

Noble Energy (Rockies)

Garfield County, CO

Sec. 35-T7S-R95W (SGV 35L PAD)

Rulison Federal 35-24D - A 7

Wellbore #1

Plan: Plan #1

Sperry Drilling Services

Proposal Report

12 November, 2009

Well Coordinates: 577,320.00 N, 1,301,596.30 E (39° 23' 32.83" N, 107° 58' 17.24" W)

Ground Level: 9,203.00 ft

Local Coordinate Origin: Centered on Well Rulison Federal 35-24D - Slot A 7

Viewing Datum: RKB - 24' @ 9227.00ft

TVDs to System: N

North Reference: Grid

Unit System: API - US Survey Feet - Custom

Geodetic Scale Factor Applied

Version: 2003.16 Build: 431

HALLIBURTON

Plan Report for Rulison Federal 35-24D - Plan #1

| 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 |
| 225.00 | 0.00 | 0.00 | 225.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Kickoff at 225.00ft | | | | | | | | | | |
| 300.00 | 1.50 | 144.01 | 299.99 | -0.79 | 0.58 | 0.98 | 2.00 | 2.00 | 0.00 | 144.01 |
| 400.00 | 3.50 | 144.01 | 399.89 | -4.32 | 3.14 | 5.34 | 2.00 | 2.00 | 0.00 | 0.00 |
| 500.00 | 5.50 | 144.01 | 499.58 | -10.67 | 7.75 | 13.19 | 2.00 | 2.00 | 0.00 | 0.00 |
| 600.00 | 7.50 | 144.01 | 598.93 | -19.83 | 14.40 | 24.50 | 2.00 | 2.00 | 0.00 | 0.00 |
| 625.00 | 8.00 | 144.01 | 623.70 | -22.56 | 16.38 | 27.87 | 2.00 | 2.00 | 0.00 | 0.00 |
| Build Rate = 2.00°/100ft | | | | | | | | | | |
| 700.00 | 9.50 | 144.01 | 697.83 | -31.79 | 23.09 | 39.28 | 2.00 | 2.00 | 0.00 | 0.00 |
| 800.00 | 11.50 | 144.01 | 796.15 | -46.53 | 33.80 | 57.50 | 2.00 | 2.00 | 0.00 | 0.00 |
| 900.00 | 13.50 | 144.01 | 893.77 | -64.05 | 46.51 | 79.13 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,000.00 | 15.50 | 144.01 | 990.58 | -84.30 | 61.23 | 104.16 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,100.00 | 17.50 | 144.01 | 1,086.46 | -107.28 | 77.92 | 132.55 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,200.00 | 19.50 | 144.01 | 1,181.29 | -132.96 | 96.56 | 164.27 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,300.00 | 21.50 | 144.01 | 1,274.95 | -161.29 | 117.14 | 199.28 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,400.00 | 23.50 | 144.01 | 1,367.33 | -192.25 | 139.63 | 237.54 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,419.59 | 23.89 | 144.01 | 1,385.27 | -198.62 | 144.25 | 245.41 | 2.00 | 2.00 | 0.00 | 0.00 |
| End Build at 1419.59ft | | | | | | | | | | |
| 1,500.00 | 23.89 | 144.01 | 1,458.79 | -224.97 | 163.39 | 277.97 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 5/8" Casing Pt. | | | | | | | | | | |
| 1,600.00 | 23.89 | 144.01 | 1,550.22 | -257.74 | 187.19 | 318.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 23.89 | 144.01 | 1,641.65 | -290.51 | 210.99 | 358.95 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 23.89 | 144.01 | 1,733.08 | -323.29 | 234.79 | 399.44 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 23.89 | 144.01 | 1,824.51 | -356.06 | 258.59 | 439.93 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 23.89 | 144.01 | 1,915.95 | -388.83 | 282.39 | 480.42 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 23.89 | 144.01 | 2,007.38 | -421.60 | 306.19 | 520.91 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 23.89 | 144.01 | 2,098.81 | -454.37 | 329.99 | 561.40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 23.89 | 144.01 | 2,190.24 | -487.14 | 353.79 | 601.89 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 23.89 | 144.01 | 2,281.67 | -519.91 | 377.59 | 642.38 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 23.89 | 144.01 | 2,373.10 | -552.68 | 401.39 | 682.87 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 23.89 | 144.01 | 2,464.53 | -585.45 | 425.19 | 723.36 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 23.89 | 144.01 | 2,555.96 | -618.22 | 448.99 | 763.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 23.89 | 144.01 | 2,647.40 | -650.99 | 472.79 | 804.34 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 23.89 | 144.01 | 2,738.83 | -683.76 | 496.59 | 844.83 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 23.89 | 144.01 | 2,830.26 | -716.53 | 520.39 | 885.32 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 23.89 | 144.01 | 2,921.69 | -749.30 | 544.19 | 925.81 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 23.89 | 144.01 | 3,013.12 | -782.07 | 567.99 | 966.30 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 23.89 | 144.01 | 3,104.55 | -814.84 | 591.78 | 1,006.79 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 23.89 | 144.01 | 3,195.98 | -847.61 | 615.58 | 1,047.28 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 23.89 | 144.01 | 3,287.41 | -880.38 | 639.38 | 1,087.77 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 23.89 | 144.01 | 3,378.85 | -913.15 | 663.18 | 1,128.26 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23.89 Inclination | | | | | | | | | | |
| 3,700.00 | 23.89 | 144.01 | 3,470.28 | -945.92 | 686.98 | 1,168.75 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 23.89 | 144.01 | 3,561.71 | -978.69 | 710.78 | 1,209.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 23.89 | 144.01 | 3,653.14 | -1,011.47 | 734.58 | 1,249.73 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 23.89 | 144.01 | 3,744.57 | -1,044.24 | 758.38 | 1,290.22 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 23.89 | 144.01 | 3,836.00 | -1,077.01 | 782.18 | 1,330.71 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 23.89 | 144.01 | 3,927.43 | -1,109.78 | 805.98 | 1,371.20 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 23.89 | 144.01 | 4,018.86 | -1,142.55 | 829.78 | 1,411.69 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 23.89 | 144.01 | 4,110.30 | -1,175.32 | 853.58 | 1,452.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 23.89 | 144.01 | 4,201.73 | -1,208.09 | 877.38 | 1,492.67 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 23.89 | 144.01 | 4,293.16 | -1,240.86 | 901.18 | 1,533.16 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 23.89 | 144.01 | 4,384.59 | -1,273.63 | 924.98 | 1,573.65 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 23.89 | 144.01 | 4,476.02 | -1,306.40 | 948.78 | 1,614.13 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 23.89 | 144.01 | 4,567.45 | -1,339.17 | 972.58 | 1,654.62 | 0.00 | 0.00 | 0.00 | 0.00 |

Plan Report for Rulison Federal 35-24D - Plan #1

| 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 (°) |
|--|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|----------------------------|
| 5,000.00 | 23.89 | 144.01 | 4,658.88 | -1,371.94 | 996.38 | 1,695.11 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 23.89 | 144.01 | 4,750.31 | -1,404.71 | 1,020.18 | 1,735.60 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 23.89 | 144.01 | 4,841.74 | -1,437.48 | 1,043.98 | 1,776.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 23.89 | 144.01 | 4,933.18 | -1,470.25 | 1,067.78 | 1,816.58 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 23.89 | 144.01 | 5,024.61 | -1,503.02 | 1,091.58 | 1,857.07 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 23.89 | 144.01 | 5,116.04 | -1,535.79 | 1,115.38 | 1,897.56 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 23.89 | 144.01 | 5,207.47 | -1,568.56 | 1,139.18 | 1,938.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 23.89 | 144.01 | 5,298.90 | -1,601.33 | 1,162.98 | 1,978.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 23.89 | 144.01 | 5,390.33 | -1,634.10 | 1,186.78 | 2,019.03 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,831.33 | 23.89 | 144.01 | 5,418.98 | -1,644.37 | 1,194.24 | 2,031.72 | 0.00 | 0.00 | 0.00 | 0.00 |
| Begin Drop at 5831.33ft | | | | | | | | | | |
| 5,900.00 | 22.86 | 144.01 | 5,482.01 | -1,666.42 | 1,210.25 | 2,058.96 | 1.50 | -1.50 | 0.00 | 180.00 |
| 6,000.00 | 21.36 | 144.01 | 5,574.65 | -1,696.87 | 1,232.37 | 2,096.59 | 1.50 | -1.50 | 0.00 | 180.00 |
| 6,100.00 | 19.86 | 144.01 | 5,668.25 | -1,725.36 | 1,253.05 | 2,131.78 | 1.50 | -1.50 | 0.00 | 180.00 |
| 6,200.00 | 18.36 | 144.01 | 5,762.73 | -1,751.85 | 1,272.29 | 2,164.51 | 1.50 | -1.50 | 0.00 | 180.00 |
| 6,300.00 | 16.86 | 144.01 | 5,858.04 | -1,776.33 | 1,290.07 | 2,194.76 | 1.50 | -1.50 | 0.00 | 180.00 |
| 6,400.00 | 15.36 | 144.01 | 5,954.11 | -1,798.78 | 1,306.38 | 2,222.50 | 1.50 | -1.50 | 0.00 | 180.00 |
| 6,500.00 | 13.86 | 144.01 | 6,050.88 | -1,819.19 | 1,321.20 | 2,247.72 | 1.50 | -1.50 | 0.00 | 180.00 |
| 6,600.00 | 12.36 | 144.01 | 6,148.27 | -1,837.55 | 1,334.53 | 2,270.40 | 1.50 | -1.50 | 0.00 | 180.00 |
| 6,700.00 | 10.86 | 144.01 | 6,246.22 | -1,853.83 | 1,346.36 | 2,290.52 | 1.50 | -1.50 | 0.00 | 180.00 |
| 6,800.00 | 9.36 | 144.01 | 6,344.66 | -1,868.04 | 1,356.67 | 2,308.07 | 1.50 | -1.50 | 0.00 | 180.00 |
| Drop Rate = 1.50°/100ft | | | | | | | | | | |
| 6,900.00 | 7.86 | 144.01 | 6,443.53 | -1,880.15 | 1,365.47 | 2,323.04 | 1.50 | -1.50 | 0.00 | -180.00 |
| 7,000.00 | 6.36 | 144.01 | 6,542.76 | -1,890.17 | 1,372.75 | 2,335.42 | 1.50 | -1.50 | 0.00 | 180.00 |
| 7,100.00 | 4.86 | 144.01 | 6,642.28 | -1,898.08 | 1,378.49 | 2,345.19 | 1.50 | -1.50 | 0.00 | 180.00 |
| 7,200.00 | 3.36 | 144.01 | 6,742.02 | -1,903.88 | 1,382.71 | 2,352.36 | 1.50 | -1.50 | 0.00 | 180.00 |
| 7,300.00 | 1.86 | 144.01 | 6,841.91 | -1,907.57 | 1,385.39 | 2,356.92 | 1.50 | -1.50 | 0.00 | 180.00 |
| 7,400.00 | 0.36 | 144.01 | 6,941.89 | -1,909.14 | 1,386.53 | 2,358.86 | 1.50 | -1.50 | 0.00 | 180.00 |
| 7,424.11 | 0.00 | 0.00 | 6,966.00 | -1,909.20 | 1,386.57 | 2,358.93 | 1.50 | -1.50 | -597.27 | -180.00 |
| End Drop at 7424.11ft - Williams Fork - Rulison Federal 35-24D Plan #1 Driller's Tgt | | | | | | | | | | |
| 7,424.14 | 0.00 | 243.44 | 6,966.03 | -1,909.20 | 1,386.57 | 2,358.93 | 0.01 | 0.00 | -349,835.63 | -148.28 |
| Rulison Federal 35-24D Plan #1 Zone Tgt | | | | | | | | | | |
| 7,500.00 | 0.07 | 243.44 | 7,041.89 | -1,909.22 | 1,386.53 | 2,358.93 | 0.09 | 0.09 | 0.00 | 0.00 |
| 7,600.00 | 0.16 | 243.44 | 7,141.89 | -1,909.31 | 1,386.35 | 2,358.90 | 0.09 | 0.09 | 0.00 | 0.00 |
| 7,700.00 | 0.25 | 243.44 | 7,241.89 | -1,909.47 | 1,386.04 | 2,358.85 | 0.09 | 0.09 | 0.00 | 0.00 |
| 7,800.00 | 0.34 | 243.44 | 7,341.89 | -1,909.70 | 1,385.58 | 2,358.78 | 0.09 | 0.09 | 0.00 | 0.00 |
| 7,900.00 | 0.43 | 243.44 | 7,441.88 | -1,910.00 | 1,384.98 | 2,358.68 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,000.00 | 0.52 | 243.44 | 7,541.88 | -1,910.36 | 1,384.24 | 2,358.57 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,100.00 | 0.61 | 243.44 | 7,641.88 | -1,910.80 | 1,383.36 | 2,358.43 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,200.00 | 0.70 | 243.44 | 7,741.87 | -1,911.31 | 1,382.34 | 2,358.27 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,300.00 | 0.79 | 243.44 | 7,841.86 | -1,911.89 | 1,381.18 | 2,358.08 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,400.00 | 0.88 | 243.44 | 7,941.85 | -1,912.54 | 1,379.88 | 2,357.88 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,500.00 | 0.97 | 243.44 | 8,041.84 | -1,913.27 | 1,378.44 | 2,357.65 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,513.16 | 0.98 | 243.44 | 8,055.00 | -1,913.37 | 1,378.24 | 2,357.62 | 0.09 | 0.09 | 0.00 | 0.00 |
| Top of Gas | | | | | | | | | | |
| 8,600.00 | 1.06 | 243.44 | 8,141.82 | -1,914.06 | 1,376.86 | 2,357.40 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,700.00 | 1.15 | 243.44 | 8,241.80 | -1,914.92 | 1,375.13 | 2,357.13 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,800.00 | 1.24 | 243.44 | 8,341.78 | -1,915.85 | 1,373.27 | 2,356.84 | 0.09 | 0.09 | 0.00 | 0.00 |
| 8,900.00 | 1.33 | 243.44 | 8,441.76 | -1,916.85 | 1,371.27 | 2,356.53 | 0.09 | 0.09 | 0.00 | 0.00 |
| 9,000.00 | 1.42 | 243.44 | 8,541.73 | -1,917.92 | 1,369.13 | 2,356.19 | 0.09 | 0.09 | 0.00 | 0.00 |
| 9,100.00 | 1.51 | 243.44 | 8,641.69 | -1,919.06 | 1,366.84 | 2,355.83 | 0.09 | 0.09 | 0.00 | 0.00 |
| 9,200.00 | 1.60 | 243.44 | 8,741.66 | -1,920.28 | 1,364.42 | 2,355.45 | 0.09 | 0.09 | 0.00 | 0.00 |
| 9,290.68 | 1.68 | 243.44 | 8,832.30 | -1,921.44 | 1,362.10 | 2,355.08 | 0.09 | 0.09 | 0.00 | 0.00 |
| 9,300.00 | 1.67 | 243.44 | 8,841.62 | -1,921.56 | 1,361.85 | 2,355.05 | 0.09 | -0.09 | 0.00 | 180.00 |
| 9,400.00 | 1.59 | 243.44 | 8,941.58 | -1,922.83 | 1,359.31 | 2,354.65 | 0.09 | -0.09 | 0.00 | 180.00 |
| 9,500.00 | 1.50 | 243.44 | 9,041.54 | -1,924.03 | 1,356.90 | 2,354.27 | 0.09 | -0.09 | 0.00 | 180.00 |
| 9,600.00 | 1.41 | 243.44 | 9,141.51 | -1,925.17 | 1,354.63 | 2,353.91 | 0.09 | -0.09 | 0.00 | 180.00 |
| 9,700.00 | 1.33 | 243.44 | 9,241.48 | -1,926.24 | 1,352.49 | 2,353.58 | 0.09 | -0.09 | 0.00 | 180.00 |
| 9,800.00 | 1.24 | 243.44 | 9,341.45 | -1,927.24 | 1,350.49 | 2,353.26 | 0.09 | -0.09 | 0.00 | 180.00 |

Plan Report for Rulison Federal 35-24D - Plan #1

| 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 (°) |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|----------------------|
| 9,829.55 | 1.21 | 243.44 | 9,371.00 | -1,927.52 | 1,349.92 | 2,353.17 | 0.09 | -0.09 | 0.00 | 180.00 |
| Cameo | | | | | | | | | | |
| 9,900.00 | 1.15 | 243.44 | 9,441.43 | -1,928.17 | 1,348.62 | 2,352.97 | 0.09 | -0.09 | 0.00 | -180.00 |
| 10,000.00 | 1.07 | 243.44 | 9,541.41 | -1,929.04 | 1,346.88 | 2,352.69 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,100.00 | 0.98 | 243.44 | 9,641.40 | -1,929.84 | 1,345.28 | 2,352.44 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,200.00 | 0.90 | 243.44 | 9,741.38 | -1,930.57 | 1,343.82 | 2,352.21 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,300.00 | 0.81 | 243.44 | 9,841.37 | -1,931.24 | 1,342.49 | 2,352.00 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,310.63 | 0.80 | 243.44 | 9,852.00 | -1,931.31 | 1,342.36 | 2,351.98 | 0.09 | -0.09 | 0.00 | -180.00 |
| Rollins | | | | | | | | | | |
| 10,400.00 | 0.72 | 243.44 | 9,941.36 | -1,931.84 | 1,341.29 | 2,351.82 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,500.00 | 0.64 | 243.44 | 10,041.36 | -1,932.37 | 1,340.23 | 2,351.65 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,600.00 | 0.55 | 243.44 | 10,141.35 | -1,932.83 | 1,339.31 | 2,351.50 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,616.65 | 0.54 | 243.44 | 10,158.00 | -1,932.90 | 1,339.17 | 2,351.48 | 0.09 | -0.09 | 0.00 | -180.00 |
| Cozzette | | | | | | | | | | |
| 10,700.00 | 0.46 | 243.44 | 10,241.35 | -1,933.23 | 1,338.52 | 2,351.38 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,800.00 | 0.38 | 243.44 | 10,341.35 | -1,933.55 | 1,337.86 | 2,351.28 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,855.66 | 0.33 | 243.44 | 10,397.00 | -1,933.71 | 1,337.55 | 2,351.23 | 0.09 | -0.09 | 0.00 | -180.00 |
| Corcora | | | | | | | | | | |
| 10,900.00 | 0.29 | 243.44 | 10,441.34 | -1,933.82 | 1,337.34 | 2,351.19 | 0.09 | -0.09 | 0.00 | 180.00 |
| 10,987.66 | 0.22 | 243.44 | 10,529.00 | -1,933.99 | 1,336.99 | 2,351.14 | 0.09 | -0.09 | 0.00 | 180.00 |
| Mancos | | | | | | | | | | |
| 11,000.00 | 0.21 | 243.44 | 10,541.34 | -1,934.01 | 1,336.95 | 2,351.13 | 0.09 | -0.09 | 0.00 | -180.00 |
| 11,237.66 | 0.00 | 360.00 | 10,779.00 | -1,934.20 | 1,336.57 | 2,351.07 | 0.09 | -0.09 | 0.00 | 180.00 |
| Rulison Federal 35-24D Plan #1 BH Tgt | | | | | | | | | | |

Plan Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates +N/-S (ft) | +E/-W (ft) | Comment |
|---------------------|---------------------|------------------------------|------------|--------------------------|
| 225.00 | 225.00 | 0.00 | 0.00 | Kickoff at 225.00ft |
| 625.00 | 623.70 | -22.56 | 16.38 | Build Rate = 2.00°/100ft |
| 1,419.59 | 1,385.27 | -198.62 | 144.25 | End Build at 1419.59ft |
| 3,600.00 | 3,378.85 | -913.15 | 663.18 | 23.89 Inclination |
| 5,831.33 | 5,418.98 | -1,644.37 | 1,194.24 | Begin Drop at 5831.33ft |
| 6,800.00 | 6,344.66 | -1,868.04 | 1,356.67 | Drop Rate = 1.50°/100ft |
| 7,424.11 | 6,966.00 | -1,909.20 | 1,386.57 | End Drop at 7424.11ft |
| 11,237.66 | 10,779.00 | -1,934.20 | 1,336.57 | Total Depth = 11237.66ft |

Vertical Section Information

| Angle Type | Target | Azimuth (°) | Origin Type | Origin +N/-S (ft) | +E/-W (ft) | Start TVD (ft) |
|------------|---------------------------------------|-------------|-------------|-------------------|------------|----------------|
| Target | Rulison Federal 35-24D Plan #1 BH Tgt | 145.35 | Slot | 0.00 | 0.00 | 0.00 |

Survey tool program

| From (ft) | To (ft) | Survey/Plan | Survey Tool |
|-----------|-----------|-------------|-------------|
| 0.00 | 11,237.66 | Plan #1 | MWD |

Plan Report for Rulison Federal 35-24D - Plan #1

Casing Details

| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (") | Hole Diameter (") |
|---------------------|---------------------|-------------------|---------------------|-------------------|
| 1,500.00 | 1,458.79 | 8 5/8" Casing Pt. | 8-5/8 | 11 |

Formation Details

| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---------------------|---------------------|---------------|-----------|---------|-------------------|
| 7,424.11 | 6,966.00 | Williams Fork | | 0.00 | |
| 8,513.16 | 8,055.00 | Top of Gas | | 0.00 | |
| 9,829.55 | 9,371.00 | Cameo | | 0.00 | |
| 10,310.63 | 9,852.00 | Rollins | | 0.00 | |
| 10,616.65 | 10,158.00 | Cozzette | | 0.00 | |
| 10,855.66 | 10,397.00 | Corcora | | 0.00 | |
| 10,987.66 | 10,529.00 | Mancos | | 0.00 | |

Targets associated with this wellbore

| Target Name | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Shape |
|--|-----------|------------|------------|-----------|
| Rulison Federal 35-24D Plan #1 BH Tgt | 10,779.00 | -1,934.20 | 1,336.57 | Point |
| Rulison Federal 35-24D Plan #1 Zone Tgt | 6,966.00 | -1,934.20 | 1,336.57 | Rectangle |
| Rulison Federal 35-24D Plan #1 Driller's Tgt | 6,966.00 | -1,909.20 | 1,386.57 | Rectangle |

North Reference Sheet for Sec. 35-T7S-R95W (SGV 35L PAD) - Rulison Federal 35-24D - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to RKB - 24' @ 9227.00ft. Northing and Easting are relative to Rulison Federal 35-24D - Slot A 7

Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is -105.50°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:39° 45' 0.000 N°

False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 0.99994881

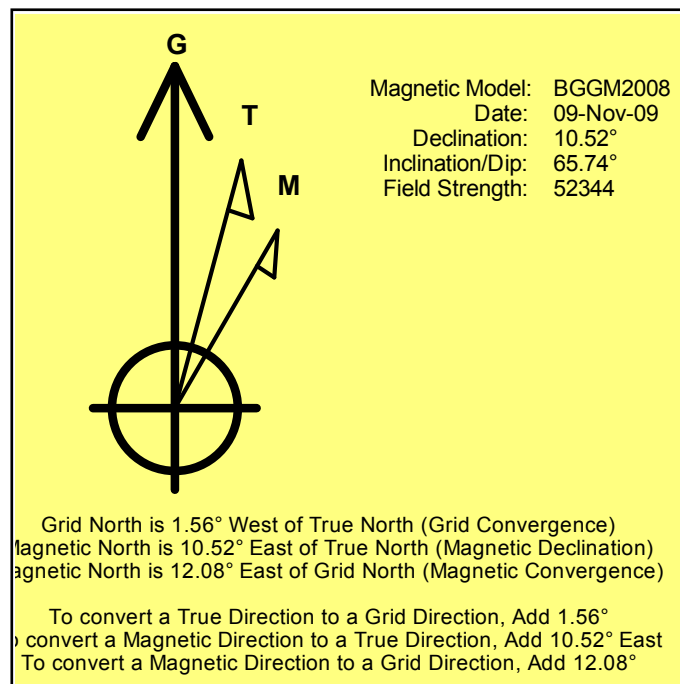
Grid Coordinates of Well: 577,320.00 ft N, 1,301,596.30 ft E

Geographical Coordinates of Well: 39° 23' 32.83" N, 107° 58' 17.24" W

Grid Convergence at Surface is: -1.56°

Based upon Minimum Curvature type calculations, at a Measured Depth of 11,237.66ft
the Bottom Hole Displacement is 2,351.07ft in the Direction of 145.35° (Grid).

Magnetic Convergence at surface is: -12.08° (9 November 2009, , BGGM2008)



Project: Garfield County, CO
Site: Sec. 35-T7S-R95W (SGV 35L PAD)
Well: Rulison Federal 35-24C
Wellbore: Wellbore #1
Plan: Plan #1

Noble Energy (Rockies)

HALLIBURTON

SECTION DETAILS

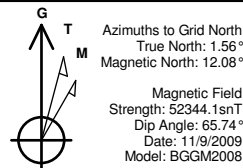
| MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | |
|----------|-------|--------|----------|----------|---------|------|--------|---------|--|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 225.00 | 0.00 | 0.00 | 225.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1279.74 | 21.09 | 139.28 | 1256.07 | -145.50 | 125.25 | 2.00 | 139.28 | 191.92 | |
| 5937.00 | 21.09 | 139.28 | 5601.23 | -1415.88 | 1218.78 | 0.00 | 0.00 | 1867.57 | Rulison Federal 35-24C Plan #1 Driller's Tgt |
| 7343.33 | 0.00 | 0.00 | 6976.00 | -1609.88 | 1385.77 | 1.50 | 180.00 | 2123.46 | |
| 9209.97 | 1.68 | 243.43 | 8842.38 | -1622.12 | 1361.30 | 0.09 | 243.43 | 2117.46 | Rulison Federal 35-24C Plan #1 BH Tgt |
| 11156.87 | 0.00 | 360.00 | 10789.00 | -1634.88 | 1335.77 | 0.09 | 180.00 | 2111.19 | |

WELL DETAILS: Rulison Federal 35-24C

Ground Level: 9203.00
Northing: 577326.00 Easting: 1301600.80 Latitude: 39° 23' 32.887 N Longitude: 107° 58' 17.182 W A 6

WELLBORE TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Shape |
|--|----------|----------|---------|------------------------------------|
| Rulison Federal 35-24C Plan #1 Driller's Tgt | 6976.00 | -1609.88 | 1385.77 | Rectangle (Sides: L25.00 W25.00) |
| Rulison Federal 35-24C Plan #1 Zone Tgt | 6976.00 | -1634.88 | 1335.77 | Rectangle (Sides: L100.00 W200.00) |
| Rulison Federal 35-24C Plan #1 BH Tgt | 10789.00 | -1634.88 | 1335.77 | Point |



FORMATION TOP DETAILS

| TVDPath | MDPath | Formation |
|----------|----------|---------------|
| 6976.00 | 7343.33 | Williams Fork |
| 8065.00 | 8432.38 | Top of Gas |
| 9381.00 | 9748.77 | Cameo |
| 9862.00 | 10229.84 | Rollins |
| 10168.00 | 10535.86 | Cozzette |
| 10407.00 | 10774.87 | Corcora |
| 10539.00 | 10906.87 | Mancos |

