

Anadarko Petroleum Corp.

Weld County, CO (NAD 83)

Sec. 34-T3N-R66W

Rattler 36C-3HZ

Plan B Rev 0

Plan: Plan B Rev 0 Permit

Sperry Drilling Services

Proposal Report

25 October, 2012

Well Coordinates: 1,307,419.55 N, 3,205,418.14 E (40° 10' 29.73" N, 104° 45' 53.54" W)

Ground Level: 4,990.00 ft

| | |
|--------------------------|-----------------------------------|
| Local Coordinate Origin: | Centered on Well Rattler 36C-3HZ |
| Viewing Datum: | RKB=17 @ 5007.00ft (Drilling Rig) |
| TVDs to System: | N |
| North Reference: | True |
| Unit System: | API - US Survey Feet - Custom |

Geodetic Scale Factor Applied

Version: 2003.16 Build: 431

HALLIBURTON

Project: Weld County, CO (NAD 83)
 Site: Sec. 34-T3N-R66W
 Well: Rattler 36C-3HZ
 Wellbore: Plan B Rev 0
 Design: Plan B Rev 0 Permit

Anadarko Petroleum Corp.



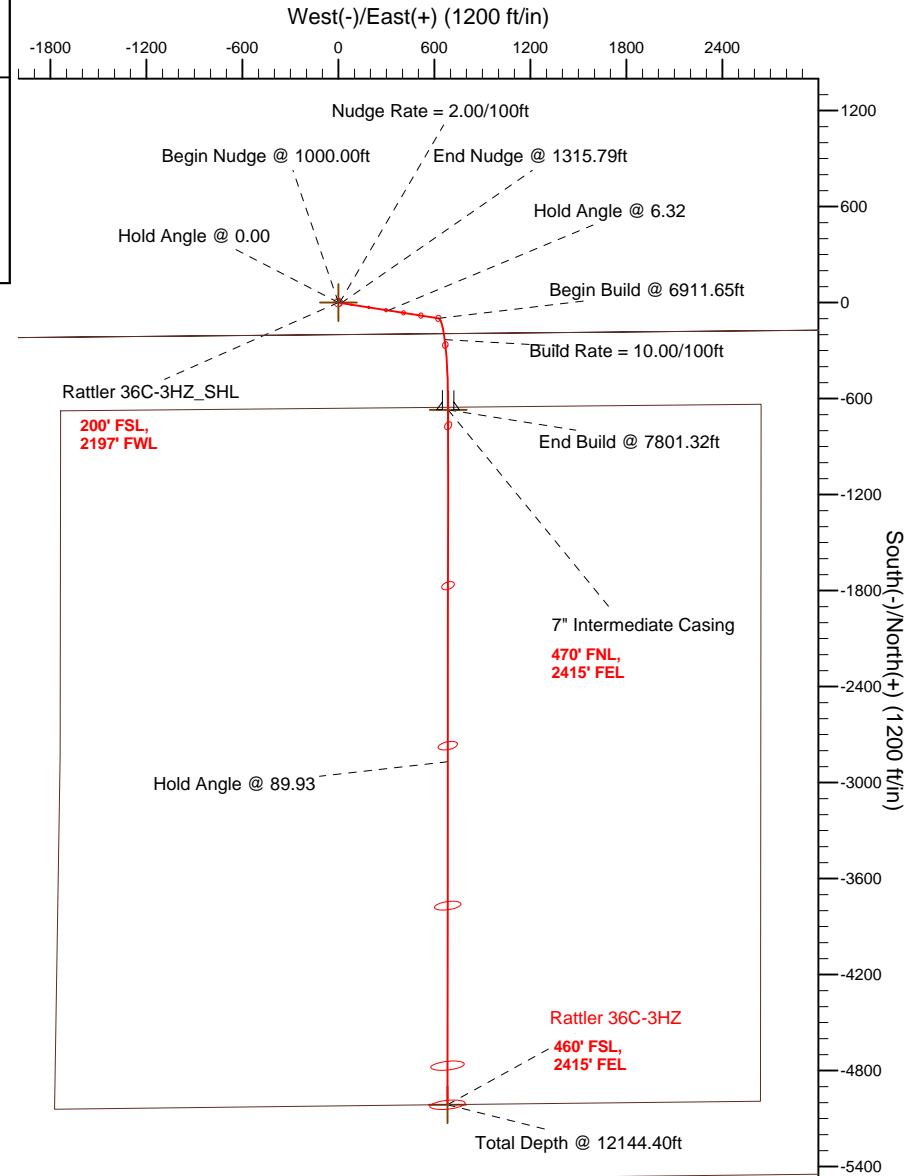
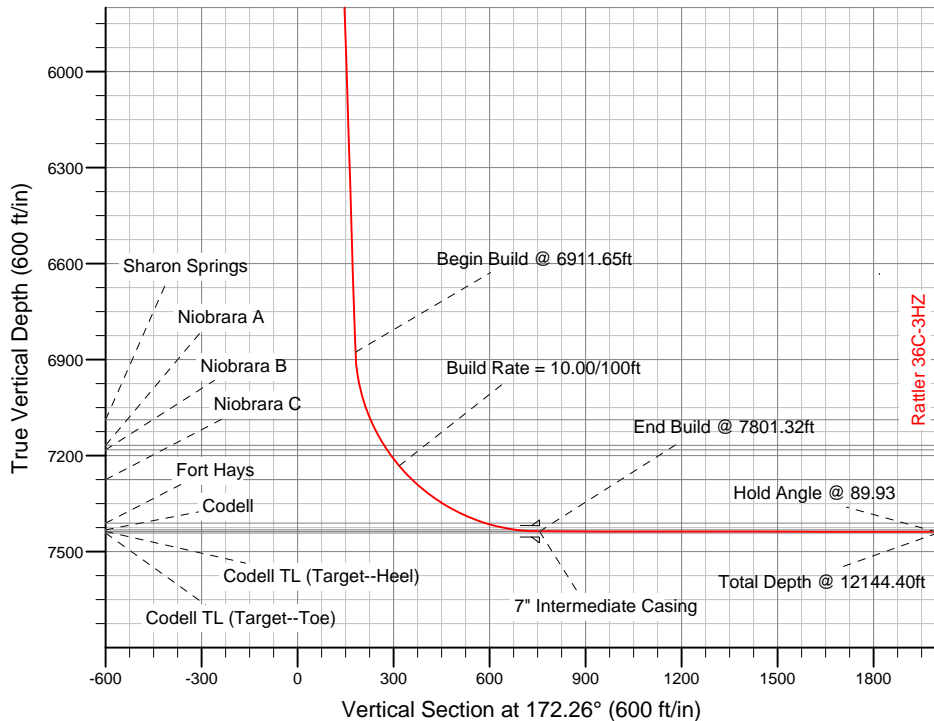
SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | Target |
|-----|----------|-------|--------|---------|----------|--------|-------|-------|---------|------------------------------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2 | 1000.00 | 0.00 | 0.00 | 1000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3 | 1315.79 | 6.32 | 98.88 | 1315.15 | -2.68 | 17.18 | 2.00 | 98.88 | 4.97 | |
| 4 | 6911.65 | 6.32 | 98.88 | 6877.04 | -97.72 | 625.39 | 0.00 | 0.00 | 181.10 | |
| 5 | 7801.32 | 89.93 | 180.06 | 7437.00 | -670.00 | 686.00 | 10.00 | 81.24 | 756.33 | Rattler 36C-3HZ_Casing Point |
| 6 | 12144.40 | 89.93 | 180.06 | 7442.00 | -5013.07 | 681.71 | 0.00 | 0.00 | 5059.21 | Rattler 36C-3HZ_BHL |

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|------------------------------|---------|----------|--------|-----------|-------------|-------|
| Rattler 36C-3HZ_SHL | 0.00 | 0.00 | 0.00 | 40.174925 | -104.764872 | Point |
| Rattler 36C-3HZ_Casing Point | 7437.00 | -670.00 | 686.00 | 40.173086 | -104.762417 | Point |
| Rattler 36C-3HZ_BHL | 7442.00 | -5013.07 | 681.71 | 40.161164 | -104.762433 | Point |

Target Line:
7435.93' TVDkb @ 0' VS Drilling 89.93°



WELL DETAILS: Rattler 36C-3HZ

Ground Level 4990.00 RKB=17 @ 5007.00ft (Drilling Rig)

Plan: Plan B Rev 0 Permit (Rattler 36C-3HZ/Plan B Rev 0)

Created By: Fred Hartmann Date: 10/25/2012
 Reviewed: _____ Date: _____

Plan Report for Rattler 36C-3HZ - Plan B Rev 0 Permit

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | Toolface Azimuth (°) |
|--------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|----------------------|
| 0.00 | 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 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 300.00 | 0.00 | 0.00 | 300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 400.00 | 0.00 | 0.00 | 400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 500.00 | 0.00 | 0.00 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hold Angle @ 0.00 | | | | | | | | | | |
| 600.00 | 0.00 | 0.00 | 600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 700.00 | 0.00 | 0.00 | 700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 800.00 | 0.00 | 0.00 | 800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 900.00 | 0.00 | 0.00 | 900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,000.00 | 0.00 | 0.00 | 1,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Begin Nudge @ 1000.00ft | | | | | | | | | | |
| 1,100.00 | 2.00 | 98.88 | 1,099.98 | -0.27 | 1.72 | 0.50 | 2.00 | 2.00 | 0.00 | 98.88 |
| 1,200.00 | 4.00 | 98.88 | 1,199.84 | -1.08 | 6.89 | 2.00 | 2.00 | 2.00 | 0.00 | 0.00 |
| Nudge Rate = 2.00/100ft | | | | | | | | | | |
| 1,300.00 | 6.00 | 98.88 | 1,299.45 | -2.42 | 15.51 | 4.49 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,315.79 | 6.32 | 98.88 | 1,315.15 | -2.68 | 17.18 | 4.97 | 2.00 | 2.00 | 0.00 | 0.00 |
| End Nudge @ 1315.79ft | | | | | | | | | | |
| 1,400.00 | 6.32 | 98.88 | 1,398.85 | -4.11 | 26.33 | 7.62 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 6.32 | 98.88 | 1,498.24 | -5.81 | 37.20 | 10.77 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 6.32 | 98.88 | 1,597.64 | -7.51 | 48.07 | 13.92 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 6.32 | 98.88 | 1,697.03 | -9.21 | 58.94 | 17.07 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 6.32 | 98.88 | 1,796.42 | -10.91 | 69.81 | 20.21 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 6.32 | 98.88 | 1,895.82 | -12.61 | 80.68 | 23.36 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 6.32 | 98.88 | 1,995.21 | -14.30 | 91.55 | 26.51 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 6.32 | 98.88 | 2,094.60 | -16.00 | 102.41 | 29.66 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 6.32 | 98.88 | 2,193.99 | -17.70 | 113.28 | 32.80 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 6.32 | 98.88 | 2,293.39 | -19.40 | 124.15 | 35.95 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 6.32 | 98.88 | 2,392.78 | -21.10 | 135.02 | 39.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 6.32 | 98.88 | 2,492.17 | -22.80 | 145.89 | 42.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 6.32 | 98.88 | 2,591.57 | -24.49 | 156.76 | 45.39 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 6.32 | 98.88 | 2,690.96 | -26.19 | 167.63 | 48.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 6.32 | 98.88 | 2,790.35 | -27.89 | 178.50 | 51.69 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 6.32 | 98.88 | 2,889.75 | -29.59 | 189.37 | 54.84 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 6.32 | 98.88 | 2,989.14 | -31.29 | 200.24 | 57.98 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 6.32 | 98.88 | 3,088.53 | -32.99 | 211.11 | 61.13 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 6.32 | 98.88 | 3,187.92 | -34.68 | 221.97 | 64.28 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 6.32 | 98.88 | 3,287.32 | -36.38 | 232.84 | 67.43 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,356.02 | 6.32 | 98.88 | 3,343.00 | -37.33 | 238.93 | 69.19 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parkman | | | | | | | | | | |
| 3,400.00 | 6.32 | 98.88 | 3,386.71 | -38.08 | 243.71 | 70.57 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 6.32 | 98.88 | 3,486.10 | -39.78 | 254.58 | 73.72 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 6.32 | 98.88 | 3,585.50 | -41.48 | 265.45 | 76.87 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 6.32 | 98.88 | 3,684.89 | -43.18 | 276.32 | 80.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 6.32 | 98.88 | 3,784.28 | -44.87 | 287.19 | 83.16 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 6.32 | 98.88 | 3,883.68 | -46.57 | 298.06 | 86.31 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 6.32 | 98.88 | 3,983.07 | -48.27 | 308.93 | 89.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hold Angle @ 6.32 | | | | | | | | | | |
| 4,100.00 | 6.32 | 98.88 | 4,082.46 | -49.97 | 319.80 | 92.60 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 6.32 | 98.88 | 4,181.86 | -51.67 | 330.66 | 95.75 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 6.32 | 98.88 | 4,281.25 | -53.37 | 341.53 | 98.90 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 6.32 | 98.88 | 4,380.64 | -55.06 | 352.40 | 102.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 6.32 | 98.88 | 4,480.03 | -56.76 | 363.27 | 105.19 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,516.06 | 6.32 | 98.88 | 4,496.00 | -57.03 | 365.02 | 105.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sussex | | | | | | | | | | |
| 4,600.00 | 6.32 | 98.88 | 4,579.43 | -58.46 | 374.14 | 108.34 | 0.00 | 0.00 | 0.00 | 0.00 |

Plan Report for Rattler 36C-3HZ - Plan B Rev 0 Permit

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | Toolface Azimuth (°) |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|----------------------|
| 4,700.00 | 6.32 | 98.88 | 4,678.82 | -60.16 | 385.01 | 111.49 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 6.32 | 98.88 | 4,778.21 | -61.86 | 395.88 | 114.64 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 6.32 | 98.88 | 4,877.61 | -63.56 | 406.75 | 117.78 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 6.32 | 98.88 | 4,977.00 | -65.25 | 417.62 | 120.93 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 6.32 | 98.88 | 5,076.39 | -66.95 | 428.49 | 124.08 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 6.32 | 98.88 | 5,175.79 | -68.65 | 439.35 | 127.23 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 6.32 | 98.88 | 5,275.18 | -70.35 | 450.22 | 130.37 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 6.32 | 98.88 | 5,374.57 | -72.05 | 461.09 | 133.52 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 6.32 | 98.88 | 5,473.97 | -73.75 | 471.96 | 136.67 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 6.32 | 98.88 | 5,573.36 | -75.44 | 482.83 | 139.81 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 6.32 | 98.88 | 5,672.75 | -77.14 | 493.70 | 142.96 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 6.32 | 98.88 | 5,772.14 | -78.84 | 504.57 | 146.11 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 6.32 | 98.88 | 5,871.54 | -80.54 | 515.44 | 149.26 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 6.32 | 98.88 | 5,970.93 | -82.24 | 526.31 | 152.40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 6.32 | 98.88 | 6,070.32 | -83.94 | 537.18 | 155.55 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 6.32 | 98.88 | 6,169.72 | -85.63 | 548.04 | 158.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 6.32 | 98.88 | 6,269.11 | -87.33 | 558.91 | 161.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 6.32 | 98.88 | 6,368.50 | -89.03 | 569.78 | 164.99 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 6.32 | 98.88 | 6,467.90 | -90.73 | 580.65 | 168.14 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,600.00 | 6.32 | 98.88 | 6,567.29 | -92.43 | 591.52 | 171.29 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,700.00 | 6.32 | 98.88 | 6,666.68 | -94.12 | 602.39 | 174.44 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,800.00 | 6.32 | 98.88 | 6,766.07 | -95.82 | 613.26 | 177.58 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,900.00 | 6.32 | 98.88 | 6,865.47 | -97.52 | 624.13 | 180.73 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,911.65 | 6.32 | 98.88 | 6,877.05 | -97.72 | 625.39 | 181.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| Begin Build @ 6911.65ft | | | | | | | | | | |
| 7,000.00 | 11.60 | 147.88 | 6,964.40 | -106.01 | 634.94 | 190.60 | 10.00 | 5.99 | 55.46 | 81.24 |
| 7,100.00 | 20.72 | 163.26 | 7,060.39 | -131.54 | 645.41 | 217.31 | 10.00 | 9.12 | 15.38 | 32.72 |
| 7,129.82 | 23.58 | 165.55 | 7,088.00 | -142.37 | 648.42 | 228.44 | 10.00 | 9.57 | 7.68 | 17.89 |
| Sharon Springs | | | | | | | | | | |
| 7,200.00 | 30.39 | 169.32 | 7,150.51 | -173.44 | 655.22 | 260.15 | 10.00 | 9.70 | 5.36 | 15.77 |
| 7,220.49 | 32.39 | 170.14 | 7,168.00 | -183.95 | 657.12 | 270.81 | 10.00 | 9.78 | 4.01 | 12.41 |
| Niobrara A | | | | | | | | | | |
| 7,237.22 | 34.03 | 170.74 | 7,182.00 | -192.98 | 658.64 | 279.97 | 10.00 | 9.80 | 3.63 | 11.71 |
| Niobrara B | | | | | | | | | | |
| 7,300.00 | 40.21 | 172.63 | 7,232.03 | -230.46 | 664.07 | 317.83 | 10.00 | 9.84 | 3.00 | 11.20 |
| Build Rate = 10.00/100ft | | | | | | | | | | |
| 7,358.88 | 46.02 | 174.01 | 7,275.00 | -270.41 | 668.73 | 358.05 | 10.00 | 9.87 | 2.34 | 9.70 |
| Niobrara C | | | | | | | | | | |
| 7,400.00 | 50.09 | 174.81 | 7,302.48 | -300.84 | 671.70 | 388.60 | 10.00 | 9.89 | 1.97 | 8.69 |
| 7,500.00 | 60.00 | 176.44 | 7,359.70 | -382.46 | 677.87 | 470.31 | 10.00 | 9.91 | 1.63 | 8.15 |
| 7,600.00 | 69.93 | 177.77 | 7,401.97 | -472.83 | 682.39 | 560.47 | 10.00 | 9.93 | 1.33 | 7.21 |
| 7,628.19 | 72.73 | 178.11 | 7,411.00 | -499.52 | 683.35 | 587.05 | 10.00 | 9.93 | 1.21 | 6.65 |
| Fort Hays | | | | | | | | | | |
| 7,700.00 | 79.86 | 178.94 | 7,428.00 | -569.22 | 685.13 | 656.34 | 10.00 | 9.94 | 1.15 | 6.54 |
| 7,726.01 | 82.45 | 179.23 | 7,432.00 | -594.91 | 685.54 | 681.86 | 10.00 | 9.94 | 1.11 | 6.34 |
| Codell | | | | | | | | | | |
| 7,800.00 | 89.80 | 180.04 | 7,437.00 | -668.68 | 686.00 | 755.02 | 10.00 | 9.94 | 1.09 | 6.30 |
| 7,801.32 | 89.93 | 180.06 | 7,437.00 | -670.00 | 686.00 | 756.33 | 10.00 | 9.94 | 1.09 | 6.24 |
| End Build @ 7801.32ft - Codell TL (Target-Heel) - 7" Intermediate Casing - Rattler 36C-3HZ_Casing Point | | | | | | | | | | |
| 7,900.00 | 89.93 | 180.06 | 7,437.11 | -768.68 | 685.90 | 854.09 | 0.00 | 0.00 | 0.00 | 6.24 |
| 8,000.00 | 89.93 | 180.06 | 7,437.23 | -868.68 | 685.80 | 953.17 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 89.93 | 180.06 | 7,437.34 | -968.68 | 685.70 | 1,052.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 89.93 | 180.06 | 7,437.46 | -1,068.68 | 685.61 | 1,151.32 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 89.93 | 180.06 | 7,437.57 | -1,168.68 | 685.51 | 1,250.39 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 89.93 | 180.06 | 7,437.69 | -1,268.68 | 685.41 | 1,349.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 89.93 | 180.06 | 7,437.80 | -1,368.68 | 685.31 | 1,448.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 89.93 | 180.06 | 7,437.92 | -1,468.68 | 685.21 | 1,547.61 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 89.93 | 180.06 | 7,438.03 | -1,568.68 | 685.11 | 1,646.69 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 89.93 | 180.06 | 7,438.15 | -1,668.68 | 685.01 | 1,745.76 | 0.00 | 0.00 | 0.00 | 0.00 |

Plan Report for Rattler 36C-3HZ - Plan B Rev 0 Permit

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | Toolface Azimuth (°) |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|----------------------|
| 8,900.00 | 89.93 | 180.06 | 7,438.26 | -1,768.68 | 684.91 | 1,844.84 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 89.93 | 180.06 | 7,438.38 | -1,868.68 | 684.82 | 1,943.91 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 89.93 | 180.06 | 7,438.50 | -1,968.68 | 684.72 | 2,042.99 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 89.93 | 180.06 | 7,438.61 | -2,068.68 | 684.62 | 2,142.06 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 89.93 | 180.06 | 7,438.73 | -2,168.68 | 684.52 | 2,241.14 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 89.93 | 180.06 | 7,438.84 | -2,268.68 | 684.42 | 2,340.21 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 89.93 | 180.06 | 7,438.96 | -2,368.68 | 684.32 | 2,439.29 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 89.93 | 180.06 | 7,439.07 | -2,468.68 | 684.22 | 2,538.36 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 89.93 | 180.06 | 7,439.19 | -2,568.68 | 684.12 | 2,637.43 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 89.93 | 180.06 | 7,439.30 | -2,668.68 | 684.03 | 2,736.51 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 89.93 | 180.06 | 7,439.42 | -2,768.68 | 683.93 | 2,835.58 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 89.93 | 180.06 | 7,439.53 | -2,868.68 | 683.83 | 2,934.66 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hold Angle @ 89.93 | | | | | | | | | | |
| 10,100.00 | 89.93 | 180.06 | 7,439.65 | -2,968.68 | 683.73 | 3,033.73 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 89.93 | 180.06 | 7,439.76 | -3,068.68 | 683.63 | 3,132.81 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 89.93 | 180.06 | 7,439.88 | -3,168.68 | 683.53 | 3,231.88 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 89.93 | 180.06 | 7,439.99 | -3,268.68 | 683.43 | 3,330.96 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 89.93 | 180.06 | 7,440.11 | -3,368.68 | 683.33 | 3,430.03 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 89.93 | 180.06 | 7,440.22 | -3,468.68 | 683.23 | 3,529.11 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 89.93 | 180.06 | 7,440.34 | -3,568.68 | 683.14 | 3,628.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 89.93 | 180.06 | 7,440.45 | -3,668.68 | 683.04 | 3,727.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 89.93 | 180.06 | 7,440.57 | -3,768.68 | 682.94 | 3,826.33 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 89.93 | 180.06 | 7,440.68 | -3,868.68 | 682.84 | 3,925.40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 89.93 | 180.06 | 7,440.80 | -3,968.68 | 682.74 | 4,024.48 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 89.93 | 180.06 | 7,440.91 | -4,068.68 | 682.64 | 4,123.55 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 89.93 | 180.06 | 7,441.03 | -4,168.68 | 682.54 | 4,222.63 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 89.93 | 180.06 | 7,441.14 | -4,268.68 | 682.44 | 4,321.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 89.93 | 180.06 | 7,441.26 | -4,368.68 | 682.35 | 4,420.78 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 89.93 | 180.06 | 7,441.37 | -4,468.68 | 682.25 | 4,519.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 89.93 | 180.06 | 7,441.49 | -4,568.68 | 682.15 | 4,618.93 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 89.93 | 180.06 | 7,441.60 | -4,668.67 | 682.05 | 4,718.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 89.93 | 180.06 | 7,441.72 | -4,768.67 | 681.95 | 4,817.08 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 89.93 | 180.06 | 7,441.83 | -4,868.67 | 681.85 | 4,916.15 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 89.93 | 180.06 | 7,441.95 | -4,968.67 | 681.75 | 5,015.22 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,144.40 | 89.93 | 180.06 | 7,442.00 | -5,013.07 | 681.71 | 5,059.21 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Depth @ 12144.40ft - Rattler 36C-3HZ_BHL | | | | | | | | | | |

Plan Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
|---------------------|---------------------|-------------------|------------|--------------------------|
| | | +N/-S (ft) | +E/-W (ft) | |
| 500.00 | 500.00 | 0.00 | 0.00 | Hold Angle @ 0.00 |
| 1,000.00 | 1,000.00 | 0.00 | 0.00 | Begin Nudge @ 1000.00ft |
| 1,200.00 | 1,199.84 | -1.08 | 6.89 | Nudge Rate = 2.00/100ft |
| 1,315.79 | 1,315.15 | -2.68 | 17.18 | End Nudge @ 1315.79ft |
| 4,000.00 | 3,983.07 | -48.27 | 308.93 | Hold Angle @ 6.32 |
| 6,911.65 | 6,877.05 | -97.72 | 625.39 | Begin Build @ 6911.65ft |
| 7,300.00 | 7,232.03 | -230.46 | 664.07 | Build Rate = 10.00/100ft |
| 7,801.32 | 7,437.00 | -670.00 | 686.00 | End Build @ 7801.32ft |
| 10,000.00 | 7,439.53 | -2,868.68 | 683.83 | Hold Angle @ 89.93 |
| 12,144.40 | 7,442.00 | -5,013.07 | 681.71 | Total Depth @ 12144.40ft |

Plan Report for Rattler 36C-3HZ - Plan B Rev 0 Permit**Vertical Section Information**

| Angle Type | Target | Azimuth (°) | Origin Type | Origin +N/_S (ft) | Origin +E/-W (ft) | Start TVD (ft) |
|---------------|---------------------|----------------|----------------|-------------------------|-------------------------|----------------------|
| Target | Rattler 36C-3HZ_BHL | 172.26 | Slot | 0.00 | 0.00 | 7,442.00 |

Survey tool program

| From (ft) | To (ft) | Survey/Plan | Survey Tool |
|--------------|------------|---------------------|-------------|
| 0.00 | 7,801.32 | Plan B Rev 0 Permit | MWD |
| 7,801.32 | 12,144.40 | Plan B Rev 0 Permit | MWD |

Casing Details

| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (") | Hole Diameter (") |
|---------------------------|---------------------------|------------------------|---------------------------|-------------------------|
| 7,801.32 | 7,437.00 | 7" Intermediate Casing | 7 | 8-3/4 |

Formation Details

| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---------------------------|---------------------------|--------------------------|-----------|------------|-------------------------|
| 3,356.02 | 3,343.00 | Parkman | | | |
| 4,516.06 | 4,496.00 | Sussex | | | |
| 7,129.82 | 7,088.00 | Sharon Springs | | | |
| 7,220.49 | 7,168.00 | Niobrara A | | | |
| 7,237.22 | 7,182.00 | Niobrara B | | | |
| 7,358.88 | 7,275.00 | Niobrara C | | | |
| 7,628.19 | 7,411.00 | Fort Hays | | | |
| 7,726.01 | 7,432.00 | Codell | | | |
| 7,801.32 | 7,437.00 | Codell TL (Target--Heel) | | | |
| 12,144.40 | 7,442.00 | Codell TL (Target--Toe) | | | |

Targets associated with this wellbore

| Target Name | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Shape |
|------------------------------|-------------|---------------|---------------|-------|
| Rattler 36C-3HZ_SHL | 0.00 | 0.00 | 0.00 | Point |
| Rattler 36C-3HZ_BHL | 7,442.00 | -5,013.07 | 681.71 | Point |
| Rattler 36C-3HZ_Casing Point | 7,437.00 | -670.00 | 686.00 | Point |

North Reference Sheet for Sec. 34-T3N-R66W - Rattler 36C-3HZ - Plan B Rev 0

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.
 Vertical Depths are relative to RKB=17 @ 5007.00ft (Drilling Rig). Northing and Easting are relative to Rattler 36C-3HZ
 Coordinate System is US State Plane 1983, Colorado Northern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Lambert Conformal Conic (2 parallel)
 Central Meridian is -105.50°, Longitude Origin:0.000000°, Latitude Origin:40.783333°
 False Easting: 3,000,000.00ft, False Northing: 1,000,000.00ft, Scale Reduction: 0.99995772

Grid Coordinates of Well: 1,307,419.55 ft N, 3,205,418.14 ft E
 Geographical Coordinates of Well: 40° 10' 29.73" N, 104° 45' 53.54" W
 Grid Convergence at Surface is: 0.47°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,144.40ft
 the Bottom Hole Displacement is 5,059.21ft in the Direction of 172.26° (True).

Magnetic Convergence at surface is: -8.23° (25 October 2012, , BGGM2012)

