Schlumberger

# CNX

CNX

| Borehole: | Well: | Field: | Structure: |
|---|---|---|---|
| Original Borehole | SHR-37P-HSM | WV Tyler County (NAD 27) | Patterson 873 |

**Gravity & Magnetic Parameters**

| | | | | | |
|---|---|---|---|---|---|
| Model: | HDGM 2022 | Dip: | 66.176° | Date: | 06-Jun-2022 |
| MagDec: | -7.464° | FS: | 51574.025nT | Gravity FS: | 999.338mgn (9.80665 Based) |

**Surface Location** NAD27 West Virginia State Plane, Northern Zone, US Feet

| | | | | | |
|---|---|---|---|---|---|
| Lat: | N 39 21 12.49 | Northing: | 313702.22ftUS | Grid Conv: | -0.8584° |
| Lon: | W 80 50 45.37 | Easting: | 1619409.37ftUS | Scale Fact: | 0.99996199 |

**Miscellaneous**

| | | | |
|---|---|---|---|
| Slot: | SHR-37P-HSM | TVD Ref: | RKB(857ft above MSL) |
| Plan: | CNX SHR-37P-HSM Surveys 0ft to 17932ft | | |

Surface Location — Northing: 313702.217 Easting: 1619405.368 Latitude: N 39 21 12.49 Longitude: W 80 50 45.37 VSec Azimuth: 161.09

| Target Description | | | Grid Coord | | | | | | Local Coord | |
|---|---|---|---|---|---|---|---|---|---|---|
| Target Name | Shape | Dimension | Latitude | Longitude | Northing | Easting | TVD | VSec | N(+)/S(-) | E(+)/W(-) |
| SHR17_m2_adverse_trait_c - 50ft setback | Polyline | N/A | N 39 21 12.38 | W 80 50 45.57 | 313690.44 | 1619393.21 | 857.00 | 5.88 | -11.78 | -18.16 |
| SHR17_m2_adverse_trait_b - 50ft setback | Polyline | N/A | N 39 21 12.38 | W 80 50 45.57 | 313690.44 | 1619393.21 | 857.00 | 5.88 | -11.78 | -18.16 |
| SHR-37_overall_unit_bndry_23Aug21 | Polyline | N/A | N 39 21 12.38 | W 80 50 45.57 | 313690.44 | 1619393.21 | 857.00 | 5.88 | -11.78 | -18.16 |
| SHR17_m2_adverse_trait_a | Polyline | N/A | N 39 21 12.38 | W 80 50 45.57 | 313690.44 | 1619393.21 | 857.00 | 5.88 | -11.78 | -18.16 |
| SHR17_m2_adverse_trait_h | Polyline | N/A | N 39 21 12.38 | W 80 50 45.57 | 313690.44 | 1619393.21 | 857.00 | 5.88 | -11.78 | -18.16 |
| SHR17_m2_adverse_trait_e - 50ft setback | Polyline | N/A | N 39 21 12.38 | W 80 50 45.57 | 313690.44 | 1619393.21 | 857.00 | 5.88 | -11.78 | -18.16 |
| SHR17_m2_adverse_trait_c | Polyline | N/A | N 39 21 12.38 | W 80 50 45.57 | 313690.44 | 1619393.21 | 857.00 | 5.88 | -11.78 | -18.16 |
| CNX SHR-37P-HSM - Marcellus | Plane | N/A | N 39 21 9.34 | W 80 50 38.34 | 313375.04 | 1619956.68 | 6291.00 | 487.56 | -327.19 | 547.34 |
| CNX SHR-37P-HSM-PBHL | Point | N/A | N 39 19 25.50 | W 80 49 46.28 | 302809.79 | 1623890.06 | 6296.00 | 11758.35 | -10962.97 | 4490.32 |
| CNX SHR-37P-HSM End Turn | Point | N/A | N 39 19 56.45 | W 80 50 4.45 | 305651.42 | 1622508.61 | 6302.59 | 8328.50 | -7741.18 | 3099.19 |
| CNX SHR-37P-HSM Begin Turn | Point | N/A | N 39 19 59.30 | W 80 50 5.96 | 306251.30 | 1622395.38 | 6305.42 | 8017.53 | -7141.29 | 2986.18 |
| CNX SHR-37P-HSM-LP_20210729 | Point | N/A | N 39 21 8.53 | W 80 50 39.14 | 313292.23 | 1619971.01 | 6317.00 | 575.51 | -410.01 | 561.87 |
| CNX SHR-37P-HSM - Onondaga | Plane | N/A | N 39 21 9.34 | W 80 50 38.34 | 313375.04 | 1619956.68 | 6332.00 | 487.56 | -327.19 | 547.34 |

| PART | Seq. | Survey Tool/ Survey Tool Code | Vendor/Tool | Hole Size (in) | Casing Size (in) | Expected Max Incl (°) | MD From (ft) | MD To (ft) | Survey Frequency (ft) | ECU Size (9sms Major) (ft) | ECU Size (9sms Minor) (ft) | Comments/ Contingency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | A020Ga_GYRO-N-S-Depth Only | | 17.5 | 13.375 | | 0 | 29 | 1/96.425 | 0.732 | 0.729 | |
| 1 | 2 | A020Ga_GYRO-N-S-Depth Only | | 17.5 | 13.375 | | 29 | 29 | Act Strs | 0.732 | 0.729 | |
| 1 | 3 | A020Ga_GYRO-N-S | | 17.5 | 13.375 | | 29 | 365 | Act Strs | 2.2 | 2.197 | |
| 1 | 4 | A001Mb_MWD | | 17.5 | 13.375 | | 365 | 800 | Act Strs | 3.296 | 3.295 | |
| 1 | 5 | A001Mb_MWD | | 12.25 | 9.625 | | 800 | 5268 | Act Strs | 24.317 | 22.543 | |
| 1 | 6 | B006Mb_MWD+IGRF | | 8.5 | 5.5 | | 5268 | 17932 | Act Strs | 342.716 | 34.142 | |

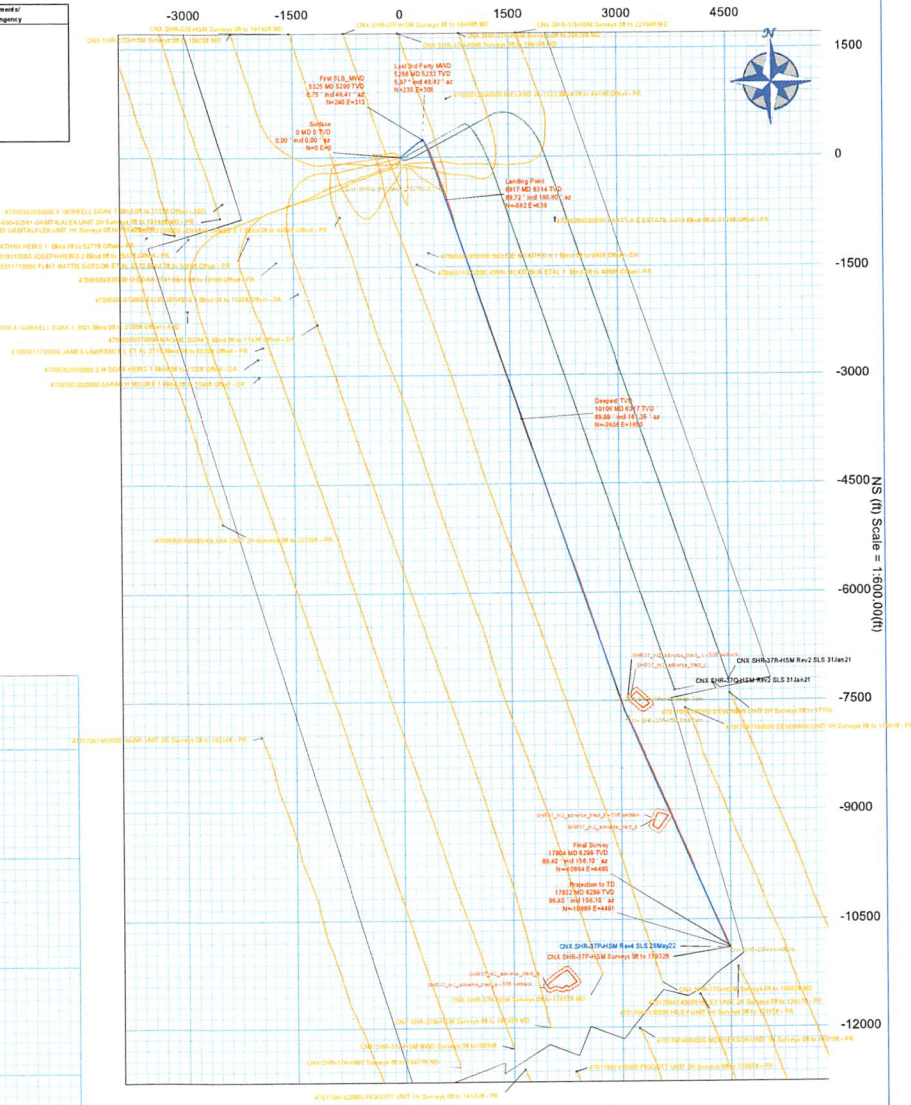
**Critical Points**

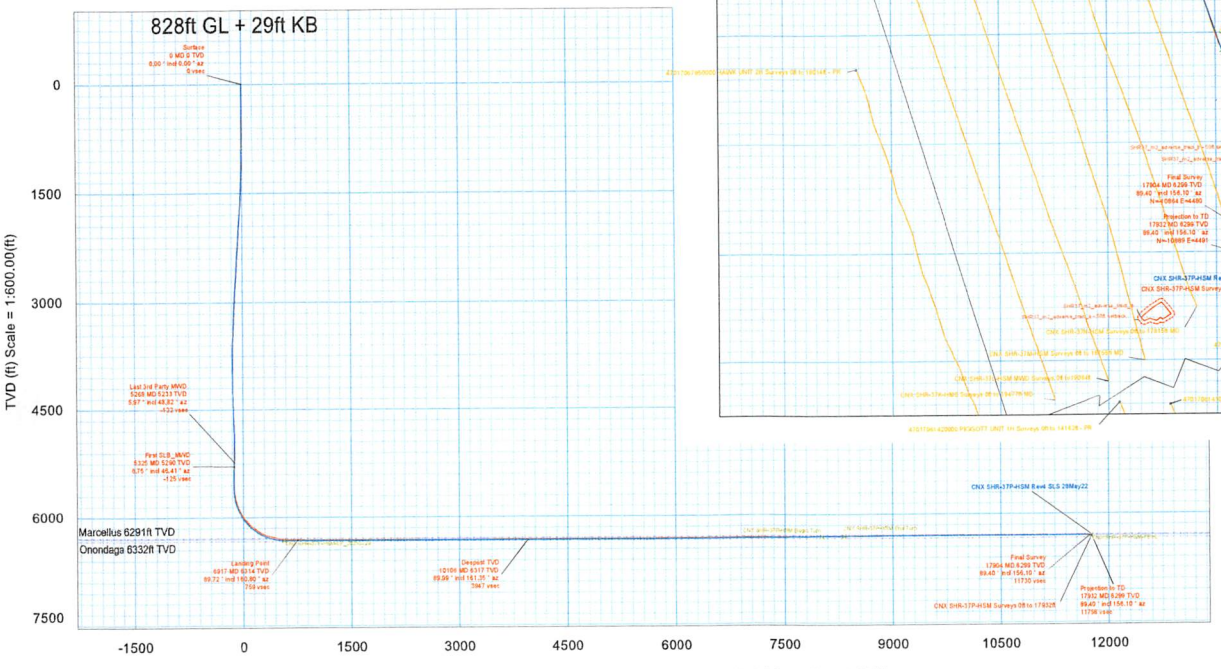
| Critical Point | MD | INCL | AZIM | TVD | VSEC | N(+)/S(-) | E(+)/W(-) | DLS |
|---|---|---|---|---|---|---|---|---|
| Surface | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Last 3rd Party MWD | 5268.00 | 5.97 | 46.82 | 5233.31 | -122.11 | 235.27 | 308.21 | 1.17 |
| First SLB_MWD | 5325.00 | 6.75 | 46.41 | 5289.96 | -124.52 | 239.53 | 312.87 | 1.45 |
| Marcellus | 6644.87 | 81.83 | 159.88 | 6291.00 | 487.56 | -327.19 | 547.34 | 1.39 |
| Landing Point | 6917.00 | 89.72 | 160.80 | 6313.53 | 758.64 | -582.42 | 638.75 | 3.19 |
| Deepest TVD | 10106.00 | 89.99 | 161.35 | 6317.15 | 3947.18 | -3606.42 | 1650.16 | 0.54 |
| Marcellus | 16133.43 | 90.18 | 156.64 | 6291.00 | 9965.81 | -8242.89 | 3767.23 | 0.84 |
| Marcellus | 16809.51 | 89.45 | 157.54 | 6291.00 | 10640.09 | -8864.20 | 4033.88 | 0.36 |
| Final Survey | 17904.00 | 89.40 | 156.10 | 6296.60 | 11730.14 | -10963.51 | 4479.83 | 1.25 |
| Projection to TD | 17932.00 | 89.40 | 156.10 | 6296.80 | 11758.04 | -10989.11 | 4491.17 | 0.00 |

Grid / Mag / True

Grid North
Tot Corr (M->G -6.606°)
Mag Dec (-7.464°)
Grid Conv (-0.858°)

EW (ft) Scale = 1:600.00(ft)




CONTROLLED

| | |
|---|---|
| Plan ref | CNX SHR-37P-HSM Surveys 0ft to 17932ft |
| Drawing ref | |
| Copy number | of 3 |
| Date | 06-Jun-2022 |

| | | |
|---|---|---|
| 1 | Drawn By | S. Shannon |
| Copy number | | for |

03/17/2023

Schlumberger

# CNX SHR-37P-HSM Surveys 0ft to 17932ft Survey Geodetic Report

**(Def Survey)**

| | | | |
|---|---|---|---|
| **Report Date:** | June 06, 2022 - 02:52 PM | **Survey / DLS Computation:** | Minimum Curvature / Lubinski |
| **Client:** | CNX | **Vertical Section Azimuth:** | 161.000 ° (Grid North) |
| **Field:** | WV Tyler County (NAD 27) | **Vertical Section Origin:** | 0.000 ft, 0.000 ft |
| **Structure / Slot:** | CNX SHR-37 Pad / SHR-37P-HSM | **TVD Reference Datum:** | RKB |
| **Well:** | SHR-37P-HSM | **TVD Reference Elevation:** | 857.000 ft above MSL |
| **Borehole:** | Original Borehole | **Seabed / Ground Elevation:** | 828.000 ft above MSL |
| **UWI / API#:** | Unknown / Unknown | **Magnetic Declination:** | -7.464 ° |
| **Survey Name:** | CNX SHR-37P-HSM Surveys 0ft to 17932ft | **Total Gravity Field Strength:** | 999.3376mgn (9.80665 Based) |
| **Survey Date:** | June 06, 2022 | **Gravity Model:** | GARM |
| **Tort / AHD / DDI / ERD Ratio:** | 262.463 ° / 12405.376 ft / 6.966 / 1.964 | **Total Magnetic Field Strength:** | 51574.025 nT |
| **Coordinate Reference System:** | NAD27 West Virginia State Plane, Northern Zone, US Feet | **Magnetic Dip Angle:** | 66.176 ° |
| **Location Lat / Long:** | N 39° 21' 12.49384", W 80° 50' 45.36562" | **Declination Date:** | June 06, 2022 |
| **Location Grid N/E Y/X:** | N 313702.217 ftUS, E 1619409.368 ftUS | **Magnetic Declination Model:** | HDGM 2022 |
| **CRS Grid Convergence Angle:** | -0.8584 ° | **North Reference:** | Grid North |
| **Grid Scale Factor:** | 0.99995199 | **Grid Convergence Used:** | -0.8584 ° |
| **Version / Patch:** | 2.10.829.1 | **Total Corr Mag North->Grid North:** | -6.6055 ° |
| | | **Local Coord Referenced To:** | Well Head |

| Comments | MD (ft) | Incl (°) | Azim Grid (°) | TVD (ft) | TVDSS (ft) | VSEC (ft) | NS (ft) | EW (ft) | DLS (°/100ft) | BR (°/100ft) | TR (°/100ft) | Northing (ftUS) | Easting (ftUS) | Latitude (°) | Longitude (°) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Surface | 0.00 | 0.00 | 0.00 | 0.00 | -857.00 | 0.00 | 0.00 | 0.00 | N/A | N/A | N/A | 313702.22 | 1619409.37 | 39.35347051 | -80.84593490 |
| | 100.00 | 0.37 | 265.96 | 100.00 | -757.00 | -0.08 | -0.02 | -0.32 | 0.37 | 0.37 | 0.00 | 313702.19 | 1619409.05 | 39.35347044 | -80.84593603 |
| | 125.00 | 0.17 | 284.40 | 125.00 | -732.00 | -0.12 | -0.02 | -0.44 | 0.86 | -0.80 | 73.76 | 313702.20 | 1619408.93 | 39.35347044 | -80.84593644 |
| | 150.00 | 0.09 | 323.22 | 150.00 | -707.00 | -0.16 | 0.01 | -0.49 | 0.46 | -0.32 | 155.28 | 313702.22 | 1619408.88 | 39.35347051 | -80.84593661 |
| | 175.00 | 0.19 | 272.80 | 175.00 | -682.00 | -0.20 | 0.02 | -0.54 | 0.60 | 0.40 | -201.68 | 313702.24 | 1619408.83 | 39.35347055 | -80.84593680 |
| | 200.00 | 0.32 | 269.05 | 200.00 | -657.00 | -0.23 | 0.02 | -0.65 | 0.52 | 0.52 | -15.00 | 313702.24 | 1619408.72 | 39.35347055 | -80.84593720 |
| | 225.00 | 0.22 | 246.08 | 225.00 | -632.00 | -0.25 | 0.00 | -0.76 | 0.58 | -0.40 | -91.88 | 313702.22 | 1619408.60 | 39.35347049 | -80.84593760 |
| | 250.00 | 0.28 | 221.11 | 250.00 | -607.00 | -0.22 | -0.06 | -0.85 | 0.49 | 0.24 | -99.88 | 313702.16 | 1619408.52 | 39.35347031 | -80.84593789 |
| | 275.00 | 0.18 | 234.75 | 275.00 | -582.00 | -0.18 | -0.13 | -0.92 | 0.45 | -0.40 | 54.56 | 313702.09 | 1619408.45 | 39.35347012 | -80.84593814 |
| | 300.00 | 0.08 | 273.32 | 300.00 | -557.00 | -0.17 | -0.15 | -0.97 | 0.51 | -0.40 | 154.28 | 313702.06 | 1619408.40 | 39.35347005 | -80.84593832 |
| | 325.00 | 0.05 | 281.55 | 325.00 | -532.00 | -0.18 | -0.15 | -1.00 | 0.13 | -0.12 | 32.92 | 313702.07 | 1619408.37 | 39.35347006 | -80.84593842 |
| | 350.00 | 0.14 | 307.56 | 350.00 | -507.00 | -0.22 | -0.13 | -1.03 | 0.39 | 0.36 | 104.04 | 313702.09 | 1619408.34 | 39.35347012 | -80.84593854 |
| | 365.00 | 0.12 | 319.20 | 365.00 | -492.00 | -0.25 | -0.11 | -1.06 | 0.22 | -0.13 | 77.60 | 313702.11 | 1619408.31 | 39.35347018 | -80.84593863 |
| | 518.00 | 0.34 | 350.98 | 518.00 | -339.00 | -0.84 | 0.46 | -1.23 | 0.16 | 0.14 | 20.77 | 313702.68 | 1619408.13 | 39.35347174 | -80.84593928 |
| | 611.00 | 0.14 | 341.27 | 611.00 | -246.00 | -1.23 | 0.84 | -1.31 | 0.22 | -0.22 | -10.44 | 313703.06 | 1619408.05 | 39.35347278 | -80.84593958 |
| | 704.00 | 0.20 | 336.85 | 704.00 | -153.00 | -1.50 | 1.10 | -1.41 | 0.07 | 0.06 | -4.75 | 313703.32 | 1619407.95 | 39.35347348 | -80.84593995 |
| | 798.00 | 0.50 | 57.32 | 797.99 | -59.01 | -1.76 | 1.47 | -1.13 | 0.54 | 0.32 | 85.61 | 313703.69 | 1619408.24 | 39.35347451 | -80.84593898 |
| | 891.00 | 0.65 | 356.78 | 890.99 | 33.99 | -2.37 | 2.22 | -0.82 | 0.64 | 0.16 | -65.10 | 313704.44 | 1619408.55 | 39.35347657 | -80.84593792 |
| | 985.00 | 1.26 | 53.43 | 984.98 | 127.98 | -3.19 | 3.37 | -0.02 | 1.12 | 0.65 | 60.27 | 313705.58 | 1619409.35 | 39.35347976 | -80.84593515 |
| | 1077.00 | 2.61 | 51.28 | 1076.92 | 219.92 | -4.20 | 5.28 | 2.43 | 1.47 | 1.47 | -2.34 | 313707.50 | 1619411.79 | 39.35348511 | -80.84592660 |
| | 1172.00 | 4.25 | 54.57 | 1171.75 | 314.75 | -5.93 | 8.67 | 6.98 | 1.74 | 1.73 | 3.46 | 313710.89 | 1619416.35 | 39.35349461 | -80.84591067 |
| | 1265.00 | 5.50 | 53.01 | 1264.41 | 407.41 | -8.28 | 13.35 | 13.35 | 1.35 | 1.34 | -1.68 | 313715.57 | 1619422.72 | 39.35350772 | -80.84588840 |
| | 1359.00 | 6.64 | 53.69 | 1357.88 | 500.88 | -11.29 | 19.28 | 21.33 | 1.22 | 1.21 | 0.72 | 313721.50 | 1619430.69 | 39.35352432 | -80.84586051 |
| | 1452.00 | 8.13 | 50.41 | 1450.11 | 593.11 | -15.20 | 26.66 | 30.73 | 1.66 | 1.60 | -3.53 | 313728.87 | 1619440.10 | 39.35354496 | -80.84582766 |
| | 1546.00 | 9.41 | 50.78 | 1543.01 | 686.01 | -20.20 | 35.75 | 41.80 | 1.36 | 1.36 | 0.39 | 313737.97 | 1619451.17 | 39.35357038 | -80.84578898 |
| | 1639.00 | 9.27 | 49.76 | 1634.78 | 777.78 | -25.54 | 45.40 | 53.41 | 0.23 | -0.15 | -1.10 | 313747.61 | 1619462.78 | 39.35359734 | -80.84574845 |
| | 1733.00 | 11.21 | 44.52 | 1727.28 | 870.28 | -32.35 | 56.81 | 65.60 | 2.29 | 2.06 | -5.57 | 313759.02 | 1619474.96 | 39.35362915 | -80.84570596 |
| | 1826.00 | 12.54 | 48.44 | 1818.29 | 961.29 | -40.26 | 69.95 | 79.49 | 1.67 | 1.43 | 4.22 | 313772.16 | 1619488.86 | 39.35366580 | -80.84565753 |
| | 1920.00 | 10.76 | 52.34 | 1910.35 | 1053.35 | -46.98 | 82.08 | 94.08 | 2.07 | -1.89 | 4.15 | 313784.30 | 1619503.44 | 39.35369971 | -80.84560661 |
| | 2014.00 | 9.75 | 47.23 | 2002.85 | 1145.85 | -53.00 | 92.85 | 106.87 | 1.45 | -1.07 | -5.44 | 313795.06 | 1619516.23 | 39.35372979 | -80.84556196 |
| | 2107.00 | 9.35 | 55.73 | 2094.56 | 1237.56 | -58.16 | 102.45 | 118.89 | 1.57 | -0.43 | 9.14 | 313804.66 | 1619528.25 | 39.35375664 | -80.84551995 |
| | 2201.00 | 10.27 | 51.45 | 2187.19 | 1330.19 | -62.98 | 111.97 | 131.76 | 1.25 | 0.98 | -4.55 | 313814.18 | 1619541.12 | 39.35378331 | -80.84547497 |
| | 2295.00 | 9.87 | 43.96 | 2279.74 | 1422.74 | -69.44 | 122.99 | 143.90 | 1.46 | -0.43 | -7.97 | 313825.21 | 1619553.26 | 39.35381407 | -80.84543261 |
| | 2388.00 | 9.60 | 47.33 | 2371.40 | 1514.40 | -76.18 | 133.99 | 155.14 | 0.68 | -0.29 | 3.62 | 313836.20 | 1619564.50 | 39.35384471 | -80.84539347 |
| | 2481.00 | 9.35 | 57.50 | 2463.14 | 1606.14 | -81.06 | 143.30 | 167.21 | 1.82 | -0.27 | 10.94 | 313845.51 | 1619576.57 | 39.35387078 | -80.84535127 |
| | 2576.00 | 9.96 | 57.61 | 2556.80 | 1699.80 | -84.76 | 151.85 | 180.66 | 0.64 | 0.64 | 0.12 | 313854.06 | 1619590.02 | 39.35389479 | -80.84530418 |
| | 2669.00 | 10.20 | 49.38 | 2648.37 | 1791.37 | -89.66 | 161.52 | 193.70 | 1.57 | 0.26 | -8.85 | 313863.73 | 1619603.06 | 39.35392188 | -80.84525858 |
| | 2762.00 | 10.29 | 44.16 | 2739.88 | 1882.88 | -96.44 | 172.84 | 205.74 | 1.00 | 0.10 | -5.61 | 313875.05 | 1619615.09 | 39.35395345 | -80.84521662 |
| | 2861.00 | 10.12 | 47.65 | 2837.32 | 1980.32 | -103.88 | 185.04 | 218.33 | 0.65 | -0.17 | 3.53 | 313887.25 | 1619627.68 | 39.35398746 | -80.84517275 |
| | 2954.00 | 9.15 | 57.31 | 2929.01 | 2072.01 | -108.87 | 194.54 | 230.59 | 2.02 | -1.04 | 10.39 | 313896.75 | 1619639.94 | 39.35401404 | -80.84512990 |
| | 3047.00 | 9.52 | 50.70 | 3020.78 | 2163.78 | -113.29 | 203.41 | 242.76 | 1.22 | 0.40 | -7.11 | 313905.61 | 1619652.12 | 39.35403888 | -80.84508732 |
| | 3140.00 | 8.75 | 58.33 | 3112.61 | 2255.61 | -117.51 | 211.99 | 254.74 | 1.54 | -0.83 | 8.20 | 313914.20 | 1619664.09 | 39.35406294 | -80.84504544 |

| Comments | MD (ft) | Incl (°) | Azim Grid (°) | TVD (ft) | TVDSS (ft) | VSEC (ft) | NS (ft) | EW (ft) | DLS (°/100ft) | BR (°/100ft) | TR (°/100ft) | Northing (ftUS) | Easting (ftUS) | Latitude (°) | Longitude (°) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3233.00 | 9.18 | 56.92 | 3204.47 | 2347.47 | -120.87 | 219.76 | 266.97 | 0.52 | 0.46 | -1.52 | 313921.96 | 1619676.33 | 39.35408475 | -80.84500259 |
| | 3326.00 | 9.09 | 51.93 | 3296.29 | 2439.29 | -125.07 | 228.34 | 278.97 | 0.86 | -0.10 | -5.37 | 313930.54 | 1619688.33 | 39.35410880 | -80.84496062 |
| | 3421.00 | 7.13 | 47.38 | 3390.34 | 2533.34 | -129.89 | 236.96 | 289.22 | 2.17 | -2.06 | -4.79 | 313939.16 | 1619698.57 | 39.35413288 | -80.84492484 |
| | 3514.00 | 5.95 | 38.18 | 3482.73 | 2625.73 | -134.81 | 244.65 | 296.45 | 1.69 | -1.27 | -9.89 | 313946.86 | 1619705.80 | 39.35415431 | -80.84489969 |
| | 3608.00 | 4.55 | 27.48 | 3576.34 | 2719.34 | -140.02 | 251.79 | 301.18 | 1.81 | -1.49 | -11.38 | 313954.00 | 1619710.53 | 39.35417410 | -80.84488334 |
| | 3702.00 | 2.86 | 27.41 | 3670.14 | 2813.14 | -144.20 | 257.18 | 303.98 | 1.80 | -1.80 | -0.07 | 313959.39 | 1619713.33 | 39.35418901 | -80.84487372 |
| | 3796.00 | 2.06 | 82.58 | 3764.06 | 2907.06 | -145.48 | 259.48 | 306.73 | 2.54 | -0.85 | 58.69 | 313961.69 | 1619716.09 | 39.35419544 | -80.84486410 |
| | 3889.00 | 2.66 | 95.49 | 3856.99 | 2999.99 | -144.25 | 259.49 | 310.54 | 0.86 | 0.65 | 13.88 | 313961.70 | 1619719.89 | 39.35419562 | -80.84485065 |
| | 3983.00 | 0.88 | 65.62 | 3950.94 | 3093.94 | -143.42 | 259.58 | 313.37 | 2.07 | -1.89 | -31.78 | 313961.78 | 1619722.72 | 39.35419598 | -80.84484065 |
| | 4076.00 | 1.57 | 216.97 | 4043.93 | 3186.93 | -142.77 | 258.86 | 313.25 | 2.56 | 0.74 | 162.74 | 313961.06 | 1619722.60 | 39.35419399 | -80.84484102 |
| | 4169.00 | 3.34 | 236.55 | 4136.84 | 3279.84 | -141.38 | 256.35 | 310.23 | 2.08 | 1.90 | 21.05 | 313958.55 | 1619719.58 | 39.35418697 | -80.84485159 |
| | 4266.00 | 4.58 | 235.77 | 4233.61 | 3376.61 | -139.66 | 252.61 | 304.67 | 1.28 | 1.28 | -0.80 | 313954.81 | 1619714.02 | 39.35417649 | -80.84487105 |
| | 4360.00 | 4.36 | 232.38 | 4327.32 | 3470.32 | -137.53 | 248.32 | 298.73 | 0.37 | -0.23 | -3.61 | 313950.52 | 1619708.09 | 39.35416446 | -80.84489180 |
| | 4453.00 | 4.05 | 230.32 | 4420.07 | 3563.07 | -135.24 | 244.06 | 293.41 | 0.37 | -0.33 | -2.22 | 313946.27 | 1619702.76 | 39.35415256 | -80.84491041 |
| | 4546.00 | 4.13 | 225.64 | 4512.84 | 3655.84 | -132.65 | 239.62 | 288.48 | 0.37 | 0.09 | -5.03 | 313941.83 | 1619697.84 | 39.35414018 | -80.84492758 |
| | 4639.00 | 3.22 | 213.13 | 4605.64 | 3748.64 | -129.61 | 235.10 | 284.66 | 1.30 | -0.98 | -13.45 | 313937.30 | 1619694.01 | 39.35412759 | -80.84494086 |
| | 4733.00 | 2.71 | 188.11 | 4699.52 | 3842.52 | -126.01 | 230.68 | 282.90 | 1.47 | -0.54 | -26.62 | 313932.89 | 1619692.26 | 39.35411541 | -80.84494683 |
| | 4827.00 | 2.71 | 165.31 | 4793.42 | 3936.42 | -121.82 | 226.34 | 283.15 | 1.14 | 0.00 | -24.26 | 313928.54 | 1619692.51 | 39.35410348 | -80.84494572 |
| | 4920.00 | 2.52 | 102.88 | 4886.34 | 4029.34 | -118.55 | 223.75 | 285.71 | 2.92 | -0.20 | -67.13 | 313925.96 | 1619695.06 | 39.35409649 | -80.84493656 |
| | 5014.00 | 3.21 | 72.55 | 4980.23 | 4123.23 | -117.38 | 224.08 | 290.23 | 1.74 | 0.73 | -32.27 | 313926.29 | 1619699.58 | 39.35409758 | -80.84492058 |
| | 5107.00 | 4.71 | 61.27 | 5073.00 | 4216.00 | -117.96 | 226.70 | 296.06 | 1.81 | 1.61 | -12.13 | 313928.90 | 1619705.42 | 39.35410500 | -80.84490009 |
| | 5199.00 | 5.38 | 54.39 | 5164.65 | 4307.65 | -119.83 | 231.02 | 302.88 | 0.98 | 0.73 | -7.48 | 313933.23 | 1619712.24 | 39.35411716 | -80.84487621 |
| Last 3rd Party MWD | 5268.00 | 5.97 | 48.82 | 5233.31 | 4376.31 | -122.11 | 235.27 | 308.21 | 1.17 | 0.86 | -8.07 | 313937.48 | 1619717.57 | 39.35412903 | -80.84485759 |
| First SLB_MWD | 5325.00 | 6.75 | 46.41 | 5289.96 | 4432.96 | -124.62 | 239.53 | 312.87 | 1.45 | 1.37 | -4.23 | 313941.74 | 1619722.22 | 39.35414092 | -80.84484135 |
| | 5417.00 | 0.08 | 84.83 | 5381.74 | 4524.74 | -126.86 | 243.27 | 316.86 | 7.27 | -7.25 | 41.76 | 313945.47 | 1619726.21 | 39.35415135 | -80.84482746 |
| | 5512.00 | 0.14 | 231.54 | 5476.74 | 4619.74 | -126.80 | 243.20 | 316.83 | 0.22 | 0.06 | 154.43 | 313945.41 | 1619726.18 | 39.35415117 | -80.84482754 |
| | 5605.00 | 0.11 | 151.53 | 5569.74 | 4712.74 | -126.68 | 243.05 | 316.78 | 0.17 | -0.03 | -86.03 | 313945.26 | 1619726.14 | 39.35415075 | -80.84482770 |
| | 5699.00 | 7.10 | 150.98 | 5663.50 | 4806.50 | -120.86 | 237.89 | 319.65 | 7.44 | 7.44 | -0.59 | 313940.09 | 1619729.00 | 39.35413669 | -80.84481730 |
| | 5794.00 | 13.06 | 146.19 | 5756.99 | 4899.99 | -104.69 | 223.82 | 328.48 | 6.33 | 6.27 | -5.04 | 313926.03 | 1619737.83 | 39.35409844 | -80.84478533 |
| | 5888.00 | 19.50 | 147.88 | 5847.18 | 4990.18 | -79.11 | 201.69 | 342.74 | 6.87 | 6.85 | 1.80 | 313903.89 | 1619752.09 | 39.35403826 | -80.84473372 |
| | 5982.00 | 29.31 | 154.06 | 5932.69 | 5075.69 | -40.89 | 167.62 | 361.20 | 10.77 | 10.44 | 6.57 | 313869.83 | 1619770.55 | 39.35394551 | -80.84466667 |
| | 6075.00 | 37.12 | 156.52 | 6010.44 | 5153.44 | 9.76 | 121.34 | 382.37 | 8.52 | 8.40 | 2.65 | 313823.55 | 1619791.72 | 39.35381932 | -80.84458936 |
| | 6168.00 | 43.79 | 157.81 | 6081.16 | 5224.16 | 69.93 | 65.74 | 405.73 | 7.23 | 7.17 | 1.39 | 313767.95 | 1619815.08 | 39.35366766 | -80.84450382 |
| | 6262.00 | 51.37 | 159.72 | 6144.53 | 5287.53 | 139.22 | 1.09 | 430.78 | 8.20 | 8.06 | 2.03 | 313703.30 | 1619840.13 | 39.35349121 | -80.84441183 |
| | 6356.00 | 59.15 | 161.28 | 6198.06 | 5341.06 | 216.40 | -71.68 | 456.50 | 8.39 | 8.28 | 1.66 | 313630.54 | 1619865.84 | 39.35329250 | -80.84431706 |
| | 6449.00 | 66.89 | 160.65 | 6240.22 | 5383.22 | 299.21 | -149.96 | 483.52 | 8.34 | 8.32 | -0.68 | 313552.26 | 1619892.86 | 39.35307871 | -80.84421736 |
| | 6544.00 | 75.03 | 160.26 | 6271.18 | 5414.18 | 388.94 | -234.52 | 513.55 | 8.58 | 8.57 | -0.41 | 313467.71 | 1619922.89 | 39.35284783 | -80.84410673 |
| | 6637.00 | 81.73 | 159.72 | 6289.90 | 5432.90 | 479.96 | -320.06 | 544.70 | 7.23 | 7.20 | -0.58 | 313382.17 | 1619954.04 | 39.35261428 | -80.84399204 |
| | 6730.00 | 82.95 | 159.29 | 6302.30 | 5445.30 | 572.10 | -406.40 | 576.97 | 1.39 | 1.31 | -0.46 | 313295.84 | 1619986.31 | 39.35237861 | -80.84387337 |
| | 6823.00 | 86.76 | 161.27 | 6310.64 | 5453.64 | 664.70 | -493.57 | 608.22 | 4.61 | 4.10 | 2.13 | 313208.67 | 1620017.55 | 39.35214059 | -80.84375830 |
| Landing Point | 6917.00 | 89.72 | 160.80 | 6313.53 | 5456.53 | 758.64 | -582.42 | 638.75 | 3.19 | 3.15 | -0.50 | 313119.83 | 1620048.08 | 39.35189795 | -80.84364565 |
| | 7010.00 | 89.85 | 162.13 | 6313.87 | 5456.87 | 851.63 | -670.59 | 668.31 | 1.44 | 0.14 | 1.43 | 313031.66 | 1620077.64 | 39.35165711 | -80.84353647 |
| | 7196.00 | 89.94 | 164.06 | 6314.21 | 5457.21 | 1037.50 | -848.54 | 722.39 | 1.04 | 0.05 | 1.04 | 312853.72 | 1620131.73 | 39.35117083 | -80.84333584 |
| | 7302.00 | 90.15 | 163.04 | 6314.13 | 5457.13 | 1143.40 | -950.20 | 752.41 | 0.98 | 0.20 | -0.96 | 312752.06 | 1620161.74 | 39.35089299 | -80.84322434 |
| | 7382.00 | 89.99 | 162.41 | 6314.03 | 5457.03 | 1223.36 | -1026.59 | 776.17 | 0.81 | -0.20 | -0.79 | 312675.67 | 1620185.50 | 39.35068426 | -80.84313631 |
| | 7475.00 | 89.82 | 161.83 | 6314.19 | 5457.19 | 1316.34 | -1115.10 | 804.72 | 0.65 | -0.18 | -0.62 | 312587.17 | 1620214.05 | 39.35044246 | -80.84303068 |
| | 7568.00 | 90.48 | 160.60 | 6313.94 | 5456.94 | 1409.34 | -1203.15 | 834.67 | 1.50 | 0.71 | -1.32 | 312499.13 | 1620243.99 | 39.35020200 | -80.84292014 |
| | 7661.00 | 90.26 | 161.52 | 6313.34 | 5456.34 | 1502.33 | -1291.11 | 864.85 | 1.02 | -0.24 | 0.99 | 312411.17 | 1620274.18 | 39.34996177 | -80.84280877 |
| | 7754.00 | 90.25 | 161.23 | 6312.93 | 5455.93 | 1595.33 | -1379.24 | 894.55 | 0.31 | -0.01 | -0.31 | 312323.05 | 1620303.88 | 39.34972107 | -80.84269911 |
| | 7847.00 | 90.15 | 161.13 | 6312.61 | 5455.61 | 1688.33 | -1467.26 | 924.55 | 0.15 | -0.11 | -0.11 | 312235.03 | 1620333.88 | 39.34948065 | -80.84258838 |
| | 7948.00 | 90.31 | 161.73 | 6312.20 | 5455.20 | 1789.33 | -1563.00 | 956.72 | 0.61 | 0.16 | 0.59 | 312139.29 | 1620366.04 | 39.34921915 | -80.84246961 |
| | 8137.00 | 89.69 | 162.10 | 6312.20 | 5455.20 | 1978.30 | -1742.66 | 1015.39 | 0.38 | -0.33 | 0.20 | 311959.64 | 1620424.71 | 39.34872836 | -80.84225269 |
| | 8230.00 | 89.56 | 161.12 | 6312.81 | 5455.81 | 2071.29 | -1830.91 | 1044.73 | 1.06 | -0.14 | -1.05 | 311871.40 | 1620454.04 | 39.34848731 | -80.84214430 |
| | 8413.00 | 90.05 | 160.44 | 6313.43 | 5456.43 | 2254.29 | -2003.71 | 1104.97 | 0.46 | 0.27 | -0.37 | 311698.61 | 1620514.28 | 39.34801543 | -80.84192219 |
| | 8510.00 | 89.84 | 161.98 | 6313.52 | 5456.52 | 2351.28 | -2095.54 | 1136.21 | 1.60 | -0.22 | 1.59 | 311606.78 | 1620545.52 | 39.34776463 | -80.84180688 |
| | 8605.00 | 89.49 | 162.46 | 6314.08 | 5457.08 | 2446.26 | -2186.00 | 1165.22 | 0.63 | -0.37 | 0.51 | 311516.33 | 1620574.53 | 39.34751749 | -80.84169954 |
| | 8698.00 | 89.70 | 161.53 | 6314.74 | 5457.74 | 2539.24 | -2274.44 | 1193.97 | 1.03 | 0.23 | -1.00 | 311427.89 | 1620603.27 | 39.34727588 | -80.84159325 |
| | 8792.00 | 89.95 | 160.41 | 6315.02 | 5458.02 | 2633.24 | -2363.30 | 1224.62 | 1.22 | 0.27 | -1.19 | 311339.03 | 1620633.92 | 39.34703320 | -80.84148020 |
| | 8886.00 | 89.62 | 160.93 | 6315.38 | 5458.38 | 2727.24 | -2452.00 | 1255.73 | 0.66 | -0.35 | 0.55 | 311250.34 | 1620665.04 | 39.34679098 | -80.84136551 |
| | 8979.00 | 89.60 | 161.08 | 6316.01 | 5459.01 | 2820.24 | -2539.93 | 1286.00 | 0.16 | -0.02 | 0.16 | 311162.41 | 1620695.30 | 39.34655083 | -80.84125386 |
| | 9073.00 | 89.74 | 162.00 | 6316.55 | 5459.55 | 2914.23 | -2629.10 | 1315.76 | 0.99 | 0.15 | 0.98 | 311073.25 | 1620725.07 | 39.34630729 | -80.84114392 |
| | 9167.00 | 89.77 | 160.95 | 6316.95 | 5459.95 | 3008.22 | -2718.22 | 1345.63 | 1.12 | 0.03 | -1.12 | 310984.13 | 1620754.93 | 39.34606385 | -80.84103364 |
| | 9261.00 | 90.44 | 160.21 | 6316.78 | 5459.78 | 3102.22 | -2806.87 | 1376.88 | 1.06 | 0.71 | -0.79 | 310895.48 | 1620786.18 | 39.34582177 | -80.84091847 |
| | 9355.00 | 90.42 | 160.99 | 6316.08 | 5459.08 | 3196.21 | -2895.53 | 1408.10 | 0.83 | -0.02 | 0.83 | 310806.83 | 1620817.40 | 39.34557967 | -80.84080341 |
| | 9449.00 | 90.26 | 160.71 | 6315.52 | 5458.52 | 3290.21 | -2984.33 | 1438.94 | 0.34 | -0.17 | -0.30 | 310718.04 | 1620848.23 | 39.34533717 | -80.84068971 |
| | 9542.00 | 89.99 | 161.33 | 6315.32 | 5458.32 | 3383.21 | -3072.27 | 1469.19 | 0.73 | -0.29 | 0.67 | 310630.10 | 1620878.48 | 39.34509699 | -80.84057814 |
| | 9636.00 | 89.69 | 160.54 | 6315.58 | 5458.58 | 3477.21 | -3161.12 | 1499.89 | 0.90 | -0.32 | -0.84 | 310541.26 | 1620909.18 | 39.34485436 | -80.84046490 |
| | 9730.00 | 89.95 | 160.36 | 6315.87 | 5458.87 | 3571.21 | -3249.70 | 1531.34 | 0.34 | 0.28 | -0.19 | 310452.68 | 1620940.64 | 39.34461249 | -80.84034903 |
| | 9823.00 | 89.77 | 161.79 | 6316.10 | 5459.10 | 3664.20 | -3337.67 | 1561.51 | 1.55 | -0.19 | 1.54 | 310364.72 | 1620970.80 | 39.34437223 | -80.84023776 |
| | 9918.00 | 89.83 | 161.93 | 6316.43 | 5459.43 | 3759.19 | -3427.94 | 1591.08 | 0.16 | 0.06 | 0.15 | 310274.44 | 1621000.37 | 39.34412562 | -80.84012843 |

| Comments | MD (ft) | Incl (°) | Azim Grid (°) | TVD (ft) | TVDSS (ft) | VSEC (ft) | NS (ft) | EW (ft) | DLS (°/100ft) | BR (°/100ft) | TR (°/100ft) | Northing (ftUS) | Easting (ftUS) | Latitude (°) | Longitude (°) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10011.00 | 89.65 | 161.73 | 6316.85 | 5459.85 | 3852.18 | -3516.31 | 1620.08 | 0.29 | -0.19 | -0.22 | 310186.09 | 1621029.37 | 39.34388424 | -80.84002125 |
| Deepest TVD | 10106.00 | 89.99 | 161.35 | 6317.15 | 5460.15 | 3947.18 | -3606.42 | 1650.16 | 0.54 | 0.36 | -0.40 | 310095.98 | 1621059.45 | 39.34363810 | -80.83991015 |
| | 10200.00 | 90.10 | 161.99 | 6317.08 | 5460.08 | 4041.17 | -3695.65 | 1679.73 | 0.69 | 0.12 | 0.68 | 310006.75 | 1621089.01 | 39.34339436 | -80.83980094 |
| | 10293.00 | 90.29 | 161.12 | 6316.76 | 5459.76 | 4134.16 | -3783.87 | 1709.15 | 0.96 | 0.20 | -0.94 | 309918.54 | 1621118.43 | 39.34315339 | -80.83969227 |
| | 10386.00 | 90.57 | 159.55 | 6316.06 | 5459.06 | 4227.15 | -3871.44 | 1740.45 | 1.71 | 0.30 | -1.69 | 309830.97 | 1621149.73 | 39.34291428 | -80.83957702 |
| | 10573.00 | 90.61 | 159.58 | 6314.14 | 5457.14 | 4414.08 | -4046.66 | 1805.73 | 0.03 | 0.02 | 0.02 | 309655.76 | 1621215.01 | 39.34243594 | -80.83933698 |
| | 10667.00 | 90.25 | 159.47 | 6313.43 | 5456.43 | 4508.05 | -4134.72 | 1838.61 | 0.40 | -0.38 | -0.12 | 309567.70 | 1621247.89 | 39.34219555 | -80.83921610 |
| | 10760.00 | 90.01 | 159.99 | 6313.22 | 5456.22 | 4601.02 | -4221.96 | 1870.83 | 0.62 | -0.26 | 0.56 | 309480.47 | 1621280.11 | 39.34195738 | -80.83909761 |
| | 10854.00 | 89.97 | 161.49 | 6313.24 | 5456.24 | 4695.02 | -4310.70 | 1901.84 | 1.60 | -0.04 | 1.60 | 309391.74 | 1621311.11 | 39.34171506 | -80.83898332 |
| | 10946.00 | 90.48 | 160.09 | 6312.88 | 5455.88 | 4787.02 | -4397.57 | 1932.11 | 1.62 | 0.55 | -1.52 | 309304.87 | 1621341.38 | 39.34147781 | -80.83887173 |
| | 11039.00 | 90.31 | 161.11 | 6312.24 | 5455.24 | 4880.01 | -4485.29 | 1963.00 | 1.11 | -0.18 | 1.10 | 309217.15 | 1621372.27 | 39.34123828 | -80.83875791 |
| | 11133.00 | 90.19 | 161.09 | 6311.83 | 5454.83 | 4974.01 | -4574.22 | 1993.44 | 0.13 | -0.13 | -0.02 | 309128.23 | 1621402.71 | 39.34099540 | -80.83864559 |
| | 11227.00 | 90.34 | 160.40 | 6311.39 | 5454.39 | 5068.01 | -4662.96 | 2024.44 | 0.75 | 0.16 | -0.73 | 309039.49 | 1621433.71 | 39.34075306 | -80.83853134 |
| | 11321.00 | 89.68 | 162.03 | 6311.37 | 5454.37 | 5162.00 | -4751.95 | 2054.71 | 1.87 | -0.70 | 1.73 | 308950.51 | 1621463.98 | 39.34051001 | -80.83841965 |
| | 11416.00 | 90.56 | 160.81 | 6311.18 | 5454.18 | 5257.00 | -4841.99 | 2084.98 | 1.58 | 0.93 | -1.28 | 308860.47 | 1621494.24 | 39.34026406 | -80.83830790 |
| | 11509.00 | 90.00 | 160.90 | 6310.72 | 5453.72 | 5350.00 | -4929.85 | 2115.48 | 0.61 | -0.60 | 0.10 | 308772.61 | 1621524.74 | 39.34002413 | -80.83819546 |
| | 11602.00 | 90.12 | 160.41 | 6310.62 | 5453.62 | 5442.99 | -5017.60 | 2146.29 | 0.54 | 0.13 | -0.53 | 308684.87 | 1621555.55 | 39.33978451 | -80.83808193 |
| | 11696.00 | 89.81 | 161.12 | 6310.68 | 5453.68 | 5536.99 | -5106.35 | 2177.25 | 0.82 | -0.33 | 0.76 | 308596.12 | 1621586.51 | 39.33954214 | -80.83796779 |
| | 11789.00 | 90.01 | 160.82 | 6310.83 | 5453.83 | 5629.99 | -5194.27 | 2207.58 | 0.39 | 0.22 | -0.32 | 308508.21 | 1621616.83 | 39.33930203 | -80.83785596 |
| | 11883.00 | 89.95 | 159.93 | 6310.86 | 5453.86 | 5723.99 | -5282.81 | 2239.15 | 0.95 | -0.06 | -0.95 | 308419.68 | 1621648.40 | 39.33906027 | -80.83773970 |
| | 11977.00 | 89.42 | 161.57 | 6311.38 | 5454.38 | 5817.98 | -5371.54 | 2270.14 | 1.83 | -0.56 | 1.74 | 308330.94 | 1621679.39 | 39.33881793 | -80.83762548 |
| | 12070.00 | 89.79 | 160.39 | 6312.02 | 5455.02 | 5910.98 | -5459.46 | 2300.44 | 1.33 | 0.40 | -1.27 | 308243.03 | 1621709.70 | 39.33857782 | -80.83751372 |
| | 12163.00 | 89.85 | 159.39 | 6312.31 | 5455.31 | 6003.96 | -5546.79 | 2332.42 | 1.08 | 0.06 | -1.08 | 308155.70 | 1621741.67 | 39.33833940 | -80.83739609 |
| | 12256.00 | 89.74 | 159.97 | 6312.64 | 5455.64 | 6096.93 | -5634.00 | 2364.71 | 0.63 | -0.12 | 0.62 | 308068.49 | 1621773.96 | 39.33810131 | -80.83727734 |
| | 12350.00 | 89.94 | 159.86 | 6312.91 | 5455.91 | 6190.91 | -5722.29 | 2397.00 | 0.24 | 0.21 | -0.12 | 307980.22 | 1621806.24 | 39.33786028 | -80.83715858 |
| | 12444.00 | 89.90 | 161.11 | 6313.04 | 5456.04 | 6284.91 | -5810.89 | 2428.40 | 1.33 | -0.04 | 1.33 | 307891.62 | 1621837.64 | 39.33761835 | -80.83704292 |
| | 12537.00 | 89.89 | 160.99 | 6313.21 | 5456.21 | 6377.91 | -5898.84 | 2458.60 | 0.13 | -0.01 | -0.13 | 307803.67 | 1621867.84 | 39.33737812 | -80.83693154 |
| | 12630.00 | 89.95 | 161.30 | 6313.34 | 5456.34 | 6470.91 | -5986.85 | 2488.65 | 0.34 | 0.06 | 0.33 | 307715.66 | 1621897.90 | 39.33713775 | -80.83682067 |
| | 12723.00 | 90.33 | 161.44 | 6313.11 | 5456.11 | 6563.90 | -6074.98 | 2518.36 | 0.44 | 0.41 | 0.15 | 307627.54 | 1621927.60 | 39.33689704 | -80.83671101 |
| | 12816.00 | 90.41 | 161.60 | 6312.51 | 5455.51 | 6656.90 | -6163.18 | 2547.84 | 0.19 | 0.09 | 0.17 | 307539.34 | 1621957.08 | 39.33665612 | -80.83660217 |
| | 12909.00 | 90.45 | 160.59 | 6311.81 | 5454.81 | 6749.90 | -6251.16 | 2577.97 | 1.09 | 0.04 | -1.09 | 307451.37 | 1621987.21 | 39.33641583 | -80.83649103 |
| | 13002.00 | 90.41 | 161.00 | 6311.11 | 5454.11 | 6842.89 | -6338.98 | 2608.56 | 0.44 | -0.04 | 0.44 | 307363.55 | 1622017.80 | 39.33617600 | -80.83637828 |
| | 13095.00 | 90.32 | 161.35 | 6310.52 | 5453.52 | 6935.89 | -6427.01 | 2638.57 | 0.39 | -0.10 | 0.38 | 307275.53 | 1622047.81 | 39.33593558 | -80.83626757 |
| | 13188.00 | 90.49 | 161.96 | 6309.86 | 5452.86 | 7028.88 | -6515.28 | 2667.84 | 0.68 | 0.18 | 0.66 | 307187.26 | 1622077.07 | 39.33569446 | -80.83615947 |
| | 13281.00 | 89.78 | 162.27 | 6309.64 | 5452.64 | 7121.86 | -6603.78 | 2696.40 | 0.83 | -0.76 | 0.33 | 307098.76 | 1622105.63 | 39.33545267 | -80.83605386 |
| | 13374.00 | 90.25 | 160.28 | 6309.62 | 5452.62 | 7214.86 | -6691.86 | 2726.25 | 2.20 | 0.51 | -2.14 | 307010.70 | 1622135.49 | 39.33521212 | -80.83594370 |
| | 13467.00 | 89.68 | 162.29 | 6309.68 | 5452.68 | 7307.85 | -6779.93 | 2756.09 | 2.25 | -0.61 | 2.16 | 306922.62 | 1622165.32 | 39.33497155 | -80.83583360 |
| | 13561.00 | 90.10 | 161.93 | 6309.86 | 5452.86 | 7401.83 | -6869.39 | 2784.97 | 0.59 | 0.45 | -0.38 | 306833.17 | 1622194.20 | 39.33472716 | -80.83572683 |
| | 13655.00 | 90.45 | 161.13 | 6309.41 | 5452.41 | 7495.83 | -6958.54 | 2814.75 | 0.93 | 0.37 | -0.85 | 306744.02 | 1622223.97 | 39.33448363 | -80.83561688 |
| | 13748.00 | 90.26 | 162.67 | 6308.83 | 5451.83 | 7588.81 | -7046.94 | 2843.64 | 1.67 | -0.20 | 1.66 | 306655.63 | 1622252.86 | 39.33424215 | -80.83551011 |
| | 13842.00 | 90.52 | 162.02 | 6308.19 | 5451.19 | 7682.78 | -7136.51 | 2872.15 | 0.74 | 0.28 | -0.69 | 306566.07 | 1622281.37 | 39.33399744 | -80.83540463 |
| | 13936.00 | 90.28 | 161.54 | 6307.53 | 5450.53 | 7776.77 | -7225.79 | 2901.54 | 0.57 | -0.26 | -0.51 | 306476.79 | 1622310.76 | 39.33375353 | -80.83529605 |
| | 14030.00 | 90.18 | 163.32 | 6307.16 | 5450.16 | 7870.74 | -7315.40 | 2929.91 | 1.90 | -0.11 | 1.89 | 306387.18 | 1622339.13 | 39.33350870 | -80.83519105 |
| | 14216.00 | 90.11 | 161.60 | 6306.69 | 5449.69 | 8056.67 | -7492.75 | 2985.96 | 0.93 | -0.04 | -0.92 | 306209.84 | 1622395.18 | 39.33302415 | -80.83498360 |
| | 14311.00 | 90.54 | 156.41 | 6306.15 | 5449.15 | 8151.58 | -7581.41 | 3019.99 | 5.48 | 0.45 | -5.46 | 306121.19 | 1622429.21 | 39.33278215 | -80.83485868 |
| | 14404.00 | 90.75 | 151.13 | 6305.10 | 5448.10 | 8243.80 | -7664.80 | 3061.08 | 5.68 | 0.23 | -5.68 | 306037.80 | 1622470.29 | 39.33255491 | -80.83470907 |
| | 14498.00 | 90.88 | 152.18 | 6303.76 | 5446.76 | 8336.54 | -7747.52 | 3105.70 | 1.13 | 0.14 | 1.12 | 305955.09 | 1622514.91 | 39.33232965 | -80.83454700 |
| | 14591.00 | 90.82 | 154.70 | 6302.38 | 5445.38 | 8428.71 | -7830.69 | 3147.28 | 2.71 | -0.06 | 2.71 | 305871.92 | 1622556.49 | 39.33210303 | -80.83439567 |
| | 14684.00 | 90.78 | 155.02 | 6301.08 | 5444.08 | 8521.17 | -7914.87 | 3186.78 | 0.35 | -0.04 | 0.34 | 305787.74 | 1622595.99 | 39.33187355 | -80.83425162 |
| | 14778.00 | 90.52 | 155.98 | 6300.02 | 5443.02 | 8614.73 | -8000.40 | 3225.76 | 1.06 | -0.28 | 1.02 | 305702.22 | 1622634.97 | 39.33164035 | -80.83410935 |
| | 14871.00 | 90.64 | 157.05 | 6299.08 | 5442.08 | 8707.44 | -8085.69 | 3262.82 | 1.16 | 0.13 | 1.15 | 305616.93 | 1622672.02 | 39.33140772 | -80.83397388 |
| | 14964.00 | 90.40 | 156.21 | 6298.23 | 5441.23 | 8800.16 | -8171.06 | 3299.71 | 0.94 | -0.26 | -0.90 | 305531.57 | 1622708.91 | 39.33117488 | -80.83383902 |
| | 15058.00 | 90.71 | 157.39 | 6297.32 | 5440.32 | 8893.91 | -8257.45 | 3336.73 | 1.30 | 0.33 | 1.26 | 305445.18 | 1622745.94 | 39.33093923 | -80.83370361 |
| | 15152.00 | 90.89 | 157.02 | 6296.01 | 5439.01 | 8987.69 | -8344.10 | 3373.15 | 0.44 | 0.19 | -0.39 | 305358.53 | 1622782.35 | 39.33070285 | -80.83357035 |
| | 15245.00 | 90.33 | 156.28 | 6295.02 | 5438.02 | 9080.42 | -8429.48 | 3410.01 | 1.00 | -0.60 | -0.80 | 305273.16 | 1622819.20 | 39.33046997 | -80.83343559 |
| | 15339.00 | 90.38 | 155.81 | 6294.44 | 5437.44 | 9174.06 | -8515.38 | 3448.17 | 0.50 | 0.05 | -0.50 | 305187.26 | 1622857.37 | 39.33023572 | -80.83329619 |
| | 15434.00 | 90.18 | 156.18 | 6293.97 | 5436.97 | 9268.70 | -8602.16 | 3486.82 | 0.44 | -0.21 | 0.39 | 305100.49 | 1622896.01 | 39.32999906 | -80.83315503 |
| | 15527.00 | 90.33 | 155.93 | 6293.56 | 5436.56 | 9361.35 | -8687.16 | 3524.56 | 0.31 | 0.16 | -0.27 | 305015.50 | 1622933.76 | 39.32976727 | -80.83301717 |
| | 15621.00 | 90.32 | 156.08 | 6293.02 | 5436.02 | 9454.99 | -8773.03 | 3562.79 | 0.16 | -0.01 | 0.16 | 304929.62 | 1622971.98 | 39.32953309 | -80.83287755 |
| | 15715.00 | 90.28 | 156.02 | 6292.53 | 5435.53 | 9548.64 | -8858.94 | 3600.95 | 0.08 | -0.04 | -0.06 | 304843.72 | 1623010.13 | 39.32929882 | -80.83273818 |
| | 15809.00 | 90.22 | 156.00 | 6292.12 | 5435.12 | 9642.29 | -8944.82 | 3639.16 | 0.07 | -0.06 | -0.02 | 304757.85 | 1623048.35 | 39.32906463 | -80.83259859 |
| | 15904.00 | 90.53 | 156.25 | 6291.50 | 5434.50 | 9736.94 | -9031.68 | 3677.61 | 0.42 | 0.33 | 0.26 | 304670.98 | 1623086.80 | 39.32882772 | -80.83245814 |
| | 15996.00 | 89.78 | 157.49 | 6291.25 | 5434.25 | 9828.70 | -9116.29 | 3713.75 | 1.58 | -0.82 | 1.35 | 304586.39 | 1623122.93 | 39.32859695 | -80.83232597 |
| | 16089.00 | 90.30 | 156.99 | 6291.19 | 5434.19 | 9921.50 | -9202.04 | 3749.73 | 0.78 | 0.56 | -0.54 | 304500.63 | 1623158.91 | 39.32836300 | -80.83219431 |
| | 16183.00 | 90.05 | 156.24 | 6290.90 | 5433.90 | 10015.22 | -9288.32 | 3787.04 | 0.84 | -0.27 | -0.80 | 304414.36 | 1623196.22 | 39.32812767 | -80.83205792 |
| | 16277.00 | 90.17 | 155.73 | 6290.72 | 5433.72 | 10108.86 | -9374.18 | 3825.30 | 0.56 | 0.13 | -0.54 | 304328.50 | 1623234.47 | 39.32789352 | -80.83191821 |
| | 16370.00 | 90.66 | 156.19 | 6290.05 | 5433.05 | 10201.50 | -9459.12 | 3863.18 | 0.72 | 0.53 | 0.49 | 304243.57 | 1623272.35 | 39.32766192 | -80.83177986 |
| | 16463.00 | 89.58 | 156.69 | 6289.85 | 5432.85 | 10294.20 | -9544.36 | 3900.35 | 1.28 | -1.16 | 0.54 | 304158.33 | 1623309.53 | 39.32742942 | -80.83164401 |
| | 16556.00 | 90.19 | 156.64 | 6290.04 | 5433.04 | 10386.93 | -9629.75 | 3937.19 | 0.66 | 0.66 | -0.05 | 304072.94 | 1623346.36 | 39.32719650 | -80.83150934 |
| | 16650.00 | 89.80 | 157.90 | 6290.05 | 5433.05 | 10480.73 | -9716.45 | 3973.51 | 1.40 | -0.41 | 1.34 | 303986.25 | 1623382.68 | 39.32695998 | -80.83137643 |
| | 16743.00 | 89.66 | 157.76 | 6290.48 | 5433.48 | 10573.59 | -9802.57 | 4008.60 | 0.21 | -0.15 | -0.15 | 303900.13 | 1623417.77 | 39.32672498 | -80.83124788 |
| | 16836.00 | 89.37 | 157.59 | 6291.27 | 5434.27 | 10666.43 | -9888.60 | 4043.93 | 0.36 | -0.31 | -0.18 | 303814.11 | 1623453.09 | 39.32649027 | -80.83111852 |

| Comments | MD (ft) | Incl (°) | Azim Grid (°) | TVD (ft) | TVDSS (ft) | VSEC (ft) | NS (ft) | EW (ft) | DLS (°/100ft) | BR (°/100ft) | TR (°/100ft) | Northing (ftUS) | Easting (ftUS) | Latitude (°) | Longitude (°) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 16930.00 | 89.55 | 156.99 | 6292.16 | 5435.16 | 10760.23 | -9975.31 | 4080.22 | 0.67 | 0.19 | -0.64 | 303727.41 | 1623489.38 | 39.32625372 | -80.83098572 |
| | 17023.00 | 89.71 | 155.78 | 6292.76 | 5435.76 | 10852.92 | -10060.52 | 4117.47 | 1.31 | 0.17 | -1.30 | 303642.20 | 1623526.63 | 39.32602132 | -80.83084960 |
| | 17116.00 | 89.48 | 155.08 | 6293.42 | 5436.42 | 10945.48 | -10145.09 | 4156.14 | 0.79 | -0.25 | -0.75 | 303557.63 | 1623565.30 | 39.32579072 | -80.83070850 |
| | 17210.00 | 89.62 | 155.39 | 6294.15 | 5437.15 | 11039.00 | -10230.45 | 4195.51 | 0.36 | 0.15 | 0.33 | 303472.28 | 1623604.67 | 39.32555801 | -80.83056487 |
| | 17303.00 | 89.68 | 155.61 | 6294.72 | 5437.72 | 11131.57 | -10315.07 | 4234.08 | 0.25 | 0.06 | 0.24 | 303387.66 | 1623643.24 | 39.32532727 | -80.83042413 |
| | 17397.00 | 89.32 | 155.67 | 6295.54 | 5438.54 | 11225.16 | -10400.70 | 4272.85 | 0.39 | -0.38 | 0.06 | 303302.04 | 1623682.00 | 39.32509379 | -80.83028262 |
| | 17491.00 | 89.55 | 155.85 | 6296.47 | 5439.47 | 11318.76 | -10486.41 | 4311.44 | 0.31 | 0.24 | 0.19 | 303216.33 | 1623720.59 | 39.32486008 | -80.83014175 |
| | 17584.00 | 89.92 | 155.99 | 6296.90 | 5439.90 | 11411.39 | -10571.31 | 4349.39 | 0.43 | 0.40 | 0.15 | 303131.43 | 1623758.54 | 39.32462854 | -80.83000320 |
| | 17678.00 | 89.56 | 155.99 | 6297.33 | 5440.33 | 11505.03 | -10657.18 | 4387.63 | 0.38 | -0.38 | 0.00 | 303045.57 | 1623796.78 | 39.32439438 | -80.82986353 |
| | 17772.00 | 89.65 | 155.63 | 6297.97 | 5440.97 | 11598.65 | -10742.92 | 4426.15 | 0.39 | 0.10 | -0.38 | 302959.83 | 1623835.30 | 39.32416056 | -80.82972291 |
| | 17864.00 | 89.88 | 156.24 | 6298.35 | 5441.35 | 11690.29 | -10826.92 | 4463.67 | 0.71 | 0.25 | 0.66 | 302875.83 | 1623872.81 | 39.32393149 | -80.82958593 |
| Final Survey | 17904.00 | 89.40 | 156.10 | 6298.60 | 5441.60 | 11730.14 | -10863.51 | 4479.83 | 1.25 | -1.20 | -0.35 | 302839.25 | 1623888.97 | 39.32383170 | -80.82952690 |
| Projection to TD | 17932.00 | 89.40 | 156.10 | 6298.90 | 5441.90 | 11758.04 | -10889.11 | 4491.17 | 0.00 | 0.00 | 0.00 | 302813.65 | 1623900.31 | 39.32376189 | -80.82948547 |

**Survey Type:** Def Survey

**Survey Error Model:** ISCWSA Rev 3 *** 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 | 29.000 | 1/98.425 | 17.500 | 13.375 | A020Ga_GYRO-NS-Depth Only | Original Borehole / CNX SHR-37P-HSM Surveys 0ft to 17932ft |
| | 1 | 29.000 | 29.000 | Act Stns | 17.500 | 13.375 | A020Ga_GYRO-NS-Depth Only | Original Borehole / CNX SHR-37P-HSM Surveys 0ft to 17932ft |
| | 1 | 29.000 | 365.000 | Act Stns | 17.500 | 13.375 | A020Ga_GYRO-NS | Original Borehole / CNX SHR-37P-HSM Surveys 0ft to 17932ft |
| | 1 | 365.000 | 800.000 | Act Stns | 17.500 | 13.375 | A001Mb_MWD | Original Borehole / CNX SHR-37P-HSM Surveys 0ft to 17932ft |
| | 1 | 800.000 | 5268.000 | Act Stns | 12.250 | 9.625 | A001Mb_MWD | Original Borehole / CNX SHR-37P-HSM Surveys 0ft to 17932ft |
| | 1 | 5268.000 | 17932.000 | Act Stns | 8.500 | 5.500 | B006Mb_MWD+IGRF | Original Borehole / CNX SHR-37P-HSM Surveys 0ft to 17932ft |