | | | | | | | | | | |
| 14,156.70 | 90.00 | 90.03 | 6,203.50 | -1,285.00 | 771.25 | 8,364.35 | 8,399.83 | 0.00 | 0.00 | 0.00 |
| EOT TO 90.38° AZ | | | | | | | | | | |
| 14,168.37 | 90.00 | 90.38 | 6,203.50 | -1,285.00 | 771.21 | 8,376.02 | 8,411.45 | 3.00 | 0.00 | 3.00 |
| 14,200.00 | 90.00 | 90.38 | 6,203.50 | -1,285.00 | 771.01 | 8,407.65 | 8,442.93 | 0.00 | 0.00 | 0.00 |
| BHL: 2105ft FSL & 2615ft FWL of Sec 18 | | | | | | | | | | |
| 14,214.69 | 90.00 | 90.38 | 6,203.50 | -1,285.00 | 770.91 | 8,422.34 | 8,457.55 | 0.00 | 0.00 | 0.00 |

| Formations | | | | | | |
|--------------|---------------|------------------------------|-----------|------------|-------------------------|--|
| MD (usft) | TVD (usft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 468.50 | 468.50 | PIERRE SHALE (BASE FOX HILLS | | | | |
| 3,249.86 | 3,198.50 | PARKMAN | | | | |
| 3,985.94 | 3,918.50 | SUSSEX | | | | |
| 4,739.19 | 4,658.50 | SHANNON | | | | |
| 6,131.06 | 6,013.50 | SHARON SPRINGS SHALE | | | | |
| 6,217.97 | 6,073.50 | NIOBRARA FORMATION | | | | |
| 6,234.01 | 6,083.50 | NIOBRARA A CHALK | | | | |
| 6,425.40 | 6,173.50 | NIOBRARA B CHALK | | | | |
| 6,611.64 | 6,203.50 | NIOBRARA B LP | | 0.00 | | |

Planning Report



| | | | |
|------------------|---------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well BOOMSLANG FED 8-60 14B-13-18-2 |
| Company: | BISON OIL & GAS II, LLC | TVD Reference: | KB 25' @ 4918.50usft |
| Project: | WELD COUNTY, COLORADO (NAD 83) | MD Reference: | KB 25' @ 4918.50usft |
| Site: | SE SE SEC. 14 T8N R60W 6th P.M. | North Reference: | True |
| Well: | BOOMSLANG FED 8-60 14B-13-18-2 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL #4 | | |

Plan Annotations

| MD (usft) | TVD (usft) | Local Coordinates | | Comment |
|--------------|---------------|-------------------|-----------------|--|
| | | +N/-S (usft) | +E/-W (usft) | |
| 0.00 | 0.00 | 0.00 | 0.00 | SHL: 1313ft FSL & 504ft FEL of Sec 14 |
| 500.00 | 500.00 | 0.00 | 0.00 | START NUDGE (2°/100ft BUR) |
| 1,100.00 | 1,095.62 | 59.66 | 18.96 | EOB TO 12° INC |
| 4,410.25 | 4,333.54 | 715.59 | 227.37 | END OF TANGENT |
| 5,010.25 | 4,929.16 | 775.25 | 246.33 | EOD TO VERTICAL |
| 5,711.63 | 5,630.54 | 775.25 | 246.33 | KOP (10°/100ft BUR) |
| 6,611.64 | 6,203.50 | 774.95 | 819.29 | BPI: 2084ft FSL & 300ft FWL of Sec 13 |
| 8,954.94 | 6,203.49 | 773.73 | 3,162.59 | ENTER COC 77278 |
| 11,635.44 | 6,203.49 | 772.42 | 5,843.09 | EXIT COC 77278 |
| 14,156.70 | 6,203.50 | 771.25 | 8,364.35 | EPI: 2104ft FSL & 2557ft FWL of Sec 18 |
| 14,168.37 | 6,203.50 | 771.21 | 8,376.02 | EOT TO 90.38° AZ |
| 14,214.69 | 6,203.50 | 770.91 | 8,422.34 | BHL: 2105ft FSL & 2615ft FWL of Sec 18 |