

US ROCKIES WATTENBERG PLANNING

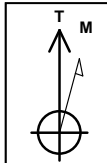
**WELD-NAD83-UTMFT13N
3N-65W-29 RW 35-29HZ Pad
RW 28C-5HZ**

Plan A

Plan: Permit Rev-1

Standard Planning Report

11 January, 2017



Azimuths to True North
Magnetic North: 8.06°

Magnetic Field
Strength: 52443.7snT
Dip Angle: 66.70°
Date: 1/4/2017
Model: IGRF2010

SITE: 3N-65W-29 RW 35-29HZ Pad

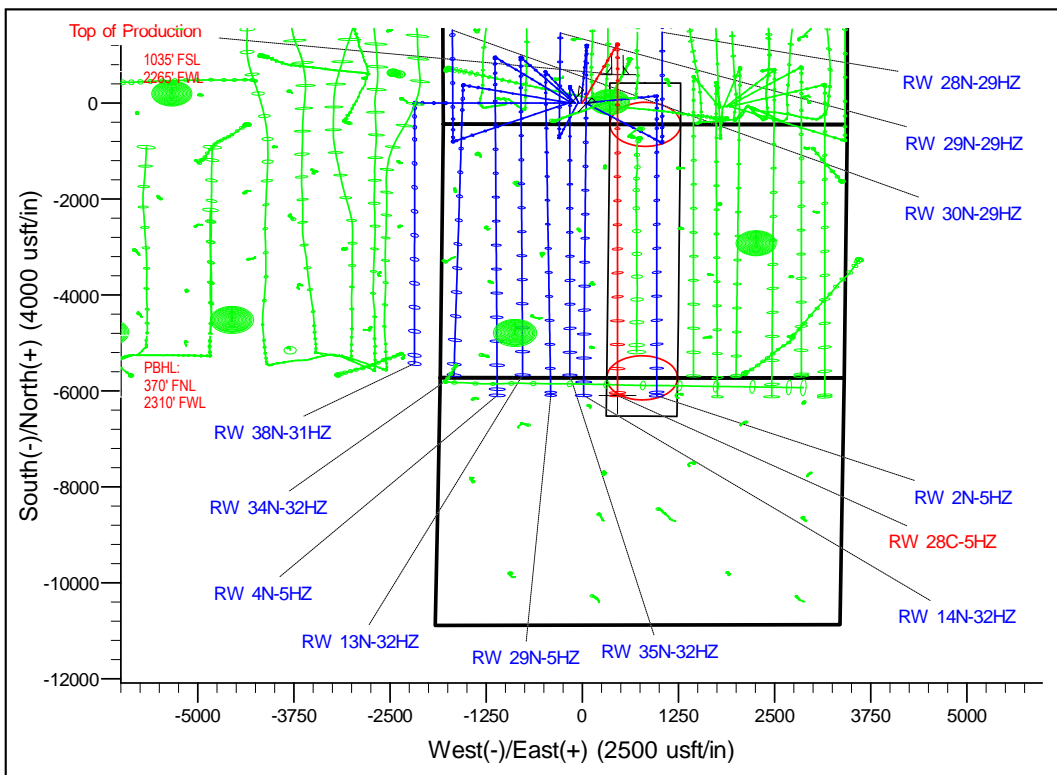
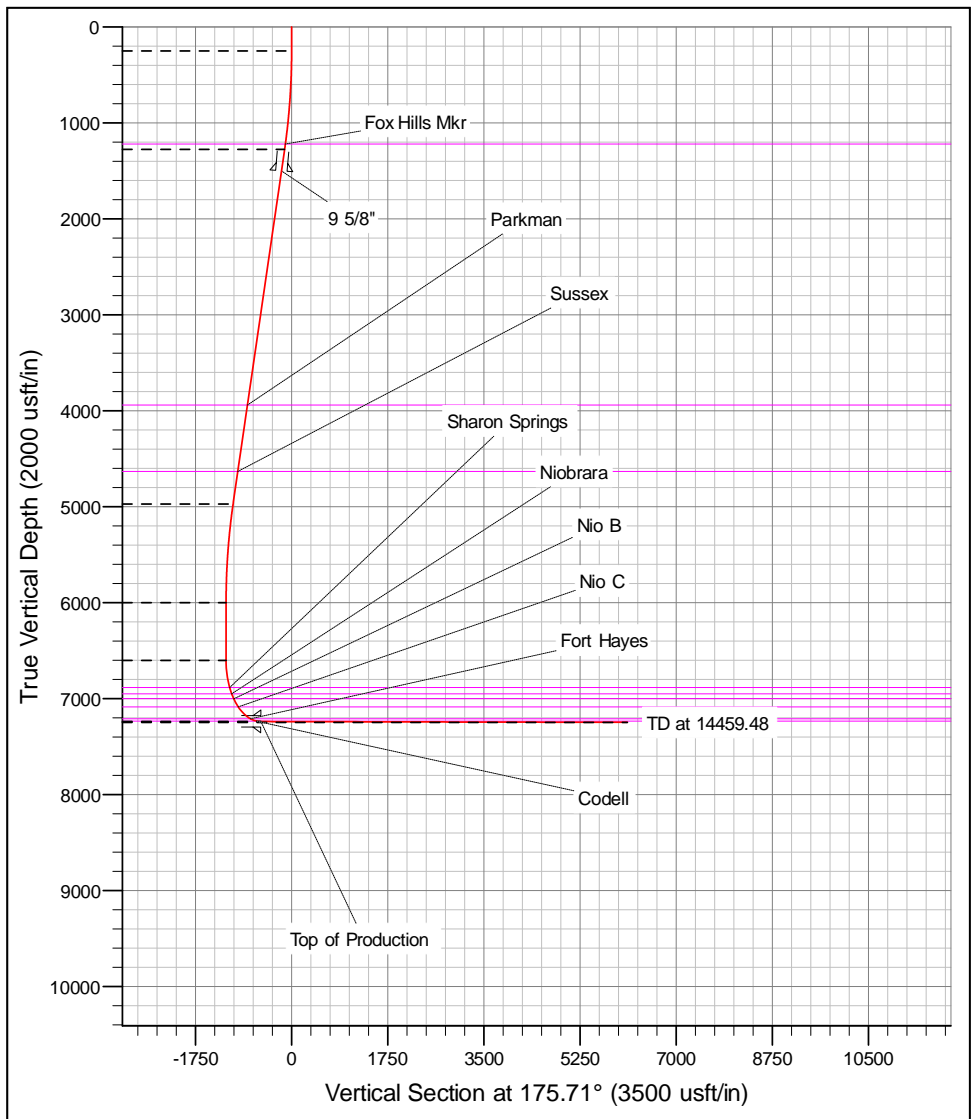
Well: RW 28C-5HZ
Wellbore: Plan A
Design: Permit Rev-1

| FORMATION TOP DETAILS | | |
|-----------------------|---------|----------------|
| TVDPath | MDPath | Formation |
| 1220.00 | 1230.74 | Fox Hills Mkr |
| 3940.00 | 4054.65 | Parkman |
| 4633.00 | 4774.16 | Sussex |
| 6884.00 | 7060.97 | Sharon Springs |
| 6951.00 | 7138.10 | Niobrara |
| 7003.00 | 7202.41 | Nio B |
| 7086.00 | 7318.17 | Nio C |
| 7210.00 | 7574.52 | Fort Hayes |
| 7234.00 | 7683.97 | Codell |

| WELL DETAILS: RW 28C-5HZ | | | | | | |
|--------------------------|-------|-------------|---------------------------|-----------|-------------|------|
| +N/-S | +E/-W | GL: 4885.00 | RKB @ 4902.00usft (D Rig) | | | |
| 0.00 | 0.00 | Northing | Easting | Latitude | Longitude | Slot |
| | | 14596213.48 | 1726921.12 | 40.190388 | -104.690250 | |

| SECTION DETAILS | | | | | | | |
|-----------------|-------|--------|---------|----------|--------|------|----------|
| MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | Vsect |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 250.00 | 0.00 | 0.00 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1290.04 | 15.60 | 20.39 | 1277.24 | 131.90 | 49.03 | 1.50 | -127.86 |
| 5126.92 | 15.60 | 20.39 | 4972.76 | 1099.09 | 408.58 | 0.00 | 1065.41 |
| 6166.96 | 0.00 | 0.00 | 6000.00 | 1230.99 | 457.61 | 1.50 | -1193.27 |
| 6770.17 | 0.00 | 0.00 | 6603.21 | 1230.99 | 457.61 | 0.00 | -1193.27 |
| 7769.39 | 89.93 | 180.00 | 7239.83 | 595.15 | 457.61 | 9.00 | -559.22 |
| 14459.48 | 89.93 | 180.00 | 7248.00 | -6094.94 | 457.61 | 0.00 | 6112.09 |

| DESIGN TARGET DETAILS | | | | | | | |
|-----------------------|---------|----------|--------|-------------|------------|-----------|-------------|
| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
| RW 28C-5HZ_PBHL | 7248.00 | -6094.94 | 457.61 | 14590120.17 | 1727400.00 | 40.173651 | -104.688612 |



Corporate Planning Report

| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------------|
| Database: | PLANNING | Local Co-ordinate Reference: | Well RW 28C-5HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB @ 4902.00usft (D Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB @ 4902.00usft (D Rig) |
| Site: | 3N-65W-29 RW 35-29HZ Pad | North Reference: | True |
| Well: | RW 28C-5HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| | | | |
|--------------------|--|----------------------|----------------|
| Project | WELD-NAD83-UTMFT13N | | |
| Map System: | Universal Transverse Mercator (US Survey Feet) | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Zone 13N (108 W to 102 W) | | |

| | | | |
|------------------------------|--------------------------|--------------------------|--------------------|
| Site | 3N-65W-29 RW 35-29HZ Pad | | |
| Site Position: | | Northing: | 14,596,214.62 usft |
| From: | Lat/Long | Easting: | 1,726,726.18 usft |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13-3/16 " |
| | | Latitude: | 40.190393 |
| | | Longitude: | -104.690948 |
| | | Grid Convergence: | 0.20 ° |

| | | | |
|-----------------------------|-------------|-------------|-------------------------------------|
| Well | RW 28C-5HZ | | |
| Well Position | +N-S | -1.82 usft | Northing: 14,596,213.48 usft |
| | +E-W | 194.93 usft | Easting: 1,726,921.12 usft |
| Position Uncertainty | | 3.28 usft | Wellhead Elevation: |
| | | | Latitude: 40.190388 |
| | | | Longitude: -104.690250 |
| | | | Ground Level: 4,885.00 usft |

| | | | |
|------------------|-------------------|--------------------|----------------------------|
| Wellbore | Plan A | | |
| Magnetics | Model Name | Sample Date | Declination (°) |
| | IGRF2010 | 1/4/2017 | 8.06 |
| | | | Dip Angle (°) |
| | | | 66.70 |
| | | | Field Strength (nT) |
| | | | 52,443.68299970 |

| | | | |
|--------------------------|--------------------------------|--------------------|---------------------------|
| Design | Permit Rev-1 | | |
| Audit Notes: | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N-S (usft) | +E-W (usft) |
| | 0.00 | 0.00 | 0.00 |
| | | | Direction (°) |
| | | | 175.71 |

| | | | | |
|---------------------------------|------------------------|--------------------------|-----------------------|---------------------------------|
| Plan Survey Tool Program | Date | 1/11/2017 | | |
| Depth From (usft) | Depth To (usft) | Survey (Wellbore) | Tool Name | Remarks |
| 1 | 0.00 | 14,459.48 | Permit Rev-1 (Plan A) | APC_ISCWSA REV 2 MWI |
| | | | | Fixed:v2:crustal field declinat |

| Plan Sections | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|-------------|-------------|-------------------------|------------------------|-----------------------|---------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N-S (usft) | +E-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 250.00 | 0.00 | 0.00 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,290.04 | 15.60 | 20.39 | 1,277.24 | 131.90 | 49.03 | 1.50 | 1.50 | 0.00 | 20.39 | 20.39 |
| 5,126.92 | 15.60 | 20.39 | 4,972.76 | 1,099.09 | 408.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,166.96 | 0.00 | 0.00 | 6,000.00 | 1,230.99 | 457.61 | 1.50 | -1.50 | 0.00 | 180.00 | 180.00 |
| 6,770.17 | 0.00 | 0.00 | 6,603.21 | 1,230.99 | 457.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,769.39 | 89.93 | 180.00 | 7,239.83 | 595.15 | 457.61 | 9.00 | 9.00 | 0.00 | 180.00 | 180.00 |
| 14,459.48 | 89.93 | 180.00 | 7,248.00 | -6,094.94 | 457.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 RW 28C-5HZ_PBH |

Corporate Planning Report

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|------------------|--------------------------------|-------------------------------------|---------------------------|
| Database: | PLANNING | Local Co-ordinate Reference: | Well RW 28C-5HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB @ 4902.00usft (D Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB @ 4902.00usft (D Rig) |
| Site: | 3N-65W-29 RW 35-29HZ Pad | North Reference: | True |
| Well: | RW 28C-5HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| Planned Survey | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 250.00 | 0.00 | 0.00 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 300.00 | 0.75 | 20.39 | 300.00 | 0.31 | 0.11 | -0.30 | 1.50 | 1.50 | 0.00 |
| 400.00 | 2.25 | 20.39 | 399.96 | 2.76 | 1.03 | -2.68 | 1.50 | 1.50 | 0.00 |
| 500.00 | 3.75 | 20.39 | 499.82 | 7.67 | 2.85 | -7.43 | 1.50 | 1.50 | 0.00 |
| 600.00 | 5.25 | 20.39 | 599.51 | 15.02 | 5.58 | -14.56 | 1.50 | 1.50 | 0.00 |
| 700.00 | 6.75 | 20.39 | 698.96 | 24.82 | 9.23 | -24.06 | 1.50 | 1.50 | 0.00 |
| 800.00 | 8.25 | 20.39 | 798.10 | 37.05 | 13.77 | -35.92 | 1.50 | 1.50 | 0.00 |
| 900.00 | 9.75 | 20.39 | 896.87 | 51.71 | 19.22 | -50.13 | 1.50 | 1.50 | 0.00 |
| 1,000.00 | 11.25 | 20.39 | 995.19 | 68.80 | 25.57 | -66.69 | 1.50 | 1.50 | 0.00 |
| 1,100.00 | 12.75 | 20.39 | 1,093.00 | 88.28 | 32.82 | -85.58 | 1.50 | 1.50 | 0.00 |
| 1,200.00 | 14.25 | 20.39 | 1,190.24 | 110.16 | 40.95 | -106.79 | 1.50 | 1.50 | 0.00 |
| 1,230.74 | 14.71 | 20.39 | 1,220.00 | 117.37 | 43.63 | -113.77 | 1.50 | 1.50 | 0.00 |
| Fox Hills Mkr | | | | | | | | | |
| 1,290.04 | 15.60 | 20.39 | 1,277.24 | 131.90 | 49.03 | -127.86 | 1.50 | 1.50 | 0.00 |
| 1,300.00 | 15.60 | 20.39 | 1,286.83 | 134.41 | 49.97 | -130.29 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 15.60 | 20.39 | 1,383.15 | 159.62 | 59.34 | -154.73 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 15.60 | 20.39 | 1,479.46 | 184.83 | 68.71 | -179.16 | 0.00 | 0.00 | 0.00 |
| 1,521.32 | 15.60 | 20.39 | 1,500.00 | 190.20 | 70.71 | -184.37 | 0.00 | 0.00 | 0.00 |
| 9 5/8" | | | | | | | | | |
| 1,600.00 | 15.60 | 20.39 | 1,575.78 | 210.03 | 78.08 | -203.60 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 15.60 | 20.39 | 1,672.09 | 235.24 | 87.45 | -228.03 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 15.60 | 20.39 | 1,768.41 | 260.45 | 96.82 | -252.47 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 15.60 | 20.39 | 1,864.73 | 285.66 | 106.19 | -276.91 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 15.60 | 20.39 | 1,961.04 | 310.87 | 115.56 | -301.34 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 15.60 | 20.39 | 2,057.36 | 336.07 | 124.93 | -325.78 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 15.60 | 20.39 | 2,153.67 | 361.28 | 134.30 | -350.21 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 15.60 | 20.39 | 2,249.99 | 386.49 | 143.67 | -374.65 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 15.60 | 20.39 | 2,346.31 | 411.70 | 153.04 | -399.08 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 15.60 | 20.39 | 2,442.62 | 436.90 | 162.42 | -423.52 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 15.60 | 20.39 | 2,538.94 | 462.11 | 171.79 | -447.95 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 15.60 | 20.39 | 2,635.25 | 487.32 | 181.16 | -472.39 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 15.60 | 20.39 | 2,731.57 | 512.53 | 190.53 | -496.82 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 15.60 | 20.39 | 2,827.88 | 537.73 | 199.90 | -521.26 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 15.60 | 20.39 | 2,924.20 | 562.94 | 209.27 | -545.69 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 15.60 | 20.39 | 3,020.52 | 588.15 | 218.64 | -570.13 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 15.60 | 20.39 | 3,116.83 | 613.36 | 228.01 | -594.56 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 15.60 | 20.39 | 3,213.15 | 638.57 | 237.38 | -619.00 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 15.60 | 20.39 | 3,309.46 | 663.77 | 246.75 | -643.44 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 15.60 | 20.39 | 3,405.78 | 688.98 | 256.12 | -667.87 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 15.60 | 20.39 | 3,502.10 | 714.19 | 265.49 | -692.31 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 15.60 | 20.39 | 3,598.41 | 739.40 | 274.86 | -716.74 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 15.60 | 20.39 | 3,694.73 | 764.60 | 284.23 | -741.18 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 15.60 | 20.39 | 3,791.04 | 789.81 | 293.61 | -765.61 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 15.60 | 20.39 | 3,887.36 | 815.02 | 302.98 | -790.05 | 0.00 | 0.00 | 0.00 |
| 4,054.65 | 15.60 | 20.39 | 3,940.00 | 828.80 | 308.10 | -803.40 | 0.00 | 0.00 | 0.00 |
| Parkman | | | | | | | | | |
| 4,100.00 | 15.60 | 20.39 | 3,983.68 | 840.23 | 312.35 | -814.48 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 15.60 | 20.39 | 4,079.99 | 865.43 | 321.72 | -838.92 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 15.60 | 20.39 | 4,176.31 | 890.64 | 331.09 | -863.35 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 15.60 | 20.39 | 4,272.62 | 915.85 | 340.46 | -887.79 | 0.00 | 0.00 | 0.00 |

Corporate Planning Report

| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------------|
| Database: | PLANNING | Local Co-ordinate Reference: | Well RW 28C-5HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB @ 4902.00usft (D Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB @ 4902.00usft (D Rig) |
| Site: | 3N-65W-29 RW 35-29HZ Pad | North Reference: | True |
| Well: | RW 28C-5HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| Planned Survey | | | | | | | | | | |
|---|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 4,500.00 | 15.60 | 20.39 | 4,368.94 | 941.06 | 349.83 | -912.22 | 0.00 | 0.00 | 0.00 | |
| 4,600.00 | 15.60 | 20.39 | 4,465.26 | 966.27 | 359.20 | -936.66 | 0.00 | 0.00 | 0.00 | |
| 4,700.00 | 15.60 | 20.39 | 4,561.57 | 991.47 | 368.57 | -961.10 | 0.00 | 0.00 | 0.00 | |
| 4,774.16 | 15.60 | 20.39 | 4,633.00 | 1,010.17 | 375.52 | -979.22 | 0.00 | 0.00 | 0.00 | |
| Sussex | | | | | | | | | | |
| 4,800.00 | 15.60 | 20.39 | 4,657.89 | 1,016.68 | 377.94 | -985.53 | 0.00 | 0.00 | 0.00 | |
| 4,900.00 | 15.60 | 20.39 | 4,754.20 | 1,041.89 | 387.31 | -1,009.97 | 0.00 | 0.00 | 0.00 | |
| 5,000.00 | 15.60 | 20.39 | 4,850.52 | 1,067.10 | 396.68 | -1,034.40 | 0.00 | 0.00 | 0.00 | |
| 5,100.00 | 15.60 | 20.39 | 4,946.84 | 1,092.30 | 406.05 | -1,058.84 | 0.00 | 0.00 | 0.00 | |
| 5,126.92 | 15.60 | 20.39 | 4,972.76 | 1,099.09 | 408.58 | -1,065.41 | 0.00 | 0.00 | 0.00 | |
| 5,200.00 | 14.50 | 20.39 | 5,043.34 | 1,116.88 | 415.19 | -1,082.66 | 1.50 | -1.50 | 0.00 | |
| 5,300.00 | 13.00 | 20.39 | 5,140.46 | 1,139.16 | 423.47 | -1,104.26 | 1.50 | -1.50 | 0.00 | |
| 5,400.00 | 11.50 | 20.39 | 5,238.18 | 1,159.06 | 430.87 | -1,123.55 | 1.50 | -1.50 | 0.00 | |
| 5,500.00 | 10.00 | 20.39 | 5,336.42 | 1,176.55 | 437.37 | -1,140.50 | 1.50 | -1.50 | 0.00 | |
| 5,600.00 | 8.50 | 20.39 | 5,435.12 | 1,191.62 | 442.98 | -1,155.11 | 1.50 | -1.50 | 0.00 | |
| 5,700.00 | 7.00 | 20.39 | 5,534.20 | 1,204.27 | 447.68 | -1,167.37 | 1.50 | -1.50 | 0.00 | |
| 5,800.00 | 5.50 | 20.39 | 5,633.60 | 1,214.48 | 451.47 | -1,177.27 | 1.50 | -1.50 | 0.00 | |
| 5,900.00 | 4.00 | 20.39 | 5,733.26 | 1,222.25 | 454.36 | -1,184.80 | 1.50 | -1.50 | 0.00 | |
| 6,000.00 | 2.50 | 20.39 | 5,833.09 | 1,227.57 | 456.34 | -1,189.96 | 1.50 | -1.50 | 0.00 | |
| 6,100.00 | 1.00 | 20.39 | 5,933.04 | 1,230.44 | 457.41 | -1,192.74 | 1.50 | -1.50 | 0.00 | |
| 6,166.96 | 0.00 | 0.00 | 6,000.00 | 1,230.99 | 457.61 | -1,193.27 | 1.50 | -1.50 | 0.00 | |
| 6,200.00 | 0.00 | 0.00 | 6,033.04 | 1,230.99 | 457.61 | -1,193.27 | 0.00 | 0.00 | 0.00 | |
| 6,300.00 | 0.00 | 0.00 | 6,133.04 | 1,230.99 | 457.61 | -1,193.27 | 0.00 | 0.00 | 0.00 | |
| 6,400.00 | 0.00 | 0.00 | 6,233.04 | 1,230.99 | 457.61 | -1,193.27 | 0.00 | 0.00 | 0.00 | |
| 6,500.00 | 0.00 | 0.00 | 6,333.04 | 1,230.99 | 457.61 | -1,193.27 | 0.00 | 0.00 | 0.00 | |
| 6,600.00 | 0.00 | 0.00 | 6,433.04 | 1,230.99 | 457.61 | -1,193.27 | 0.00 | 0.00 | 0.00 | |
| 6,700.00 | 0.00 | 0.00 | 6,533.04 | 1,230.99 | 457.61 | -1,193.27 | 0.00 | 0.00 | 0.00 | |
| 6,770.17 | 0.00 | 0.00 | 6,603.21 | 1,230.99 | 457.61 | -1,193.27 | 0.00 | 0.00 | 0.00 | |
| 6,800.00 | 2.68 | 180.00 | 6,633.03 | 1,230.29 | 457.61 | -1,192.58 | 9.00 | 9.00 | 0.00 | |
| 6,900.00 | 11.68 | 180.00 | 6,732.14 | 1,217.80 | 457.61 | -1,180.12 | 9.00 | 9.00 | 0.00 | |
| 7,000.00 | 20.68 | 180.00 | 6,828.08 | 1,189.95 | 457.61 | -1,152.35 | 9.00 | 9.00 | 0.00 | |
| 7,060.97 | 26.17 | 180.00 | 6,884.00 | 1,165.72 | 457.61 | -1,128.19 | 9.00 | 9.00 | 0.00 | |
| Sharon Springs | | | | | | | | | | |
| 7,100.00 | 29.68 | 180.00 | 6,918.48 | 1,147.44 | 457.61 | -1,109.96 | 9.00 | 9.00 | 0.00 | |
| 7,138.10 | 33.11 | 180.00 | 6,951.00 | 1,127.59 | 457.61 | -1,090.17 | 9.00 | 9.00 | 0.00 | |
| Niobrara | | | | | | | | | | |
| 7,200.00 | 38.68 | 180.00 | 7,001.12 | 1,091.31 | 457.61 | -1,053.99 | 9.00 | 9.00 | 0.00 | |
| 7,202.41 | 38.90 | 180.00 | 7,003.00 | 1,089.80 | 457.61 | -1,052.48 | 9.00 | 9.00 | 0.00 | |
| Nio B | | | | | | | | | | |
| 7,300.00 | 47.68 | 180.00 | 7,073.96 | 1,022.95 | 457.61 | -985.81 | 9.00 | 9.00 | 0.00 | |
| 7,318.17 | 49.32 | 180.00 | 7,086.00 | 1,009.34 | 457.61 | -972.24 | 9.00 | 9.00 | 0.00 | |
| Nio C | | | | | | | | | | |
| 7,400.00 | 56.68 | 180.00 | 7,135.21 | 944.03 | 457.61 | -907.12 | 9.00 | 9.00 | 0.00 | |
| 7,500.00 | 65.68 | 180.00 | 7,183.36 | 856.50 | 457.61 | -819.84 | 9.00 | 9.00 | 0.00 | |
| 7,574.52 | 72.39 | 180.00 | 7,210.00 | 786.95 | 457.61 | -750.48 | 9.00 | 9.00 | 0.00 | |
| Fort Hayes | | | | | | | | | | |
| 7,600.00 | 74.68 | 180.00 | 7,217.22 | 762.52 | 457.61 | -726.12 | 9.00 | 9.00 | 0.00 | |
| 7,683.97 | 82.24 | 180.00 | 7,234.00 | 680.31 | 457.61 | -644.14 | 9.00 | 9.00 | 0.00 | |
| Codell | | | | | | | | | | |
| 7,700.00 | 83.68 | 180.00 | 7,235.96 | 664.40 | 457.61 | -628.27 | 9.00 | 9.00 | 0.00 | |
| 7,769.39 | 89.93 | 180.00 | 7,239.83 | 595.15 | 457.61 | -559.22 | 9.00 | 9.00 | 0.00 | |
| Top of Production - RW 28C-5HZ_PHL | | | | | | | | | | |
| 7,800.00 | 89.93 | 180.00 | 7,239.86 | 564.54 | 457.61 | -528.69 | 0.00 | 0.00 | 0.00 | |

Corporate Planning Report

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|------------------|--------------------------------|-------------------------------------|---------------------------|
| Database: | PLANNING | Local Co-ordinate Reference: | Well RW 28C-5HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB @ 4902.00usft (D Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB @ 4902.00usft (D Rig) |
| Site: | 3N-65W-29 RW 35-29HZ Pad | North Reference: | True |
| Well: | RW 28C-5HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| Planned Survey | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 7,900.00 | 89.93 | 180.00 | 7,239.99 | 464.54 | 457.61 | -428.97 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 89.93 | 180.00 | 7,240.11 | 364.54 | 457.61 | -329.25 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 89.93 | 180.00 | 7,240.23 | 264.54 | 457.61 | -229.53 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 89.93 | 180.00 | 7,240.35 | 164.54 | 457.61 | -129.81 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 89.93 | 180.00 | 7,240.47 | 64.54 | 457.61 | -30.10 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 89.93 | 180.00 | 7,240.60 | -35.46 | 457.61 | 69.62 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 89.93 | 180.00 | 7,240.72 | -135.46 | 457.61 | 169.34 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 89.93 | 180.00 | 7,240.84 | -235.46 | 457.61 | 269.06 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 89.93 | 180.00 | 7,240.96 | -335.46 | 457.61 | 368.78 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 89.93 | 180.00 | 7,241.09 | -435.46 | 457.61 | 468.50 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 89.93 | 180.00 | 7,241.21 | -535.46 | 457.61 | 568.22 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 89.93 | 180.00 | 7,241.33 | -635.46 | 457.61 | 667.94 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 89.93 | 180.00 | 7,241.45 | -735.46 | 457.61 | 767.66 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 89.93 | 180.00 | 7,241.57 | -835.46 | 457.61 | 867.38 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 89.93 | 180.00 | 7,241.70 | -935.46 | 457.61 | 967.10 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 89.93 | 180.00 | 7,241.82 | -1,035.46 | 457.61 | 1,066.82 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 89.93 | 180.00 | 7,241.94 | -1,135.46 | 457.61 | 1,166.54 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 89.93 | 180.00 | 7,242.06 | -1,235.46 | 457.61 | 1,266.26 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 89.93 | 180.00 | 7,242.19 | -1,335.46 | 457.61 | 1,365.97 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 89.93 | 180.00 | 7,242.31 | -1,435.46 | 457.61 | 1,465.69 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 89.93 | 180.00 | 7,242.43 | -1,535.46 | 457.61 | 1,565.41 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 89.93 | 180.00 | 7,242.55 | -1,635.46 | 457.61 | 1,665.13 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 89.93 | 180.00 | 7,242.67 | -1,735.46 | 457.61 | 1,764.85 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 89.93 | 180.00 | 7,242.80 | -1,835.46 | 457.61 | 1,864.57 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 89.93 | 180.00 | 7,242.92 | -1,935.46 | 457.61 | 1,964.29 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 89.93 | 180.00 | 7,243.04 | -2,035.46 | 457.61 | 2,064.01 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 89.93 | 180.00 | 7,243.16 | -2,135.46 | 457.61 | 2,163.73 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 89.93 | 180.00 | 7,243.28 | -2,235.46 | 457.61 | 2,263.45 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 89.93 | 180.00 | 7,243.41 | -2,335.46 | 457.61 | 2,363.17 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 89.93 | 180.00 | 7,243.53 | -2,435.46 | 457.61 | 2,462.89 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 89.93 | 180.00 | 7,243.65 | -2,535.46 | 457.61 | 2,562.61 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 89.93 | 180.00 | 7,243.77 | -2,635.46 | 457.61 | 2,662.32 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 89.93 | 180.00 | 7,243.90 | -2,735.46 | 457.61 | 2,762.04 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 89.93 | 180.00 | 7,244.02 | -2,835.46 | 457.61 | 2,861.76 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 89.93 | 180.00 | 7,244.14 | -2,935.46 | 457.61 | 2,961.48 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 89.93 | 180.00 | 7,244.26 | -3,035.46 | 457.61 | 3,061.20 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 89.93 | 180.00 | 7,244.38 | -3,135.46 | 457.61 | 3,160.92 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 89.93 | 180.00 | 7,244.51 | -3,235.46 | 457.61 | 3,260.64 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 89.93 | 180.00 | 7,244.63 | -3,335.46 | 457.61 | 3,360.36 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 89.93 | 180.00 | 7,244.75 | -3,435.46 | 457.61 | 3,460.08 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 89.93 | 180.00 | 7,244.87 | -3,535.46 | 457.61 | 3,559.80 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 89.93 | 180.00 | 7,245.00 | -3,635.46 | 457.61 | 3,659.52 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 89.93 | 180.00 | 7,245.12 | -3,735.46 | 457.61 | 3,759.24 | 0.00 | 0.00 | 0.00 |
| 12,200.00 | 89.93 | 180.00 | 7,245.24 | -3,835.46 | 457.61 | 3,858.96 | 0.00 | 0.00 | 0.00 |
| 12,300.00 | 89.93 | 180.00 | 7,245.36 | -3,935.46 | 457.61 | 3,958.68 | 0.00 | 0.00 | 0.00 |
| 12,400.00 | 89.93 | 180.00 | 7,245.48 | -4,035.46 | 457.61 | 4,058.39 | 0.00 | 0.00 | 0.00 |
| 12,500.00 | 89.93 | 180.00 | 7,245.61 | -4,135.46 | 457.61 | 4,158.11 | 0.00 | 0.00 | 0.00 |
| 12,600.00 | 89.93 | 180.00 | 7,245.73 | -4,235.46 | 457.61 | 4,257.83 | 0.00 | 0.00 | 0.00 |
| 12,700.00 | 89.93 | 180.00 | 7,245.85 | -4,335.46 | 457.61 | 4,357.55 | 0.00 | 0.00 | 0.00 |
| 12,800.00 | 89.93 | 180.00 | 7,245.97 | -4,435.46 | 457.61 | 4,457.27 | 0.00 | 0.00 | 0.00 |
| 12,900.00 | 89.93 | 180.00 | 7,246.09 | -4,535.46 | 457.61 | 4,556.99 | 0.00 | 0.00 | 0.00 |
| 13,000.00 | 89.93 | 180.00 | 7,246.22 | -4,635.46 | 457.61 | 4,656.71 | 0.00 | 0.00 | 0.00 |
| 13,100.00 | 89.93 | 180.00 | 7,246.34 | -4,735.46 | 457.61 | 4,756.43 | 0.00 | 0.00 | 0.00 |
| 13,200.00 | 89.93 | 180.00 | 7,246.46 | -4,835.46 | 457.61 | 4,856.15 | 0.00 | 0.00 | 0.00 |

Corporate Planning Report

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|------------------|--------------------------------|-------------------------------------|---------------------------|
| Database: | PLANNING | Local Co-ordinate Reference: | Well RW 28C-5HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB @ 4902.00usft (D Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB @ 4902.00usft (D Rig) |
| Site: | 3N-65W-29 RW 35-29HZ Pad | North Reference: | True |
| Well: | RW 28C-5HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| Planned Survey | | | | | | | | | |
|------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 13,300.00 | 89.93 | 180.00 | 7,246.58 | -4,935.46 | 457.61 | 4,955.87 | 0.00 | 0.00 | 0.00 |
| 13,400.00 | 89.93 | 180.00 | 7,246.71 | -5,035.46 | 457.61 | 5,055.59 | 0.00 | 0.00 | 0.00 |
| 13,500.00 | 89.93 | 180.00 | 7,246.83 | -5,135.46 | 457.61 | 5,155.31 | 0.00 | 0.00 | 0.00 |
| 13,600.00 | 89.93 | 180.00 | 7,246.95 | -5,235.46 | 457.61 | 5,255.03 | 0.00 | 0.00 | 0.00 |
| 13,700.00 | 89.93 | 180.00 | 7,247.07 | -5,335.46 | 457.61 | 5,354.74 | 0.00 | 0.00 | 0.00 |
| 13,800.00 | 89.93 | 180.00 | 7,247.19 | -5,435.46 | 457.61 | 5,454.46 | 0.00 | 0.00 | 0.00 |
| 13,900.00 | 89.93 | 180.00 | 7,247.32 | -5,535.46 | 457.61 | 5,554.18 | 0.00 | 0.00 | 0.00 |
| 14,000.00 | 89.93 | 180.00 | 7,247.44 | -5,635.46 | 457.61 | 5,653.90 | 0.00 | 0.00 | 0.00 |
| 14,100.00 | 89.93 | 180.00 | 7,247.56 | -5,735.46 | 457.61 | 5,753.62 | 0.00 | 0.00 | 0.00 |
| 14,200.00 | 89.93 | 180.00 | 7,247.68 | -5,835.46 | 457.61 | 5,853.34 | 0.00 | 0.00 | 0.00 |
| 14,300.00 | 89.93 | 180.00 | 7,247.81 | -5,935.46 | 457.61 | 5,953.06 | 0.00 | 0.00 | 0.00 |
| 14,400.00 | 89.93 | 180.00 | 7,247.93 | -6,035.46 | 457.61 | 6,052.78 | 0.00 | 0.00 | 0.00 |
| 14,459.48 | 89.93 | 180.00 | 7,248.00 | -6,094.94 | 457.61 | 6,112.09 | 0.00 | 0.00 | 0.00 |
| RW 28C-5HZ_PBHL | | | | | | | | | |

| Design Targets | | | | | | | | | |
|--|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| RW 28C-5HZ_PHL - hit/miss target center - Shape - Point | 0.00 | 0.00 | 7,239.83 | 595.15 | 457.61 | 14,596,810.22 | 1,727,376.65 | 40.192022 | -104.688612 |
| RW 28C-5HZ_PBHL - plan hits target center - Point | 0.00 | 0.00 | 7,248.00 | -6,094.94 | 457.61 | 14,590,120.17 | 1,727,399.99 | 40.173651 | -104.688612 |

| Casing Points | | | | | | |
|-----------------------|-----------------------|-------------------|---------------------|-------------------|--|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") | | |
| 1,521.32 | 1,500.00 | 9 5/8" | 9-5/8 | 13-1/2 | | |
| 7,769.39 | 7,239.83 | Top of Production | 5-1/2 | 8-1/2 | | |

| Formations | | | | | | |
|-----------------------|-----------------------|----------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 1,230.74 | 1,220.00 | Fox Hills Mkr | | | | |
| 4,054.65 | 3,940.00 | Parkman | | | | |
| 4,774.16 | 4,633.00 | Sussex | | | | |
| 7,060.97 | 6,884.00 | Sharon Springs | | | | |
| 7,138.10 | 6,951.00 | Niobrara | | | | |
| 7,202.41 | 7,003.00 | Nio B | | | | |
| 7,318.17 | 7,086.00 | Nio C | | | | |
| 7,574.52 | 7,210.00 | Fort Hayes | | | | |
| 7,683.97 | 7,234.00 | Codell | | | | |

Corporate Planning Report

| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------------|
| Database: | PLANNING | Local Co-ordinate Reference: | Well RW 28C-5HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB @ 4902.00usft (D Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB @ 4902.00usft (D Rig) |
| Site: | 3N-65W-29 RW 35-29HZ Pad | North Reference: | True |
| Well: | RW 28C-5HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |