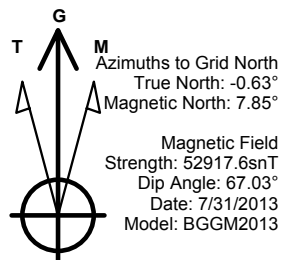


Project: Weld County, CO (NAD 83)
Site: Sec. 2-T5N-R64W (Wolfpack B02 PAD)
Well: Wolfpack B02-66-1HN

Noble Energy

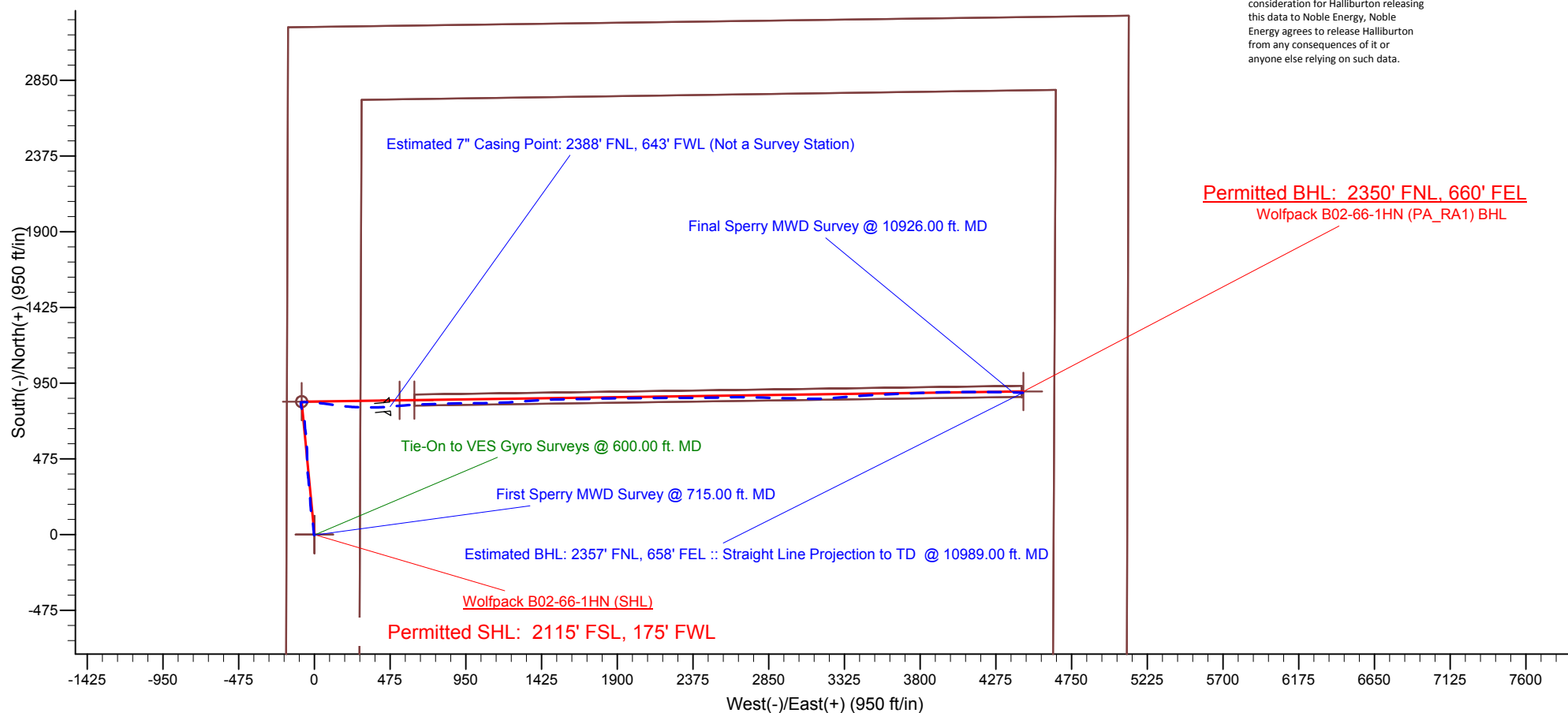
HALLIBURTON
Sperry Drilling



LEGEND

- Wolfpack B02-66-1HN
- - Vaughn ESS and Sperry MWD Survey

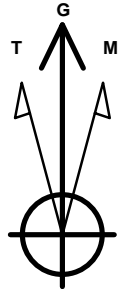
Halliburton Energy Services, Inc. ("Halliburton") recently completed directional drilling and MWD operations at the "Wolfpack B02-66-1HN" well located at Weld County, CO. At the conclusion of the job Halliburton performed a final survey on the well. Noble Energy has requested that Halliburton provide them the distances from BHL to section lines from that final survey to allow Noble Energy to meet its requirements under Colorado law. These distances are generated by a mathematical algorithm based on rough data collected after the well is drilled. Halliburton considers it to be a rough estimate only and it is not to be relied upon in any application where accurate data is required. In consideration for Halliburton releasing this data to Noble Energy, Noble Energy agrees to release Halliburton from any consequences of it or anyone else relying on such data.



Project: Weld County, CO (NAD 83)
Site: Sec. 2-T5N-R64W (Wolfpack B02 PAD)
Well: Wolfpack B02-66-1HN

Noble Energy

HALLIBURTON
Sperry Drilling



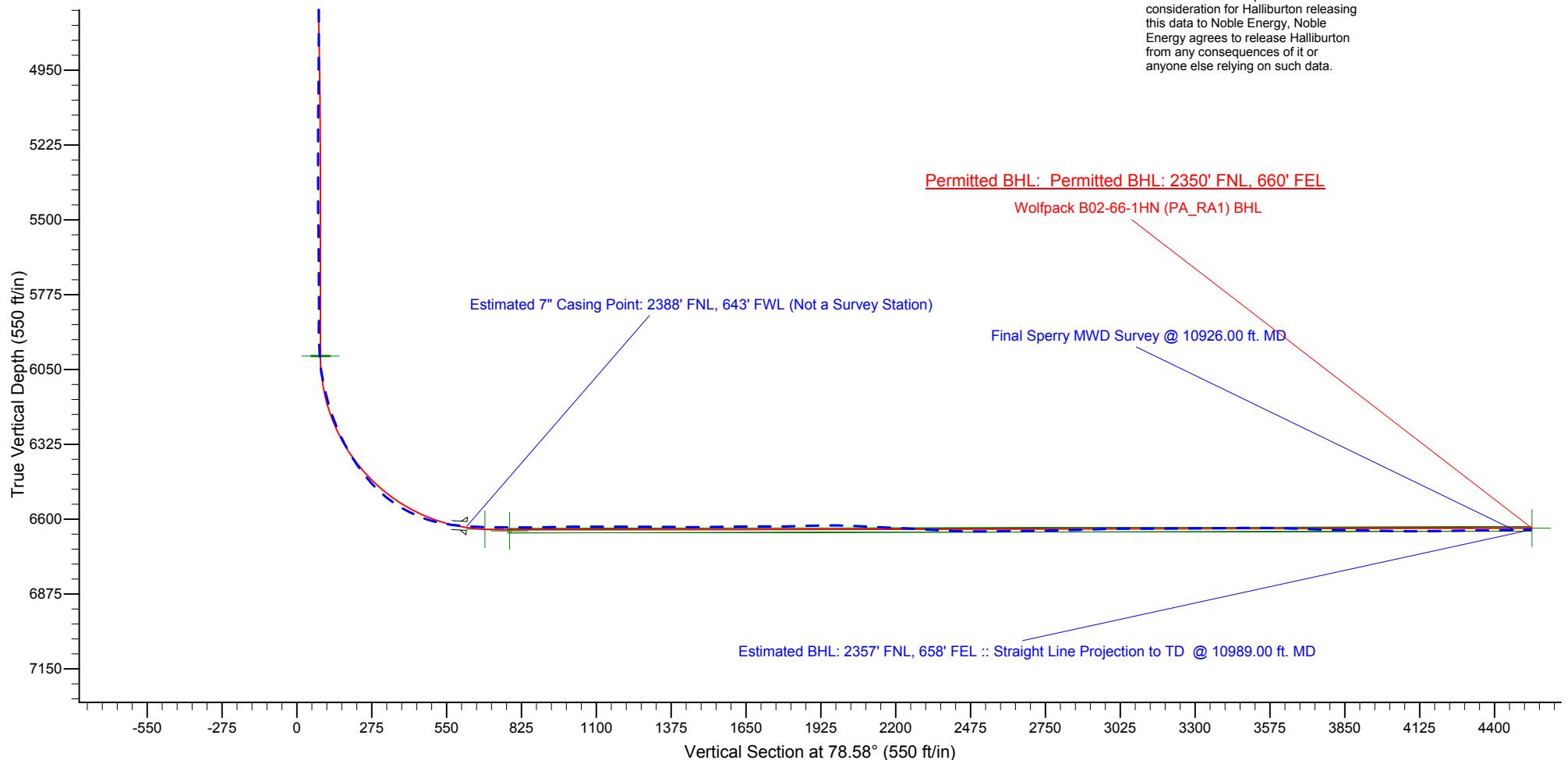
Azimuths to Grid North
True North: -0.63°
Magnetic North: 7.85°

Magnetic Field
Strength: 52917.6snT
Dip Angle: 67.03°
Date: 7/31/2013
Model: BGGM2013

LEGEND

- Wolfpack B02-66-1HN
- - Vaughn ESS and Sperry MWD Survey

Halliburton Energy Services, Inc. ("Halliburton") recently completed directional drilling and MWD operations at the "Wolfpack B02-66-1HN" well located at Weld County, CO. At the conclusion of the job Halliburton performed a final survey on the well. Noble Energy has requested that Halliburton provide them the distances from BHL to section lines from that final survey to allow Noble Energy to meet its requirements under Colorado law. These distances are generated by a mathematical algorithm based on rough data collected after the well is drilled. Halliburton considers it to be a rough estimate only and it is not to be relied upon in any application where accurate data is required. In consideration for Halliburton releasing this data to Noble Energy, Noble Energy agrees to release Halliburton from any consequences of it or anyone else relying on such data.



Noble Energy

Weld County, CO (NAD 83)

Sec. 2-T5N-R64W (Wolfpack B02 PAD)

Wolfpack B02-66-1HN

Design: Vaughn ESS and Sperry MWD Survey

Sperry Drilling Services

Final Survey Report

15 August, 2013

Well Coordinates: 1,399,841.00 N, 3,271,072.56 E (40° 25' 36.77" N, 104° 31' 34.68" W)

Ground Level: 4,625.00 ft

Local Coordinate Origin: Centered on Well Wolfpack B02-66-1HN - Slot A1

Viewing Datum: RKB 24 ft. @ 4649.00ft (H&P 315)

TVDs to System: N

North Reference: Grid

Unit System: API - US Survey Feet - Custom

Geodetic Scale Factor Applied

Version: 2003.16 Build: 431

HALLIBURTON

Design Report for Wolfpack B02-66-1HN - Vaughn ESS and Sperry MWD Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) |
|---------------------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 356.00 | 0.30 | 112.65 | 356.00 | -0.36 | 0.86 | 0.77 | 0.08 |
| 600.00 | 0.80 | 226.05 | 599.99 | -1.79 | 0.22 | -0.13 | 0.39 |
| Tie-On to VES Gyro Surveys @ 600.00 ft. MD | | | | | | | |
| 715.00 | 0.48 | 184.14 | 714.98 | -2.82 | -0.39 | -0.94 | 0.48 |
| First Sperry MWD Survey @ 715.00 ft. MD | | | | | | | |
| 808.00 | 0.41 | 180.15 | 807.98 | -3.55 | -0.42 | -1.11 | 0.08 |
| 901.00 | 0.31 | 318.76 | 900.98 | -3.69 | -0.59 | -1.30 | 0.73 |
| 994.00 | 0.25 | 331.29 | 993.98 | -3.32 | -0.85 | -1.49 | 0.09 |
| 1,088.00 | 0.36 | 311.32 | 1,087.98 | -2.95 | -1.17 | -1.73 | 0.16 |
| 1,179.00 | 0.56 | 299.68 | 1,178.97 | -2.54 | -1.77 | -2.24 | 0.24 |
| 1,273.00 | 0.39 | 333.42 | 1,272.97 | -2.03 | -2.31 | -2.67 | 0.34 |
| 1,366.00 | 0.33 | 269.31 | 1,365.97 | -1.75 | -2.72 | -3.01 | 0.41 |
| 1,459.00 | 2.52 | 342.56 | 1,458.94 | 0.20 | -3.60 | -3.49 | 2.63 |
| 1,554.00 | 4.06 | 4.32 | 1,553.78 | 5.55 | -3.97 | -2.80 | 2.06 |
| 1,649.00 | 6.33 | 356.27 | 1,648.39 | 14.13 | -4.06 | -1.19 | 2.50 |
| 1,744.00 | 7.95 | 353.05 | 1,742.65 | 25.88 | -5.20 | 0.03 | 1.76 |
| 1,838.00 | 9.62 | 357.72 | 1,835.54 | 40.18 | -6.30 | 1.78 | 1.93 |
| 1,933.00 | 11.14 | 353.32 | 1,928.99 | 57.23 | -7.68 | 3.80 | 1.80 |
| 2,028.00 | 12.15 | 351.66 | 2,022.03 | 76.23 | -10.20 | 5.09 | 1.12 |
| 2,123.00 | 14.00 | 351.41 | 2,114.56 | 97.49 | -13.37 | 6.20 | 1.95 |
| 2,218.00 | 13.99 | 349.23 | 2,206.74 | 120.13 | -17.23 | 6.89 | 0.56 |
| 2,313.00 | 13.98 | 353.21 | 2,298.93 | 142.81 | -20.73 | 7.95 | 1.01 |
| 2,408.00 | 14.84 | 355.98 | 2,390.94 | 166.34 | -22.94 | 10.44 | 1.16 |
| 2,503.00 | 15.03 | 355.23 | 2,482.73 | 190.75 | -24.82 | 13.43 | 0.29 |
| 2,597.00 | 15.08 | 357.33 | 2,573.51 | 215.11 | -26.40 | 16.70 | 0.58 |
| 2,692.00 | 16.54 | 355.66 | 2,664.91 | 240.94 | -28.00 | 20.25 | 1.61 |
| 2,787.00 | 17.22 | 355.40 | 2,755.82 | 268.44 | -30.15 | 23.58 | 0.72 |
| 2,882.00 | 14.94 | 353.87 | 2,847.10 | 294.64 | -32.59 | 26.38 | 2.44 |
| 2,977.00 | 16.18 | 354.71 | 2,938.61 | 320.00 | -35.11 | 28.92 | 1.33 |
| 3,072.00 | 15.83 | 353.79 | 3,029.93 | 346.06 | -37.74 | 31.51 | 0.45 |
| 3,167.00 | 12.84 | 352.61 | 3,121.96 | 369.41 | -40.50 | 33.43 | 3.16 |
| 3,262.00 | 14.18 | 353.01 | 3,214.33 | 391.43 | -43.27 | 35.07 | 1.41 |
| 3,357.00 | 14.34 | 358.31 | 3,306.41 | 414.74 | -45.03 | 37.95 | 1.38 |
| 3,451.00 | 13.63 | 1.40 | 3,397.62 | 437.45 | -45.11 | 42.38 | 1.10 |
| 3,546.00 | 15.06 | 359.03 | 3,489.66 | 460.98 | -45.04 | 47.10 | 1.63 |
| 3,641.00 | 16.05 | 358.57 | 3,581.18 | 486.45 | -45.58 | 51.61 | 1.05 |
| 3,736.00 | 15.53 | 357.96 | 3,672.59 | 512.29 | -46.36 | 55.96 | 0.57 |
| 3,831.00 | 16.45 | 357.33 | 3,763.92 | 538.44 | -47.44 | 60.08 | 0.99 |
| 3,926.00 | 17.11 | 356.76 | 3,854.87 | 565.83 | -48.85 | 64.11 | 0.72 |
| 4,021.00 | 14.33 | 356.51 | 3,946.31 | 591.52 | -50.36 | 67.72 | 2.93 |
| 4,116.00 | 12.57 | 354.93 | 4,038.70 | 613.55 | -51.99 | 70.49 | 1.89 |
| 4,211.00 | 11.04 | 353.79 | 4,131.69 | 632.89 | -53.89 | 72.46 | 1.63 |
| 4,306.00 | 8.83 | 350.82 | 4,225.26 | 649.14 | -56.03 | 73.57 | 2.39 |
| 4,400.00 | 7.54 | 352.20 | 4,318.30 | 662.37 | -58.02 | 74.24 | 1.39 |
| 4,495.00 | 8.39 | 354.26 | 4,412.38 | 675.44 | -59.56 | 75.32 | 0.94 |
| 4,590.00 | 8.45 | 356.23 | 4,506.36 | 689.30 | -60.71 | 76.93 | 0.31 |
| 4,685.00 | 8.36 | 358.05 | 4,600.34 | 703.17 | -61.41 | 78.99 | 0.30 |
| 4,780.00 | 8.66 | 353.88 | 4,694.29 | 717.18 | -62.40 | 80.79 | 0.72 |
| 4,875.00 | 8.34 | 345.02 | 4,788.25 | 730.95 | -64.95 | 81.02 | 1.42 |

Design Report for Wolfpack B02-66-1HN - Vaughn ESS and Sperry MWD Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) |
|------------------------------------------------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|
| 4,970.00 | 8.97 | 346.62 | 4,882.17 | 744.81 | -68.44 | 80.34 | 0.71 |
| 5,065.00 | 9.79 | 345.85 | 4,975.90 | 759.85 | -72.13 | 79.70 | 0.87 |
| 5,159.00 | 10.17 | 345.68 | 5,068.48 | 775.64 | -76.14 | 78.90 | 0.41 |
| 5,254.00 | 8.11 | 345.44 | 5,162.27 | 790.25 | -79.90 | 78.11 | 2.17 |
| 5,349.00 | 6.39 | 350.15 | 5,256.50 | 801.95 | -82.49 | 77.89 | 1.91 |
| 5,444.00 | 4.56 | 347.06 | 5,351.07 | 810.84 | -84.24 | 77.93 | 1.95 |
| 5,539.00 | 4.01 | 352.31 | 5,445.80 | 817.81 | -85.53 | 78.04 | 0.71 |
| 5,634.00 | 2.73 | 10.67 | 5,540.64 | 823.32 | -85.55 | 79.11 | 1.75 |
| 5,728.00 | 1.02 | 32.26 | 5,634.58 | 826.23 | -84.69 | 80.53 | 1.94 |
| 5,918.00 | 0.85 | 324.16 | 5,824.56 | 828.80 | -84.61 | 81.12 | 0.56 |
| 5,976.00 | 0.81 | 297.88 | 5,882.56 | 829.34 | -85.23 | 80.62 | 0.65 |
| 6,108.00 | 4.53 | 88.21 | 6,014.44 | 829.94 | -80.84 | 85.04 | 3.98 |
| 6,156.00 | 9.16 | 84.25 | 6,062.08 | 830.39 | -75.14 | 90.72 | 9.69 |
| 6,203.00 | 12.07 | 86.10 | 6,108.27 | 831.10 | -66.51 | 99.31 | 6.23 |
| 6,251.00 | 15.00 | 93.38 | 6,154.94 | 831.07 | -55.30 | 110.30 | 7.05 |
| 6,298.00 | 18.44 | 90.25 | 6,199.95 | 830.68 | -41.79 | 123.46 | 7.56 |
| 6,346.00 | 22.06 | 91.43 | 6,244.97 | 830.42 | -25.19 | 139.69 | 7.59 |
| 6,393.00 | 25.30 | 94.96 | 6,288.01 | 829.33 | -6.35 | 157.94 | 7.52 |
| 6,441.00 | 29.66 | 97.15 | 6,330.59 | 826.97 | 15.66 | 179.04 | 9.32 |
| 6,488.00 | 32.53 | 96.05 | 6,370.83 | 824.19 | 39.77 | 202.13 | 6.22 |
| 6,536.00 | 36.77 | 97.84 | 6,410.31 | 820.86 | 66.85 | 228.01 | 9.08 |
| 6,583.00 | 41.09 | 97.95 | 6,446.86 | 816.81 | 96.10 | 255.88 | 9.19 |
| 6,631.00 | 46.25 | 98.56 | 6,481.57 | 812.04 | 128.89 | 287.07 | 10.79 |
| 6,677.00 | 51.09 | 96.11 | 6,511.94 | 807.66 | 163.13 | 319.78 | 11.25 |
| 6,725.00 | 56.55 | 95.25 | 6,540.27 | 803.84 | 201.67 | 356.80 | 11.47 |
| 6,772.00 | 61.70 | 93.07 | 6,564.38 | 800.93 | 241.89 | 395.64 | 11.66 |
| 6,820.00 | 67.08 | 91.84 | 6,585.12 | 799.09 | 285.12 | 437.65 | 11.44 |
| 6,867.00 | 72.20 | 90.84 | 6,601.47 | 798.07 | 329.16 | 480.62 | 11.07 |
| 6,915.00 | 78.46 | 89.58 | 6,613.62 | 797.90 | 375.57 | 526.08 | 13.29 |
| 6,967.00 | 83.44 | 86.97 | 6,621.80 | 799.46 | 426.88 | 576.68 | 10.78 |
| 7,015.00 | 86.15 | 84.92 | 6,626.15 | 802.84 | 474.55 | 624.08 | 7.08 |
| Estimated 7" Casing Point: 2388' FNL, 643' FWL (Not a Survey Station) | | | | | | | |
| 7,033.00 | 87.17 | 84.15 | 6,627.20 | 804.55 | 492.44 | 641.95 | 7.08 |
| 7,127.00 | 89.45 | 86.91 | 6,629.97 | 811.87 | 586.10 | 735.20 | 3.81 |
| 7,222.00 | 90.12 | 87.17 | 6,630.33 | 816.78 | 680.97 | 829.17 | 0.76 |
| 7,317.00 | 91.14 | 88.99 | 6,629.28 | 819.96 | 775.90 | 922.86 | 2.20 |
| 7,412.00 | 90.68 | 87.72 | 6,627.77 | 822.69 | 870.85 | 1,016.46 | 1.42 |
| 7,507.00 | 89.60 | 90.10 | 6,627.54 | 824.50 | 965.82 | 1,109.92 | 2.75 |
| 7,602.00 | 90.25 | 89.19 | 6,627.67 | 825.08 | 1,060.82 | 1,203.15 | 1.18 |
| 7,697.00 | 89.48 | 88.32 | 6,627.89 | 827.15 | 1,155.80 | 1,296.66 | 1.22 |
| 7,792.00 | 89.32 | 86.09 | 6,628.88 | 831.78 | 1,250.67 | 1,390.57 | 2.35 |
| 7,887.00 | 90.52 | 85.74 | 6,629.02 | 838.55 | 1,345.43 | 1,484.79 | 1.32 |
| 7,982.00 | 90.89 | 86.54 | 6,627.85 | 844.94 | 1,440.21 | 1,578.96 | 0.93 |
| 8,077.00 | 90.68 | 88.83 | 6,626.55 | 848.78 | 1,535.11 | 1,672.75 | 2.42 |
| 8,172.00 | 89.57 | 89.71 | 6,626.34 | 849.99 | 1,630.10 | 1,766.10 | 1.49 |
| 8,267.00 | 91.97 | 88.75 | 6,625.06 | 851.27 | 1,725.08 | 1,859.45 | 2.72 |
| 8,361.00 | 90.28 | 88.36 | 6,623.22 | 853.64 | 1,819.03 | 1,952.00 | 1.85 |
| 8,456.00 | 87.53 | 89.43 | 6,625.03 | 855.47 | 1,913.98 | 2,045.44 | 3.11 |
| 8,552.00 | 87.38 | 89.69 | 6,629.30 | 856.20 | 2,009.88 | 2,139.59 | 0.31 |
| 8,646.00 | 87.25 | 89.36 | 6,633.70 | 856.98 | 2,103.78 | 2,231.78 | 0.38 |
| 8,741.00 | 86.46 | 89.85 | 6,638.91 | 857.64 | 2,198.63 | 2,324.89 | 0.98 |

Design Report for Wolfpack B02-66-1HN - Vaughn ESS and Sperry MWD Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) |
|-----------------------------------------------------------------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|
| 8,836.00 | 87.72 | 89.62 | 6,643.73 | 858.08 | 2,293.50 | 2,417.97 | 1.35 |
| 8,931.00 | 90.46 | 90.22 | 6,645.24 | 858.21 | 2,388.48 | 2,511.10 | 2.95 |
| 9,026.00 | 90.99 | 89.46 | 6,644.04 | 858.47 | 2,483.47 | 2,604.26 | 0.98 |
| 9,120.00 | 90.40 | 87.52 | 6,642.90 | 860.95 | 2,577.43 | 2,696.85 | 2.16 |
| 9,215.00 | 91.30 | 90.98 | 6,641.49 | 862.19 | 2,672.40 | 2,790.18 | 3.76 |
| 9,310.00 | 91.72 | 90.95 | 6,638.99 | 860.59 | 2,767.35 | 2,882.94 | 0.44 |
| 9,405.00 | 91.94 | 92.33 | 6,635.95 | 857.88 | 2,862.26 | 2,975.44 | 1.47 |
| 9,500.00 | 89.60 | 90.57 | 6,634.68 | 855.47 | 2,957.21 | 3,068.03 | 3.08 |
| 9,595.00 | 90.40 | 91.93 | 6,634.68 | 853.40 | 3,052.18 | 3,160.72 | 1.66 |
| 9,690.00 | 90.37 | 89.57 | 6,634.04 | 852.16 | 3,147.17 | 3,253.57 | 2.48 |
| 9,785.00 | 90.40 | 85.85 | 6,633.40 | 855.95 | 3,242.07 | 3,347.35 | 3.92 |
| 9,880.00 | 90.96 | 85.17 | 6,632.27 | 863.39 | 3,336.77 | 3,441.65 | 0.93 |
| 9,974.00 | 89.69 | 85.81 | 6,631.74 | 870.78 | 3,430.48 | 3,534.97 | 1.51 |
| 10,069.00 | 88.12 | 86.92 | 6,633.55 | 876.80 | 3,525.27 | 3,629.07 | 2.02 |
| 10,164.00 | 87.81 | 87.36 | 6,636.93 | 881.54 | 3,620.09 | 3,722.95 | 0.57 |
| 10,259.00 | 88.92 | 87.67 | 6,639.64 | 885.66 | 3,714.96 | 3,816.76 | 1.21 |
| 10,354.00 | 89.08 | 88.17 | 6,641.30 | 889.10 | 3,809.88 | 3,910.49 | 0.55 |
| 10,449.00 | 88.64 | 88.25 | 6,643.19 | 892.07 | 3,904.81 | 4,004.13 | 0.47 |
| 10,544.00 | 89.85 | 89.58 | 6,644.44 | 893.87 | 3,999.79 | 4,097.58 | 1.89 |
| 10,639.00 | 91.20 | 89.39 | 6,643.57 | 894.72 | 4,094.78 | 4,190.86 | 1.44 |
| 10,734.00 | 90.46 | 90.37 | 6,642.19 | 894.92 | 4,189.76 | 4,284.01 | 1.29 |
| 10,829.00 | 90.77 | 90.41 | 6,641.17 | 894.28 | 4,284.76 | 4,376.99 | 0.33 |
| 10,926.00 | 90.77 | 91.85 | 6,639.87 | 892.36 | 4,381.73 | 4,471.66 | 1.48 |
| Final Sperry MWD Survey @ 10926.00 ft. MD | | | | | | | |
| 10,989.00 | 90.77 | 91.85 | 6,639.02 | 890.33 | 4,444.69 | 4,532.98 | 0.00 |
| Estimated BHL: 2357' FNL, 658' FEL :: Straight Line Projection to TD @ 10989.00 ft. MD | | | | | | | |

Design Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
|---------------------|---------------------|-------------------|------------|----------------------------------------------------------------------------------------|
| | | +N/-S (ft) | +E/-W (ft) | |
| 600.00 | 599.99 | -1.79 | 0.22 | Tie-On to VES Gyro Surveys @ 600.00 ft. MD |
| 715.00 | 714.98 | -2.82 | -0.39 | First Sperry MWD Survey @ 715.00 ft. MD |
| 7,015.00 | 6,626.15 | 802.84 | 474.55 | Estimated 7" Casing Point: 2388' FNL, 643' FWL (Not a Survey Station) |
| | | | | |
| 10,926.00 | 6,639.87 | 892.36 | 4,381.73 | Final Sperry MWD Survey @ 10926.00 ft. MD |
| 10,989.00 | 6,639.02 | 890.33 | 4,444.69 | Estimated BHL: 2357' FNL, 658' FEL :: Straight Line Projection to TD @ 10989.00 ft. MD |

Vertical Section Information

| Angle Type | Target | Azimuth (°) | Origin Type | Origin | | Start TVD (ft) |
|------------|----------------------------------|-------------|-------------|------------|------------|----------------|
| | | | | +N/-S (ft) | +E/-W (ft) | |
| Target | Wolfpack B02-66-1HN (PA_RA1) BHL | 78.58 | Slot | 0.00 | 0.00 | 0.00 |

Design Report for Wolfpack B02-66-1HN - Vaughn ESS and Sperry MWD Survey

Survey tool program

| From (ft) | To (ft) | Survey/Plan | Survey Tool |
|--------------|------------|--------------------|-------------|
| 356.00 | 600.00 | Vaughn ESS Surveys | Flexi-Shot |
| 715.00 | 7,015.00 | MWD Surveys | MWD |
| 7,015.00 | 10,989.00 | MWD Surveys | MWD |

Casing Details

| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (") | Hole Diameter (") |
|---------------------------|---------------------------|--------------|---------------------------|-------------------------|
| 7,015.00 | 6,626.15 | 7" Casing PT | 7 | 8-3/4 |

Targets

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------|-------------|---------------|---------------|------------------|-----------------|-----------|-------------|
| Wolfpack - actual wellpath hits target center - Point | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,399,841.00 | 3,271,072.56 | 40.426880 | -104.526300 |
| Wolfpack - actual wellpath misses target center by 35.11ft at 7078.02ft MD (6628.99 TVD, 808.62 N, 537.24 E) - Point | | 0.00 | 6,636.99 | 842.68 | 534.34 | 1,400,683.65 | 3,271,606.88 | 40.429177 | -104.524348 |
| Wolfpack B02 PAD - actual wellpath hits target center - Polygon | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,399,841.00 | 3,271,072.56 | 40.426880 | -104.526300 |
| Point 1 | | | | 279.96 | -1,649.12 | 1,398,191.94 | 3,271,352.51 | | |
| Point 2 | | | | 4,629.86 | -1,571.55 | 1,398,269.51 | 3,275,702.24 | | |
| Point 3 | | | | 4,650.92 | 2,790.50 | 1,402,631.39 | 3,275,723.30 | | |
| Point 4 | | | | 295.96 | 2,727.47 | 1,402,568.37 | 3,271,368.51 | | |
| Point 5 | | | | 279.96 | -1,649.12 | 1,398,191.94 | 3,271,352.51 | | |
| Wolfpack - actual wellpath misses target center by 10.24ft at 10989.00ft MD (6639.02 TVD, 890.33 N, 4444.69 E) - Point | | 0.00 | 6,633.08 | 898.14 | 4,447.61 | 1,400,739.11 | 3,275,520.00 | 40.429210 | -104.510290 |
| Wolfpack - actual wellpath misses target center by 32.42ft at 7169.35ft MD (6630.27 TVD, 814.11 N, 628.38 E) - Rectangle (sides W70.00 H3,811.21 D8.00) | -0.10 | 89.19 | 6,642.75 | 843.99 | 626.79 | 1,400,684.96 | 3,271,699.33 | 40.429178 | -104.524015 |
| Wolfpack - actual wellpath misses target center by 4.49ft at 6094.36ft MD (6000.84 TVD, 829.91 N, -81.85 E) - Circle (radius 35.00) | 0.00 | 0.00 | 6,000.75 | 834.00 | -80.00 | 1,400,674.97 | 3,270,992.56 | 40.429172 | -104.526554 |
| Wolfpack B02 PAD - actual wellpath hits target center - Polygon | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,399,841.00 | 3,271,072.56 | 40.426880 | -104.526300 |
| Point 1 | | | | -180.04 | -2,115.12 | 1,397,725.96 | 3,270,892.53 | | |
| Point 2 | | | | 5,092.86 | -2,027.55 | 1,397,813.53 | 3,276,165.23 | | |
| Point 3 | | | | 5,108.92 | 3,255.50 | 1,403,096.38 | 3,276,181.29 | | |
| Point 4 | | | | -165.79 | 3,182.47 | 1,403,023.35 | 3,270,906.78 | | |
| Point 5 | | | | -180.04 | -2,115.12 | 1,397,725.96 | 3,270,892.53 | | |

North Reference Sheet for Sec. 2-T5N-R64W (Wolfpack B02 PAD) - Wolfpack B02-66-1HN

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 ft. @ 4649.00ft (H&P 315). Northing and Easting are relative to Wolfpack B02-66-1HN - Slot A1

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 -105.500000°, Longitude Origin:0.000000°, Latitude Origin:40.783333°

False Easting: 3,000,000.00ft, False Northing: 1,000,000.00ft, Scale Reduction: 0.99996156

Grid Coordinates of Well: 1,399,841.00 ft N, 3,271,072.56 ft E

Geographical Coordinates of Well: 40° 25' 36.77" N, 104° 31' 34.68" W

Grid Convergence at Surface is: 0.63°

Based upon Minimum Curvature type calculations, at a Measured Depth of 10,989.00ft the Bottom Hole Displacement is 4,532.98ft in the Direction of 78.67° (Grid).

Magnetic Convergence at surface is: -7.85° (31 July 2013, , BGGM2013)

