

Crestone Peak Resources

CO, Weld County (NAD 83 NZ)
Sec 21 Twn 2 N Rng 68 W
Dream Weaver North 3F-21H-N268 Original Hole
05-123-48290
Ensign 142



Final Survey Report

11-Dec-2019

| | |
|---------------------------|--|
| Well Coordinates: | NAD83 Colorado State Plane, NZ, US Ft |
| | 40.119924 -105.011242 |
| | 1286908.99 usFt 3136685.83 usFt |
| Ground Level: | 4901.00 ft MSL |
| TVD Reference: | KB 28ft @ 4929.00 ft MSL |
| Local Coordinate Origin: | Dream Weaver North 3F-21H-N268 well head |
| Vertical Section Azimuth: | 357.110 ° (True North) |
| North Reference: | True North |

DOX Version: 2.1

Dream Weaver North 3F-21H-N268 MWD 0' to 19832' Definitive Survey

Geodetic Report

(Def Survey)



Report Date: December 11, 2019 - 09:45 AM
Client: Crestone Peak Resources
Field: CO, Weld County (NAD 83 NZ) - 2019
Structure / Slot: Crestone Peak 21-02N-68W (Dream Weaver Pad) / Dream Weaver North 3F-21H-N268
Well: Dream Weaver North 3F-21H-N268
Borehole: Original Hole
UWI / API#: Unknown / 05-123-48290
Survey Name: Dream Weaver North 3F-21H-N268 MWD 0' to 19832' Definitive
Survey Date: September 05, 2019
Tort / AHD / DDI / ERD Ratio: 369.275 ° / 13495.064 ft / 7.116 / 1.785
Coordinate Reference System: NAD83 Colorado State Plane, Northern Zone, US Feet
Location Lat / Long: N 40° 7' 11.72640", W 105° 0' 40.47120"
Location Grid N/E Y/X: N 1286908.989 ftUS, E 3136685.831 ftUS
CRS Grid Convergence Angle: 0.3158 °
Grid Scale Factor: 0.99995944
Version / Patch: 2.10.787.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 357.110 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB 28ft
TVD Reference Elevation: 4929.000 ft above MSL
Seabed / Ground Elevation: 4901.000 ft above MSL
Magnetic Declination: 8.350 °
Total Gravity Field Strength: 998.9833mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 51936.053 nT
Magnetic Dip Angle: 66.427 °
Declination Date: November 19, 2019
Magnetic Declination Model: HDGM 2019
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North->True North: 8.3501 °
Local Coord Referenced To: Well Head

| Comments | MD (ft) | Incl (°) | Azim True (°) | TVD (ft) | NS (ft) | EW (ft) | VSEC (ft) | DLS (°/100ft) | BR (°/100ft) |
|----------------------|------------|-------------|------------------|-------------|------------|------------|--------------|------------------|-----------------|
| Surface | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A | N/A |
| KB Adjustment | 15.00 | 0.00 | 0.00 | 15.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Begin Surface Survey | 116.00 | 0.70 | 242.05 | 116.00 | -0.29 | -0.55 | -0.26 | 0.69 | 0.69 |
| | 206.00 | 1.06 | 211.99 | 205.99 | -1.25 | -1.47 | -1.18 | 0.64 | 0.40 |
| | 296.00 | 1.32 | 237.04 | 295.97 | -2.52 | -2.78 | -2.38 | 0.64 | 0.29 |
| | 387.00 | 0.79 | 253.56 | 386.95 | -3.27 | -4.26 | -3.05 | 0.67 | -0.58 |
| | 476.00 | 1.23 | 236.34 | 475.94 | -3.97 | -5.65 | -3.68 | 0.60 | 0.49 |
| | 590.00 | 1.71 | 224.24 | 589.90 | -5.87 | -7.85 | -5.47 | 0.50 | 0.42 |
| | 635.00 | 1.75 | 210.11 | 634.88 | -6.95 | -8.67 | -6.50 | 0.95 | 0.09 |
| | 724.00 | 1.57 | 173.40 | 723.85 | -9.33 | -9.21 | -8.86 | 1.19 | -0.20 |
| | 813.00 | 2.47 | 178.12 | 812.79 | -12.46 | -9.00 | -11.99 | 1.03 | 1.01 |
| | 902.00 | 3.49 | 192.17 | 901.67 | -17.03 | -9.51 | -16.52 | 1.40 | 1.15 |
| | 992.00 | 5.19 | 207.57 | 991.41 | -23.31 | -11.97 | -22.68 | 2.27 | 1.89 |
| | 1081.00 | 6.35 | 209.47 | 1079.96 | -31.17 | -16.26 | -30.31 | 1.32 | 1.30 |
| | 1170.00 | 7.05 | 209.42 | 1168.35 | -40.21 | -21.36 | -39.08 | 0.79 | 0.79 |
| | 1260.00 | 7.76 | 209.01 | 1257.60 | -50.33 | -27.02 | -48.91 | 0.79 | 0.79 |
| | 1349.00 | 8.40 | 210.01 | 1345.72 | -61.22 | -33.19 | -59.47 | 0.74 | 0.72 |
| | 1438.00 | 7.32 | 218.28 | 1433.88 | -71.30 | -39.95 | -69.19 | 1.75 | -1.21 |
| | 1527.00 | 6.98 | 222.52 | 1522.19 | -79.73 | -47.12 | -77.26 | 0.71 | -0.38 |
| | 1617.00 | 7.41 | 223.73 | 1611.48 | -87.96 | -54.83 | -85.08 | 0.51 | 0.48 |
| | 1702.00 | 7.92 | 222.66 | 1695.72 | -96.23 | -62.58 | -92.95 | 0.62 | 0.60 |
| | 1792.00 | 7.41 | 227.01 | 1784.92 | -104.74 | -71.03 | -101.03 | 0.86 | -0.57 |
| | 1881.00 | 8.39 | 216.48 | 1873.08 | -113.88 | -79.09 | -109.75 | 1.96 | 1.10 |
| | 1967.00 | 10.05 | 216.25 | 1957.96 | -124.98 | -87.26 | -120.42 | 1.93 | 1.93 |
| | 2056.00 | 10.86 | 217.92 | 2045.48 | -137.85 | -97.00 | -132.79 | 0.97 | 0.91 |
| | 2146.00 | 10.67 | 220.65 | 2133.90 | -150.86 | -107.64 | -145.24 | 0.60 | -0.21 |
| Last Surface Survey | 2181.00 | 10.82 | 222.74 | 2168.29 | -155.73 | -111.98 | -149.89 | 1.19 | 0.43 |
| 9 5/8" Casing | 2228.00 | 10.65 | 222.55 | 2214.46 | -162.17 | -117.91 | -156.02 | 0.37 | -0.36 |
| First SLB MWD Survey | 2270.00 | 10.50 | 222.38 | 2255.75 | -167.86 | -123.12 | -161.44 | 0.37 | -0.36 |
| | 2359.00 | 9.61 | 221.30 | 2343.38 | -179.43 | -133.49 | -172.47 | 1.02 | -1.00 |
| | 2448.00 | 11.10 | 220.63 | 2430.93 | -191.51 | -143.97 | -184.01 | 1.68 | 1.67 |
| | 2537.00 | 10.24 | 217.70 | 2518.39 | -204.28 | -154.39 | -196.23 | 1.14 | -0.97 |
| | 2626.00 | 10.83 | 222.26 | 2605.89 | -216.72 | -164.85 | -208.14 | 1.15 | 0.66 |
| | 2715.00 | 9.65 | 222.31 | 2693.47 | -228.43 | -175.49 | -219.29 | 1.33 | -1.33 |
| | 2804.00 | 10.97 | 218.10 | 2781.04 | -240.61 | -185.74 | -230.94 | 1.71 | 1.48 |
| | 2893.00 | 9.89 | 215.72 | 2868.56 | -253.48 | -195.43 | -243.30 | 1.31 | -1.21 |
| | 2982.00 | 10.48 | 215.26 | 2956.16 | -266.29 | -204.56 | -255.64 | 0.67 | 0.66 |
| | 3071.00 | 11.67 | 213.87 | 3043.50 | -280.38 | -214.25 | -269.22 | 1.37 | 1.34 |
| | 3160.00 | 9.82 | 212.28 | 3130.94 | -294.27 | -223.32 | -282.64 | 2.10 | -2.08 |
| | 3249.00 | 10.66 | 216.05 | 3218.52 | -307.34 | -232.22 | -295.24 | 1.21 | 0.94 |
| | 3338.00 | 11.05 | 221.99 | 3305.93 | -320.34 | -242.77 | -307.69 | 1.33 | 0.44 |
| | 3427.00 | 10.55 | 220.77 | 3393.35 | -332.85 | -253.80 | -319.63 | 0.62 | -0.56 |
| | 3516.00 | 10.43 | 216.95 | 3480.87 | -345.46 | -263.96 | -331.71 | 0.79 | -0.13 |
| | 3605.00 | 11.21 | 217.39 | 3568.29 | -358.77 | -274.06 | -344.49 | 0.88 | 0.88 |
| | 3694.00 | 11.37 | 218.12 | 3655.56 | -372.54 | -284.72 | -357.71 | 0.24 | 0.18 |
| | 3783.00 | 9.38 | 217.47 | 3743.10 | -385.20 | -294.55 | -369.86 | 2.24 | -2.24 |
| | 3872.00 | 9.86 | 222.48 | 3830.85 | -396.58 | -304.11 | -380.74 | 1.08 | 0.54 |
| | 3961.00 | 11.13 | 219.44 | 3918.36 | -408.83 | -314.72 | -392.45 | 1.56 | 1.43 |
| | 4050.00 | 12.72 | 219.64 | 4005.44 | -423.01 | -326.42 | -406.02 | 1.79 | 1.79 |
| | 4139.00 | 11.14 | 218.88 | 4092.51 | -437.25 | -338.07 | -419.65 | 1.78 | -1.78 |
| | 4228.00 | 10.72 | 219.30 | 4179.90 | -450.35 | -348.71 | -432.20 | 0.48 | -0.47 |
| | 4317.00 | 10.12 | 221.17 | 4267.43 | -462.64 | -359.10 | -443.95 | 0.77 | -0.67 |
| | 4406.00 | 10.87 | 219.15 | 4354.94 | -475.04 | -369.55 | -455.80 | 0.94 | 0.84 |
| | 4495.00 | 12.78 | 217.39 | 4442.05 | -489.37 | -380.83 | -469.54 | 2.18 | 2.15 |
| | 4584.00 | 13.46 | 218.95 | 4528.73 | -505.24 | -393.31 | -484.77 | 0.86 | 0.76 |
| | 4673.00 | 11.06 | 218.37 | 4615.69 | -519.99 | -405.13 | -498.91 | 2.70 | -2.70 |
| | 4763.00 | 11.25 | 219.66 | 4703.99 | -533.52 | -416.09 | -511.86 | 0.35 | 0.21 |
| | 4852.00 | 12.48 | 222.09 | 4791.09 | -547.34 | -428.08 | -525.06 | 1.49 | 1.38 |
| | 4941.00 | 13.62 | 220.62 | 4877.79 | -562.43 | -441.34 | -539.46 | 1.33 | 1.28 |
| | 5030.00 | 11.74 | 219.22 | 4964.61 | -577.40 | -453.89 | -553.78 | 2.14 | -2.11 |
| | 5119.00 | 9.77 | 217.58 | 5052.05 | -590.40 | -464.22 | -566.25 | 2.24 | -2.21 |
| | 5178.00 | 10.32 | 217.05 | 5110.14 | -598.59 | -470.46 | -574.11 | 0.95 | 0.93 |
| | 5267.00 | 9.35 | 208.94 | 5197.84 | -611.28 | -478.76 | -586.36 | 1.90 | -1.09 |
| | 5356.00 | 10.14 | 220.85 | 5285.56 | -623.53 | -487.39 | -598.17 | 2.43 | 0.89 |
| | 5445.00 | 9.92 | 215.08 | 5373.20 | -635.73 | -496.92 | -609.87 | 1.16 | -0.25 |
| | 5534.00 | 10.32 | 217.87 | 5460.82 | -648.30 | -506.22 | -621.95 | 0.71 | 0.45 |
| | 5624.00 | 10.29 | 218.38 | 5549.37 | -660.96 | -516.16 | -634.10 | 0.11 | -0.03 |

...Original Hole\Dream Weaver North 3F-21H-N268 MWD 0' to 19832' Definitive

| Comments | MD (ft) | Incl (°) | Azim True (°) | TVD (ft) | NS (ft) | EW (ft) | VSEC (ft) | DLS (°/100ft) | BR (°/100ft) |
|---|------------|-------------|------------------|-------------|------------|------------|--------------|------------------|-----------------|
| | 5713.00 | 10.14 | 215.04 | 5636.96 | -673.61 | -525.59 | -646.25 | 0.69 | -0.17 |
| | 5802.00 | 10.34 | 221.70 | 5724.54 | -685.99 | -535.40 | -658.12 | 1.35 | 0.22 |
| | 5891.00 | 10.78 | 223.12 | 5812.04 | -698.03 | -546.41 | -669.59 | 0.57 | 0.49 |
| | 5980.00 | 10.84 | 224.12 | 5899.46 | -710.11 | -557.92 | -681.08 | 0.22 | 0.07 |
| | 6069.00 | 10.35 | 219.69 | 5986.94 | -722.27 | -568.85 | -692.67 | 1.07 | -0.55 |
| | 6158.00 | 10.63 | 221.70 | 6074.45 | -734.55 | -579.42 | -704.40 | 0.52 | 0.31 |
| | 6247.00 | 10.57 | 222.10 | 6161.93 | -746.74 | -590.35 | -716.02 | 0.11 | -0.07 |
| | 6336.00 | 10.73 | 221.42 | 6249.40 | -759.01 | -601.31 | -727.73 | 0.23 | 0.18 |
| | 6426.00 | 10.15 | 223.27 | 6337.91 | -771.06 | -612.28 | -739.21 | 0.74 | -0.64 |
| | 6515.00 | 5.26 | 221.77 | 6426.08 | -779.82 | -620.38 | -747.55 | 5.50 | -5.49 |
| | 6604.00 | 0.45 | 230.14 | 6514.94 | -783.09 | -623.37 | -750.67 | 5.41 | -5.40 |
| | 6693.00 | 0.48 | 328.63 | 6603.94 | -783.00 | -623.83 | -750.55 | 0.79 | 0.03 |
| | 6782.00 | 0.33 | 293.21 | 6692.94 | -782.58 | -624.26 | -750.11 | 0.32 | -0.17 |
| | 6871.00 | 0.09 | 200.78 | 6781.94 | -782.54 | -624.52 | -750.06 | 0.39 | -0.27 |
| | 6960.00 | 4.45 | 358.30 | 6870.85 | -779.15 | -624.65 | -746.67 | 5.09 | 4.90 |
| | 7049.00 | 12.44 | 352.00 | 6958.82 | -766.19 | -626.09 | -733.65 | 9.02 | 8.98 |
| | 7138.00 | 17.12 | 350.78 | 7044.85 | -743.75 | -629.52 | -711.07 | 5.27 | 5.26 |
| | 7227.00 | 22.32 | 355.44 | 7128.61 | -713.95 | -632.97 | -681.13 | 6.10 | 5.84 |
| | 7316.00 | 28.50 | 359.50 | 7208.96 | -675.83 | -634.50 | -642.98 | 7.21 | 6.94 |
| Cross Setback (460' FSL, 1180' FWL) | 7372.01 | 32.65 | 0.41 | 7257.17 | -647.35 | -634.51 | -614.54 | 7.46 | 7.41 |
| | 7405.00 | 35.10 | 0.86 | 7284.56 | -628.96 | -634.30 | -596.18 | 7.46 | 7.42 |
| | 7494.00 | 42.75 | 358.89 | 7353.75 | -573.09 | -634.50 | -540.37 | 8.71 | 8.60 |
| | 7583.00 | 50.45 | 358.95 | 7414.86 | -508.49 | -635.72 | -475.79 | 8.65 | 8.65 |
| | 7672.00 | 58.93 | 359.91 | 7466.25 | -435.93 | -636.41 | -403.29 | 9.57 | 9.53 |
| | 7761.00 | 66.03 | 0.31 | 7507.35 | -357.05 | -636.25 | -324.52 | 7.99 | 7.98 |
| | 7850.00 | 75.04 | 2.11 | 7536.98 | -273.25 | -634.44 | -240.92 | 10.30 | 10.12 |
| | 7940.00 | 82.28 | 2.63 | 7554.66 | -185.14 | -630.79 | -153.10 | 8.06 | 8.04 |
| | 8029.00 | 88.91 | 2.37 | 7561.50 | -96.54 | -626.92 | -64.81 | 7.46 | 7.45 |
| | 8118.00 | 91.06 | 359.14 | 7561.52 | -7.56 | -625.75 | 24.00 | 4.36 | 2.42 |
| | 8207.00 | 91.28 | 0.17 | 7559.70 | 81.41 | -626.28 | 112.89 | 1.18 | 0.25 |
| | 8296.00 | 91.45 | 358.24 | 7557.58 | 170.38 | -627.52 | 201.80 | 2.18 | 0.19 |
| | 8385.00 | 91.45 | 0.16 | 7555.33 | 259.34 | -628.76 | 290.71 | 2.16 | 0.00 |
| | 8474.00 | 91.37 | 0.44 | 7553.14 | 348.31 | -628.30 | 379.54 | 0.33 | -0.09 |
| | 8564.00 | 91.30 | 0.40 | 7551.04 | 438.28 | -627.64 | 469.37 | 0.09 | -0.08 |
| | 8653.00 | 91.28 | 359.38 | 7549.04 | 527.26 | -627.81 | 558.24 | 1.15 | -0.02 |
| | 8742.00 | 91.39 | 0.76 | 7546.97 | 616.23 | -627.70 | 647.09 | 1.56 | 0.12 |
| | 8831.00 | 91.41 | 0.92 | 7544.79 | 705.19 | -626.39 | 735.88 | 0.18 | 0.02 |
| | 8920.00 | 91.14 | 1.54 | 7542.81 | 794.15 | -624.48 | 824.63 | 0.76 | -0.30 |
| | 9009.00 | 91.14 | 2.83 | 7541.04 | 883.07 | -621.09 | 913.26 | 1.45 | 0.00 |
| | 9098.00 | 91.07 | 1.24 | 7539.32 | 971.99 | -617.93 | 1001.91 | 1.79 | -0.08 |
| | 9187.00 | 91.13 | 1.77 | 7537.62 | 1060.94 | -615.59 | 1090.63 | 0.60 | 0.07 |
| | 9276.00 | 91.33 | 0.48 | 7535.70 | 1149.90 | -613.85 | 1179.39 | 1.47 | 0.22 |
| | 9366.00 | 91.11 | 3.23 | 7533.79 | 1239.83 | -610.93 | 1269.05 | 3.06 | -0.24 |
| | 9455.00 | 91.05 | 359.68 | 7532.11 | 1328.77 | -608.68 | 1357.77 | 3.99 | -0.07 |
| | 9544.00 | 90.82 | 358.49 | 7530.66 | 1417.74 | -610.10 | 1446.70 | 1.36 | -0.26 |
| | 9633.00 | 91.20 | 359.60 | 7529.09 | 1506.72 | -611.58 | 1535.64 | 1.32 | 0.43 |
| | 9722.00 | 90.78 | 1.16 | 7527.55 | 1595.70 | -610.99 | 1624.47 | 1.81 | -0.47 |
| | 9811.00 | 90.93 | 359.21 | 7526.22 | 1684.68 | -610.70 | 1713.33 | 2.20 | 0.17 |
| | 9900.00 | 90.94 | 358.69 | 7524.77 | 1773.66 | -612.33 | 1802.27 | 0.58 | 0.01 |
| | 9990.00 | 90.92 | 0.78 | 7523.31 | 1863.64 | -612.75 | 1892.16 | 2.32 | -0.02 |
| | 10079.00 | 91.09 | 0.35 | 7521.75 | 1952.62 | -611.87 | 1980.99 | 0.52 | 0.19 |
| | 10168.00 | 91.02 | 1.02 | 7520.11 | 2041.60 | -610.81 | 2069.80 | 0.76 | -0.08 |
| | 10257.00 | 91.12 | 0.14 | 7518.45 | 2130.58 | -609.91 | 2158.62 | 0.99 | 0.11 |
| | 10346.00 | 90.99 | 1.34 | 7516.81 | 2219.55 | -608.76 | 2247.42 | 1.36 | -0.15 |
| | 10435.00 | 91.18 | 0.61 | 7515.12 | 2308.52 | -607.24 | 2336.20 | 0.85 | 0.21 |
| | 10524.00 | 91.30 | 359.35 | 7513.20 | 2397.50 | -607.27 | 2425.07 | 1.42 | 0.13 |
| | 10613.00 | 91.19 | 2.18 | 7511.26 | 2486.46 | -606.09 | 2513.86 | 3.18 | -0.12 |
| | 10702.00 | 90.97 | 2.29 | 7509.59 | 2575.38 | -602.62 | 2602.49 | 0.28 | -0.25 |
| | 10792.00 | 91.27 | 359.59 | 7507.83 | 2665.34 | -601.14 | 2692.26 | 3.02 | 0.33 |
| | 10881.00 | 91.34 | 359.54 | 7505.80 | 2754.32 | -601.82 | 2781.16 | 0.10 | 0.08 |
| | 10970.00 | 91.27 | 359.39 | 7503.77 | 2843.29 | -602.65 | 2870.06 | 0.19 | -0.08 |
| | 11059.00 | 91.44 | 0.75 | 7501.67 | 2932.26 | -602.54 | 2958.91 | 1.54 | 0.19 |
| | 11148.00 | 89.85 | 350.63 | 7500.66 | 3020.89 | -609.22 | 3047.76 | 11.51 | -1.79 |
| | 11237.00 | 89.99 | 347.82 | 7500.79 | 3108.31 | -625.86 | 3135.91 | 3.16 | 0.16 |
| | 11326.00 | 90.90 | 350.68 | 7500.10 | 3195.73 | -642.45 | 3224.06 | 3.37 | 1.02 |
| | 11415.00 | 91.21 | 354.64 | 7498.46 | 3283.97 | -653.82 | 3312.76 | 4.46 | 0.35 |
| | 11504.00 | 91.39 | 355.10 | 7496.44 | 3372.59 | -661.78 | 3401.67 | 0.55 | 0.20 |
| | 11594.00 | 90.92 | 1.22 | 7494.62 | 3462.48 | -664.66 | 3491.59 | 6.82 | -0.52 |
| | 11683.00 | 90.88 | 0.37 | 7493.22 | 3551.46 | -663.43 | 3580.40 | 0.96 | -0.04 |
| | 11772.00 | 90.81 | 1.12 | 7491.91 | 3640.45 | -662.27 | 3669.21 | 0.85 | -0.08 |
| | 11861.00 | 90.32 | 1.27 | 7491.03 | 3729.42 | -660.42 | 3757.98 | 0.58 | -0.55 |
| | 11950.00 | 89.95 | 1.60 | 7490.82 | 3818.39 | -658.19 | 3846.72 | 0.56 | -0.42 |
| | 12039.00 | 90.34 | 1.79 | 7490.60 | 3907.35 | -655.55 | 3935.44 | 0.49 | 0.44 |
| | 12129.00 | 90.00 | 1.21 | 7490.33 | 3997.32 | -653.20 | 4025.17 | 0.75 | -0.38 |
| | 12218.00 | 90.39 | 0.47 | 7490.03 | 4086.31 | -651.89 | 4113.98 | 0.94 | 0.44 |
| | 12307.00 | 90.22 | 1.24 | 7489.56 | 4175.30 | -650.57 | 4202.79 | 0.89 | -0.19 |
| | 12396.00 | 90.86 | 2.47 | 7488.72 | 4264.25 | -647.69 | 4291.48 | 1.56 | 0.72 |
| | 12485.00 | 91.12 | 2.49 | 7487.18 | 4353.15 | -643.83 | 4380.08 | 0.29 | 0.29 |
| | 12574.00 | 90.91 | 359.82 | 7485.60 | 4442.11 | -642.04 | 4468.83 | 3.01 | -0.24 |
| | 12663.00 | 91.06 | 358.92 | 7484.07 | 4531.09 | -643.02 | 4557.75 | 1.03 | 0.17 |
| | 12752.00 | 91.00 | 359.03 | 7482.47 | 4620.06 | -644.61 | 4646.69 | 0.14 | -0.07 |
| | 12841.00 | 91.02 | 0.17 | 7480.90 | 4709.05 | -645.23 | 4735.59 | 1.28 | 0.02 |
| | 12931.00 | 91.34 | 2.98 | 7479.05 | 4798.98 | -642.76 | 4825.29 | 3.14 | 0.36 |
| | 13020.00 | 90.69 | 3.50 | 7477.47 | 4887.83 | -637.73 | 4913.76 | 0.94 | -0.73 |
| | 13109.00 | 89.52 | 2.53 | 7477.31 | 4976.70 | -633.05 | 5002.29 | 1.71 | -1.31 |
| | 13198.00 | 90.38 | 2.01 | 7477.39 | 5065.63 | -629.52 | 5090.93 | 1.13 | 0.97 |
| | 13287.00 | 91.03 | 1.15 | 7476.29 | 5154.59 | -627.07 | 5179.65 | 1.21 | 0.73 |
| | 13376.00 | 90.89 | 0.98 | 7474.80 | 5243.56 | -625.42 | 5268.42 | 0.25 | -0.16 |
| | 13466.00 | 90.48 | 0.27 | 7473.73 | 5333.55 | -624.43 | 5358.25 | 0.91 | -0.46 |
| | 13555.00 | 90.97 | 1.78 | 7472.60 | 5422.52 | -622.84 | 5447.03 | 1.78 | 0.55 |
| | 13644.00 | 88.48 | 358.62 | 7473.03 | 5511.50 | -622.53 | 5535.88 | 4.52 | -2.80 |
| | 13733.00 | 88.53 | 350.85 | 7475.35 | 5600.03 | -630.69 | 5624.71 | 8.73 | 0.06 |
| | 13822.00 | 89.91 | 352.80 | 7476.56 | 5688.11 | -643.34 | 5713.31 | 2.68 | 1.55 |
| | 13911.00 | 90.02 | 349.78 | 7476.62 | 5776.07 | -656.82 | 5801.84 | 3.40 | 0.12 |
| | 14000.00 | 89.96 | 348.53 | 7476.63 | 5863.48 | -673.56 | 5889.98 | 1.41 | -0.07 |
| | 14089.00 | 90.06 | 344.99 | 7476.62 | 5950.10 | -693.94 | 5977.52 | 3.98 | 0.11 |
| | 14178.00 | 90.61 | 350.10 | 7476.10 | 6036.98 | -713.13 | 6065.25 | 5.77 | 0.62 |
| | 14267.00 | 90.67 | 352.28 | 7475.10 | 6124.92 | -726.76 | 6153.77 | 2.45 | 0.07 |
| | 14356.00 | 90.47 | 353.61 | 7474.22 | 6213.24 | -737.69 | 6242.53 | 1.51 | -0.22 |

...Original Hole\Dream Weaver North 3F-21H-N268 MWD 0' to 19832' Definitive

| Comments | MD (ft) | Incl (°) | Azim True (°) | TVD (ft) | NS (ft) | EW (ft) | VSEC (ft) | DLS (°/100ft) | BR (°/100ft) |
|--|------------|-------------|------------------|-------------|------------|------------|--------------|------------------|-----------------|
| | 14445.00 | 90.80 | 356.14 | 7473.23 | 6301.87 | -745.64 | 6331.45 | 2.87 | 0.37 |
| | 14534.00 | 90.92 | 359.08 | 7471.90 | 6390.77 | -749.35 | 6420.42 | 3.31 | 0.13 |
| | 14624.00 | 90.53 | 359.09 | 7470.76 | 6480.75 | -750.79 | 6510.36 | 0.43 | -0.43 |
| | 14713.00 | 91.13 | 3.12 | 7469.47 | 6569.71 | -749.07 | 6599.12 | 4.58 | 0.67 |
| | 14802.00 | 90.43 | 1.80 | 7468.25 | 6658.61 | -745.25 | 6687.72 | 1.68 | -0.79 |
| | 14891.00 | 90.73 | 4.54 | 7467.35 | 6747.46 | -740.33 | 6776.21 | 3.10 | 0.34 |
| | 14980.00 | 90.65 | 2.98 | 7466.28 | 6836.26 | -734.50 | 6864.60 | 1.75 | -0.09 |
| | 15069.00 | 90.20 | 1.85 | 7465.62 | 6925.18 | -730.75 | 6953.22 | 1.37 | -0.51 |
| | 15158.00 | 91.31 | 5.50 | 7464.45 | 7013.97 | -725.05 | 7041.61 | 4.29 | 1.25 |
| | 15247.00 | 90.83 | 5.25 | 7462.79 | 7102.57 | -716.71 | 7129.67 | 0.61 | -0.54 |
| | 15336.00 | 90.75 | 6.56 | 7461.56 | 7191.08 | -707.55 | 7217.61 | 1.47 | -0.09 |
| | 15425.00 | 90.23 | 3.49 | 7460.80 | 7279.73 | -699.76 | 7305.75 | 3.50 | -0.58 |
| | 15514.00 | 89.21 | 0.37 | 7461.23 | 7368.66 | -696.76 | 7394.42 | 3.69 | -1.15 |
| | 15603.00 | 90.58 | 4.88 | 7461.40 | 7457.55 | -692.69 | 7482.99 | 5.30 | 1.54 |
| | 15693.00 | 90.75 | 4.82 | 7460.35 | 7547.22 | -685.08 | 7572.16 | 0.20 | 0.19 |
| | 15782.00 | 90.71 | 3.50 | 7459.22 | 7635.97 | -678.62 | 7660.48 | 1.48 | -0.04 |
| | 15871.00 | 90.97 | 3.57 | 7457.91 | 7724.79 | -673.14 | 7748.91 | 0.30 | 0.29 |
| | 15960.00 | 91.43 | 5.58 | 7456.05 | 7813.49 | -666.04 | 7837.13 | 2.32 | 0.52 |
| | 16049.00 | 91.48 | 7.15 | 7453.79 | 7901.91 | -656.18 | 7924.94 | 1.76 | 0.06 |
| | 16138.00 | 91.70 | 6.48 | 7451.32 | 7990.24 | -645.62 | 8012.63 | 0.79 | 0.25 |
| | 16227.00 | 91.81 | 5.07 | 7448.59 | 8078.75 | -636.67 | 8100.57 | 1.59 | 0.12 |
| | 16316.00 | 91.53 | 4.94 | 7446.00 | 8167.37 | -628.91 | 8188.69 | 0.35 | -0.31 |
| | 16405.00 | 90.97 | 4.43 | 7444.06 | 8256.05 | -621.64 | 8276.89 | 0.85 | -0.63 |
| | 16494.00 | 90.58 | 3.12 | 7442.85 | 8344.85 | -615.78 | 8365.28 | 1.54 | -0.44 |
| | 16583.00 | 88.88 | 2.12 | 7443.27 | 8433.75 | -611.71 | 8453.87 | 2.22 | -1.91 |
| | 16672.00 | 88.07 | 2.12 | 7445.64 | 8522.66 | -608.42 | 8542.49 | 0.91 | -0.91 |
| | 16761.00 | 89.73 | 0.55 | 7447.35 | 8611.61 | -606.35 | 8631.23 | 2.57 | 1.87 |
| | 16851.00 | 91.00 | 359.76 | 7446.78 | 8701.61 | -606.11 | 8721.10 | 1.66 | 1.41 |
| | 16940.00 | 90.77 | 3.56 | 7445.40 | 8790.54 | -603.53 | 8809.79 | 4.28 | -0.26 |
| | 17029.00 | 91.04 | 3.23 | 7444.00 | 8879.37 | -598.26 | 8898.24 | 0.48 | 0.30 |
| | 17118.00 | 90.99 | 3.23 | 7442.42 | 8968.22 | -593.24 | 8986.72 | 0.06 | -0.06 |
| | 17207.00 | 91.09 | 2.60 | 7440.80 | 9057.09 | -588.72 | 9075.25 | 0.72 | 0.11 |
| | 17296.00 | 91.21 | 3.17 | 7439.02 | 9145.96 | -584.24 | 9163.78 | 0.65 | 0.13 |
| | 17385.00 | 90.78 | 2.13 | 7437.47 | 9234.85 | -580.13 | 9252.35 | 1.26 | -0.48 |
| | 17474.00 | 90.86 | 2.92 | 7436.20 | 9323.75 | -576.21 | 9340.94 | 0.89 | 0.09 |
| | 17563.00 | 90.95 | 2.28 | 7434.79 | 9412.65 | -572.17 | 9429.52 | 0.73 | 0.10 |
| | 17652.00 | 90.80 | 0.33 | 7433.43 | 9501.61 | -570.14 | 9518.27 | 2.20 | -0.17 |
| | 17741.00 | 90.52 | 0.93 | 7432.41 | 9590.60 | -569.16 | 9607.10 | 0.74 | -0.31 |
| | 17830.00 | 91.01 | 0.69 | 7431.22 | 9679.58 | -567.91 | 9695.90 | 0.61 | 0.55 |
| | 17919.00 | 90.61 | 0.28 | 7429.96 | 9768.57 | -567.15 | 9784.74 | 0.64 | -0.45 |
| | 18009.00 | 90.74 | 359.36 | 7428.90 | 9858.56 | -567.44 | 9874.63 | 1.03 | 0.14 |
| | 18098.00 | 90.82 | 357.84 | 7427.69 | 9947.52 | -569.61 | 9963.59 | 1.71 | 0.09 |
| | 18187.00 | 90.30 | 357.95 | 7426.82 | 10036.46 | -572.88 | 10052.58 | 0.60 | -0.58 |
| | 18276.00 | 90.43 | 358.06 | 7426.25 | 10125.40 | -575.98 | 10141.57 | 0.19 | 0.15 |
| | 18365.00 | 90.16 | 359.43 | 7425.80 | 10214.38 | -577.93 | 10230.53 | 1.57 | -0.30 |
| | 18454.00 | 90.33 | 359.15 | 7425.42 | 10303.37 | -579.03 | 10319.46 | 0.37 | 0.19 |
| | 18543.00 | 90.13 | 359.81 | 7425.06 | 10392.37 | -579.84 | 10408.38 | 0.77 | -0.22 |
| | 18632.00 | 90.04 | 359.61 | 7424.93 | 10481.36 | -580.29 | 10497.29 | 0.25 | -0.10 |
| | 18721.00 | 90.23 | 359.26 | 7424.72 | 10570.36 | -581.17 | 10586.22 | 0.45 | 0.21 |
| | 18810.00 | 90.13 | 359.72 | 7424.44 | 10659.36 | -581.96 | 10675.14 | 0.53 | -0.11 |
| | 18899.00 | 90.18 | 359.98 | 7424.20 | 10748.35 | -582.19 | 10764.04 | 0.30 | 0.06 |
| | 18989.00 | 90.42 | 359.89 | 7423.72 | 10838.35 | -582.29 | 10853.93 | 0.28 | 0.27 |
| | 19078.00 | 90.32 | 359.56 | 7423.15 | 10927.35 | -582.72 | 10942.83 | 0.39 | -0.11 |
| | 19167.00 | 89.78 | 359.67 | 7423.07 | 11016.35 | -583.32 | 11031.75 | 0.62 | -0.61 |
| | 19256.00 | 89.90 | 0.24 | 7423.32 | 11105.35 | -583.39 | 11120.64 | 0.65 | 0.13 |
| | 19345.00 | 89.76 | 359.75 | 7423.58 | 11194.35 | -583.40 | 11209.52 | 0.57 | -0.16 |
| | 19434.00 | 90.08 | 359.56 | 7423.71 | 11283.34 | -583.93 | 11298.44 | 0.42 | 0.36 |
| | 19523.00 | 89.93 | 359.92 | 7423.70 | 11372.34 | -584.33 | 11387.34 | 0.44 | -0.17 |
| | 19612.00 | 89.76 | 359.29 | 7423.94 | 11461.34 | -584.95 | 11476.26 | 0.73 | -0.19 |
| | 19701.00 | 89.58 | 359.39 | 7424.45 | 11550.33 | -585.97 | 11565.19 | 0.23 | -0.20 |
| Last SLB_MWD Survey | 19790.00 | 89.62 | 0.29 | 7425.08 | 11639.33 | -586.22 | 11654.08 | 1.01 | 0.04 |
| Projection to Bit (2187' FSL, 1189' FWL) | 19832.00 | 89.62 | 0.29 | 7425.35 | 11681.33 | -586.01 | 11696.02 | 0.00 | 0.00 |

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

| Description | Part | MD From (ft) | MD To (ft) | EOU Freq (ft) | Hole Size (in) | Casing Diameter (in) | Survey Tool Type | Borehole / Survey |
|-------------|------|-----------------|---------------|------------------|-------------------|----------------------------|----------------------------|---|
| | 1 | 0.000 | 15.000 | 1/98.425 | 13.500 | 9.625 | NAL_MWD-NON_SLB-Depth Only | Original Hole / Dream Weaver North 3F-21H-N268 MWD 0' to 19832' Definitive |
| | 1 | 15.000 | 28.000 | Act Stns | 13.500 | 9.625 | NAL_MWD-NON_SLB-Depth Only | Original Hole / Dream Weaver North 3F-21H-N268 MWD 0' to 19832' Definitive |
| | 1 | 28.000 | 2228.000 | Act Stns | 13.500 | 9.625 | NAL_MWD-NON_SLB | Original Hole / Dream Weaver North 3F-21H-N268 MWD 0' to Original Hole / Dream Weaver |
| | 1 | 2228.000 | 19832.000 | Act Stns | 8.500 | 5.500 | NAL_MWD_PLUS_0.5_DEG | North 3F-21H-N268 MWD 0' to |

...Original Hole\Dream Weaver North 3F-21H-N268 MWD 0' to 19832' Definitive