Final V1 Rev1 Plot 017 (RKB-26.5)

OCD

NOV 2 02018

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**Schlumberger**

**OXY**

| Borehole: | Well: | Field: | Structure: |
|---|---|---|---|
| Original Borehole | Mesa Verde BS Unit 24H | NM Lea County (NAD 83) | Oxy Mesa Verde BS Unit 24H |

**Gravity & Magnetic Parameters**

Model: HDGM 2018 Dip: 59.909° Date: 10-Sep-2018

MagDec: 6.783° FS: 47965.868nT Gravity FS: 998.432mgn (9.80665 Based)

**Surface Location** NAD83 New Mexico State Plane, Eastern Zone, US Feet

Lat: N 32 12 39.43 Northing: 441084.7ftUS Grid Conv: 0.346°

Lon: W 103 41 3.22 Easting: 742092.66ftUS Scale Fact: 0.99996525

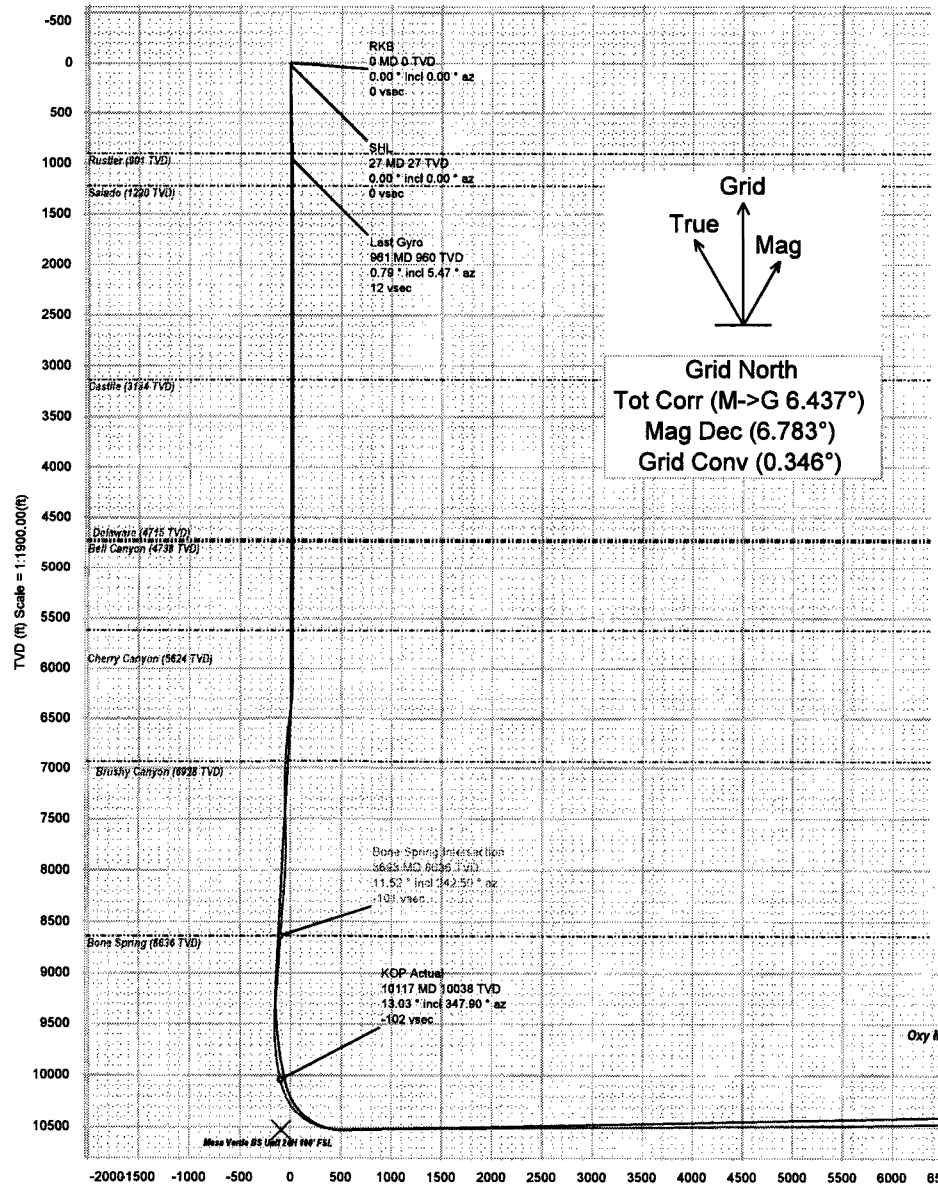
**Miscellaneous**

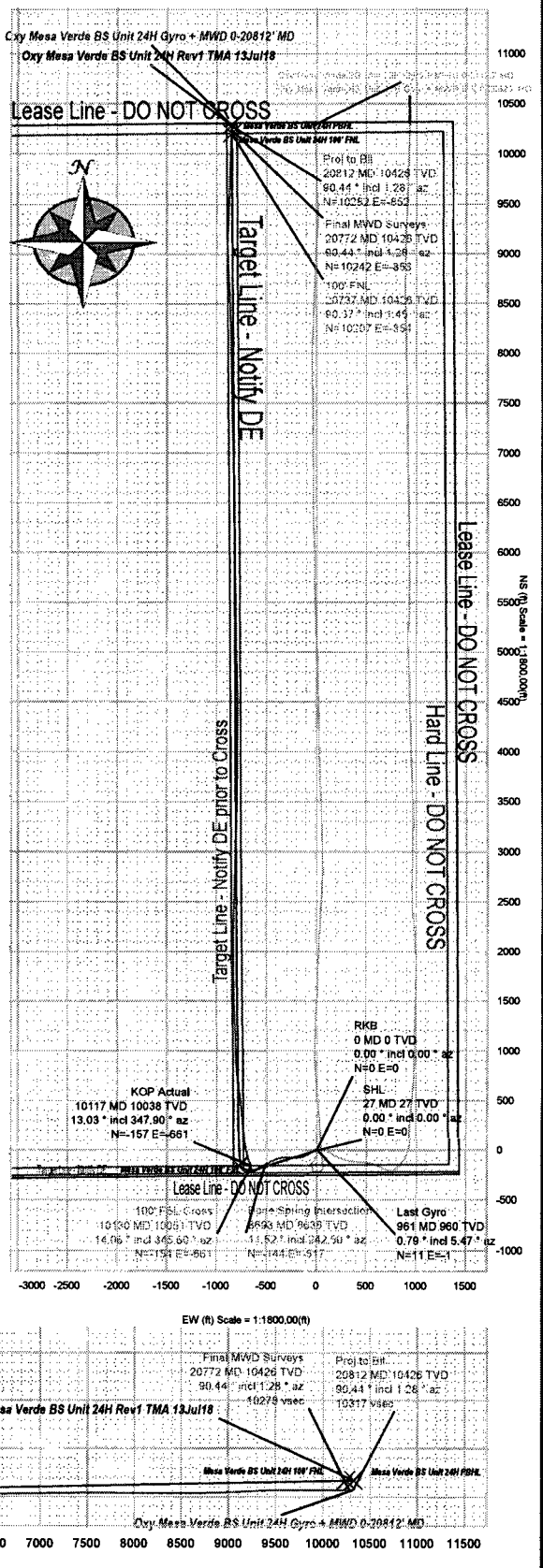
Slot: Mesa Verde BS Unit 24H TVD Ref: RKB=26.5'(3596.8ft above MSL)

Plan: Oxy Mesa Verde BS Unit 24H Gyro + MWD 0-20812' MD

**Critical Points**

| Critical Point | MD | INCL | AZIM | TVD | VSEC | N(+)/S(-) | E(+)/W(-) | DLS |
|---|---|---|---|---|---|---|---|---|
| RKB | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| SHL | 26.50 | 0.00 | 0.00 | 26.50 | 0.00 | 0.00 | 0.00 | 0.00 |
| Last Gyro | 960.50 | 0.79 | 5.47 | 960.42 | 11.53 | 11.49 | -0.97 | 0.14 |
| Bone Spring Intersection | 8698.00 | 11.52 | 242.50 | 8635.55 | -101.06 | -144.19 | -516.81 | 0.39 |
| KOP Actual | 10117.00 | 13.03 | 347.90 | 10038.49 | -102.34 | -157.39 | -660.73 | 1.63 |
| 100' FSL Cross | 10130.00 | 14.06 | 345.60 | 10051.13 | -99.33 | -154.43 | -661.43 | 8.94 |
| 100' FNL | 20737.00 | 90.37 | 1.45 | 10426.45 | 10242.80 | 10207.15 | -853.94 | 0.11 |
| Final MWD Surveys | 20772.00 | 90.44 | 1.28 | 10426.21 | 10277.60 | 10242.14 | -853.10 | 0.56 |
| Proj to Bit | 20812.00 | 90.44 | 1.28 | 10425.90 | 10317.38 | 10282.13 | -852.21 | 0.00 |




Vertical Section (ft) Azim = 355.27° Scale = 1:1900.00(ft) Origin = 0N/-S, 0E/-W

Schlumberger

# Oxy Mesa Verde BS Unit 24H Gyro + MWD 0-20812' MD Survey Geodetic Report

**(Def Survey)**

| | | | |
|---|---|---|---|
| **Report Date:** | September 26, 2018 - 11:13 AM | **Survey / DLS Computation:** | Minimum Curvature / Lubinski |
| **Client:** | OXY | **Vertical Section Azimuth:** | 355.267 ° (Grid North) |
| **Field:** | NM Lea County (NAD 83) | **Vertical Section Origin:** | 0.000 ft, 0.000 ft |
| **Structure / Slot:** | Oxy Mesa Verde BS Unit 24H / Mesa Verde BS Unit 24H | **TVD Reference Datum:** | RKB=26.5' |
| **Well:** | Mesa Verde BS Unit 24H | **TVD Reference Elevation:** | 3595.800 ft above MSL |
| **Borehole:** | Original Borehole | **Seabed / Ground Elevation:** | 3569.300 ft above MSL |
| **UWI / API#:** | Unknown / Unknown | **Magnetic Declination:** | 6.783 ° |
| **Survey Name:** | Oxy Mesa Verde BS Unit 24H Gyro + MWD 0-20812' MD | **Total Gravity Field Strength:** | 998.4318mgn (9.80665 Based) |
| **Survey Date:** | September 10, 2018 | **Gravity Model:** | GARM |
| **Tort / AHD / DDI / ERD Ratio:** | 205.715 ° / 11242.982 ft / 6.660 / 1.069 | **Total Magnetic Field Strength:** | 47985.868 nT |
| **Coordinate Reference System:** | NAD83 New Mexico State Plane, Eastern Zone, US Feet | **Magnetic Dip Angle:** | 59.908 ° |
| **Location Lat / Long:** | N 32° 12' 39.42829", W 103° 41' 3.21567" | **Declination Date:** | September 10, 2018 |
| **Location Grid N/E Y/X:** | N 441084.700 ftUS, E 742092.660 ftUS | **Magnetic Declination Model:** | HDGM 2018 |
| **CRS Grid Convergence Angle:** | 0.3460 ° | **North Reference:** | Grid North |
| **Grid Scale Factor:** | 0.99995525 | **Grid Convergence Used:** | 0.3460 ° |
| **Version / Patch:** | 2.10.740.0 | **Total Corr Mag North->Grid North:** | 6.4372 ° |
| | | **Local Coord Referenced To:** | Well Head |

| Comments | MD (ft) | Incl (°) | Azim Grid (°) | TVD (ft) | VSEC (ft) | NS (ft) | EW (ft) | DLS (°/100ft) | Northing (ftUS) | Easting (ftUS) | Latitude (N/S ° ' ") | Longitude (E/W ° ' ") |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RKB | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A | 441084.70 | 742092.66 | N 32 12 39.43 | W 103 41 3.22 |
| SHL | 26.50 | 0.00 | 0.00 | 26.50 | 0.00 | 0.00 | 0.00 | 0.00 | 441084.70 | 742092.66 | N 32 12 39.43 | W 103 41 3.22 |
| | 120.50 | 0.97 | 342.75 | 120.50 | 0.78 | 0.76 | -0.24 | 1.03 | 441085.46 | 742092.42 | N 32 12 39.44 | W 103 41 3.22 |
| | 213.10 | 0.95 | 346.45 | 213.08 | 2.30 | 2.25 | -0.65 | 0.07 | 441086.95 | 742092.01 | N 32 12 39.45 | W 103 41 3.22 |
| | 298.70 | 0.87 | 349.35 | 298.67 | 3.65 | 3.58 | -0.93 | 0.11 | 441088.28 | 742091.73 | N 32 12 39.46 | W 103 41 3.23 |
| | 393.30 | 0.68 | 352.08 | 393.26 | 4.92 | 4.85 | -1.14 | 0.20 | 441089.54 | 742091.52 | N 32 12 39.48 | W 103 41 3.23 |
| | 487.80 | 0.67 | 351.02 | 487.76 | 6.03 | 5.95 | -1.31 | 0.02 | 441090.65 | 742091.35 | N 32 12 39.49 | W 103 41 3.23 |
| | 582.20 | 0.61 | 354.94 | 582.15 | 7.09 | 6.99 | -1.44 | 0.08 | 441091.69 | 742091.22 | N 32 12 39.50 | W 103 41 3.23 |
| | 676.70 | 0.68 | 6.00 | 676.64 | 8.14 | 8.05 | -1.42 | 0.15 | 441092.75 | 742091.24 | N 32 12 39.51 | W 103 41 3.23 |
| | 771.40 | 0.69 | 5.44 | 771.34 | 9.25 | 9.18 | -1.31 | 0.01 | 441093.88 | 742091.35 | N 32 12 39.52 | W 103 41 3.23 |
| | 866.00 | 0.68 | 11.38 | 865.93 | 10.35 | 10.29 | -1.15 | 0.08 | 441094.99 | 742091.51 | N 32 12 39.53 | W 103 41 3.23 |
| Last Gyro | 960.50 | 0.79 | 5.47 | 960.42 | 11.53 | 11.49 | -0.97 | 0.14 | 441096.19 | 742091.69 | N 32 12 39.54 | W 103 41 3.23 |
| | 1063.00 | 0.80 | 18.85 | 1062.91 | 12.89 | 12.87 | -0.68 | 0.18 | 441097.57 | 742091.98 | N 32 12 39.56 | W 103 41 3.22 |
| | 1215.00 | 0.53 | 20.80 | 1214.90 | 14.49 | 14.53 | -0.08 | 0.18 | 441099.23 | 742092.58 | N 32 12 39.57 | W 103 41 3.22 |
| | 1399.00 | 0.63 | 17.07 | 1398.89 | 16.20 | 16.30 | 0.52 | 0.06 | 441101.00 | 742093.18 | N 32 12 39.59 | W 103 41 3.21 |
| | 1493.00 | 0.18 | 9.36 | 1492.89 | 16.82 | 16.94 | 0.69 | 0.48 | 441101.64 | 742093.35 | N 32 12 39.60 | W 103 41 3.21 |
| | 1682.00 | 0.11 | 331.19 | 1681.89 | 17.28 | 17.39 | 0.65 | 0.06 | 441102.09 | 742093.31 | N 32 12 39.60 | W 103 41 3.21 |
| | 1872.00 | 0.11 | 239.02 | 1871.89 | 17.36 | 17.45 | 0.41 | 0.08 | 441102.15 | 742093.07 | N 32 12 39.60 | W 103 41 3.21 |
| | 1966.00 | 0.13 | 23.41 | 1965.89 | 17.42 | 17.51 | 0.37 | 0.24 | 441102.21 | 742093.03 | N 32 12 39.60 | W 103 41 3.21 |
| | 2061.00 | 0.11 | 27.70 | 2060.89 | 17.59 | 17.69 | 0.46 | 0.02 | 441102.39 | 742093.12 | N 32 12 39.60 | W 103 41 3.21 |
| | 2250.00 | 0.11 | 290.51 | 2249.89 | 17.82 | 17.91 | 0.37 | 0.09 | 441102.61 | 742093.03 | N 32 12 39.61 | W 103 41 3.21 |
| | 2344.00 | 0.11 | 97.53 | 2343.89 | 17.84 | 17.93 | 0.38 | 0.23 | 441102.63 | 742093.04 | N 32 12 39.61 | W 103 41 3.21 |
| | 2439.00 | 0.06 | 185.64 | 2438.89 | 17.77 | 17.87 | 0.46 | 0.13 | 441102.57 | 742093.12 | N 32 12 39.61 | W 103 41 3.21 |
| | 2628.00 | 0.11 | 297.03 | 2627.89 | 17.77 | 17.85 | 0.29 | 0.08 | 441102.55 | 742092.95 | N 32 12 39.60 | W 103 41 3.21 |
| | 2722.00 | 0.17 | 207.85 | 2721.89 | 17.70 | 17.77 | 0.15 | 0.21 | 441102.47 | 742092.81 | N 32 12 39.60 | W 103 41 3.21 |
| | 2817.00 | 0.06 | 354.61 | 2816.89 | 17.63 | 17.70 | 0.08 | 0.23 | 441102.39 | 742092.74 | N 32 12 39.60 | W 103 41 3.21 |
| | 2911.00 | 0.13 | 283.67 | 2910.89 | 17.71 | 17.77 | -0.03 | 0.13 | 441102.47 | 742092.63 | N 32 12 39.60 | W 103 41 3.21 |
| | 3100.00 | 0.18 | 272.19 | 3099.89 | 17.81 | 17.83 | -0.54 | 0.03 | 441102.53 | 742092.12 | N 32 12 39.60 | W 103 41 3.22 |
| | 3195.00 | 0.11 | 232.25 | 3194.89 | 17.78 | 17.78 | -0.76 | 0.13 | 441102.48 | 742091.90 | N 32 12 39.60 | W 103 41 3.22 |
| | 3289.00 | 0.17 | 225.57 | 3288.89 | 17.64 | 17.63 | -0.93 | 0.07 | 441102.33 | 742091.73 | N 32 12 39.60 | W 103 41 3.23 |
| | 3383.00 | 0.17 | 157.56 | 3382.89 | 17.42 | 17.40 | -0.98 | 0.20 | 441102.10 | 742091.68 | N 32 12 39.60 | W 103 41 3.23 |
| | 3478.00 | 0.17 | 214.30 | 3477.89 | 17.18 | 17.16 | -1.00 | 0.17 | 441101.85 | 742091.66 | N 32 12 39.60 | W 103 41 3.23 |
| | 3572.00 | 0.13 | 99.45 | 3571.89 | 17.04 | 17.02 | -0.97 | 0.27 | 441101.72 | 742091.69 | N 32 12 39.60 | W 103 41 3.23 |
| | 3667.00 | 0.06 | 319.88 | 3666.89 | 17.06 | 17.04 | -0.90 | 0.19 | 441101.74 | 742091.76 | N 32 12 39.60 | W 103 41 3.22 |
| | 3761.00 | 0.17 | 130.89 | 3760.89 | 17.00 | 16.99 | -0.83 | 0.24 | 441101.69 | 742091.83 | N 32 12 39.60 | W 103 41 3.22 |
| | 3856.00 | 0.11 | 335.39 | 3855.89 | 16.98 | 16.98 | -0.76 | 0.29 | 441101.68 | 742091.90 | N 32 12 39.60 | W 103 41 3.22 |
| | 3950.00 | 0.13 | 158.74 | 3949.89 | 16.97 | 16.96 | -0.76 | 0.26 | 441101.66 | 742091.90 | N 32 12 39.60 | W 103 41 3.22 |
| | 4045.00 | 0.08 | 318.06 | 4044.89 | 16.92 | 16.91 | -0.76 | 0.22 | 441101.61 | 742091.90 | N 32 12 39.60 | W 103 41 3.22 |
| | 4140.00 | 0.08 | 255.33 | 4139.89 | 16.96 | 16.94 | -0.87 | 0.09 | 441101.64 | 742091.79 | N 32 12 39.60 | W 103 41 3.22 |
| | 4235.00 | 0.00 | 88.04 | 4234.89 | 16.95 | 16.93 | -0.93 | 0.08 | 441101.63 | 742091.73 | N 32 12 39.60 | W 103 41 3.23 |
| | 4329.00 | 0.20 | 42.48 | 4328.89 | 17.06 | 17.05 | -0.82 | 0.21 | 441101.75 | 742091.84 | N 32 12 39.60 | W 103 41 3.22 |
| | 4424.00 | 0.06 | 123.91 | 4423.89 | 17.14 | 17.14 | -0.67 | 0.21 | 441101.84 | 742091.99 | N 32 12 39.60 | W 103 41 3.22 |
| | 4519.00 | 0.28 | 278.66 | 4518.89 | 17.16 | 17.15 | -0.86 | 0.35 | 441101.85 | 742091.80 | N 32 12 39.60 | W 103 41 3.22 |
| | 4611.00 | 0.17 | 235.78 | 4610.89 | 17.15 | 17.11 | -1.19 | 0.21 | 441101.81 | 742091.47 | N 32 12 39.60 | W 103 41 3.23 |
| | 4791.00 | 0.30 | 67.84 | 4790.88 | 17.16 | 17.13 | -0.98 | 0.26 | 441101.83 | 742091.68 | N 32 12 39.60 | W 103 41 3.23 |
| | 4823.00 | 0.36 | 70.82 | 4822.88 | 17.21 | 17.20 | -0.81 | 0.19 | 441101.90 | 742091.85 | N 32 12 39.60 | W 103 41 3.22 |
| | 4917.00 | 0.44 | 64.22 | 4916.88 | 17.41 | 17.45 | -0.20 | 0.10 | 441102.15 | 742092.46 | N 32 12 39.60 | W 103 41 3.22 |
| | 5012.00 | 0.03 | 258.70 | 5011.88 | 17.54 | 17.61 | 0.10 | 0.49 | 441102.31 | 742092.76 | N 32 12 39.60 | W 103 41 3.21 |
| | 5106.00 | 0.06 | 226.45 | 5105.88 | 17.50 | 17.57 | 0.04 | 0.04 | 441102.27 | 742092.70 | N 32 12 39.60 | W 103 41 3.21 |
| | 5201.00 | 0.06 | 166.22 | 5200.88 | 17.42 | 17.49 | 0.02 | 0.06 | 441102.18 | 742092.68 | N 32 12 39.60 | W 103 41 3.21 |
| | 5295.00 | 0.03 | 38.82 | 5294.88 | 17.39 | 17.46 | 0.05 | 0.09 | 441102.16 | 742092.71 | N 32 12 39.60 | W 103 41 3.21 |
| | 5390.00 | 0.03 | 1.24 | 5389.88 | 17.44 | 17.50 | 0.06 | 0.02 | 441102.20 | 742092.72 | N 32 12 39.60 | W 103 41 3.21 |
| | 5485.00 | 0.06 | 67.59 | 5484.88 | 17.48 | 17.54 | 0.11 | 0.06 | 441102.24 | 742092.77 | N 32 12 39.60 | W 103 41 3.21 |
| | 5580.00 | 0.06 | 202.50 | 5579.88 | 17.45 | 17.52 | 0.13 | 0.12 | 441102.22 | 742092.79 | N 32 12 39.60 | W 103 41 3.21 |
| | 5674.00 | 0.02 | 130.13 | 5673.88 | 17.39 | 17.46 | 0.13 | 0.06 | 441102.16 | 742092.79 | N 32 12 39.60 | W 103 41 3.21 |
| | 5769.00 | 0.08 | 73.72 | 5768.88 | 17.39 | 17.47 | 0.20 | 0.07 | 441102.17 | 742092.86 | N 32 12 39.60 | W 103 41 3.21 |
| | 5863.00 | 0.02 | 97.96 | 5862.88 | 17.40 | 17.49 | 0.28 | 0.07 | 441102.19 | 742092.94 | N 32 12 39.60 | W 103 41 3.21 |
| | 5958.00 | 0.08 | 261.30 | 5957.88 | 17.39 | 17.47 | 0.23 | 0.10 | 441102.17 | 742092.89 | N 32 12 39.60 | W 103 41 3.21 |
| | 6053.00 | 0.02 | 186.02 | 6052.88 | 17.37 | 17.45 | 0.17 | 0.08 | 441102.15 | 742092.83 | N 32 12 39.60 | W 103 41 3.21 |
| | 6147.00 | 2.79 | 235.15 | 6146.84 | 16.21 | 16.12 | -1.71 | 2.95 | 441100.82 | 742090.95 | N 32 12 39.59 | W 103 41 3.23 |
| | 6242.00 | 6.55 | 233.17 | 6241.51 | 12.17 | 11.55 | -7.95 | 3.96 | 441096.25 | 742084.71 | N 32 12 39.54 | W 103 41 3.31 |
| | 6337.00 | 10.31 | 231.96 | 6335.47 | 4.62 | 3.06 | -18.98 | 3.96 | 441087.76 | 742073.68 | N 32 12 39.46 | W 103 41 3.44 |
| | 6431.00 | 13.50 | 232.81 | 6427.43 | -5.89 | -8.76 | -34.35 | 3.40 | 441075.94 | 742058.31 | N 32 12 39.34 | W 103 41 3.62 |
| | 6526.00 | 14.09 | 234.68 | 6519.69 | -17.73 | -22.14 | -52.62 | 0.78 | 441062.56 | 742040.04 | N 32 12 39.21 | W 103 41 3.83 |
| | 6620.00 | 14.11 | 239.72 | 6610.87 | -28.49 | -34.54 | -71.85 | 1.31 | 441050.16 | 742020.81 | N 32 12 39.09 | W 103 41 4.05 |
| | 6715.00 | 14.08 | 244.38 | 6703.01 | -37.60 | -45.37 | -92.27 | 1.19 | 441039.33 | 742000.39 | N 32 12 38.98 | W 103 41 4.29 |
| | 6810.00 | 14.25 | 248.20 | 6795.12 | -45.16 | -54.71 | -113.55 | 1.00 | 441029.99 | 741979.11 | N 32 12 38.89 | W 103 41 4.54 |
| | 6904.00 | 13.82 | 252.57 | 6886.32 | -51.02 | -62.37 | -135.01 | 1.22 | 441022.33 | 741957.66 | N 32 12 38.82 | W 103 41 4.79 |
| | 6999.00 | 13.10 | 255.40 | 6978.71 | -55.36 | -68.48 | -156.25 | 1.03 | 441016.22 | 741936.42 | N 32 12 38.76 | W 103 41 5.04 |
| | 7093.00 | 13.28 | 260.63 | 7070.23 | -58.06 | -72.93 | -177.21 | 1.28 | 441011.78 | 741915.46 | N 32 12 38.72 | W 103 41 5.28 |
| | 7187.00 | 12.88 | 265.43 | 7161.80 | -58.90 | -75.52 | -198.31 | 1.23 | 441009.18 | 741894.36 | N 32 12 38.69 | W 103 41 5.53 |
| | 7282.00 | 13.03 | 271.16 | 7254.38 | -57.77 | -76.15 | -219.57 | 1.36 | 441008.56 | 741873.10 | N 32 12 38.69 | W 103 41 5.78 |
| | 7377.00 | 12.89 | 273.36 | 7346.96 | -55.18 | -75.31 | -240.86 | 0.54 | 441009.39 | 741851.82 | N 32 12 38.70 | W 103 41 6.02 |
| | 7472.00 | 12.79 | 272.54 | 7439.59 | -52.36 | -74.22 | -261.94 | 0.22 | 441010.48 | 741830.73 | N 32 12 38.71 | W 103 41 6.27 |
| | 7661.00 | 13.01 | 272.21 | 7623.82 | -47.14 | -72.47 | -304.10 | 0.12 | 441012.23 | 741788.58 | N 32 12 38.73 | W 103 41 6.76 |
| | 7755.00 | 12.81 | 267.77 | 7715.44 | -45.40 | -72.47 | -325.08 | 1.08 | 441012.23 | 741767.59 | N 32 12 38.73 | W 103 41 7.00 |
| | 7850.00 | 13.16 | 261.77 | 7808.02 | -45.60 | -74.43 | -346.31 | 1.47 | 441010.27 | 741746.37 | N 32 12 38.71 | W 103 41 7.25 |
| | 7945.00 | 13.05 | 256.60 | 7900.55 | -47.88 | -78.46 | -367.45 | 1.24 | 441006.24 | 741725.23 | N 32 12 38.67 | W 103 41 7.50 |
| | 8040.00 | 13.18 | 251.46 | 7993.07 | -52.08 | -84.39 | -388.15 | 1.23 | 441000.31 | 741704.53 | N 32 12 38.62 | W 103 41 7.74 |

| Comments | MD (ft) | Incl (°) | Azim Grid (°) | TVD (ft) | VSEC (ft) | NS (ft) | EW (ft) | DLS (°/100ft) | Northing (ftUS) | Easting (ftUS) | Latitude (N/S ° ' ") | Longitude (E/W ° ' ") |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8134.00 | 12.89 | 247.00 | 8084.65 | -57.92 | -91.90 | -407.96 | 1.11 | 440992.81 | 741684.72 | N 32 12 38.54 | W 103 41 7.97 |
| | 8323.00 | 12.86 | 245.11 | 8268.90 | -71.78 | -108.99 | -446.45 | 0.22 | 440975.72 | 741646.23 | N 32 12 38.38 | W 103 41 8.42 |
| | 8418.00 | 12.14 | 243.73 | 8361.65 | -79.09 | -117.86 | -465.00 | 0.82 | 440966.85 | 741627.69 | N 32 12 38.29 | W 103 41 8.64 |
| | 8513.00 | 12.23 | 243.18 | 8454.51 | -86.54 | -126.82 | -482.93 | 0.15 | 440957.89 | 741609.75 | N 32 12 38.20 | W 103 41 8.85 |
| *Bone Spring Intersection* | *8698.00* | *11.52* | *242.50* | *8635.55* | *-101.06* | *-144.19* | *-516.81* | *0.39* | *440940.52* | *741575.88* | *N 32 12 38.03* | *W 103 41 9.24* |
| | 8701.00 | 11.51 | 242.49 | 8638.49 | -101.29 | -144.47 | -517.34 | 0.39 | 440940.24 | 741575.34 | N 32 12 38.03 | W 103 41 9.25 |
| | 8796.00 | 8.82 | 242.11 | 8731.99 | -107.82 | -152.25 | -532.19 | 2.83 | 440932.45 | 741560.50 | N 32 12 37.95 | W 103 41 9.42 |
| | 8890.00 | 9.88 | 241.91 | 8824.76 | -113.79 | -159.35 | -545.53 | 0.92 | 440925.36 | 741547.16 | N 32 12 37.88 | W 103 41 9.58 |
| | 8985.00 | 9.58 | 240.83 | 8918.43 | -120.23 | -166.96 | -559.48 | 0.22 | 440917.75 | 741533.21 | N 32 12 37.81 | W 103 41 9.74 |
| | 9080.00 | 9.01 | 236.91 | 9012.18 | -127.03 | -174.87 | -572.61 | 0.90 | 440909.83 | 741520.07 | N 32 12 37.73 | W 103 41 9.89 |
| | 9174.00 | 8.62 | 234.06 | 9105.07 | -134.18 | -183.03 | -584.48 | 0.62 | 440901.68 | 741508.21 | N 32 12 37.65 | W 103 41 10.03 |
| | 9269.00 | 9.40 | 235.71 | 9198.90 | -141.69 | -191.58 | -596.66 | 0.86 | 440893.13 | 741496.03 | N 32 12 37.57 | W 103 41 10.17 |
| | 9364.00 | 11.05 | 237.26 | 9292.38 | -149.79 | -200.87 | -610.72 | 1.76 | 440883.84 | 741481.96 | N 32 12 37.48 | W 103 41 10.34 |
| | 9458.00 | 7.81 | 246.55 | 9385.11 | -156.08 | -208.29 | -624.17 | 3.80 | 440876.42 | 741468.52 | N 32 12 37.40 | W 103 41 10.49 |
| | 9553.00 | 6.59 | 254.89 | 9479.36 | -159.13 | -212.28 | -635.35 | 1.69 | 440872.43 | 741457.34 | N 32 12 37.37 | W 103 41 10.63 |
| | 9647.00 | 4.52 | 283.88 | 9572.93 | -158.92 | -212.80 | -644.16 | 3.64 | 440871.91 | 741448.53 | N 32 12 37.36 | W 103 41 10.73 |
| | 9741.00 | 4.03 | 329.91 | 9666.69 | -154.75 | -209.05 | -649.41 | 3.59 | 440875.66 | 741443.28 | N 32 12 37.40 | W 103 41 10.79 |
| | 9836.00 | 5.71 | 345.75 | 9761.35 | -147.07 | -201.58 | -652.25 | 2.25 | 440883.13 | 741440.44 | N 32 12 37.47 | W 103 41 10.82 |
| | 9931.00 | 7.48 | 350.54 | 9855.72 | -136.25 | -190.90 | -654.43 | 1.95 | 440893.81 | 741438.26 | N 32 12 37.58 | W 103 41 10.85 |
| | 10025.00 | 10.80 | 349.83 | 9948.51 | -121.38 | -176.19 | -656.99 | 3.53 | 440908.52 | 741435.70 | N 32 12 37.72 | W 103 41 10.87 |
| | 10090.00 | 12.60 | 348.31 | 10012.16 | -108.28 | -163.25 | -659.50 | 2.81 | 440921.46 | 741433.19 | N 32 12 37.85 | W 103 41 10.90 |
| KOP Actual | 10117.00 | 13.03 | 347.90 | 10038.49 | -102.34 | -157.39 | -660.73 | 1.63 | 440927.32 | 741431.96 | N 32 12 37.91 | W 103 41 10.92 |
| *100' FSL Cross* | *10130.00* | *14.06* | *345.60* | *10051.13* | *-99.33* | *-154.43* | *-661.43* | *8.94* | *440930.28* | *741431.26* | *N 32 12 37.94* | *W 103 41 10.92* |
| | 10211.00 | 20.79 | 336.47 | 10128.38 | -75.99 | -131.69 | -669.63 | 8.94 | 440953.02 | 741423.06 | N 32 12 38.17 | W 103 41 11.02 |
| | 10306.00 | 26.49 | 339.97 | 10215.38 | -39.56 | -96.29 | -683.63 | 6.18 | 440988.41 | 741409.06 | N 32 12 38.52 | W 103 41 11.18 |
| | 10400.00 | 35.73 | 346.13 | 10295.79 | 7.88 | -49.84 | -697.43 | 10.39 | 441034.86 | 741395.27 | N 32 12 38.98 | W 103 41 11.34 |
| | 10495.00 | 48.03 | 348.20 | 10366.39 | 70.55 | 11.90 | -711.35 | 13.03 | 441096.60 | 741381.34 | N 32 12 39.59 | W 103 41 11.49 |
| | 10590.00 | 57.85 | 352.66 | 10423.59 | 145.99 | 86.56 | -723.75 | 10.99 | 441171.26 | 741368.95 | N 32 12 40.33 | W 103 41 11.63 |
| | 10685.00 | 67.34 | 353.72 | 10467.27 | 230.17 | 170.21 | -733.70 | 10.04 | 441254.91 | 741358.99 | N 32 12 41.16 | W 103 41 11.74 |
| | 10779.00 | 75.36 | 355.29 | 10497.30 | 319.15 | 258.79 | -742.19 | 8.68 | 441343.48 | 741350.50 | N 32 12 42.03 | W 103 41 11.84 |
| | 10874.00 | 82.42 | 354.12 | 10515.60 | 412.31 | 351.56 | -750.80 | 7.53 | 441436.24 | 741341.89 | N 32 12 42.95 | W 103 41 11.93 |
| | 10968.00 | 91.28 | 353.82 | 10520.76 | 506.05 | 444.80 | -760.65 | 9.43 | 441529.48 | 741332.04 | N 32 12 43.87 | W 103 41 12.04 |
| | 11055.00 | 91.76 | 352.29 | 10518.45 | 592.95 | 531.13 | -771.17 | 1.84 | 441615.80 | 741321.53 | N 32 12 44.73 | W 103 41 12.15 |
| | 11146.00 | 90.59 | 352.90 | 10516.58 | 683.83 | 621.35 | -782.89 | 1.45 | 441706.02 | 741309.80 | N 32 12 45.62 | W 103 41 12.28 |
| | 11330.00 | 89.66 | 354.84 | 10516.18 | 867.76 | 804.29 | -802.54 | 1.17 | 441888.95 | 741290.16 | N 32 12 47.43 | W 103 41 12.50 |
| | 11422.00 | 90.62 | 357.04 | 10515.96 | 959.75 | 896.05 | -809.05 | 2.61 | 441980.71 | 741283.64 | N 32 12 48.34 | W 103 41 12.57 |
| | 11514.00 | 90.45 | 358.72 | 10515.10 | 1051.85 | 987.98 | -812.46 | 1.84 | 442072.63 | 741280.24 | N 32 12 49.25 | W 103 41 12.60 |
| | 11697.00 | 90.59 | 358.85 | 10513.44 | 1234.29 | 1170.93 | -816.34 | 0.10 | 442255.57 | 741276.36 | N 32 12 51.06 | W 103 41 12.63 |
| | 11788.00 | 90.45 | 357.83 | 10512.61 | 1325.16 | 1261.89 | -818.97 | 1.13 | 442346.53 | 741273.72 | N 32 12 51.96 | W 103 41 12.66 |
| | 11880.00 | 90.24 | 358.12 | 10512.06 | 1417.05 | 1353.83 | -822.22 | 0.39 | 442438.46 | 741270.47 | N 32 12 52.87 | W 103 41 12.69 |
| | 12069.00 | 90.55 | 358.67 | 10510.76 | 1605.77 | 1542.75 | -827.52 | 0.33 | 442627.37 | 741265.18 | N 32 12 54.74 | W 103 41 12.74 |
| | 12163.00 | 90.35 | 358.42 | 10510.02 | 1699.61 | 1636.71 | -829.90 | 0.34 | 442721.34 | 741262.79 | N 32 12 55.67 | W 103 41 12.76 |
| | 12352.00 | 90.17 | 359.30 | 10509.16 | 1888.23 | 1825.67 | -833.66 | 0.48 | 442910.29 | 741259.03 | N 32 12 57.54 | W 103 41 12.79 |
| | 12540.00 | 90.21 | 0.24 | 10508.54 | 2075.85 | 2013.67 | -834.42 | 0.50 | 443098.27 | 741258.28 | N 32 12 59.40 | W 103 41 12.79 |
| | 12730.00 | 90.59 | 1.29 | 10507.21 | 2264.77 | 2203.64 | -831.88 | 0.59 | 443288.24 | 741260.82 | N 32 13 1.28 | W 103 41 12.74 |
| | 12918.00 | 90.41 | 1.89 | 10505.57 | 2451.62 | 2391.56 | -826.67 | 0.33 | 443476.15 | 741266.03 | N 32 13 3.14 | W 103 41 12.67 |
| | 13108.00 | 90.41 | 1.83 | 10504.21 | 2640.36 | 2581.46 | -820.50 | 0.03 | 443666.04 | 741272.20 | N 32 13 5.02 | W 103 41 12.58 |
| | 13297.00 | 90.48 | 1.85 | 10502.74 | 2828.11 | 2770.35 | -814.43 | 0.04 | 443854.93 | 741278.27 | N 32 13 6.89 | W 103 41 12.50 |
| | 13392.00 | 90.59 | 1.33 | 10501.85 | 2922.53 | 2865.31 | -811.80 | 0.56 | 443949.88 | 741280.90 | N 32 13 7.83 | W 103 41 12.46 |
| | 13486.00 | 90.28 | 0.64 | 10501.14 | 3016.06 | 2959.30 | -810.18 | 0.80 | 444043.86 | 741282.52 | N 32 13 8.76 | W 103 41 12.44 |
| | 13675.00 | 90.28 | 1.51 | 10500.22 | 3204.08 | 3148.26 | -806.63 | 0.46 | 444232.81 | 741286.06 | N 32 13 10.63 | W 103 41 12.38 |
| | 13770.00 | 90.31 | 0.99 | 10499.73 | 3298.56 | 3243.23 | -804.56 | 0.55 | 444327.78 | 741288.14 | N 32 13 11.57 | W 103 41 12.35 |
| | 13959.00 | 90.41 | 1.13 | 10498.54 | 3486.59 | 3432.20 | -801.07 | 0.09 | 444516.74 | 741291.63 | N 32 13 13.44 | W 103 41 12.30 |
| | 14148.00 | 90.45 | 1.19 | 10497.12 | 3674.59 | 3621.15 | -797.24 | 0.04 | 444705.69 | 741295.46 | N 32 13 15.31 | W 103 41 12.24 |
| | 14243.00 | 90.31 | 0.63 | 10496.49 | 3769.13 | 3716.14 | -795.73 | 0.61 | 444800.67 | 741296.97 | N 32 13 16.25 | W 103 41 12.22 |
| | 14337.00 | 90.45 | 0.28 | 10495.87 | 3862.74 | 3810.13 | -794.98 | 0.40 | 444894.66 | 741297.71 | N 32 13 17.18 | W 103 41 12.20 |
| | 14527.00 | 90.14 | 0.11 | 10494.89 | 4052.03 | 4000.13 | -794.34 | 0.19 | 445084.64 | 741298.36 | N 32 13 19.06 | W 103 41 12.18 |
| | 14621.00 | 90.83 | 1.03 | 10494.10 | 4145.63 | 4094.12 | -793.40 | 1.22 | 445178.63 | 741299.29 | N 32 13 19.99 | W 103 41 12.16 |
| | 14811.00 | 90.24 | 0.55 | 10492.32 | 4334.73 | 4284.09 | -790.78 | 0.40 | 445368.59 | 741301.91 | N 32 13 21.87 | W 103 41 12.12 |
| | 14905.00 | 90.48 | 359.93 | 10491.73 | 4428.38 | 4378.09 | -790.39 | 0.71 | 445462.59 | 741302.31 | N 32 13 22.80 | W 103 41 12.11 |
| | 15000.00 | 90.17 | 0.68 | 10491.19 | 4523.01 | 4473.09 | -789.88 | 0.85 | 445557.58 | 741302.81 | N 32 13 23.74 | W 103 41 12.10 |
| | 15094.00 | 90.48 | 357.87 | 10490.66 | 4616.77 | 4567.07 | -791.07 | 3.01 | 445651.55 | 741301.62 | N 32 13 24.67 | W 103 41 12.10 |
| | 15188.00 | 90.38 | 358.07 | 10489.95 | 4710.66 | 4661.01 | -794.40 | 0.24 | 445745.49 | 741298.29 | N 32 13 25.60 | W 103 41 12.14 |
| | 15283.00 | 90.31 | 357.96 | 10489.38 | 4805.55 | 4755.95 | -797.69 | 0.14 | 445840.43 | 741295.00 | N 32 13 26.54 | W 103 41 12.17 |
| | 15472.00 | 90.41 | 358.94 | 10488.19 | 4994.25 | 4944.87 | -802.80 | 0.52 | 446029.34 | 741289.89 | N 32 13 28.41 | W 103 41 12.21 |
| | 15566.00 | 90.62 | 358.25 | 10487.35 | 5088.09 | 5038.84 | -805.11 | 0.77 | 446123.30 | 741287.59 | N 32 13 29.34 | W 103 41 12.23 |
| | 15660.00 | 90.48 | 359.02 | 10486.45 | 5181.92 | 5132.81 | -807.35 | 0.83 | 446217.27 | 741285.35 | N 32 13 30.27 | W 103 41 12.25 |
| | 15755.00 | 90.41 | 358.84 | 10485.71 | 5276.72 | 5227.79 | -809.12 | 0.20 | 446312.24 | 741283.58 | N 32 13 31.21 | W 103 41 12.27 |
| | 15850.00 | 90.48 | 358.07 | 10484.97 | 5371.57 | 5322.75 | -811.68 | 0.81 | 446407.20 | 741281.01 | N 32 13 32.15 | W 103 41 12.29 |
| | 15944.00 | 90.45 | 358.93 | 10484.21 | 5465.42 | 5416.71 | -814.14 | 0.92 | 446501.16 | 741278.55 | N 32 13 33.08 | W 103 41 12.31 |
| | 16039.00 | 90.41 | 359.43 | 10483.49 | 5560.20 | 5511.70 | -815.50 | 0.53 | 446596.14 | 741277.19 | N 32 13 34.02 | W 103 41 12.32 |
| | 16134.00 | 90.48 | 359.03 | 10482.76 | 5654.97 | 5606.69 | -816.78 | 0.43 | 446691.13 | 741275.92 | N 32 13 34.96 | W 103 41 12.33 |
| | 16228.00 | 90.72 | 359.47 | 10481.77 | 5748.73 | 5700.68 | -818.01 | 0.53 | 446785.11 | 741274.69 | N 32 13 35.89 | W 103 41 12.34 |
| | 16323.00 | 91.00 | 359.54 | 10480.35 | 5843.46 | 5795.66 | -818.83 | 0.30 | 446880.09 | 741273.87 | N 32 13 36.83 | W 103 41 12.34 |
| | 16417.00 | 90.90 | 359.50 | 10478.79 | 5937.19 | 5889.65 | -819.62 | 0.11 | 446974.07 | 741273.08 | N 32 13 37.76 | W 103 41 12.34 |
| | 16607.00 | 90.93 | 359.41 | 10475.75 | 6126.66 | 6079.61 | -821.43 | 0.05 | 447164.03 | 741271.27 | N 32 13 39.63 | W 103 41 12.35 |
| | 16796.00 | 90.93 | 359.61 | 10472.69 | 6315.12 | 6268.58 | -823.04 | 0.11 | 447352.99 | 741269.66 | N 32 13 41.50 | W 103 41 12.36 |
| | 16890.00 | 91.03 | 359.07 | 10471.08 | 6408.87 | 6362.56 | -824.12 | 0.58 | 447446.96 | 741268.57 | N 32 13 42.43 | W 103 41 12.36 |
| | 16985.00 | 91.00 | 359.11 | 10469.40 | 6503.64 | 6457.53 | -825.63 | 0.05 | 447541.93 | 741267.07 | N 32 13 43.37 | W 103 41 12.37 |
| | 17173.00 | 91.00 | 359.23 | 10466.11 | 6691.17 | 6645.49 | -828.36 | 0.06 | 447729.87 | 741264.34 | N 32 13 45.23 | W 103 41 12.39 |
| | 17362.00 | 90.55 | 358.88 | 10463.56 | 6879.74 | 6834.44 | -831.47 | 0.30 | 447918.82 | 741261.23 | N 32 13 47.10 | W 103 41 12.41 |
| | 17457.00 | 90.76 | 358.81 | 10462.47 | 6974.55 | 6929.42 | -833.39 | 0.23 | 448013.79 | 741259.31 | N 32 13 48.04 | W 103 41 12.43 |
| | 17646.00 | 90.52 | 358.82 | 10460.36 | 7163.18 | 7118.36 | -837.30 | 0.13 | 448202.73 | 741255.40 | N 32 13 49.91 | W 103 41 12.46 |
| | 17741.00 | 90.83 | 358.99 | 10459.24 | 7257.98 | 7213.34 | -839.11 | 0.37 | 448297.70 | 741253.59 | N 32 13 50.85 | W 103 41 12.48 |
| | 17835.00 | 90.38 | 359.03 | 10458.25 | 7351.77 | 7307.32 | -840.74 | 0.48 | 448391.68 | 741251.96 | N 32 13 51.78 | W 103 41 12.49 |
| | 17930.00 | 90.04 | 358.92 | 10457.90 | 7446.57 | 7402.30 | -842.44 | 0.38 | 448486.66 | 741250.26 | N 32 13 52.72 | W 103 41 12.50 |
| | 18024.00 | 89.97 | 358.37 | 10457.89 | 7540.41 | 7496.28 | -844.66 | 0.59 | 448580.63 | 741248.04 | N 32 13 53.65 | W 103 41 12.52 |
| | 18213.00 | 89.93 | 358.77 | 10458.06 | 7729.10 | 7685.22 | -849.37 | 0.21 | 448769.56 | 741243.33 | N 32 13 55.52 | W 103 41 12.56 |
| | 18307.00 | 89.86 | 358.80 | 10458.23 | 7822.92 | 7779.20 | -851.37 | 0.08 | 448863.53 | 741241.33 | N 32 13 56.45 | W 103 41 12.58 |
| | 18402.00 | 89.83 | 358.83 | 10458.49 | 7917.74 | 7874.18 | -853.33 | 0.04 | 448958.51 | 741239.37 | N 32 13 57.39 | W 103 41 12.60 |
| | 18496.00 | 90.04 | 359.03 | 10458.59 | 8011.54 | 7968.16 | -855.09 | 0.31 | 449052.49 | 741237.61 | N 32 13 58.32 | W 103 41 12.61 |
| | 18591.00 | 90.07 | 358.92 | 10458.50 | 8106.34 | 8063.14 | -856.79 | 0.12 | 449147.47 | 741235.91 | N 32 13 59.26 | W 103 41 12.62 |
| | 18686.00 | 89.90 | 359.27 | 10458.53 | 8201.13 | 8158.13 | -858.29 | 0.41 | 449242.45 | 741234.41 | N 32 14 0.20 | W 103 41 12.63 |
| | 18875.00 | 90.00 | 358.32 | 10458.69 | 8389.77 | 8347.09 | -862.26 | 0.51 | 449431.40 | 741230.44 | N 32 14 2.07 | W 103 41 12.67 |
| | 19065.00 | 90.21 | 357.79 | 10458.34 | 8579.55 | 8536.98 | -868.71 | 0.30 | 449621.28 | 741223.99 | N 32 14 3.95 | W 103 41 12.73 |
| | 19159.00 | 89.73 | 357.44 | 10458.39 | 8673.47 | 8630.90 | -872.62 | 0.63 | 449715.19 | 741220.08 | N 32 14 4.88 | W 103 41 12.77 |
| | 19254.00 | 90.65 | 357.42 | 10458.08 | 8768.40 | 8725.80 | -876.88 | 0.97 | 449810.09 | 741215.82 | N 32 14 5.82 | W 103 41 12.81 |
| | 19348.00 | 91.45 | 357.12 | 10456.36 | 8862.32 | 8819.68 | -881.36 | 0.91 | 449903.96 | 741211.34 | N 32 14 6.75 | W 103 41 12.86 |
| | 19443.00 | 92.38 | 357.58 | 10453.18 | 8957.21 | 8914.52 | -885.75 | 1.09 | 449998.80 | 741206.95 | N 32 14 7.69 | W 103 41 12.90 |
| | 19538.00 | 93.03 | 357.50 | 10448.70 | 9052.03 | 9009.33 | -889.82 | 0.69 | 450093.60 | 741202.88 | N 32 14 8.63 | W 103 41 12.94 |
| | 19703.00 | 92.78 | 1.84 | 10440.33 | 9216.29 | 9174.07 | -890.77 | 2.63 | 450258.34 | 741201.93 | N 32 14 10.26 | W 103 41 12.94 |
| | 19795.00 | 92.47 | 3.48 | 10436.12 | 9307.42 | 9265.87 | -886.50 | 1.81 | 450350.14 | 741206.20 | N 32 14 11.17 | W 103 41 12.88 |
| | 19889.00 | 92.02 | 2.78 | 10432.44 | 9400.47 | 9359.66 | -881.38 | 0.88 | 450443.92 | 741211.33 | N 32 14 12.09 | W 103 41 12.82 |
| | 19984.00 | 91.16 | 1.94 | 10429.80 | 9494.70 | 9454.54 | -877.47 | 1.27 | 450538.80 | 741215.24 | N 32 14 13.03 | W 103 41 12.77 |
| | 20172.00 | 89.89 | 1.54 | 10428.08 | 9681.49 | 9642.44 | -871.76 | 0.71 | 450726.69 | 741220.94 | N 32 14 14.89 | W 103 41 12.69 |
| | 20266.00 | 89.89 | 1.63 | 10428.26 | 9774.92 | 9736.41 | -869.16 | 0.10 | 450820.65 | 741223.54 | N 32 14 15.82 | W 103 41 12.65 |
| | 20361.00 | 90.06 | 1.96 | 10428.30 | 9869.30 | 9831.36 | -866.18 | 0.39 | 450915.60 | 741226.52 | N 32 14 16.76 | W 103 41 12.61 |
| | 20455.00 | 89.99 | 2.14 | 10428.26 | 9962.65 | 9925.30 | -862.82 | 0.21 | 451009.53 | 741229.88 | N 32 14 17.69 | W 103 41 12.56 |

| Comments | MD (ft) | Incl (°) | Azim Grid (°) | TVD (ft) | VSEC (ft) | NS (ft) | EW (ft) | DLS (°/100ft) | Northing (ftUS) | Easting (ftUS) | Latitude (N/S ° ' ") | Longitude (E/W ° ' ") |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20550.00 | 90.51 | 2.06 | 10427.84 | 10056.97 | 10020.23 | -859.34 | 0.55 | 451104.47 | 741233.36 | N 32 14 18.63 | W 103 41 12.52 |
| | 20644.00 | 90.41 | 1.55 | 10427.09 | 10150.36 | 10114.18 | -856.38 | 0.55 | 451198.41 | 741236.32 | N 32 14 19.56 | W 103 41 12.47 |
| *100' FNL* | 20737.00 | 90.37 | 1.45 | 10426.45 | 10242.80 | 10207.15 | -853.94 | 0.11 | 451291.37 | 741238.76 | N 32 14 20.48 | W 103 41 12.44 |
| | 20739.00 | 90.37 | 1.45 | 10426.44 | 10244.79 | 10209.15 | -853.89 | 0.11 | 451293.37 | 741238.81 | N 32 14 20.50 | W 103 41 12.44 |
| Final MWD Surveys | 20772.00 | 90.44 | 1.28 | 10426.21 | 10277.60 | 10242.14 | -853.10 | 0.56 | 451326.36 | 741239.60 | N 32 14 20.82 | W 103 41 12.43 |
| Proj to Bit | 20812.00 | 90.44 | 1.28 | 10425.90 | 10317.38 | 10282.13 | -852.21 | 0.00 | 451366.35 | 741240.49 | N 32 14 21.22 | W 103 41 12.41 |

**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 | 26.500 | 1/98.425 | 30.000 | 30.000 | NAL_NSG+MSHOT-Depth Only | Original Borehole / Oxy Mesa Verde BS Unit 24H Gyro + MWD 0-20812' MD |
| | 1 | 26.500 | 26.500 | Act Stns | 30.000 | 30.000 | NAL_NSG+MSHOT-Depth Only | Original Borehole / Oxy Mesa Verde BS Unit 24H Gyro + MWD 0-20812' MD |
| | 1 | 26.500 | 866.000 | Act Stns | 30.000 | 30.000 | NAL_NSG+MSHOT | Original Borehole / Oxy Mesa Verde BS Unit 24H Gyro + MWD |
| | 1 | 866.000 | 4611.000 | Act Stns | 30.000 | 30.000 | NAL_MWD_PLUS_0.5_DEG | Original Borehole / Oxy Mesa Verde BS Unit 24H Gyro + MWD |
| | 1 | 4611.000 | 20812.000 | Act Stns | 30.000 | 30.000 | NAL_MWD_IFR1+MS | Original Borehole / Oxy Mesa Verde BS Unit 24H Gyro + MWD |