

API: 47-009-00198-0000
Job#: 8698650
Rig: SDC-46
Duration: 08/08/17 - 08/16/17

SOUTHWESTERN ENERGY

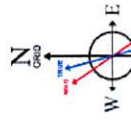
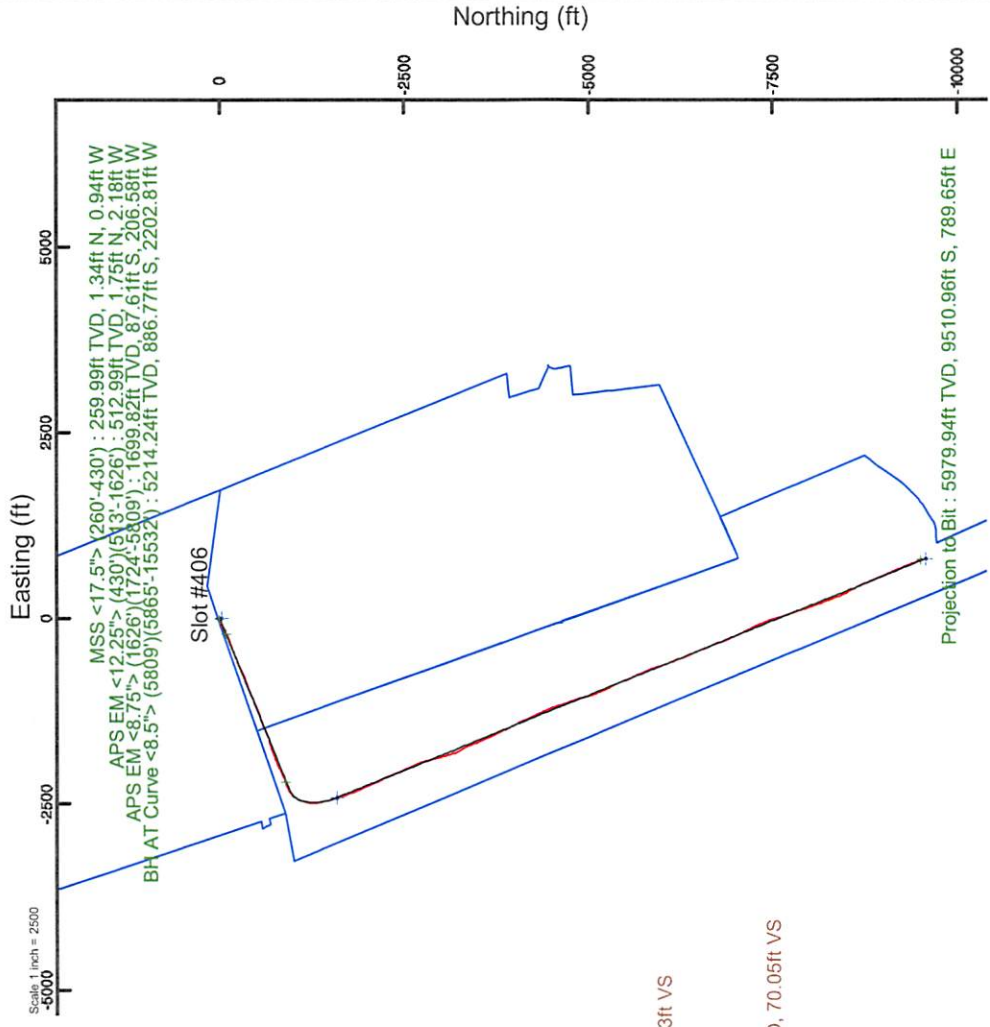
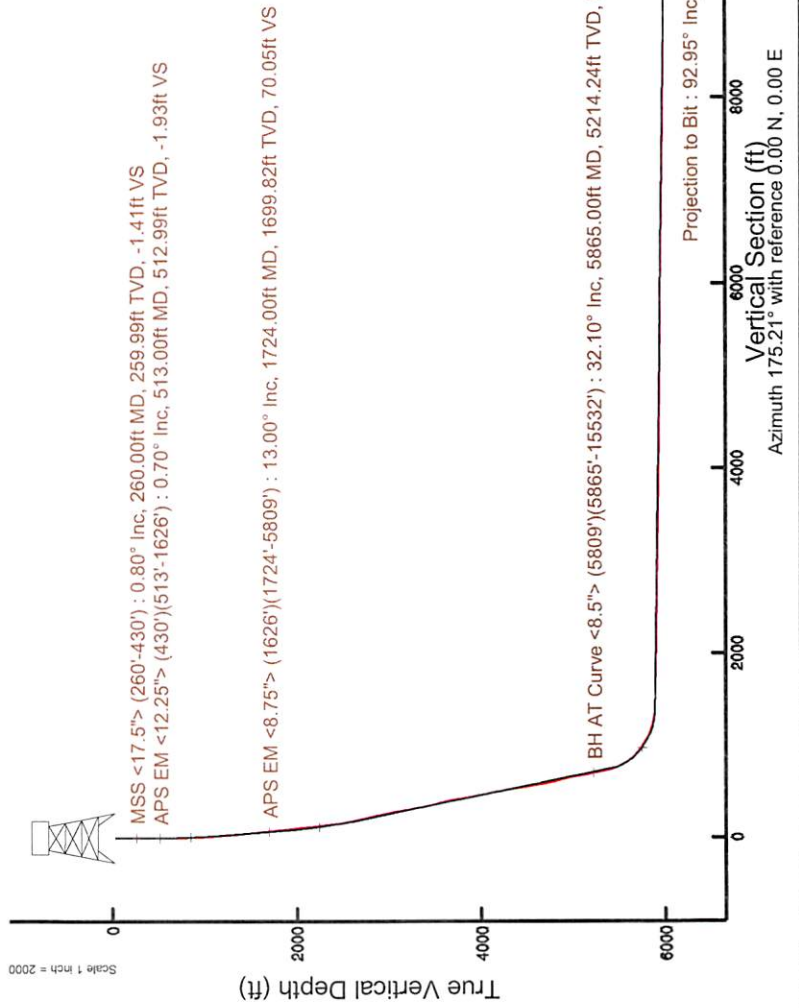
Location: Brooke County, WV
Slot: Slot #406
Well: John Good Jr BRK 406H
Field: John Good Jr BRK 406H PWB
Facility: John Good Jr BRK Pad Wellbore: John Good Jr BRK 406H PWB
Plot reference wellpath is John Good Jr BRK 406H PWB Rev-A.0 Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to SDC-46 (RKB) North Reference: Grid north
Measured depths are referenced to SDC-46 (RKB) Scale: True distance
SDC-46 (RKB) to Mean Sea Level: 1178.6 feet Depths are in feet
Mean Sea Level to Ground level (At Slot: Slot #406): -1152.6 feet Created by: amarc on 2017-08-18
Coordinates are in feet referenced to Slot Database: WA_MPL_EASTERNUS_Defn

Location Information

| Facility Name | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
|---|-------------------|--------------------|----------------|----------------|
| John Good Jr BRK Pad | 1757463.232 | 14608504.851 | 40°13'25.666"N | 80°34'50.452"W |
| Slot #406 | 26.59 | -7.36 | 40°13'25.929"N | 80°34'50.545"W |
| SDC-46 (RKB) to Ground level (At Slot: Slot #406) | | 26ft | | |
| Mean Sea Level to Ground level (At Slot: Slot #406) | | -1152.6ft | | |
| SDC-46 (RKB) to Mean Sea Level | | 1178.6ft | | |

Well Profile Data

| Design Comment | MD (ft) | Inc (°) | Az (°) | TVD (ft) | Local N (ft) | Local E (ft) | DLS (°/100ft) | VS (ft) |
|----------------|----------|---------|---------|----------|--------------|--------------|---------------|---------|
| Tie On | 26.00 | 0.000 | 247.925 | 26.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start Nudge | 500.00 | 0.000 | 247.925 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| End Nudge | 1200.00 | 14.000 | 247.925 | 1193.06 | -31.98 | -78.86 | 2.00 | 25.28 |
| Start Build | 1784.30 | 14.000 | 247.925 | 1760.00 | -85.11 | -209.85 | 0.00 | 67.28 |
| End Build | 2806.40 | 34.442 | 247.925 | 2687.18 | -241.86 | -596.37 | 2.00 | 191.22 |
| Curve KOP | 6110.27 | 34.442 | 247.925 | 5411.89 | -944.12 | -2327.96 | 0.00 | 746.43 |
| Landing Point | 7003.55 | 89.281 | 158.065 | 5886.00 | -1589.73 | -2413.23 | 10.00 | 1382.66 |
| Total Depth | 15614.79 | 89.281 | 158.065 | 5994.00 | -9576.95 | 803.29 | 0.00 | 9610.58 |



User specified Dip: 67.74° Field: 52710 nT
Magnetic North is 8.32 degrees West of True North (at 01/Aug/2017)
To correct azimuth from True to Grid subtract 0.27 degrees
To correct azimuth from Magnetic to Grid subtract 8.59 degrees

Scale 1 inch = 2000

Vertical Section (ft)
Azimuth 175.21° with reference 0.00 N, 0.00 E

REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|----------------------|----------|---------------------------|
| Operator | SOUTHWESTERN ENERGY | Slot | Slot #406 |
| Area | Brooke County, WV | Well | John Good Jr BRK 406H |
| Field | Brooke | Wellbore | John Good Jr BRK 406H AWB |
| Facility | John Good Jr BRK Pad | | |

REPORT SETUP INFORMATION

| | | | |
|---------------------|---------------------------------------|----------------------|---|
| Projection System | NAD83 / UTM Zone 17 North, US feet | Software System | WellArchitect® 5.1 |
| North Reference | Grid | User | Amarcar |
| Scale | 0.999616 | Report Generated | 18/Aug/2017 at 10:22 |
| Convergence at slot | 0.27° East | Database/Source file | WA_MPL_EASTERNUS_Defn/John_Good_Jr_BRK_406H_AWP_Proj_15556_.xml |

WELLPATH LOCATION

| | Local coordinates | | Grid coordinates | | Geographic coordinates | |
|-----------------------|-------------------|----------|------------------|-----------------|------------------------|----------------|
| | North[ft] | East[ft] | Easting[US ft] | Northing[US ft] | Latitude | Longitude |
| Slot Location | 26.59 | -7.36 | 1757455.88 | 14608531.43 | 40°13'25.929"N | 80°34'50.545"W |
| Facility Reference Pt | | | 1757463.23 | 14608504.85 | 40°13'25.666"N | 80°34'50.452"W |
| Field Reference Pt | | | 0.00 | 0.00 | 0°00'00.000" | 85°29'19.478"W |

WELLPATH DATUM

| | | | |
|--------------------------|-------------------|--|-------------------|
| Calculation method | Minimum curvature | SDC-46 (RKB) to Facility Vertical Datum | 26.00ft |
| Horizontal Reference Pt | Slot | SDC-46 (RKB) to Mean Sea Level | 1178.60ft |
| Vertical Reference Pt | SDC-46 (RKB) | SDC-46 (RKB) to Ground Level at Slot (Slot #406) | 26.00ft |
| MD Reference Pt | SDC-46 (RKB) | Section Origin | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level | Section Azimuth | 175.21° |

REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|----------------------|----------|---------------------------|
| Operator | SOUTHWESTERN ENERGY | Slot | Slot #406 |
| Area | Brooke County, WV | Well | John Good Jr BRK 406H |
| Field | Brooke | Wellbore | John Good Jr BRK 406H AWB |
| Facility | John Good Jr BRK Pad | | |

WELLPATH DATA (170 stations) † = interpolated/extrapolated station

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Closure Dist [ft] | Closure Dir [°] | DLS [°/100ft] | Build Rate [°/100ft] | Turn Rate [°/100ft] |
|---------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|----------------|----------------|-------------------|-----------------|---------------|----------------------|---------------------|
| 0.00† | 0.000 | 324.880 | 0.00 | 0.00 | 0.00 | 0.00 | 1757455.88 | 14608531.43 | 40°13'25.929"N | 80°34'50.545"W | 0.00 | 0.000 | 0.00 | 0.00 | 0.00 |
| 26.00 | 0.000 | 324.880 | 26.00 | 0.00 | 0.00 | 0.00 | 1757455.88 | 14608531.43 | 40°13'25.929"N | 80°34'50.545"W | 0.00 | 0.000 | 0.00 | 0.00 | 0.00 |
| 260.00 | 0.800 | 324.880 | 259.99 | -1.41 | 1.34 | -0.94 | 1757454.94 | 14608532.77 | 40°13'25.942"N | 80°34'50.557"W | 1.63 | 324.880 | 0.34 | 0.34 | -15.01 |
| 383.00 | 0.200 | 251.880 | 382.99 | -2.10 | 1.97 | -1.64 | 1757454.24 | 14608533.40 | 40°13'25.949"N | 80°34'50.566"W | 2.56 | 320.286 | 0.62 | -0.49 | -59.35 |
| 430.00 | 0.000 | 245.680 | 429.99 | -2.08 | 1.95 | -1.72 | 1757454.16 | 14608533.38 | 40°13'25.948"N | 80°34'50.567"W | 2.59 | 318.602 | 0.43 | -0.43 | 230.04 |
| 513.00 | 0.700 | 247.180 | 512.99 | -1.93 | 1.75 | -2.18 | 1757453.70 | 14608533.18 | 40°13'25.946"N | 80°34'50.573"W | 2.80 | 308.710 | 0.84 | 0.84 | -135.93 |
| 606.00 | 2.590 | 249.430 | 605.94 | -1.18 | 0.79 | -4.67 | 1757451.21 | 14608532.22 | 40°13'25.937"N | 80°34'50.605"W | 4.74 | 279.604 | 2.03 | 2.03 | 2.42 |
| 699.00 | 4.970 | 257.350 | 698.73 | -0.06 | -0.83 | -10.57 | 1757445.31 | 14608530.60 | 40°13'25.921"N | 80°34'50.682"W | 10.61 | 265.513 | 2.61 | 2.56 | 8.52 |
| 791.00 | 7.720 | 256.810 | 790.16 | 1.39 | -3.11 | -20.48 | 1757435.41 | 14608528.32 | 40°13'25.899"N | 80°34'50.809"W | 20.71 | 261.357 | 2.99 | 2.99 | -0.59 |
| 884.00 | 9.910 | 254.910 | 882.06 | 3.74 | -6.62 | -34.29 | 1757421.60 | 14608524.81 | 40°13'25.865"N | 80°34'50.988"W | 34.92 | 259.070 | 2.38 | 2.35 | -2.04 |
| 977.00 | 11.410 | 250.660 | 973.45 | 7.48 | -11.75 | -50.70 | 1757405.20 | 14608519.68 | 40°13'25.815"N | 80°34'51.199"W | 52.04 | 256.949 | 1.82 | 1.61 | -4.57 |
| 1070.00 | 11.410 | 245.990 | 1064.62 | 12.82 | -18.54 | -67.78 | 1757388.13 | 14608512.90 | 40°13'25.749"N | 80°34'51.420"W | 70.27 | 254.701 | 0.99 | 0.00 | -5.02 |
| 1162.00 | 12.410 | 245.580 | 1154.63 | 19.13 | -26.33 | -85.10 | 1757370.82 | 14608505.11 | 40°13'25.673"N | 80°34'51.644"W | 89.08 | 252.806 | 1.09 | 1.09 | -0.45 |
| 1255.00 | 13.740 | 247.170 | 1245.22 | 25.91 | -34.75 | -104.37 | 1757351.55 | 14608496.69 | 40°13'25.591"N | 80°34'51.893"W | 110.01 | 251.586 | 1.48 | 1.43 | 1.71 |
| 1348.00 | 14.160 | 246.020 | 1335.48 | 33.07 | -43.66 | -124.95 | 1757330.98 | 14608487.79 | 40°13'25.504"N | 80°34'52.159"W | 132.36 | 250.740 | 0.54 | 0.45 | -1.24 |
| 1441.00 | 15.180 | 245.300 | 1425.45 | 40.96 | -53.37 | -146.40 | 1757309.53 | 14608478.08 | 40°13'25.409"N | 80°34'52.436"W | 155.83 | 249.972 | 1.11 | 1.10 | -0.77 |
| 1533.00 | 14.310 | 241.910 | 1514.42 | 49.56 | -63.76 | -167.38 | 1757288.57 | 14608467.70 | 40°13'25.307"N | 80°34'52.707"W | 179.11 | 249.148 | 1.33 | -0.95 | -3.68 |
| 1626.00 | 14.180 | 237.290 | 1604.56 | 59.44 | -75.32 | -187.10 | 1757268.85 | 14608456.14 | 40°13'25.193"N | 80°34'52.962"W | 201.70 | 248.071 | 1.23 | -0.14 | -4.97 |
| 1724.00 | 13.000 | 238.250 | 1699.82 | 70.05 | -87.61 | -206.58 | 1757249.38 | 14608443.85 | 40°13'25.073"N | 80°34'53.214"W | 224.39 | 247.018 | 1.23 | -1.20 | 0.98 |
| 1817.00 | 14.810 | 241.450 | 1790.09 | 79.59 | -98.80 | -225.91 | 1757230.05 | 14608432.67 | 40°13'24.963"N | 80°34'53.464"W | 246.57 | 246.379 | 2.11 | 1.95 | 3.44 |
| 1910.00 | 20.670 | 247.120 | 1878.63 | 89.48 | -110.87 | -251.50 | 1757204.48 | 14608420.60 | 40°13'24.845"N | 80°34'53.794"W | 274.86 | 246.210 | 6.56 | 6.30 | 6.10 |
| 2002.00 | 20.800 | 244.760 | 1964.68 | 100.23 | -124.15 | -281.24 | 1757174.75 | 14608407.33 | 40°13'24.715"N | 80°34'54.178"W | 307.42 | 246.181 | 0.92 | 0.14 | -2.57 |
| 2095.00 | 19.370 | 249.710 | 2052.02 | 110.12 | -136.54 | -310.64 | 1757145.36 | 14608394.94 | 40°13'24.594"N | 80°34'54.558"W | 339.33 | 246.273 | 2.39 | -1.54 | 5.32 |
| 2187.00 | 18.950 | 250.910 | 2138.93 | 117.89 | -146.72 | -339.07 | 1757116.94 | 14608384.77 | 40°13'24.495"N | 80°34'54.925"W | 369.45 | 246.602 | 0.63 | -0.46 | 1.30 |
| 2280.00 | 22.760 | 250.620 | 2225.82 | 126.15 | -157.63 | -370.32 | 1757085.70 | 14608373.86 | 40°13'24.389"N | 80°34'55.329"W | 402.47 | 246.943 | 4.10 | 4.10 | -0.31 |
| 2372.00 | 26.460 | 252.150 | 2309.45 | 135.27 | -169.82 | -406.63 | 1757049.41 | 14608361.67 | 40°13'24.270"N | 80°34'55.798"W | 440.67 | 247.333 | 4.08 | 4.02 | 1.66 |
| 2465.00 | 28.010 | 252.630 | 2392.14 | 144.71 | -182.69 | -447.20 | 1757008.85 | 14608348.81 | 40°13'24.145"N | 80°34'56.321"W | 483.08 | 247.779 | 1.68 | 1.67 | 0.52 |
| 2558.00 | 30.310 | 249.260 | 2473.35 | 155.92 | -197.53 | -490.00 | 1756966.07 | 14608333.98 | 40°13'24.000"N | 80°34'56.874"W | 528.31 | 248.045 | 3.04 | 2.47 | -3.62 |
| 2650.00 | 30.800 | 247.500 | 2552.58 | 169.46 | -214.76 | -533.47 | 1756922.62 | 14608316.75 | 40°13'23.832"N | 80°34'57.436"W | 575.07 | 248.072 | 1.11 | 0.53 | -1.91 |
| 2743.00 | 32.820 | 245.850 | 2631.60 | 185.06 | -234.19 | -578.47 | 1756877.64 | 14608297.33 | 40°13'23.642"N | 80°34'58.017"W | 624.07 | 247.960 | 2.36 | 2.17 | -1.77 |

REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|----------------------|----------|---------------------------|
| Operator | SOUTHWESTERN ENERGY | Slot | Slot #406 |
| Area | Brooke County, WV | Well | John Good Jr BRK 406H |
| Field | Brooke | Wellbore | John Good Jr BRK 406H AWB |
| Facility | John Good Jr BRK Pad | | |

WELLPATH DATA (170 stations)

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Closure Dist [ft] | Closure Dir [°] | DLS [°/100ft] | Build Rate [°/100ft] | Turn Rate [°/100ft] |
|---------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|----------------|----------------|-------------------|-----------------|---------------|----------------------|---------------------|
| 2836.00 | 33.290 | 245.750 | 2709.55 | 201.92 | -254.98 | -624.74 | 1756831.38 | 14608276.55 | 40°13'23.439"N | 80°34'58.615"W | 674.77 | 247.798 | 0.51 | 0.51 | -0.11 |
| 2929.00 | 32.610 | 245.210 | 2787.59 | 219.00 | -275.97 | -670.76 | 1756785.38 | 14608255.57 | 40°13'23.233"N | 80°34'59.209"W | 725.31 | 247.636 | 0.80 | -0.73 | -0.58 |
| 3021.00 | 31.840 | 242.310 | 2865.42 | 236.92 | -297.64 | -714.76 | 1756741.40 | 14608233.90 | 40°13'23.021"N | 80°34'59.778"W | 774.25 | 247.392 | 1.88 | -0.84 | -3.15 |
| 3117.00 | 32.430 | 246.160 | 2946.73 | 255.18 | -319.82 | -760.73 | 1756695.45 | 14608211.74 | 40°13'22.804"N | 80°35'00.372"W | 825.22 | 247.198 | 2.22 | 0.61 | 4.01 |
| 3210.00 | 32.250 | 247.870 | 3025.30 | 270.71 | -339.24 | -806.52 | 1756649.67 | 14608192.32 | 40°13'22.614"N | 80°35'00.963"W | 874.97 | 247.187 | 1.00 | -0.19 | 1.84 |
| 3303.00 | 32.830 | 249.880 | 3103.70 | 284.77 | -357.26 | -853.18 | 1756603.03 | 14608174.30 | 40°13'22.438"N | 80°35'01.566"W | 924.96 | 247.279 | 1.32 | 0.62 | 2.16 |
| 3395.00 | 33.500 | 252.290 | 3180.72 | 297.04 | -373.57 | -900.79 | 1756555.44 | 14608158.01 | 40°13'22.279"N | 80°35'02.180"W | 975.18 | 247.476 | 1.61 | 0.73 | 2.62 |
| 3488.00 | 34.400 | 250.210 | 3257.87 | 309.58 | -390.27 | -949.96 | 1756506.29 | 14608141.31 | 40°13'22.117"N | 80°35'02.815"W | 1027.00 | 247.666 | 1.58 | 0.97 | -2.24 |
| 3580.00 | 35.740 | 249.160 | 3333.16 | 323.74 | -408.63 | -999.52 | 1756456.74 | 14608122.96 | 40°13'21.938"N | 80°35'03.455"W | 1079.83 | 247.764 | 1.60 | 1.46 | -1.14 |
| 3673.00 | 34.830 | 246.150 | 3409.08 | 339.92 | -429.03 | -1049.20 | 1756407.08 | 14608102.56 | 40°13'21.738"N | 80°35'04.097"W | 1133.53 | 247.760 | 2.11 | -0.98 | -3.24 |
| 3766.00 | 35.370 | 245.950 | 3485.17 | 357.47 | -450.74 | -1098.07 | 1756358.23 | 14608080.86 | 40°13'21.526"N | 80°35'04.728"W | 1186.99 | 247.683 | 0.59 | 0.58 | -0.22 |
| 3859.00 | 35.890 | 245.360 | 3560.76 | 375.61 | -473.07 | -1147.43 | 1756308.89 | 14608058.54 | 40°13'21.308"N | 80°35'05.366"W | 1241.13 | 247.594 | 0.67 | 0.56 | -0.63 |
| 3951.00 | 33.810 | 245.780 | 3636.26 | 393.28 | -494.82 | -1195.29 | 1756261.05 | 14608036.80 | 40°13'21.095"N | 80°35'05.984"W | 1293.67 | 247.512 | 2.28 | -2.26 | 0.46 |
| 4044.00 | 33.870 | 250.010 | 3713.51 | 408.68 | -514.30 | -1243.25 | 1756213.11 | 14608017.33 | 40°13'20.905"N | 80°35'06.604"W | 1345.43 | 247.527 | 2.53 | 0.06 | 4.55 |
| 4137.00 | 33.080 | 250.530 | 3791.09 | 421.91 | -531.62 | -1291.53 | 1756164.85 | 14608000.02 | 40°13'20.736"N | 80°35'07.227"W | 1396.67 | 247.627 | 0.90 | -0.85 | 0.56 |
| 4230.00 | 33.860 | 250.020 | 3868.67 | 435.13 | -548.93 | -1339.81 | 1756116.59 | 14607982.71 | 40°13'20.567"N | 80°35'07.851"W | 1447.90 | 247.721 | 0.89 | 0.84 | -0.55 |
| 4323.00 | 36.260 | 251.220 | 3944.79 | 448.57 | -566.64 | -1390.21 | 1756066.21 | 14607965.01 | 40°13'20.394"N | 80°35'08.501"W | 1501.25 | 247.825 | 2.68 | 2.58 | 1.29 |
| 4415.00 | 35.920 | 249.920 | 4019.13 | 462.26 | -584.66 | -1441.31 | 1756015.12 | 14607946.99 | 40°13'20.218"N | 80°35'09.161"W | 1555.38 | 247.920 | 0.91 | -0.37 | -1.41 |
| 4508.00 | 35.110 | 245.750 | 4094.84 | 478.37 | -605.02 | -1491.33 | 1755965.13 | 14607926.65 | 40°13'20.020"N | 80°35'09.807"W | 1609.38 | 247.918 | 2.75 | -0.87 | -4.48 |
| 4601.00 | 33.970 | 245.150 | 4171.45 | 496.19 | -626.92 | -1539.29 | 1755917.19 | 14607904.75 | 40°13'19.805"N | 80°35'10.427"W | 1662.06 | 247.840 | 1.28 | -1.23 | -0.65 |
| 4693.00 | 33.550 | 249.790 | 4247.95 | 511.77 | -646.51 | -1586.48 | 1755870.02 | 14607885.17 | 40°13'19.614"N | 80°35'11.036"W | 1713.15 | 247.829 | 2.84 | -0.46 | 5.04 |
| 4786.00 | 34.640 | 254.190 | 4324.97 | 523.66 | -662.59 | -1636.03 | 1755820.48 | 14607869.10 | 40°13'19.457"N | 80°35'11.676"W | 1765.12 | 247.952 | 2.90 | 1.17 | 4.73 |
| 4879.00 | 34.410 | 253.210 | 4401.59 | 534.18 | -677.38 | -1686.62 | 1755769.91 | 14607854.31 | 40°13'19.314"N | 80°35'12.329"W | 1817.57 | 248.119 | 0.65 | -0.25 | -1.05 |
| 4974.00 | 34.630 | 251.600 | 4479.87 | 546.11 | -693.66 | -1737.94 | 1755718.61 | 14607838.04 | 40°13'19.155"N | 80°35'12.992"W | 1871.25 | 248.242 | 0.99 | 0.23 | -1.69 |
| 5067.00 | 35.810 | 250.860 | 4555.84 | 559.07 | -710.92 | -1788.72 | 1755667.86 | 14607820.79 | 40°13'18.987"N | 80°35'13.647"W | 1924.81 | 248.325 | 1.35 | 1.27 | -0.80 |
| 5160.00 | 37.460 | 251.420 | 4630.47 | 572.56 | -728.85 | -1841.23 | 1755615.36 | 14607802.86 | 40°13'18.812"N | 80°35'14.325"W | 1980.24 | 248.404 | 1.81 | 1.77 | 0.60 |
| 5253.00 | 35.970 | 248.450 | 4705.02 | 587.18 | -747.90 | -1893.45 | 1755563.16 | 14607783.82 | 40°13'18.626"N | 80°35'15.000"W | 2035.80 | 248.446 | 2.49 | -1.60 | -3.19 |
| 5345.00 | 34.780 | 246.030 | 4780.04 | 603.59 | -768.48 | -1942.56 | 1755514.07 | 14607763.24 | 40°13'18.425"N | 80°35'15.634"W | 2089.04 | 248.416 | 2.00 | -1.29 | -2.63 |
| 5438.00 | 33.310 | 242.410 | 4857.10 | 622.20 | -791.09 | -1989.44 | 1755467.21 | 14607740.65 | 40°13'18.204"N | 80°35'16.240"W | 2140.95 | 248.315 | 2.69 | -1.58 | -3.89 |
| 5530.00 | 32.310 | 242.790 | 4934.43 | 641.37 | -814.03 | -2033.69 | 1755422.97 | 14607717.71 | 40°13'17.979"N | 80°35'16.812"W | 2190.56 | 248.185 | 1.11 | -1.09 | 0.41 |

REFERENCE WELLPATH IDENTIFICATION

| Operator | Slot | Slot #406 |
|---------------------|----------|---------------------------|
| SOUTHWESTERN ENERGY | Well | John Good Jr BRK 406H |
| Area | Wellbore | John Good Jr BRK 406H AWB |
| Field | | |
| Facility | | |

WELLPATH DATA (170 stations)

| MD | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Closure Dist [ft] | Closure Dir [°] | DLS [°/100ft] | Build Rate [°/100ft] | Turn Rate [°/100ft] |
|---------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|----------------|----------------|-------------------|-----------------|---------------|----------------------|---------------------|
| 5623.00 | 34.930 | 247.810 | 5011.88 | 658.82 | -835.46 | -2080.47 | 1755376.22 | 14607696.29 | 40°13'17.769"N | 80°35'17.416"W | 2241.95 | 248.121 | 4.11 | 2.82 | 5.40 |
| 5716.00 | 33.230 | 246.090 | 5088.91 | 675.13 | -855.85 | -2128.42 | 1755328.28 | 14607675.91 | 40°13'17.570"N | 80°35'18.035"W | 2294.05 | 248.095 | 2.10 | -1.83 | -1.85 |
| 5809.00 | 32.670 | 247.540 | 5166.95 | 691.09 | -875.76 | -2174.91 | 1755281.81 | 14607656.00 | 40°13'17.376"N | 80°35'18.636"W | 2344.61 | 248.067 | 1.04 | -0.60 | 1.56 |
| 5865.00 | 32.100 | 249.420 | 5214.24 | 699.73 | -886.77 | -2202.81 | 1755253.92 | 14607645.00 | 40°13'17.268"N | 80°35'18.996"W | 2374.60 | 248.072 | 2.07 | -1.02 | 3.36 |
| 5958.00 | 34.550 | 248.670 | 5291.94 | 713.96 | -905.05 | -2250.52 | 1755206.23 | 14607626.73 | 40°13'17.090"N | 80°35'19.612"W | 2425.68 | 248.092 | 2.67 | 2.63 | -0.81 |
| 6051.00 | 34.890 | 247.860 | 5368.38 | 729.40 | -924.67 | -2299.72 | 1755157.05 | 14607607.12 | 40°13'16.898"N | 80°35'20.248"W | 2478.65 | 248.096 | 0.62 | 0.37 | -0.87 |
| 6144.00 | 35.180 | 237.200 | 5444.60 | 749.94 | -949.23 | -2346.92 | 1755109.87 | 14607582.57 | 40°13'16.657"N | 80°35'20.858"W | 2531.61 | 247.979 | 6.58 | 0.31 | -11.46 |
| 6236.00 | 37.710 | 223.090 | 5518.74 | 781.31 | -984.20 | -2388.50 | 1755068.30 | 14607547.61 | 40°13'16.314"N | 80°35'21.396"W | 2583.33 | 247.606 | 9.50 | 2.75 | -15.34 |
| 6329.00 | 43.220 | 210.890 | 5589.58 | 826.36 | -1032.41 | -2424.36 | 1755032.45 | 14607499.42 | 40°13'15.839"N | 80°35'21.861"W | 2635.03 | 246.933 | 10.35 | 5.92 | -13.12 |
| 6422.00 | 48.250 | 202.330 | 5654.53 | 883.19 | -1091.92 | -2453.94 | 1755002.89 | 14607439.93 | 40°13'15.252"N | 80°35'22.246"W | 2685.91 | 246.013 | 8.52 | 5.41 | -9.20 |
| 6514.00 | 52.930 | 195.020 | 5712.97 | 948.36 | -1159.21 | -2476.52 | 1754980.32 | 14607372.67 | 40°13'14.588"N | 80°35'22.541"W | 2734.39 | 244.917 | 7.97 | 5.09 | -7.95 |
| 6607.00 | 55.520 | 184.400 | 5767.43 | 1021.26 | -1233.41 | -2489.10 | 1754967.74 | 14607298.49 | 40°13'13.856"N | 80°35'22.707"W | 2777.94 | 243.640 | 9.67 | 2.78 | -11.42 |
| 6699.00 | 64.040 | 172.430 | 5813.82 | 1100.36 | -1312.58 | -2486.55 | 1754970.29 | 14607219.36 | 40°13'13.073"N | 80°35'22.679"W | 2811.73 | 242.172 | 14.55 | 9.26 | -13.01 |
| 6792.00 | 73.850 | 165.520 | 5847.23 | 1186.45 | -1397.57 | -2469.82 | 1754987.02 | 14607134.40 | 40°13'12.233"N | 80°35'22.469"W | 2837.81 | 240.496 | 12.62 | 10.55 | -7.43 |
| 6885.00 | 78.250 | 163.800 | 5869.64 | 1275.15 | -1484.58 | -2445.93 | 1755010.89 | 14607047.42 | 40°13'11.372"N | 80°35'22.166"W | 2861.22 | 238.744 | 5.06 | 4.73 | -1.85 |
| 6977.00 | 85.750 | 164.470 | 5882.44 | 1364.49 | -1572.15 | -2421.05 | 1755035.76 | 14606959.89 | 40°13'10.505"N | 80°35'21.850"W | 2886.72 | 237.002 | 8.18 | 8.15 | 0.73 |
| 7070.00 | 89.200 | 162.940 | 5886.54 | 1455.52 | -1661.31 | -2394.99 | 1755061.82 | 14606870.76 | 40°13'09.623"N | 80°35'21.520"W | 2914.78 | 235.252 | 4.06 | 3.71 | -1.65 |
| 7163.00 | 88.520 | 160.430 | 5888.39 | 1545.92 | -1749.58 | -2365.77 | 1755091.02 | 14606782.53 | 40°13'08.749"N | 80°35'21.148"W | 2942.43 | 233.516 | 2.80 | -0.73 | -2.70 |
| 7256.00 | 88.280 | 157.290 | 5890.98 | 1635.11 | -1836.27 | -2332.25 | 1755124.53 | 14606695.87 | 40°13'07.891"N | 80°35'20.721"W | 2968.38 | 231.785 | 3.38 | -0.26 | -3.38 |
| 7348.00 | 88.430 | 156.800 | 5893.62 | 1722.49 | -1920.95 | -2296.38 | 1755160.39 | 14606611.22 | 40°13'07.053"N | 80°35'20.284"W | 2993.90 | 230.087 | 0.56 | 0.16 | -0.53 |
| 7441.00 | 88.400 | 156.310 | 5896.20 | 1810.50 | -2006.24 | -2259.39 | 1755197.36 | 14606525.96 | 40°13'06.208"N | 80°35'19.792"W | 3021.57 | 228.396 | 0.53 | -0.03 | -0.53 |
| 7534.00 | 88.490 | 156.170 | 5898.72 | 1898.48 | -2091.33 | -2221.94 | 1755234.81 | 14606440.90 | 40°13'05.366"N | 80°35'19.315"W | 3051.34 | 226.734 | 0.18 | 0.10 | -0.15 |
| 7627.00 | 89.170 | 155.470 | 5900.62 | 1986.19 | -2176.15 | -2183.85 | 1755272.87 | 14606356.12 | 40°13'04.526"N | 80°35'18.829"W | 3082.99 | 225.101 | 1.05 | 0.73 | -0.75 |
| 7720.00 | 89.170 | 153.460 | 5901.97 | 2073.15 | -2260.05 | -2143.77 | 1755312.94 | 14606272.25 | 40°13'03.695"N | 80°35'18.317"W | 3115.06 | 223.487 | 2.16 | 0.00 | -2.16 |
| 7813.00 | 89.170 | 157.940 | 5903.31 | 2160.77 | -2344.78 | -2105.51 | 1755351.18 | 14606187.55 | 40°13'02.856"N | 80°35'17.829"W | 3151.38 | 221.922 | 4.82 | 0.00 | 4.82 |
| 7905.00 | 89.110 | 158.270 | 5904.70 | 2248.70 | -2430.14 | -2071.21 | 1755385.47 | 14606102.23 | 40°13'02.011"N | 80°35'17.392"W | 3193.03 | 220.441 | 0.36 | -0.07 | 0.36 |
| 7998.00 | 89.170 | 155.830 | 5906.09 | 2337.05 | -2515.76 | -2034.95 | 1755421.71 | 14606016.64 | 40°13'01.163"N | 80°35'16.930"W | 3235.75 | 218.969 | 2.62 | 0.06 | -2.62 |
| 8091.00 | 89.200 | 154.660 | 5907.41 | 2424.45 | -2600.20 | -1996.01 | 1755460.64 | 14605932.23 | 40°13'00.327"N | 80°35'16.433"W | 3277.98 | 217.511 | 1.26 | 0.03 | -1.26 |
| 8184.00 | 89.170 | 156.070 | 5908.74 | 2511.91 | -2684.73 | -1957.25 | 1755499.38 | 14605847.74 | 40°12'59.490"N | 80°35'15.938"W | 3322.44 | 216.093 | 1.52 | -0.03 | 1.52 |
| 8276.00 | 89.230 | 163.110 | 5910.02 | 2600.45 | -2770.89 | -1925.19 | 1755531.43 | 14605761.61 | 40°12'58.637"N | 80°35'15.530"W | 3374.05 | 214.791 | 7.65 | 0.07 | 7.65 |

REFERENCE WELLPATH IDENTIFICATION

| Operator | SOUTHWESTERN ENERGY | Slot | Slot #406 |
|----------|----------------------|----------|---------------------------|
| Area | Brooke County, WV | Well | John Good Jr BRK 406H |
| Field | Brooke | Wellbore | John Good Jr BRK 406H AWB |
| Facility | John Good Jr BRK Pad | | |

WELLPATH DATA (170 stations)

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Closure Dist [ft] | Closure Dir [°] | DLS [°/100ft] | Build Rate [°/100ft] | Turn Rate [°/100ft] |
|----------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|----------------|----------------|-------------------|-----------------|---------------|----------------------|---------------------|
| 8369.00 | 89.140 | 166.840 | 5911.35 | 2691.95 | -2860.69 | -1901.09 | 1755555.52 | 1460567.185 | 40°12'57.748"N | 80°35'15.225"W | 3434.77 | 213.606 | 4.01 | -0.10 | 4.01 |
| 8461.00 | 89.260 | 166.630 | 5912.63 | 2782.93 | -2950.22 | -1879.98 | 1755576.62 | 14605582.35 | 40°12'56.863"N | 80°35'14.958"W | 3498.31 | 212.507 | 0.26 | 0.13 | -0.23 |
| 8554.00 | 89.200 | 164.240 | 5913.88 | 2874.57 | -3040.22 | -1856.60 | 1755600.00 | 14605492.39 | 40°12'55.972"N | 80°35'14.662"W | 3562.29 | 211.412 | 2.57 | -0.06 | -2.57 |
| 8647.00 | 89.230 | 162.260 | 5915.16 | 2965.53 | -3129.26 | -1829.80 | 1755626.79 | 14605403.38 | 40°12'55.091"N | 80°35'14.322"W | 3624.97 | 210.316 | 2.13 | 0.03 | -2.13 |
| 8740.00 | 89.110 | 155.750 | 5916.50 | 3054.78 | -3216.03 | -1796.50 | 1755660.07 | 14605316.64 | 40°12'54.232"N | 80°35'13.898"W | 3683.78 | 209.188 | 7.00 | -0.13 | -7.00 |
| 8833.00 | 89.020 | 152.390 | 5918.02 | 3141.50 | -3299.64 | -1755.85 | 1755700.71 | 146052233.06 | 40°12'53.404"N | 80°35'13.379"W | 3737.73 | 208.019 | 3.61 | -0.10 | -3.61 |
| 8925.00 | 89.170 | 156.130 | 5919.48 | 3227.39 | -3382.49 | -1715.90 | 1755740.64 | 14605150.25 | 40°12'52.583"N | 80°35'12.869"W | 3792.83 | 206.898 | 4.07 | 0.16 | 4.07 |
| 9018.00 | 89.200 | 158.940 | 5920.80 | 3315.98 | -3468.42 | -1680.37 | 1755776.16 | 14605064.35 | 40°12'51.733"N | 80°35'12.416"W | 3854.03 | 205.849 | 3.02 | 0.03 | 3.02 |
| 9111.00 | 89.200 | 158.910 | 5922.10 | 3405.24 | -3555.19 | -1646.94 | 1755809.58 | 14604977.62 | 40°12'50.874"N | 80°35'11.990"W | 3918.13 | 204.856 | 0.03 | 0.00 | -0.03 |
| 9200.00 | 88.520 | 154.010 | 5923.87 | 3489.48 | -3636.74 | -1611.41 | 1755845.09 | 14604896.10 | 40°12'50.066"N | 80°35'11.537"W | 3977.75 | 203.898 | 5.56 | -0.76 | -5.51 |
| 9293.00 | 89.110 | 151.110 | 5925.79 | 3575.28 | -3719.25 | -1568.57 | 1755887.52 | 14604813.62 | 40°12'49.249"N | 80°35'10.990"W | 4036.48 | 202.867 | 3.18 | 0.63 | -3.12 |
| 9386.00 | 89.230 | 158.420 | 5927.14 | 3662.35 | -3803.31 | -1528.95 | 1755927.52 | 14604729.59 | 40°12'48.416"N | 80°35'10.485"W | 4099.13 | 201.900 | 7.86 | 0.13 | 7.86 |
| 9478.00 | 89.230 | 156.570 | 5928.38 | 3749.98 | -3888.29 | -1493.74 | 1755962.72 | 14604644.64 | 40°12'47.575"N | 80°35'10.036"W | 4165.34 | 201.015 | 2.01 | 0.00 | -2.01 |
| 9571.00 | 89.200 | 151.840 | 5929.65 | 3836.76 | -3971.99 | -1453.28 | 1756003.16 | 14604560.97 | 40°12'46.746"N | 80°35'09.519"W | 4229.51 | 200.097 | 5.09 | -0.03 | -5.09 |
| 9664.00 | 89.260 | 153.440 | 5930.90 | 3922.63 | -4054.58 | -1410.55 | 1756045.88 | 14604478.42 | 40°12'45.928"N | 80°35'08.974"W | 4292.93 | 199.182 | 1.72 | 0.06 | 1.72 |
| 9756.00 | 89.290 | 158.140 | 5932.07 | 4009.37 | -4138.46 | -1372.83 | 1756083.58 | 14604394.57 | 40°12'45.097"N | 80°35'08.492"W | 4360.22 | 198.352 | 5.11 | 0.03 | 5.11 |
| 9849.00 | 89.290 | 157.180 | 5933.22 | 4098.03 | -4224.47 | -1337.49 | 1756118.91 | 14604308.59 | 40°12'44.246"N | 80°35'08.042"W | 4431.14 | 197.568 | 1.03 | 0.00 | -1.03 |
| 9942.00 | 89.050 | 154.260 | 5934.57 | 4185.68 | -4309.22 | -1299.26 | 1756157.13 | 14604223.87 | 40°12'43.406"N | 80°35'07.554"W | 4500.83 | 196.778 | 3.15 | -0.26 | -3.14 |
| 10034.00 | 89.380 | 154.430 | 5935.83 | 4271.64 | -4392.15 | -1259.43 | 1756196.94 | 14604140.98 | 40°12'42.585"N | 80°35'07.046"W | 4569.15 | 196.000 | 0.40 | 0.36 | 0.18 |
| 10127.00 | 89.420 | 159.650 | 5936.80 | 4359.97 | -4477.74 | -1223.16 | 1756233.19 | 14604055.42 | 40°12'41.738"N | 80°35'06.584"W | 4641.80 | 195.278 | 5.61 | 0.04 | 5.61 |
| 10220.00 | 89.320 | 162.660 | 5937.83 | 4450.17 | -4565.74 | -1193.13 | 1756263.21 | 14603967.45 | 40°12'40.867"N | 80°35'06.202"W | 4719.07 | 194.645 | 3.24 | -0.11 | 3.24 |
| 10313.00 | 89.350 | 160.850 | 5938.91 | 4540.60 | -4654.06 | -1164.02 | 1756292.32 | 14603879.17 | 40°12'39.992"N | 80°35'05.832"W | 4797.42 | 194.042 | 1.95 | 0.03 | -1.95 |
| 10405.00 | 89.350 | 159.230 | 5939.95 | 4629.39 | -4740.52 | -1132.61 | 1756323.70 | 14603792.74 | 40°12'39.137"N | 80°35'05.432"W | 4873.95 | 193.437 | 1.76 | 0.00 | -1.76 |
| 10498.00 | 89.290 | 160.280 | 5941.05 | 4719.02 | -4827.77 | -1100.44 | 1756355.87 | 14603705.52 | 40°12'38.273"N | 80°35'05.023"W | 4951.60 | 192.841 | 1.13 | -0.06 | 1.13 |
| 10591.00 | 89.420 | 165.110 | 5942.10 | 4809.78 | -4916.53 | -1072.78 | 1756383.51 | 14603616.80 | 40°12'37.395"N | 80°35'04.672"W | 5032.21 | 192.309 | 5.20 | 0.14 | 5.19 |
| 10684.00 | 89.380 | 165.940 | 5943.07 | 4901.45 | -5006.57 | -1049.54 | 1756406.75 | 14603526.79 | 40°12'36.504"N | 80°35'04.378"W | 5115.40 | 191.840 | 0.89 | -0.04 | 0.89 |
| 10776.00 | 89.420 | 158.110 | 5944.04 | 4990.95 | -5094.01 | -1021.17 | 1756435.11 | 14603439.39 | 40°12'35.638"N | 80°35'04.017"W | 5195.35 | 191.336 | 8.51 | 0.04 | -8.51 |
| 10869.00 | 89.290 | 156.890 | 5945.09 | 5079.53 | -5179.92 | -985.58 | 1756470.68 | 14603353.51 | 40°12'34.788"N | 80°35'03.564"W | 5272.85 | 190.773 | 1.32 | -0.14 | -1.31 |
| 10962.00 | 89.480 | 153.640 | 5946.08 | 5166.94 | -5264.37 | -946.68 | 1756509.57 | 14603269.09 | 40°12'33.951"N | 80°35'03.067"W | 5348.82 | 190.194 | 3.50 | 0.20 | -3.49 |
| 11055.00 | 89.600 | 153.320 | 5946.83 | 5253.32 | -5347.59 | -905.15 | 1756551.08 | 14603185.91 | 40°12'33.127"N | 80°35'02.537"W | 5423.65 | 189.607 | 0.37 | 0.13 | -0.34 |

REFERENCE WELLPATH IDENTIFICATION

| Operator | Slot | Slot #406 |
|---------------------|----------|---------------------------|
| SOUTHWESTERN ENERGY | Well | John Good Jr BRK 406H |
| Area | Wellbore | John Good Jr BRK 406H AWB |
| Field | | |
| Facility | | |

WELLPATH DATA (170 stations)

| MD (ft) | Inclination (°) | Azimuth (°) | TVD (ft) | Vert Sect (ft) | North (ft) | East (ft) | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude | Closure Dist (ft) | Closure Dir (°) | DLS (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|----------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|----------------|----------------|-------------------|-----------------|---------------|----------------------|---------------------|
| 11147.00 | 89.630 | 157.080 | 5947.45 | 5339.75 | -5431.08 | -866.57 | 1756589.64 | 14603102.44 | 40°12'32.300"N | 80°35'02.045"W | 5499.78 | 189.066 | 4.09 | 0.03 | 4.09 |
| 11240.00 | 89.600 | 157.100 | 5948.07 | 5428.14 | -5516.75 | -830.37 | 1756625.83 | 14603016.82 | 40°12'31.452"N | 80°35'01.584"W | 5578.89 | 188.560 | 0.04 | -0.03 | 0.02 |
| 11333.00 | 89.630 | 155.350 | 5948.70 | 5516.08 | -5601.85 | -792.88 | 1756663.31 | 14602931.75 | 40°12'30.609"N | 80°35'01.106"W | 5657.68 | 188.056 | 1.88 | 0.03 | -1.88 |
| 11426.00 | 89.570 | 154.340 | 5949.35 | 5603.26 | -5686.03 | -753.35 | 1756702.82 | 14602847.60 | 40°12'29.776"N | 80°35'00.601"W | 5735.71 | 187.547 | 1.09 | -0.06 | -1.09 |
| 11518.00 | 89.540 | 156.130 | 5950.06 | 5689.72 | -5769.56 | -714.81 | 1756741.34 | 14602764.10 | 40°12'28.948"N | 80°35'00.110"W | 5813.67 | 187.063 | 1.95 | -0.03 | 1.95 |
| 11611.00 | 89.570 | 161.810 | 5950.79 | 5778.97 | -5856.33 | -681.45 | 1756774.69 | 14602677.37 | 40°12'28.090"N | 80°34'59.685"W | 5895.84 | 186.637 | 6.11 | 0.03 | 6.11 |
| 11704.00 | 89.540 | 161.910 | 5951.51 | 5869.45 | -5944.70 | -652.50 | 1756803.63 | 14602589.03 | 40°12'27.215"N | 80°34'59.317"W | 5980.40 | 186.264 | 0.11 | -0.03 | 0.11 |
| 11797.00 | 89.260 | 161.130 | 5952.48 | 5959.80 | -6032.90 | -623.02 | 1756833.10 | 14602500.86 | 40°12'26.342"N | 80°34'58.942"W | 6064.98 | 185.896 | 0.89 | -0.30 | -0.84 |
| 11890.00 | 89.420 | 159.660 | 5953.55 | 6049.70 | -6120.50 | -591.82 | 1756864.29 | 14602413.29 | 40°12'25.475"N | 80°34'58.546"W | 6149.05 | 185.523 | 1.59 | 0.17 | -1.58 |
| 11983.00 | 89.320 | 158.830 | 5954.58 | 6139.11 | -6207.46 | -558.87 | 1756897.23 | 14602326.37 | 40°12'24.614"N | 80°34'58.126"W | 6232.57 | 185.145 | 0.90 | -0.11 | -0.89 |
| 12075.00 | 89.260 | 158.290 | 5955.72 | 6227.25 | -6293.09 | -525.24 | 1756930.84 | 14602240.78 | 40°12'23.766"N | 80°34'57.698"W | 6314.97 | 184.771 | 0.59 | -0.07 | -0.59 |
| 12168.00 | 89.260 | 156.870 | 5956.92 | 6315.87 | -6379.05 | -489.78 | 1756966.29 | 14602154.85 | 40°12'22.915"N | 80°34'57.246"W | 6397.82 | 184.390 | 1.53 | 0.00 | -1.53 |
| 12261.00 | 89.320 | 156.540 | 5958.07 | 6404.05 | -6464.46 | -453.00 | 1757003.06 | 14602069.47 | 40°12'22.069"N | 80°34'56.777"W | 6480.31 | 184.008 | 0.36 | 0.06 | -0.35 |
| 12354.00 | 89.320 | 157.160 | 5959.17 | 6492.31 | -6549.96 | -416.44 | 1757039.60 | 14601984.00 | 40°12'21.223"N | 80°34'56.311"W | 6563.19 | 183.638 | 0.67 | 0.00 | 0.67 |
| 12447.00 | 89.290 | 158.440 | 5960.30 | 6581.04 | -6636.06 | -381.30 | 1757074.72 | 14601897.93 | 40°12'20.370"N | 80°34'55.884"W | 6647.01 | 183.289 | 1.38 | -0.03 | 1.38 |
| 12540.00 | 89.230 | 159.820 | 5961.50 | 6670.40 | -6722.95 | -348.18 | 1757107.84 | 14601811.08 | 40°12'19.510"N | 80°34'55.442"W | 6731.96 | 182.965 | 1.49 | -0.06 | 1.48 |
| 12632.00 | 89.200 | 158.900 | 5962.76 | 6758.89 | -6809.04 | -315.75 | 1757140.25 | 14601725.02 | 40°12'18.658"N | 80°34'55.029"W | 6816.35 | 182.655 | 1.00 | -0.03 | -1.00 |
| 12725.00 | 89.230 | 157.400 | 5964.04 | 6847.79 | -6895.34 | -281.14 | 1757174.85 | 14601638.75 | 40°12'17.803"N | 80°34'54.588"W | 6901.07 | 182.335 | 1.61 | 0.03 | -1.61 |
| 12818.00 | 89.170 | 158.110 | 5965.34 | 6936.49 | -6981.41 | -245.94 | 1757210.04 | 14601552.71 | 40°12'16.951"N | 80°34'54.140"W | 6985.74 | 182.018 | 0.77 | -0.06 | 0.76 |
| 12910.00 | 89.140 | 153.040 | 5966.69 | 7023.11 | -7065.14 | -207.91 | 1757248.05 | 14601469.02 | 40°12'16.122"N | 80°34'53.655"W | 7068.20 | 181.686 | 5.51 | -0.03 | -5.51 |
| 13003.00 | 89.170 | 152.550 | 5968.07 | 7109.07 | -7147.85 | -165.40 | 1757290.54 | 14601386.34 | 40°12'15.303"N | 80°34'53.112"W | 7149.76 | 181.326 | 0.53 | 0.03 | -0.53 |
| 13096.00 | 89.170 | 154.080 | 5969.41 | 7195.35 | -7230.93 | -123.64 | 1757332.29 | 14601303.29 | 40°12'14.480"N | 80°34'52.579"W | 7231.99 | 180.980 | 1.64 | 0.00 | 1.65 |
| 13189.00 | 89.200 | 156.890 | 5970.74 | 7282.88 | -7315.53 | -85.06 | 1757370.85 | 14601218.73 | 40°12'13.642"N | 80°34'52.087"W | 7316.02 | 180.666 | 3.02 | 0.03 | 3.02 |
| 13281.00 | 89.200 | 156.870 | 5972.02 | 7370.20 | -7400.13 | -48.94 | 1757406.96 | 14601134.16 | 40°12'12.804"N | 80°34'51.627"W | 7400.29 | 180.379 | 0.02 | 0.00 | -0.02 |
| 13374.00 | 89.260 | 160.840 | 5973.27 | 7459.41 | -7486.85 | -15.40 | 1757440.48 | 14601047.48 | 40°12'11.946"N | 80°34'51.200"W | 7486.86 | 180.118 | 4.27 | 0.06 | 4.27 |
| 13467.00 | 89.170 | 167.830 | 5974.55 | 7550.68 | -7576.33 | 9.69 | 1757465.57 | 14600958.03 | 40°12'11.061"N | 80°34'50.882"W | 7576.33 | 179.927 | 7.52 | -0.10 | 7.52 |
| 13560.00 | 89.170 | 161.730 | 5975.89 | 7642.09 | -7666.01 | 34.09 | 1757489.96 | 14600868.38 | 40°12'10.173"N | 80°34'50.573"W | 7666.09 | 179.745 | 6.56 | 0.00 | -6.56 |
| 13653.00 | 89.480 | 157.930 | 5976.99 | 7731.73 | -7753.29 | 66.15 | 1757522.01 | 14600781.14 | 40°12'09.309"N | 80°34'50.165"W | 7753.57 | 179.511 | 4.10 | 0.33 | -4.09 |
| 13746.00 | 89.480 | 161.430 | 5977.83 | 7821.32 | -7840.48 | 98.44 | 1757554.28 | 14600693.98 | 40°12'08.446"N | 80°34'49.754"W | 7841.10 | 179.281 | 3.76 | 0.00 | 3.76 |
| 13838.00 | 89.450 | 163.160 | 5978.69 | 7910.98 | -7928.12 | 126.42 | 1757582.25 | 14600606.37 | 40°12'07.579"N | 80°34'49.399"W | 7929.13 | 179.086 | 1.88 | -0.03 | 1.88 |

REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|----------------------|----------|---------------------------|
| Operator | SOUTHWESTERN ENERGY | Slot | Slot #406 |
| Area | Brooke County, WV | Well | John Good Jr BRK 406H |
| Field | Brooke | Wellbore | John Good Jr BRK 406H AWB |
| Facility | John Good Jr BRK Pad | | |

WELLPATH DATA (170 stations)

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Closure Dist [ft] | Closure Dir [°] | DLS ["/100ft] | Build Rate ["/100ft] | Turn Rate ["/100ft] |
|----------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|----------------|----------------|-------------------|-----------------|---------------|----------------------|---------------------|
| 13931.00 | 89.450 | 159.590 | 5979.59 | 8001.27 | -8016.23 | 156.11 | 1757611.93 | 14600518.30 | 40°12'06.707"N | 80°34'49.021"W | 8017.75 | 178.884 | 3.84 | 0.00 | -3.84 |
| 14024.00 | 89.450 | 158.650 | 5980.48 | 8090.62 | -8103.12 | 189.26 | 1757645.06 | 14600431.44 | 40°12'05.846"N | 80°34'48.600"W | 8105.33 | 178.662 | 1.01 | 0.00 | -1.01 |
| 14117.00 | 89.420 | 160.060 | 5981.40 | 8180.08 | -8190.14 | 222.04 | 1757677.84 | 14600344.46 | 40°12'04.985"N | 80°34'48.182"W | 8193.15 | 178.447 | 1.52 | -0.03 | 1.52 |
| 14210.00 | 89.480 | 160.140 | 5982.29 | 8269.86 | -8277.58 | 253.70 | 1757709.48 | 14600257.05 | 40°12'04.119"N | 80°34'47.780"W | 8281.47 | 178.245 | 0.11 | 0.06 | 0.09 |
| 14302.00 | 89.480 | 157.990 | 5983.12 | 8358.22 | -8363.50 | 286.57 | 1757742.34 | 14600171.16 | 40°12'03.269"N | 80°34'47.361"W | 8368.41 | 178.038 | 2.34 | 0.00 | -2.34 |
| 14395.00 | 89.480 | 156.210 | 5983.97 | 8446.60 | -8449.16 | 322.75 | 1757778.51 | 14600085.53 | 40°12'02.421"N | 80°34'46.900"W | 8455.32 | 177.812 | 1.91 | 0.00 | -1.91 |
| 14488.00 | 89.450 | 151.430 | 5984.84 | 8533.17 | -8532.59 | 363.77 | 1757819.51 | 14600002.13 | 40°12'01.594"N | 80°34'46.377"W | 8540.34 | 177.559 | 5.14 | -0.03 | -5.14 |
| 14581.00 | 89.480 | 150.520 | 5985.71 | 8617.97 | -8613.91 | 408.89 | 1757864.61 | 14599920.85 | 40°12'00.789"N | 80°34'45.800"W | 8623.61 | 177.282 | 0.98 | 0.03 | -0.98 |
| 14674.00 | 89.880 | 156.550 | 5986.23 | 8704.35 | -8697.12 | 450.32 | 1757906.02 | 14599837.67 | 40°11'59.964"N | 80°34'45.271"W | 8708.77 | 177.036 | 6.50 | 0.43 | 6.48 |
| 14766.00 | 89.940 | 158.060 | 5986.37 | 8791.89 | -8782.00 | 485.81 | 1757941.50 | 14599752.82 | 40°11'59.124"N | 80°34'44.819"W | 8795.42 | 176.834 | 1.64 | 0.07 | 1.64 |
| 14859.00 | 89.970 | 157.670 | 5986.44 | 8880.66 | -8868.14 | 520.85 | 1757976.53 | 14599666.71 | 40°11'58.271"N | 80°34'44.373"W | 8883.43 | 176.639 | 0.42 | 0.03 | -0.42 |
| 14952.00 | 90.030 | 157.640 | 5986.44 | 8969.33 | -8954.16 | 556.21 | 1758011.87 | 14599580.73 | 40°11'57.419"N | 80°34'43.923"W | 8971.42 | 176.446 | 0.07 | 0.06 | -0.03 |
| 15045.00 | 89.600 | 155.190 | 5986.74 | 9057.37 | -9039.38 | 593.42 | 1758049.07 | 14599495.54 | 40°11'56.575"N | 80°34'43.448"W | 9058.84 | 176.244 | 2.67 | -0.46 | -2.63 |
| 15137.00 | 89.720 | 158.010 | 5987.29 | 9144.55 | -9123.81 | 629.95 | 1758085.59 | 14599411.15 | 40°11'55.740"N | 80°34'42.983"W | 9145.53 | 176.050 | 3.07 | 0.13 | 3.07 |
| 15227.00 | 89.880 | 159.130 | 5987.60 | 9230.77 | -9207.58 | 662.83 | 1758118.45 | 14599327.40 | 40°11'54.910"N | 80°34'42.564"W | 9231.41 | 175.883 | 1.26 | 0.18 | 1.24 |
| 15320.00 | 90.950 | 158.210 | 5986.93 | 9319.92 | -9294.21 | 696.66 | 1758152.27 | 14599240.81 | 40°11'54.053"N | 80°34'42.133"W | 9320.28 | 175.713 | 1.52 | 1.15 | -0.99 |
| 15413.00 | 91.200 | 156.990 | 5985.19 | 9408.55 | -9380.17 | 732.09 | 1758187.69 | 14599154.88 | 40°11'53.201"N | 80°34'41.682"W | 9408.70 | 175.537 | 1.34 | 0.27 | -1.31 |
| 15506.00 | 92.280 | 156.050 | 5982.36 | 9496.60 | -9465.43 | 769.12 | 1758224.71 | 14599069.65 | 40°11'52.357"N | 80°34'41.210"W | 9496.63 | 175.355 | 1.54 | 1.16 | -1.01 |
| 15532.00 | 92.950 | 155.630 | 5981.18 | 9521.10 | -9489.13 | 779.76 | 1758235.33 | 14599045.97 | 40°11'52.122"N | 80°34'41.074"W | 9521.11 | 175.302 | 3.04 | 2.58 | -1.62 |
| 15556.00 | 92.950 | 155.630 | 6979.94 | 9543.68 | -9510.96 | 789.65 | 1758245.22 | 14599024.14 | 40°11'51.906"N | 80°34'40.948"W | 9543.69 | 175.254 | 0.00 | 0.00 | 0.00 |

REFERENCE WELLPATH IDENTIFICATION

| | | | | |
|----------|----------------------|--|----------|---------------------------|
| Operator | SOUTHWESTERN ENERGY | | Slot | Slot #406 |
| Area | Brooke County, WV | | Well | John Good Jr BRK 406H |
| Field | Brooke | | Wellbore | John Good Jr BRK 406H AWB |
| Facility | John Good Jr BRK Pad | | | |

HOLE & CASING SECTIONS - Ref Wellbore: John Good Jr BRK 406H AWB Ref Wellpath: John Good Jr BRK 406H AWP Proj: 15556'

| String/Diameter | Start MD [ft] | End MD [ft] | Interval [ft] | Start TVD [ft] | End TVD [ft] | Start N/S [ft] | Start E/W [ft] | End N/S [ft] | End E/W [ft] |
|-----------------------------|---------------|-------------|---------------|----------------|--------------|----------------|----------------|--------------|--------------|
| 17.5in Open Hole | 26.00 | 500.00 | 474.00 | 26.00 | 499.99 | 0.00 | 0.00 | 1.81 | -2.05 |
| 13.375in Casing Surface | 26.00 | 380.00 | 354.00 | 26.00 | 379.99 | 0.00 | 0.00 | 1.97 | -1.63 |
| 12.25in Open Hole | 500.00 | 1723.00 | 1223.00 | 499.99 | 1698.84 | 1.81 | -2.05 | -87.49 | -206.39 |
| 9.625in Casing Intermediate | 26.00 | 1701.00 | 1675.00 | 26.00 | 1677.42 | 0.00 | 0.00 | -84.85 | -202.14 |
| 8.75in Open Hole | 1723.00 | 5879.00 | 4156.00 | 1698.84 | 5226.07 | -87.49 | -206.39 | -889.41 | -2209.81 |
| 8.5in Open Hole | 5879.00 | 15556.00 | 9677.00 | 5226.07 | 5979.94 | -889.41 | -2209.81 | -9510.96 | 789.65 |

TARGETS

| Name | TVD [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Shape |
|---------------------------------|----------|------------|-----------|-------------------|--------------------|----------------|----------------|---------|
| John Good Jr BRK 406H LP Rev-3 | 5886.00 | -1589.73 | -2413.24 | 1755043.58 | 14606942.32 | 40°13'10.331"N | 80°35'21.751"W | point |
| John Good Jr N LL | 5897.00 | -26.63 | 7.38 | 1757463.26 | 14608504.81 | 40°13'25.666"N | 80°34'50.452"W | polygon |
| John Good Jr S LL | 5897.00 | -26.63 | 7.38 | 1757463.26 | 14608504.81 | 40°13'25.666"N | 80°34'50.452"W | polygon |
| John Good Jr SW LL | 5897.00 | -26.63 | 7.38 | 1757463.26 | 14608504.81 | 40°13'25.666"N | 80°34'50.452"W | polygon |
| John Good Jr BRK 406H BHL Rev-3 | 5994.00 | -9576.95 | 803.28 | 1758258.85 | 14598958.18 | 40°11'51.253"N | 80°34'40.777"W | point |

REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|----------------------|----------|---------------------------|
| Operator | SOUTHWESTERN ENERGY | Slot | Slot #406 |
| Area | Brooke County, WV | Well | John Good Jr BRK 406H |
| Field | Brooke | Wellbore | John Good Jr BRK 406H AWB |
| Facility | John Good Jr BRK Pad | | |

WELLPATH COMPOSITION - Ref Wellbore: John Good Jr BRK 406H AWB Ref Wellpath: John Good Jr BRK 406H AWP Proj: 15556'

| Start MD [ft] | End MD [ft] | Positional Uncertainty Model | Log Name/Comment |
|---------------|-------------|------------------------------|---|
| 26.00 | 430.00 | OWSG EMS rev2 - Standard | 01_MSS <17.5"> (260'-430') |
| 430.00 | 1626.00 | BHI NaviTrak (Axial) | 02_APS EM <12.25"> (430')(513'-1626') |
| 1626.00 | 5809.00 | BHI NaviTrak (Axial) | 03_APS EM <8.75"> (1626')(1724'-5809') |
| 5809.00 | 15532.00 | BHI AutoTrak Curve (Short) | 04_BH AT Curve <8.5"> (5809')(5865'-15532') |
| 15532.00 | 15556.00 | Blind Drilling (std) | Projection to bit |
| | | | Wellbore |

REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|----------------------|----------|---------------------------|
| Operator | SOUTHWESTERN ENERGY | Slot | Slot #406 |
| Area | Brooke County, WV | Well | John Good Jr BRK 406H |
| Field | Brooke | Wellbore | John Good Jr BRK 406H AWB |
| Facility | John Good Jr BRK Pad | | |

WELLPATH COMMENTS

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Comment |
|----------|-----------------|-------------|----------|--|
| 260.00 | 0.800 | 324.880 | 259.99 | MSS <17.5"> (260'-430') |
| 513.00 | 0.700 | 247.180 | 512.99 | APS EM <12.25"> (430')(513'-1626') |
| 1724.00 | 13.000 | 238.250 | 1699.82 | APS EM <8.75"> (1626')(1724'-5809') |
| 5865.00 | 32.100 | 249.420 | 5214.24 | BH AT Curve <8.5"> (5809')(5865'-15532') |
| 15556.00 | 92.950 | 155.630 | 5979.94 | Projection to Bit |

COMMENTS

Wellpath general comments
API: 47-009-00198-0000
Job#: 8698650
Rig: SDC-46
Duration: 08/08/17 - 08/16/17

Top Hole Latitude: 40°15'00"

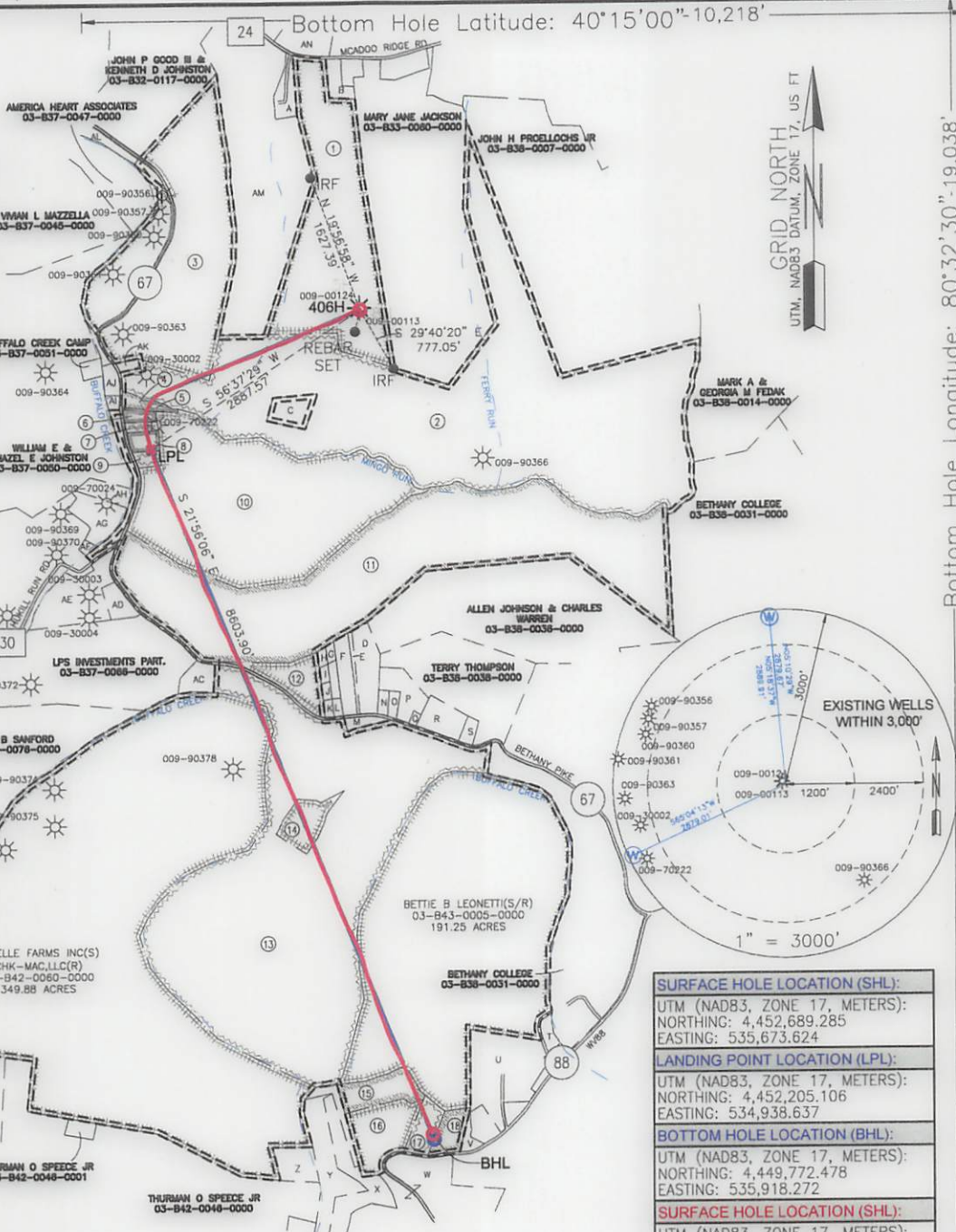
10,960'

THRASHER

THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

NOTES ON SURVEY

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM HAZEL E JOHNSTON 03-837-0050-0000 WITHIN 300 FEET OF LIMITS OF DISTURBANCE.



GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT

Bottom Hole Longitude: 80°32'30"-19,038'

Top Hole Longitude: 80°32'30"

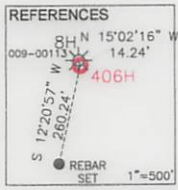
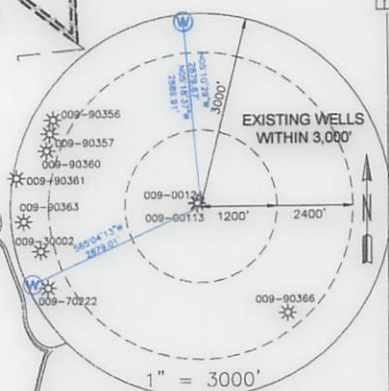
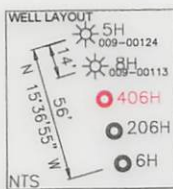
Top Hole Longitude: 80°32'30"

Top Hole Longitude: 80°32'30"

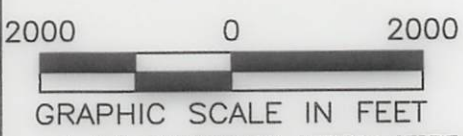
Top Hole Longitude: 80°32'30"

Top Hole Longitude: 80°32'30"

Top Hole Longitude: 80°32'30"



| |
|---|
| SURFACE HOLE LOCATION (SHL): |
| UTM (NAD83, ZONE 17, METERS): NORTHING: 4,452,689.285 EASTING: 5,35,673.624 |
| LANDING POINT LOCATION (LPL): |
| UTM (NAD83, ZONE 17, METERS): NORTHING: 4,452,205.106 EASTING: 5,34,938.637 |
| BOTTOM HOLE LOCATION (BHL): |
| UTM (NAD83, ZONE 17, METERS): NORTHING: 4,449,772.478 EASTING: 5,35,918.272 |
| SURFACE HOLE LOCATION (SHL): |
| UTM (NAD83, ZONE 17, METERS): NORTHING: 4,452,689.285 EASTING: 5,35,673.624 |
| LANDING POINT LOCATION (LPL): |
| UTM (NAD83, ZONE 17, METERS): NORTHING: 4,452,210.139 EASTING: 5,34,935.653 |
| BOTTOM HOLE LOCATION (BHL): |
| UTM (NAD83, ZONE 17, METERS): NORTHING: 4,449,790.385 EASTING: 5,35,914.276 |



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 2270 *M.S. Wolf 1/8/18*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WVDP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
 PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)

COMPANY: **SWN** Production Company, LLC

OPERATOR'S WELL #: JOHN GOOD JR BRK 406H
 API WELL #: 47 009 00198
 STATE COUNTY PERMIT

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
 WATERSHED: BUFFALO CREEK ELEVATION: 1152.6'
 DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: BETHANY
 SURFACE OWNER: JOHN P. GOOD III, TRUSTEE OF THE JOHN P. GOOD JR. IRREVOCABLE TRUST ACREAGE: 66.57
 OIL & GAS ROYALTY OWNER: JOHN P. GOOD JR. ACREAGE: 66.57
 DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) AS-DRILLED
 TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5,988' TVD 15,556' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL
 ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300
 CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

| | | | |
|---------------------------------------|---------------------|------------|------------------|
| LEGEND: | — SURVEYED BOUNDARY | REVISIONS: | DATE: 01-08-2018 |
| ● PROPOSED SURFACE HOLE / BOTTOM HOLE | — DRILLING UNIT | | |
| ⊙ EXISTING / PRODUCING WELLHEAD | — LEASE BOUNDARY | | |
| LPL* LANDING POINT LOCATION | — PROPOSED PATH | | |
| ⊙ EXISTING WATER WELL | — AS-DRILLED PATH | | |
| ⊙ EXISTING SPRING | | | |

DRAWN BY: R. DOERR
 SCALE: 1" = 2000'
 DRAWING NO: 050-5700
 WELL LOCATION PLAT

THRASHER

THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

| TRACT | SURFACE OWNER | TAX PARCEL | ACRES |
|-------|--|------------------|--------|
| 1 | JOHN P. GOOD II, TRUSTEE OF THE JOHN P. GOOD JR. IRREVOCABLE TRUST | 03-838-0001-0000 | 86.57 |
| 2 | STARVAGGI INDUSTRIES INC | 03-837-0053-0000 | 215.08 |
| 3 | BONNIE LEE LUKACENA, SHELBY CARRELL, SHAYNE SCHUETZNER, SHANON SCHUETZNER, SHEY SCHUETZNER, CHERI SHARPE, JOHN THOMAS RODGERS, PAIGE ELIZABETH ROLLINS | 03-837-0048-0000 | 81.50 |
| 4 | VERNON E SMITH, REBECCA HALL, LAWRENCE PAUL SMITH, LINDA DARLENE CAREY, VERNON EUGENE SMITH JR | 03-837-0054-0000 | 0.97 |
| 5 | MARLIN G SR & JOY CRAWFORD | 03-837-0055-0000 | 1.33 |
| 6 | ERWIN R JR & ARLENE CORWIN | 03-837-0056-0000 | 1.11 |
| 7 | JEREMY S PERSINGER | 03-837-0057-0000 | 1.07 |
| 8 | TRAVIS POLEN | 03-837-0059-0000 | 1.84 |
| 9 | JOHN E & SHERRILL J RIPLEY | 03-837-0061-0000 | 1.30 |
| 10 | WILDA L RIPLEY, JOHN E & SHERRILL J RIPLEY | 03-837-0062-0000 | 95.40 |
| 11 | MELVIN E PELUCHETTE | 03-837-0063-0000 | 109.39 |
| 12 | SHAWN C ARACICH | 03-837-0064-0000 | 8.30 |
| 13 | ELLEN B SANFORD, ROBERT & EVELEYN CHEHL, STEPHEN & ANN PAULL, HARRY SANFORD, JAMES & JO ELLEN HAZLETT | 03-838-0059-0000 | 203.93 |
| 14 | JAMES A & JO ELLEN HAZLETT | 03-843-0064-0000 | 5.74 |
| 15 | WINDSOR POWER HOUSE COAL CO | 03-843-0015-0000 | 5.74 |
| 16 | MARY LOU CHAMBERS | 03-843-0014-0000 | 11.25 |
| 17 | MARY LOU CHAMBERS | 03-843-0013-0000 | 3.77 |
| 18 | MARY LOU CHAMBERS | 03-843-0012-0000 | 2.00 |

| TRACT | ADJOINER | TAX PARCEL |
|-------|------------------------------|------------------|
| A | JOHN P. GOOD JR | 03-832-0119-0000 |
| B | JOHN P. GOOD JR | 03-833-0057-0000 |
| C | MARLIN G CRAWFORD | 03-837-0053-0002 |
| D | MARK T NICHOLSON | 03-838-0045-0000 |
| E | MARK T NICHOLSON | 03-838-0046-0000 |
| F | HARRY J LOWE | 03-838-0047-0000 |
| G | LESLIE & GAYLENE ELSON | 03-838-0051-0000 |
| H | LESLIE & GAYLENE ELSON | 03-838-0052-0000 |
| I | LESLIE & GAYLENE ELSON | 03-838-0053-0000 |
| J | LESLIE & GAYLENE ELSON | 03-838-0054-0000 |
| K | LESLIE & GAYLENE ELSON | 03-838-0055-0000 |
| L | LESLIE & GAYLENE ELSON | 03-838-0048-0000 |
| M | PENNY M STUMPF | 03-838-0057-0000 |
| N | MATHEW T NICHOLSON | 03-838-0043-0000 |
| O | MARK T NICHOLSON | 03-838-0042-0001 |
| P | ROY T NICHOLSON | 03-838-0042-0000 |
| Q | ROY T NICHOLSON | 03-838-0041-0000 |
| R | AMY LYNN RICE | 03-838-0040-0000 |
| S | GEORGE S RICE | 03-838-0039-0000 |
| T | BRIAN CORWIN | 03-843-0026-0000 |
| U | JOHN BECK | 03-843-0006-0000 |
| V | MARY WELLS CHAMBERS | 03-843-0011-0000 |
| W | WILLIAM P & YVONNE I GROOMS | 03-843-0017-0000 |
| X | WINDSOR POWER HOUSE COAL CO | 03-843-0016-0000 |
| Y | WINDSOR POWER HOUSE COAL CO | 03-842-0048-0000 |
| Z | THURMAN D SPEECE JR | 03-842-0047-0000 |
| AA | AUSTIN W WADE | 03-842-0050-0000 |
| AB | AUSTIN WADE | 03-842-0080-0001 |
| AC | JOHN B DAUGHERTY | 03-837-0065-0000 |
| AD | KETH LORAE | 03-837-0067-0000 |
| AE | THEODORE W BUNNELL | 03-837-0068-0000 |
| AF | WILLIAM E & HAZEL E JOHNSTON | 03-837-0069-0000 |
| AG | JOSEPH K BOBMAN | 03-837-0069-0001 |
| AH | JOSEPH K BOBMAN SR | 03-837-0070-0000 |
| AI | MARLIN G CRAWFORD SR | 03-837-0055-0000 |
| AJ | WILLIAM E & HAZEL E JOHNSTON | 03-837-0053-0001 |
| AK | CLEO KLAGES | 03-837-0052-0000 |
| AL | BONNIE LUKACENA | 03-837-0049-0000 |
| AM | MARSH LIVING TRUST | 03-832-0118-0000 |
| AN | BRIAN BRODSALL | 03-832-0120-0000 |

COMPANY:

SWN

Production Company, LLC

SWN ^{R+}/_A → V+®

Production Company™

JOHN GOOD JR

OPERATOR'S WELL #:

BRK 406H

| | |
|------------|----------------------|
| REVISIONS: | DATE: 01-08-2018 |
| | DRAWN BY: R. DOERR |
| | SCALE: 1" = 2000' |
| | DRAWING NO: 050-5700 |
| | WELL LOCATION PLAT |