

| REFERENCE WELLPATH IDENTIFICATION | | | |
|-----------------------------------|-----------------------------|----------------|---|
| Operator | SWN PRODUCTION COMPANY, LLC | Well | OCC A OHI 1H ST01 |
| Field | Ohio | API | 47069003400100 |
| Facility | OCC A OHI Pad | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | Sidetrack from | OCC A OHI 1H AWB_awp 142' - 24020' Proj: 24045' at 1988.00 MD |

| REPORT SETUP INFORMATION | | | |
|--------------------------|------------------------------------|------------------|-------------------------|
| Projection System | NAD83 / UTM Zone 17 North, US feet | Software System | WellArchitect® 6.0 |
| North Reference | Grid | User | Tranlam |
| Scale | 0.999614 | Report Generated | 8/15/2022 at 9:43:20 AM |
| Convergence at slot | 0.26° East | Database | WA_MPL_EASTERNU_S_Defn |

| WELLPATH LOCATION | | | | | | |
|-----------------------|-------------------|----------|------------------|-----------------|------------------------|-----------------|
| | Local coordinates | | Grid coordinates | | Geographic coordinates | |
| | North[ft] | East[ft] | Easting[US ft] | Northing[US ft] | Latitude | Longitude |
| Slot Location | -13.95 | 0.56 | 1752837.46 | 14555908.82 | 40°04'45.9244"N | 80°35'53.1772"W |
| Facility Reference Pt | | | 1752836.90 | 14555922.76 | 40°04'46.0622"N | 80°35'53.1835"W |
| Field Reference Pt | | | 0.00 | 0.00 | 0°00'0.0000" | 85°29'19.4780"W |

| WELLPATH DATUM | | | |
|--------------------------|-------------------|---|-------------------|
| Calculation method | Minimum curvature | SDC 40 (RKB) to Facility Vertical Datum | 1121.20ft |
| Horizontal Reference Pt | Slot | SDC 40 (RKB) to Mean Sea Level | 1121.20ft |
| Vertical Reference Pt | SDC 40 (RKB) | SDC 40 (RKB) to Ground Level at Slot (1H) | 26.00ft |
| MD Reference Pt | SDC 40 (RKB) | Section Origin | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level | Section Azimuth | 338.40° |

RECEIVED
Office of Oil and Gas
APR 14 2023
Environmental Protection

Actual Wellpath Report

OCC A OHI 1H ST01 awp 2083' - 22910' Proj: 22935'

| REFERENCE WELLPATH IDENTIFICATION | | | | |
|-----------------------------------|-----------------------------|--|----------------|--|
| Operator | SWN PRODUCTION COMPANY, LLC | | Well | OCC A OHI 1H ST01 |
| Field | Ohio | | API | 47069003400100 |
| Facility | OCC A OHI Pad | | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | | Sidetrack from | OCC A OHI 1H AWB_ awp 142' - 24020' Proj: 24045' at 1988.00 MD |

| WELLPATH DATA (250 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] | Comments |
| 0.00† | 0.000 | 248.310 | 0.00 | 0.00 | 0.00 | 0.00 | 1752837.46 | 14555908.82 | 40°04'45.9244"N | 80°35'53.1772"W | 0.00 | 0.000 | 0.00 | |
| 26.00 | 0.000 | 248.310 | 26.00 | 0.00 | 0.00 | 0.00 | 1752837.46 | 14555908.82 | 40°04'45.9244"N | 80°35'53.1772"W | 0.00 | 0.000 | 0.00 | |
| 142.00 | 0.330 | 248.310 | 142.00 | 0.00 | -0.12 | -0.31 | 1752837.15 | 14555908.70 | 40°04'45.9232"N | 80°35'53.1812"W | 0.33 | 248.310 | 0.28 | 1 Tally MWD 142' - 495' |
| 233.00 | 0.280 | 201.550 | 233.00 | -0.16 | -0.43 | -0.64 | 1752836.82 | 14555908.39 | 40°04'45.9202"N | 80°35'53.1854"W | 0.77 | 236.098 | 0.27 | |
| 323.00 | 0.160 | 179.440 | 323.00 | -0.44 | -0.76 | -0.72 | 1752836.75 | 14555908.06 | 40°04'45.9170"N | 80°35'53.1864"W | 1.04 | 223.359 | 0.16 | |
| 414.00 | 0.410 | 197.080 | 414.00 | -0.81 | -1.20 | -0.81 | 1752836.65 | 14555907.62 | 40°04'45.9126"N | 80°35'53.1876"W | 1.44 | 214.101 | 0.29 | |
| 495.00 | 0.440 | 205.750 | 494.99 | -1.25 | -1.75 | -1.03 | 1752836.43 | 14555907.07 | 40°04'45.9071"N | 80°35'53.1905"W | 2.03 | 210.434 | 0.09 | |
| 594.00 | 0.550 | 220.460 | 593.99 | -1.73 | -2.46 | -1.50 | 1752835.96 | 14555906.36 | 40°04'45.9002"N | 80°35'53.1966"W | 2.88 | 211.462 | 0.17 | 2 Tally MWD 594' - 1830' |
| 686.00 | 1.110 | 150.030 | 685.98 | -2.82 | -3.56 | -1.34 | 1752836.12 | 14555905.26 | 40°04'45.8892"N | 80°35'53.1947"W | 3.81 | 200.667 | 1.15 | |
| 777.00 | 2.810 | 127.130 | 776.93 | -5.60 | -5.67 | 0.87 | 1752838.33 | 14555903.15 | 40°04'45.8683"N | 80°35'53.1662"W | 5.74 | 171.242 | 2.02 | |
| 868.00 | 5.040 | 123.830 | 867.71 | -10.80 | -9.25 | 5.97 | 1752843.43 | 14555899.58 | 40°04'45.8328"N | 80°35'53.1008"W | 11.01 | 147.137 | 2.46 | |
| 959.00 | 6.490 | 131.300 | 958.25 | -18.67 | -14.87 | 13.16 | 1752850.61 | 14555893.96 | 40°04'45.7769"N | 80°35'53.0087"W | 19.85 | 138.489 | 1.79 | |
| 1050.00 | 8.140 | 140.020 | 1048.51 | -29.36 | -23.20 | 21.16 | 1752858.61 | 14555885.63 | 40°04'45.6942"N | 80°35'52.9063"W | 31.40 | 137.629 | 2.18 | |
| 1142.00 | 8.880 | 150.470 | 1139.50 | -42.58 | -34.37 | 28.85 | 1752866.30 | 14555874.46 | 40°04'45.5835"N | 80°35'52.8080"W | 44.87 | 139.992 | 1.86 | |
| 1234.00 | 10.740 | 156.620 | 1230.15 | -58.18 | -48.42 | 35.75 | 1752873.20 | 14555860.42 | 40°04'45.4443"N | 80°35'52.7201"W | 60.19 | 143.559 | 2.32 | |
| 1323.00 | 13.750 | 156.390 | 1317.12 | -77.04 | -65.72 | 43.28 | 1752880.72 | 14555843.12 | 40°04'45.2730"N | 80°35'52.6242"W | 78.69 | 146.636 | 3.38 | |
| 1413.00 | 16.580 | 154.250 | 1403.97 | -100.54 | -87.10 | 53.14 | 1752890.58 | 14555821.76 | 40°04'45.0613"N | 80°35'52.4986"W | 102.03 | 148.610 | 3.20 | |
| 1505.00 | 17.320 | 153.570 | 1491.98 | -127.28 | -111.18 | 64.94 | 1752902.38 | 14555797.68 | 40°04'44.8228"N | 80°35'52.3482"W | 128.76 | 149.711 | 0.83 | |
| 1595.00 | 18.460 | 156.060 | 1577.62 | -154.87 | -136.20 | 76.69 | 1752914.12 | 14555772.67 | 40°04'44.5750"N | 80°35'52.1985"W | 156.31 | 150.619 | 1.53 | |
| 1687.00 | 21.100 | 156.380 | 1664.19 | -185.98 | -164.69 | 89.23 | 1752926.66 | 14555744.19 | 40°04'44.2929"N | 80°35'52.0388"W | 187.31 | 151.550 | 2.87 | |
| 1779.00 | 22.370 | 157.000 | 1749.65 | -220.03 | -195.98 | 102.71 | 1752940.13 | 14555712.91 | 40°04'43.9831"N | 80°35'51.8672"W | 221.27 | 152.342 | 1.40 | |
| 1830.00 | 23.260 | 157.350 | 1796.66 | -239.80 | -214.21 | 110.38 | 1752947.80 | 14555694.69 | 40°04'43.8026"N | 80°35'51.7696"W | 240.98 | 152.738 | 1.77 | |
| 1896.00 | 24.760 | 155.300 | 1856.94 | -266.63 | -238.79 | 121.18 | 1752958.59 | 14555670.12 | 40°04'43.5592"N | 80°35'51.6322"W | 267.78 | 153.095 | 2.60 | 3 Tally MWD 1896' - 4453' |
| 1988.00 | 25.410 | 158.310 | 1940.27 | -305.61 | -274.64 | 136.52 | 1752973.93 | 14555634.29 | 40°04'43.2043"N | 80°35'51.4369"W | 306.70 | 153.568 | 1.56 | |
| 2083.00 | 26.110 | 164.450 | 2025.84 | -346.79 | -313.73 | 149.66 | 1752987.06 | 14555595.22 | 40°04'42.8175"N | 80°35'51.2701"W | 347.60 | 154.497 | 2.90 | 1 BH MWD 2083' - 5451' |
| 2176.00 | 26.620 | 164.880 | 2109.17 | -387.84 | -353.56 | 160.58 | 1752997.98 | 14555555.40 | 40°04'42.4234"N | 80°35'51.1319"W | 388.31 | 155.573 | 0.59 | |
| 2267.00 | 26.880 | 168.530 | 2190.44 | -428.35 | -393.40 | 169.99 | 1753007.39 | 14555515.57 | 40°04'42.0292"N | 80°35'51.0132"W | 428.56 | 156.630 | 1.83 | |
| 2357.00 | 26.820 | 167.920 | 2270.73 | -468.40 | -433.19 | 178.29 | 1753015.68 | 14555475.79 | 40°04'41.6356"N | 80°35'50.9088"W | 468.45 | 157.630 | 0.31 | |
| 2448.00 | 24.530 | 167.590 | 2352.74 | -507.30 | -471.72 | 186.64 | 1753024.03 | 14555437.28 | 40°04'41.2545"N | 80°35'50.8035"W | 507.30 | 158.413 | 2.52 | |
| 2465.00 | 21.300 | 169.620 | 2368.40 | -513.82 | -478.21 | 187.96 | 1753025.35 | 14555430.80 | 40°04'41.1903"N | 80°35'50.7870"W | 513.82 | 158.543 | 19.56 | |

| REFERENCE WELLPATH IDENTIFICATION | | | |
|-----------------------------------|-----------------------------|----------------|--|
| Operator | SWN PRODUCTION COMPANY, LLC | Well | OCC A OHI 1H ST01 |
| Field | Ohio | API | 47069003400100 |
| Facility | OCC A OHI Pad | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | Sidetrack from | OCC A OHI 1H AWB_ awp 142' - 24020' Proj: 24045' at 1988.00 MD |

| WELLPATH DATA (250 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] | Comments |
| 2538.00 | 20.910 | 176.130 | 2436.51 | -539.24 | -504.25 | 191.23 | 1753028.61 | 14555404.77 | 40°04'40.9328"N | 80°35'50.7465"W | 539.29 | 159.232 | 3.25 | |
| 2630.00 | 22.860 | 175.750 | 2521.88 | -571.93 | -538.45 | 193.66 | 1753031.04 | 14555370.57 | 40°04'40.5947"N | 80°35'50.7172"W | 572.22 | 160.218 | 2.13 | |
| 2721.00 | 24.000 | 174.820 | 2605.38 | -606.56 | -574.51 | 196.64 | 1753034.02 | 14555334.53 | 40°04'40.2382"N | 80°35'50.6809"W | 607.23 | 161.105 | 1.32 | |
| 2812.00 | 24.080 | 174.720 | 2688.48 | -642.13 | -611.43 | 200.02 | 1753037.40 | 14555297.63 | 40°04'39.8733"N | 80°35'50.6396"W | 643.32 | 161.885 | 0.10 | |
| 2903.00 | 24.090 | 175.240 | 2771.56 | -677.72 | -648.42 | 203.27 | 1753040.65 | 14555260.65 | 40°04'39.5075"N | 80°35'50.5999"W | 679.54 | 162.595 | 0.23 | |
| 2993.00 | 24.070 | 174.590 | 2853.73 | -712.92 | -685.00 | 206.52 | 1753043.90 | 14555224.09 | 40°04'39.1459"N | 80°35'50.5602"W | 715.46 | 163.222 | 0.30 | |
| 3085.00 | 24.110 | 174.790 | 2937.72 | -748.97 | -722.39 | 210.00 | 1753047.38 | 14555186.71 | 40°04'38.7763"N | 80°35'50.5177"W | 752.30 | 163.791 | 0.10 | |
| 3176.00 | 24.020 | 174.570 | 3020.81 | -784.59 | -759.34 | 213.44 | 1753050.82 | 14555149.78 | 40°04'38.4110"N | 80°35'50.4756"W | 788.77 | 164.300 | 0.14 | |
| 3266.00 | 23.870 | 174.610 | 3103.06 | -819.67 | -795.70 | 216.88 | 1753054.26 | 14555113.43 | 40°04'38.0515"N | 80°35'50.4334"W | 824.73 | 164.753 | 0.17 | |
| 3357.00 | 23.950 | 175.080 | 3186.25 | -855.04 | -832.44 | 220.20 | 1753057.57 | 14555076.71 | 40°04'37.6884"N | 80°35'50.3929"W | 861.07 | 165.183 | 0.23 | |
| 3448.00 | 23.910 | 174.500 | 3269.43 | -890.45 | -869.19 | 223.55 | 1753060.92 | 14555039.96 | 40°04'37.3250"N | 80°35'50.3519"W | 897.48 | 165.577 | 0.26 | |
| 3540.00 | 23.940 | 175.000 | 3353.52 | -926.25 | -906.35 | 226.96 | 1753064.33 | 14555002.82 | 40°04'36.9577"N | 80°35'50.3102"W | 934.33 | 165.941 | 0.22 | |
| 3633.00 | 23.800 | 174.780 | 3438.57 | -962.34 | -943.83 | 230.31 | 1753067.68 | 14554965.35 | 40°04'36.5871"N | 80°35'50.2692"W | 971.53 | 166.287 | 0.18 | |
| 3724.00 | 25.410 | 178.130 | 3521.31 | -998.33 | -981.63 | 232.62 | 1753069.99 | 14554927.57 | 40°04'36.2134"N | 80°35'50.2418"W | 1008.82 | 166.668 | 2.34 | |
| 3815.00 | 25.530 | 177.700 | 3603.46 | -1035.22 | -1020.74 | 234.05 | 1753071.42 | 14554888.47 | 40°04'35.8269"N | 80°35'50.2257"W | 1047.23 | 167.086 | 0.24 | |
| 3906.00 | 25.250 | 178.040 | 3685.67 | -1072.01 | -1059.73 | 235.50 | 1753072.87 | 14554849.50 | 40°04'35.4415"N | 80°35'50.2093"W | 1085.58 | 167.471 | 0.35 | |
| 3996.00 | 24.410 | 177.830 | 3767.35 | -1107.62 | -1097.50 | 236.86 | 1753074.23 | 14554811.74 | 40°04'35.0682"N | 80°35'50.1940"W | 1122.77 | 167.821 | 0.94 | |
| 4088.00 | 25.340 | 177.740 | 3850.82 | -1144.13 | -1136.17 | 238.35 | 1753075.72 | 14554773.09 | 40°04'34.6860"N | 80°35'50.1770"W | 1160.90 | 168.152 | 1.01 | |
| 4179.00 | 24.660 | 177.520 | 3933.29 | -1180.44 | -1174.60 | 239.94 | 1753077.31 | 14554734.68 | 40°04'34.3062"N | 80°35'50.1588"W | 1198.85 | 168.455 | 0.75 | |
| 4269.00 | 25.370 | 177.520 | 4014.85 | -1216.40 | -1212.62 | 241.59 | 1753078.96 | 14554696.67 | 40°04'33.9304"N | 80°35'50.1398"W | 1236.45 | 168.732 | 0.79 | |
| 4361.00 | 23.800 | 177.510 | 4098.51 | -1252.56 | -1250.86 | 243.25 | 1753080.61 | 14554658.45 | 40°04'33.5525"N | 80°35'50.1207"W | 1274.29 | 168.995 | 1.71 | |
| 4452.00 | 25.260 | 177.780 | 4181.29 | -1288.23 | -1288.60 | 244.80 | 1753082.16 | 14554620.72 | 40°04'33.1794"N | 80°35'50.1030"W | 1311.65 | 169.244 | 1.61 | |
| 4542.00 | 25.280 | 177.980 | 4262.68 | -1324.45 | -1327.00 | 246.22 | 1753083.58 | 14554582.34 | 40°04'32.7999"N | 80°35'50.0869"W | 1349.65 | 169.488 | 0.10 | |
| 4633.00 | 24.830 | 178.120 | 4345.11 | -1360.74 | -1365.51 | 247.53 | 1753084.90 | 14554543.84 | 40°04'32.4192"N | 80°35'50.0723"W | 1387.77 | 169.725 | 0.50 | |
| 4723.00 | 25.190 | 177.690 | 4426.68 | -1396.61 | -1403.54 | 248.92 | 1753086.29 | 14554505.83 | 40°04'32.0434"N | 80°35'50.0566"W | 1425.44 | 169.943 | 0.45 | |
| 4815.00 | 25.040 | 178.210 | 4509.98 | -1433.41 | -1442.56 | 250.32 | 1753087.68 | 14554466.82 | 40°04'31.6577"N | 80°35'50.0409"W | 1464.12 | 170.156 | 0.29 | |
| 4906.00 | 24.920 | 178.100 | 4592.46 | -1469.57 | -1480.97 | 251.56 | 1753088.92 | 14554428.43 | 40°04'31.2781"N | 80°35'50.0272"W | 1502.18 | 170.360 | 0.14 | |
| 4998.00 | 25.530 | 178.240 | 4675.69 | -1506.47 | -1520.16 | 252.81 | 1753090.17 | 14554389.25 | 40°04'30.8908"N | 80°35'50.0134"W | 1541.03 | 170.558 | 0.67 | |
| 5088.00 | 26.320 | 177.960 | 4756.63 | -1543.52 | -1559.48 | 254.12 | 1753091.48 | 14554349.94 | 40°04'30.5021"N | 80°35'49.9989"W | 1580.05 | 170.745 | 0.89 | |
| 5179.00 | 26.190 | 177.840 | 4838.25 | -1581.46 | -1599.71 | 255.59 | 1753092.95 | 14554309.73 | 40°04'30.1045"N | 80°35'49.9823"W | 1620.00 | 170.922 | 0.15 | |



RECEIVED
Office of Oil and Gas
APR 14 2023

Actual Wellpath Report

OCC A OHI 1H ST01 awp 2083' - 22910' Proj: 22935'

Page 4 of 11



WV Department of
Environmental Protection

REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|-----------------------------|----------------|--|
| Operator | SWN PRODUCTION COMPANY, LLC | Well | OCC A OHI 1H ST01 |
| Field | Ohio | API | 47069003400100 |
| Facility | OCC A OHI Pad | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | Sidetrack from | OCC A OHI 1H AWB_ awp 142' - 24020' Proj: 24045' at 1988.00 MD |

WELLPATH DATA (250 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] | Comments |
|---------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|-----------------|-----------------|-------------------|-----------------|---------------|-------------------------|
| 5270.00 | 26.150 | 177.870 | 4919.92 | -1619.30 | -1639.82 | 257.09 | 1753094.45 | 14554269.64 | 40°04'29.7081"N | 80°35'49.9653"W | 1659.85 | 171.090 | 0.05 | |
| 5360.00 | 26.300 | 178.030 | 5000.65 | -1656.78 | -1679.56 | 258.52 | 1753095.88 | 14554229.91 | 40°04'29.3153"N | 80°35'49.9493"W | 1699.34 | 171.250 | 0.18 | |
| 5451.00 | 25.700 | 177.860 | 5082.44 | -1694.38 | -1719.43 | 259.95 | 1753097.30 | 14554190.06 | 40°04'28.9213"N | 80°35'49.9332"W | 1738.97 | 171.403 | 0.66 | |
| 5537.00 | 25.510 | 177.870 | 5160.00 | -1729.42 | -1756.57 | 261.33 | 1753098.69 | 14554152.93 | 40°04'28.5542"N | 80°35'49.9176"W | 1775.90 | 171.538 | 0.22 | 2 BH MWD 5537' - 22910' |
| 5628.00 | 21.270 | 186.760 | 5243.53 | -1762.44 | -1792.57 | 260.11 | 1753097.47 | 14554116.95 | 40°04'28.1985"N | 80°35'49.9353"W | 1811.34 | 171.744 | 6.05 | |
| 5718.00 | 17.620 | 198.950 | 5328.41 | -1787.18 | -1821.68 | 253.76 | 1753091.13 | 14554087.84 | 40°04'27.9110"N | 80°35'50.0187"W | 1839.27 | 172.070 | 6.04 | |
| 5809.00 | 14.450 | 221.100 | 5415.94 | -1802.87 | -1843.29 | 241.81 | 1753079.18 | 14554066.24 | 40°04'27.6980"N | 80°35'50.1737"W | 1859.09 | 172.526 | 7.51 | |
| 5900.00 | 14.610 | 245.340 | 5504.11 | -1808.69 | -1856.65 | 223.90 | 1753061.28 | 14554052.89 | 40°04'27.5211"N | 80°35'50.4048"W | 1870.10 | 173.124 | 6.64 | |
| 5991.00 | 17.090 | 270.260 | 5591.75 | -1804.32 | -1861.38 | 200.07 | 1753037.45 | 14554048.16 | 40°04'27.5211"N | 80°35'50.7117"W | 1872.10 | 173.865 | 7.89 | |
| 6083.00 | 21.330 | 285.520 | 5678.66 | -1789.17 | -1856.84 | 170.40 | 1753007.79 | 14554052.70 | 40°04'27.5673"N | 80°35'51.0931"W | 1864.64 | 174.757 | 7.11 | |
| 6173.00 | 26.600 | 295.830 | 5760.91 | -1764.43 | -1843.67 | 136.45 | 1752973.86 | 14554065.87 | 40°04'27.6990"N | 80°35'51.5290"W | 1848.71 | 175.767 | 7.46 | |
| 6265.00 | 31.560 | 301.390 | 5841.30 | -1730.01 | -1822.13 | 97.33 | 1752934.75 | 14554087.39 | 40°04'27.9136"N | 80°35'52.0310"W | 1824.73 | 176.942 | 6.13 | |
| 6356.00 | 37.300 | 306.630 | 5916.35 | -1687.50 | -1793.25 | 54.83 | 1752892.27 | 14554116.27 | 40°04'28.2009"N | 80°35'52.5760"W | 1794.09 | 178.249 | 7.09 | |
| 6447.00 | 43.260 | 310.560 | 5985.75 | -1636.44 | -1756.48 | 8.96 | 1752846.42 | 14554153.02 | 40°04'28.5663"N | 80°35'53.1639"W | 1756.51 | 179.708 | 7.12 | |
| 6538.00 | 49.390 | 315.710 | 6048.58 | -1576.92 | -1711.42 | -38.91 | 1752798.57 | 14554198.06 | 40°04'29.0137"N | 80°35'53.7771"W | 1711.87 | 181.302 | 7.88 | |
| 6630.00 | 56.470 | 321.220 | 6104.03 | -1507.94 | -1656.44 | -87.40 | 1752750.10 | 14554253.03 | 40°04'29.5593"N | 80°35'54.3976"W | 1658.74 | 183.020 | 9.05 | |
| 6721.00 | 63.640 | 325.620 | 6149.44 | -1431.82 | -1593.12 | -134.25 | 1752703.26 | 14554316.32 | 40°04'30.1871"N | 80°35'54.9967"W | 1598.76 | 184.817 | 8.92 | |
| 6812.00 | 71.210 | 327.950 | 6184.36 | -1349.57 | -1522.85 | -180.20 | 1752657.33 | 14554386.56 | 40°04'30.8835"N | 80°35'55.5837"W | 1533.47 | 186.749 | 8.65 | |
| 6903.00 | 77.940 | 330.300 | 6208.55 | -1263.05 | -1447.59 | -225.17 | 1752612.38 | 14554461.79 | 40°04'31.6292"N | 80°35'56.1577"W | 1465.00 | 188.841 | 7.80 | |
| 6995.00 | 83.650 | 332.640 | 6223.26 | -1172.94 | -1367.84 | -268.51 | 1752569.06 | 14554541.51 | 40°04'32.4193"N | 80°35'56.7106"W | 1393.94 | 191.106 | 6.69 | |
| 7086.00 | 90.310 | 335.520 | 6228.05 | -1082.38 | -1286.16 | -308.20 | 1752529.38 | 14554623.16 | 40°04'33.2282"N | 80°35'57.2164"W | 1322.57 | 193.475 | 7.97 | |
| 7176.00 | 91.020 | 338.380 | 6227.01 | -992.43 | -1203.36 | -343.43 | 1752494.17 | 14554705.93 | 40°04'34.0480"N | 80°35'57.6648"W | 1251.40 | 195.928 | 3.27 | |
| 7268.00 | 90.460 | 337.680 | 6225.82 | -900.44 | -1118.04 | -377.84 | 1752459.76 | 14554791.21 | 40°04'34.8926"N | 80°35'58.1026"W | 1180.17 | 198.673 | 0.97 | |
| 7359.00 | 90.620 | 337.290 | 6224.96 | -809.45 | -1033.98 | -412.69 | 1752424.93 | 14554875.24 | 40°04'35.7249"N | 80°35'58.5460"W | 1113.30 | 201.758 | 0.46 | |
| 7450.00 | 90.490 | 337.610 | 6224.08 | -718.47 | -949.95 | -447.58 | 1752390.05 | 14554959.24 | 40°04'36.5569"N | 80°35'58.9900"W | 1050.11 | 205.228 | 0.38 | |
| 7540.00 | 90.650 | 335.730 | 6223.19 | -628.52 | -867.31 | -483.22 | 1752354.42 | 14555041.84 | 40°04'37.3751"N | 80°35'59.4437"W | 992.84 | 209.124 | 2.10 | |
| 7632.00 | 90.920 | 335.700 | 6221.93 | -536.63 | -783.46 | -521.06 | 1752316.61 | 14555125.66 | 40°04'38.2054"N | 80°35'59.9256"W | 940.91 | 213.627 | 0.30 | |
| 7723.00 | 90.310 | 337.770 | 6220.95 | -445.68 | -699.87 | -557.00 | 1752280.68 | 14555209.22 | 40°04'39.0330"N | 80°36'0.3830"W | 894.46 | 218.515 | 2.37 | |
| 7813.00 | 90.460 | 337.710 | 6220.34 | -355.69 | -616.58 | -591.09 | 1752246.60 | 14555292.48 | 40°04'39.8576"N | 80°36'0.8168"W | 854.14 | 223.791 | 0.18 | |
| 7904.00 | 91.080 | 336.330 | 6219.12 | -264.72 | -532.81 | -626.61 | 1752211.09 | 14555376.22 | 40°04'40.6870"N | 80°36'1.2689"W | 822.51 | 229.625 | 1.66 | |

| REFERENCE WELLPATH IDENTIFICATION | | | |
|-----------------------------------|-----------------------------|----------------|--|
| Operator | SWN PRODUCTION COMPANY, LLC | Well | OCC A OHI 1H ST01 |
| Field | Ohio | API | 47069003400100 |
| Facility | OCC A OHI Pad | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | Sidetrack from | OCC A OHI 1H AWB_ awp 142' - 24020' Proj: 24045' at 1988.00 MD |

| WELLPATH DATA (250 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] | Comments |
| 7994.00 | 90.150 | 331.490 | 6218.16 | -175.03 | -452.01 | -666.18 | 1752171.54 | 14555456.98 | 40°04'41.4872"N | 80°36'1.7732"W | 805.05 | 235.843 | 5.48 | |
| 8085.00 | 90.220 | 334.860 | 6217.86 | -84.43 | -370.82 | -707.24 | 1752130.50 | 14555538.15 | 40°04'42.2914"N | 80°36'2.2967"W | 798.55 | 242.331 | 3.70 | |
| 8175.00 | 90.090 | 333.710 | 6217.62 | 5.34 | -289.73 | -746.29 | 1752091.46 | 14555619.20 | 40°04'43.0945"N | 80°36'2.7944"W | 800.55 | 248.782 | 1.29 | |
| 8266.00 | 90.060 | 335.530 | 6217.50 | 96.14 | -207.52 | -785.29 | 1752052.48 | 14555701.38 | 40°04'43.9086"N | 80°36'3.2914"W | 812.25 | 255.198 | 2.00 | |
| 8358.00 | 90.490 | 337.500 | 6217.06 | 188.08 | -123.14 | -821.95 | 1752015.83 | 14555785.72 | 40°04'44.7440"N | 80°36'3.7582"W | 831.12 | 261.479 | 2.19 | |
| 8448.00 | 90.060 | 337.480 | 6216.63 | 278.07 | -40.00 | -856.41 | 1751981.39 | 14555868.83 | 40°04'45.5672"N | 80°36'4.1966"W | 857.34 | 267.326 | 0.48 | |
| 8540.00 | 90.340 | 337.680 | 6216.30 | 370.06 | 45.04 | -891.49 | 1751946.31 | 14555953.85 | 40°04'46.4092"N | 80°36'4.6431"W | 892.63 | 272.892 | 0.37 | |
| 8630.00 | 90.310 | 337.680 | 6215.79 | 460.05 | 128.30 | -925.67 | 1751912.15 | 14556037.07 | 40°04'47.2334"N | 80°36'5.0780"W | 934.52 | 277.891 | 0.03 | |
| 8722.00 | 90.150 | 337.340 | 6215.42 | 552.04 | 213.30 | -960.86 | 1751876.97 | 14556122.04 | 40°04'48.0750"N | 80°36'5.5258"W | 984.25 | 282.516 | 0.41 | |
| 8813.00 | 90.090 | 337.080 | 6215.23 | 643.02 | 297.20 | -996.11 | 1751841.73 | 14556205.90 | 40°04'48.9056"N | 80°36'5.9745"W | 1039.50 | 286.613 | 0.29 | |
| 8903.00 | 90.800 | 337.780 | 6214.53 | 733.00 | 380.30 | -1030.66 | 1751807.20 | 14556288.97 | 40°04'49.7284"N | 80°36'6.4140"W | 1098.58 | 290.253 | 1.11 | |
| 8993.00 | 90.980 | 338.520 | 6213.14 | 822.99 | 463.82 | -1064.15 | 1751773.73 | 14556372.46 | 40°04'50.5552"N | 80°36'6.8401"W | 1160.84 | 293.551 | 0.85 | |
| 9085.00 | 90.800 | 338.330 | 6211.71 | 914.98 | 549.37 | -1097.97 | 1751739.91 | 14556457.97 | 40°04'51.4021"N | 80°36'7.2703"W | 1227.74 | 296.581 | 0.28 | |
| 9176.00 | 90.220 | 336.880 | 6210.90 | 1005.96 | 633.50 | -1132.64 | 1751705.26 | 14556542.07 | 40°04'52.2350"N | 80°36'7.7115"W | 1297.77 | 299.219 | 1.72 | |
| 9267.00 | 90.650 | 336.230 | 6210.21 | 1096.91 | 716.98 | -1168.85 | 1751669.07 | 14556625.52 | 40°04'53.0616"N | 80°36'8.1724"W | 1371.23 | 301.525 | 0.86 | |
| 9357.00 | 90.680 | 336.520 | 6209.16 | 1186.85 | 799.43 | -1204.91 | 1751633.02 | 14556707.94 | 40°04'53.8780"N | 80°36'8.6317"W | 1446.00 | 303.563 | 0.32 | |
| 9448.00 | 90.710 | 336.600 | 6208.06 | 1277.80 | 882.92 | -1241.11 | 1751596.83 | 14556791.40 | 40°04'54.7046"N | 80°36'9.0925"W | 1523.12 | 305.428 | 0.09 | |
| 9539.00 | 91.020 | 336.400 | 6206.68 | 1368.74 | 966.36 | -1277.39 | 1751560.57 | 14556874.81 | 40°04'55.5308"N | 80°36'9.5545"W | 1601.74 | 307.108 | 0.41 | |
| 9629.00 | 91.110 | 336.540 | 6205.01 | 1458.67 | 1048.86 | -1313.31 | 1751524.66 | 14556957.28 | 40°04'56.3476"N | 80°36'10.0119"W | 1680.75 | 308.612 | 0.18 | |
| 9720.00 | 90.950 | 336.970 | 6203.38 | 1549.62 | 1132.46 | -1349.22 | 1751488.76 | 14557040.84 | 40°04'57.1754"N | 80°36'10.4691"W | 1761.50 | 310.008 | 0.50 | |
| 9812.00 | 90.650 | 337.150 | 6202.09 | 1641.58 | 1217.18 | -1385.08 | 1751452.92 | 14557125.53 | 40°04'58.0141"N | 80°36'10.9255"W | 1843.90 | 311.308 | 0.38 | |
| 9903.00 | 90.650 | 336.390 | 6201.06 | 1732.54 | 1300.79 | -1420.97 | 1751417.04 | 14557209.11 | 40°04'58.8420"N | 80°36'11.3824"W | 1926.45 | 312.472 | 0.84 | |
| 9994.00 | 90.890 | 336.360 | 6199.84 | 1823.48 | 1384.16 | -1457.43 | 1751380.59 | 14557292.44 | 40°04'59.6674"N | 80°36'11.8468"W | 2009.98 | 313.523 | 0.27 | |
| 10085.00 | 90.180 | 338.600 | 6198.99 | 1914.45 | 1468.21 | -1492.28 | 1751345.76 | 14557376.46 | 40°05'0.4996"N | 80°36'12.2903"W | 2093.45 | 314.534 | 2.58 | |
| 10176.00 | 91.200 | 335.950 | 6197.89 | 2005.42 | 1552.13 | -1527.43 | 1751310.62 | 14557460.35 | 40°05'1.3304"N | 80°36'12.7377"W | 2177.65 | 315.460 | 3.12 | |
| 10269.00 | 90.860 | 336.480 | 6196.22 | 2098.34 | 1637.22 | -1564.93 | 1751273.14 | 14557545.41 | 40°05'2.1729"N | 80°36'13.2153"W | 2264.84 | 316.293 | 0.68 | |
| 10360.00 | 90.920 | 336.860 | 6194.81 | 2189.28 | 1720.77 | -1600.96 | 1751237.12 | 14557628.92 | 40°05'3.0001"N | 80°36'13.6741"W | 2350.35 | 317.066 | 0.42 | |
| 10451.00 | 90.800 | 336.630 | 6193.44 | 2280.24 | 1804.37 | -1636.89 | 1751201.21 | 14557712.49 | 40°05'3.8278"N | 80°36'14.1315"W | 2436.21 | 317.786 | 0.29 | |
| 10541.00 | 90.650 | 336.540 | 6192.30 | 2370.18 | 1886.95 | -1672.65 | 1751165.46 | 14557795.04 | 40°05'4.6455"N | 80°36'14.5868"W | 2521.57 | 318.445 | 0.19 | |
| 10632.00 | 90.680 | 336.930 | 6191.24 | 2461.14 | 1970.54 | -1708.59 | 1751129.53 | 14557878.60 | 40°05'5.4732"N | 80°36'15.0444"W | 2608.13 | 319.073 | 0.43 | |

RECEIVED
 Office of Oil and
 Gas
 APR 14 2014
 WV Dept of
 Environment
 and Conservation

Actual Wellpath Report

OCC A OHI 1H ST01 awp 2083' - 22910' Proj: 22935'
Page 6 of 11

| REFERENCE WELLPATH IDENTIFICATION | | | |
|-----------------------------------|-----------------------------|----------------|--|
| Operator | SWN PRODUCTION COMPANY, LLC | Well | OCC A OHI 1H ST01 |
| Field | Ohio | API | 47069003400100 |
| Facility | OCC A OHI Pad | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | Sidetrack from | OCC A OHI 1H AWB_ awp 142' - 24020' Proj: 24045' at 1988.00 MD |

| WELLPATH DATA (250 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] | Comments |
| 10722.00 | 90.250 | 337.030 | 6190.51 | 2551.11 | 2053.37 | -1743.78 | 1751094.35 | 14557961.40 | 40°05'6.2932"N | 80°36'15.4925"W | 2693.91 | 319.661 | 0.49 | |
| 10814.00 | 90.620 | 336.500 | 6189.82 | 2643.07 | 2137.91 | -1780.08 | 1751058.07 | 14558045.90 | 40°05'7.1302"N | 80°36'15.9546"W | 2781.97 | 320.218 | 0.70 | |
| 10904.00 | 90.520 | 335.070 | 6188.92 | 2732.97 | 2219.98 | -1816.99 | 1751021.17 | 14558127.94 | 40°05'7.9429"N | 80°36'16.4248"W | 2868.76 | 320.701 | 1.59 | |
| 10997.00 | 91.110 | 335.910 | 6187.60 | 2825.84 | 2304.59 | -1855.57 | 1750982.61 | 14558212.52 | 40°05'8.7807"N | 80°36'16.9162"W | 2958.76 | 321.160 | 1.10 | |
| 11088.00 | 90.980 | 335.750 | 6185.94 | 2916.73 | 2387.60 | -1892.82 | 1750945.37 | 14558295.50 | 40°05'9.6027"N | 80°36'17.3908"W | 3046.87 | 321.594 | 0.23 | |
| 11179.00 | 91.080 | 335.810 | 6184.30 | 3007.62 | 2470.58 | -1930.15 | 1750908.06 | 14558378.44 | 40°05'10.4243"N | 80°36'17.8663"W | 3135.16 | 322.001 | 0.13 | |
| 11269.00 | 90.770 | 335.870 | 6182.85 | 3097.52 | 2552.68 | -1966.98 | 1750871.25 | 14558460.52 | 40°05'11.2373"N | 80°36'18.3354"W | 3222.61 | 322.384 | 0.35 | |
| 11360.00 | 90.830 | 335.620 | 6181.58 | 3188.41 | 2635.64 | -2004.36 | 1750833.88 | 14558543.44 | 40°05'12.0587"N | 80°36'18.8116"W | 3311.20 | 322.748 | 0.28 | |
| 11450.00 | 90.890 | 336.020 | 6180.23 | 3278.31 | 2717.74 | -2041.22 | 1750797.04 | 14558625.50 | 40°05'12.8716"N | 80°36'19.2812"W | 3398.92 | 323.091 | 0.45 | |
| 11541.00 | 90.770 | 335.570 | 6178.91 | 3369.21 | 2800.73 | -2078.52 | 1750759.74 | 14558708.46 | 40°05'13.6934"N | 80°36'19.7564"W | 3487.74 | 323.420 | 0.51 | |
| 11631.00 | 90.120 | 335.320 | 6178.21 | 3459.08 | 2882.59 | -2115.92 | 1750722.36 | 14558790.29 | 40°05'14.5039"N | 80°36'20.2329"W | 3575.81 | 323.720 | 0.77 | |
| 11722.00 | 89.600 | 335.950 | 6178.43 | 3549.98 | 2965.48 | -2153.46 | 1750684.83 | 14558873.15 | 40°05'15.3247"N | 80°36'20.7112"W | 3664.90 | 324.014 | 0.90 | |
| 11812.00 | 90.770 | 335.850 | 6178.14 | 3639.89 | 3047.63 | -2190.21 | 1750648.10 | 14558955.27 | 40°05'16.1382"N | 80°36'21.1793"W | 3753.01 | 324.297 | 1.30 | |
| 11903.00 | 90.520 | 336.130 | 6177.12 | 3730.80 | 3130.75 | -2227.24 | 1750611.09 | 14559038.36 | 40°05'16.9612"N | 80°36'21.6510"W | 3842.16 | 324.572 | 0.41 | |
| 11994.00 | 90.550 | 336.150 | 6176.27 | 3821.73 | 3213.97 | -2264.05 | 1750574.29 | 14559121.55 | 40°05'17.7852"N | 80°36'22.1198"W | 3931.35 | 324.838 | 0.04 | |
| 12085.00 | 90.340 | 336.300 | 6175.56 | 3912.66 | 3297.25 | -2300.73 | 1750537.62 | 14559204.79 | 40°05'18.6097"N | 80°36'22.5870"W | 4020.60 | 325.094 | 0.28 | |
| 12177.00 | 90.280 | 336.570 | 6175.06 | 4004.60 | 3381.58 | -2337.51 | 1750500.86 | 14559289.08 | 40°05'19.4447"N | 80°36'23.0555"W | 4110.84 | 325.346 | 0.30 | |
| 12268.00 | 90.430 | 336.650 | 6174.50 | 4095.56 | 3465.10 | -2373.64 | 1750464.74 | 14559372.57 | 40°05'20.2716"N | 80°36'23.5155"W | 4200.12 | 325.588 | 0.19 | |
| 12358.00 | 90.490 | 336.740 | 6173.78 | 4185.52 | 3547.75 | -2409.24 | 1750429.15 | 14559455.19 | 40°05'21.0900"N | 80°36'23.9689"W | 4288.47 | 325.820 | 0.12 | |
| 12450.00 | 91.570 | 337.210 | 6172.12 | 4277.47 | 3632.41 | -2445.22 | 1750393.19 | 14559539.82 | 40°05'21.9281"N | 80°36'24.4270"W | 4378.75 | 326.053 | 1.28 | |
| 12542.00 | 90.340 | 336.600 | 6170.59 | 4369.42 | 3717.02 | -2481.30 | 1750357.12 | 14559624.40 | 40°05'22.7658"N | 80°36'24.8864"W | 4469.12 | 326.275 | 1.49 | |
| 12632.00 | 90.740 | 336.620 | 6169.74 | 4459.38 | 3799.62 | -2517.03 | 1750321.41 | 14559706.97 | 40°05'23.5836"N | 80°36'25.3414"W | 4557.69 | 326.478 | 0.44 | |
| 12723.00 | 90.490 | 336.510 | 6168.76 | 4550.32 | 3883.11 | -2553.22 | 1750285.23 | 14559790.42 | 40°05'24.4103"N | 80°36'25.8023"W | 4647.30 | 326.674 | 0.30 | |
| 12814.00 | 90.550 | 336.700 | 6167.94 | 4641.28 | 3966.62 | -2589.35 | 1750249.11 | 14559873.91 | 40°05'25.2371"N | 80°36'26.2624"W | 4736.96 | 326.864 | 0.22 | |
| 12904.00 | 90.400 | 336.720 | 6167.19 | 4731.23 | 4049.29 | -2624.93 | 1750213.55 | 14559956.54 | 40°05'26.0556"N | 80°36'26.7156"W | 4825.66 | 327.047 | 0.17 | |
| 12995.00 | 90.370 | 336.390 | 6166.58 | 4822.18 | 4132.77 | -2661.14 | 1750177.35 | 14560039.99 | 40°05'26.8822"N | 80°36'27.1767"W | 4915.43 | 327.222 | 0.36 | |
| 13086.00 | 90.520 | 336.760 | 6165.87 | 4913.13 | 4216.27 | -2697.31 | 1750141.19 | 14560123.45 | 40°05'27.7089"N | 80°36'27.6374"W | 5005.24 | 327.391 | 0.44 | |
| 13176.00 | 90.460 | 336.630 | 6165.10 | 5003.09 | 4298.92 | -2732.92 | 1750105.60 | 14560206.08 | 40°05'28.5272"N | 80°36'28.0908"W | 5094.07 | 327.555 | 0.16 | |
| 13267.00 | 90.340 | 336.370 | 6164.47 | 5094.04 | 4382.37 | -2769.20 | 1750069.33 | 14560289.49 | 40°05'29.3535"N | 80°36'28.5530"W | 5183.98 | 327.711 | 0.31 | |
| 13358.00 | 90.620 | 337.000 | 6163.71 | 5184.99 | 4465.94 | -2805.22 | 1750033.33 | 14560373.03 | 40°05'30.1808"N | 80°36'29.0116"W | 5273.88 | 327.866 | 0.76 | |

RECEIVED
Office of Oil and Gas
APR 14 2014
WV Dept of Environmental Protection

Actual Wellpath Report

OCC A OHI 1H ST01 awp 2083' - 22910' Proj: 22935'
Page 7 of 11

| REFERENCE WELLPATH IDENTIFICATION | | | | |
|-----------------------------------|-----------------------------|--|----------------|---|
| Operator | SWN PRODUCTION COMPANY, LLC | | Well | OCC A OHI 1H ST01 |
| Field | Ohio | | API | 47069003400100 |
| Facility | OCC A OHI Pad | | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | | Sidetrack from | OCC A OHI 1H AWB_awp 142' - 24020' Proj: 24045' at 1988.00 MD |

| WELLPATH DATA (250 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] | Comments |
| 13449.00 | 90.580 | 337.040 | 6162.75 | 5275.96 | 4549.71 | -2840.74 | 1749997.82 | 14560456.77 | 40°05'31.0102"N | 80°36'29.4640"W | 5363.74 | 328.020 | 0.06 | |
| 13540.00 | 90.520 | 337.030 | 6161.88 | 5366.93 | 4633.50 | -2876.25 | 1749962.33 | 14560540.52 | 40°05'31.8397"N | 80°36'29.9160"W | 5453.63 | 328.170 | 0.07 | |
| 13640.00 | 90.650 | 336.650 | 6160.86 | 5466.89 | 4725.43 | -2915.58 | 1749923.01 | 14560632.42 | 40°05'32.7500"N | 80°36'30.4169"W | 5552.50 | 328.326 | 0.40 | |
| 13736.00 | 90.490 | 336.460 | 6159.90 | 5562.84 | 4813.50 | -2953.77 | 1749884.84 | 14560720.46 | 40°05'33.6219"N | 80°36'30.9033"W | 5647.53 | 328.465 | 0.26 | |
| 13833.00 | 90.550 | 336.800 | 6159.02 | 5659.79 | 4902.54 | -2992.24 | 1749846.38 | 14560809.46 | 40°05'34.5035"N | 80°36'31.3933"W | 5743.56 | 328.602 | 0.36 | |
| 13929.00 | 90.520 | 336.590 | 6158.13 | 5755.74 | 4990.70 | -3030.22 | 1749808.41 | 14560897.59 | 40°05'35.3764"N | 80°36'31.8770"W | 5838.61 | 328.735 | 0.22 | |
| 14026.00 | 90.340 | 336.040 | 6157.40 | 5852.67 | 5079.53 | -3069.19 | 1749769.46 | 14560986.38 | 40°05'36.2559"N | 80°36'32.3733"W | 5934.77 | 328.859 | 0.60 | |
| 14122.00 | 90.740 | 335.990 | 6156.50 | 5948.58 | 5167.24 | -3108.21 | 1749730.46 | 14561074.06 | 40°05'37.1243"N | 80°36'32.8705"W | 6030.03 | 328.972 | 0.42 | |
| 14219.00 | 90.710 | 336.180 | 6155.27 | 6045.50 | 5255.90 | -3147.53 | 1749691.15 | 14561162.69 | 40°05'38.0022"N | 80°36'33.3714"W | 6126.29 | 329.084 | 0.20 | |
| 14315.00 | 90.710 | 336.110 | 6154.08 | 6141.42 | 5343.69 | -3186.35 | 1749652.35 | 14561250.44 | 40°05'38.8715"N | 80°36'33.8659"W | 6221.57 | 329.193 | 0.07 | |
| 14412.00 | 90.620 | 335.750 | 6152.95 | 6238.32 | 5432.25 | -3225.91 | 1749612.80 | 14561338.97 | 40°05'39.7483"N | 80°36'34.3700"W | 6317.90 | 329.296 | 0.38 | |
| 14509.00 | 90.340 | 335.440 | 6152.14 | 6335.20 | 5520.58 | -3265.99 | 1749572.74 | 14561427.26 | 40°05'40.6229"N | 80°36'34.8807"W | 6414.32 | 329.391 | 0.43 | |
| 14605.00 | 90.650 | 336.090 | 6151.31 | 6431.09 | 5608.12 | -3305.39 | 1749533.35 | 14561514.77 | 40°05'41.4897"N | 80°36'35.3827"W | 6509.73 | 329.485 | 0.75 | |
| 14702.00 | 91.110 | 336.570 | 6149.82 | 6528.02 | 5696.95 | -3344.33 | 1749494.43 | 14561603.56 | 40°05'42.3692"N | 80°36'35.8788"W | 6606.04 | 329.585 | 0.69 | |
| 14798.00 | 90.430 | 335.140 | 6148.53 | 6623.91 | 5784.54 | -3383.59 | 1749455.18 | 14561691.12 | 40°05'43.2365"N | 80°36'36.3790"W | 6701.46 | 329.675 | 1.65 | |
| 14895.00 | 90.580 | 335.260 | 6147.68 | 6720.76 | 5872.59 | -3424.28 | 1749414.51 | 14561779.13 | 40°05'44.1083"N | 80°36'36.8976"W | 6798.01 | 329.754 | 0.20 | |
| 14991.00 | 90.490 | 335.570 | 6146.78 | 6816.62 | 5959.88 | -3464.21 | 1749374.59 | 14561866.39 | 40°05'44.9727"N | 80°36'37.4066"W | 6893.55 | 329.832 | 0.34 | |
| 15088.00 | 90.890 | 335.900 | 6145.61 | 6913.51 | 6048.31 | -3504.07 | 1749334.74 | 14561954.78 | 40°05'45.8482"N | 80°36'37.9145"W | 6990.03 | 329.914 | 0.53 | |
| 15184.00 | 90.520 | 335.540 | 6144.43 | 7009.40 | 6135.81 | -3543.55 | 1749295.29 | 14562042.25 | 40°05'46.7147"N | 80°36'38.4175"W | 7085.54 | 329.993 | 0.54 | |
| 15281.00 | 90.920 | 335.460 | 6143.21 | 7106.26 | 6224.07 | -3583.77 | 1749255.08 | 14562130.48 | 40°05'47.5886"N | 80°36'38.9301"W | 7182.09 | 330.067 | 0.42 | |
| 15377.00 | 90.800 | 335.450 | 6141.77 | 7202.13 | 6311.38 | -3623.64 | 1749215.22 | 14562217.76 | 40°05'48.4532"N | 80°36'39.4382"W | 7277.66 | 330.138 | 0.13 | |
| 15473.00 | 90.920 | 336.400 | 6140.33 | 7298.03 | 6399.02 | -3662.80 | 1749176.08 | 14562305.36 | 40°05'49.3209"N | 80°36'39.9372"W | 7373.17 | 330.213 | 1.00 | |
| 15570.00 | 90.620 | 336.190 | 6139.03 | 7394.95 | 6487.83 | -3701.79 | 1749137.10 | 14562394.13 | 40°05'50.2002"N | 80°36'40.4339"W | 7469.62 | 330.292 | 0.38 | |
| 15667.00 | 90.920 | 337.200 | 6137.72 | 7491.90 | 6576.91 | -3740.16 | 1749098.75 | 14562483.18 | 40°05'51.0821"N | 80°36'40.9227"W | 7566.01 | 330.374 | 1.09 | |
| 15763.00 | 91.320 | 338.490 | 6135.85 | 7587.87 | 6665.80 | -3776.36 | 1749062.56 | 14562572.03 | 40°05'51.9621"N | 80°36'41.3834"W | 7661.19 | 330.467 | 1.41 | |
| 15860.00 | 91.230 | 336.550 | 6133.69 | 7684.83 | 6755.40 | -3813.44 | 1749025.50 | 14562661.60 | 40°05'52.8492"N | 80°36'41.8555"W | 7757.43 | 330.555 | 2.00 | |
| 15957.00 | 91.140 | 336.470 | 6131.68 | 7781.76 | 6844.34 | -3852.09 | 1748986.86 | 14562750.51 | 40°05'53.7298"N | 80°36'42.3479"W | 7853.89 | 330.629 | 0.12 | |
| 16053.00 | 91.200 | 336.760 | 6129.72 | 7877.69 | 6932.44 | -3890.19 | 1748948.78 | 14562838.57 | 40°05'54.6020"N | 80°36'42.8332"W | 7949.36 | 330.701 | 0.31 | |
| 16150.00 | 91.510 | 336.500 | 6127.43 | 7974.62 | 7021.46 | -3928.65 | 1748910.33 | 14562927.56 | 40°05'55.4833"N | 80°36'43.3232"W | 8045.82 | 330.772 | 0.42 | |
| 16246.00 | 91.450 | 336.590 | 6124.95 | 8070.54 | 7109.50 | -3966.85 | 1748872.15 | 14563015.56 | 40°05'56.3550"N | 80°36'43.8098"W | 8141.30 | 330.840 | 0.11 | |

RECEIVED
Office of Oil & Gas
APR 17 2018
WV Dept. of Environmental Protection

| REFERENCE WELLPATH IDENTIFICATION | | | | |
|-----------------------------------|-----------------------------|--|----------------|--|
| Operator | SWN PRODUCTION COMPANY, LLC | | Well | OCC A OHI 1H ST01 |
| Field | Ohio | | API | 47069003400100 |
| Facility | OCC A OHI Pad | | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | | Sidetrack from | OCC A OHI 1H AWB_ awp 142' - 24020' Proj: 24045' at 1988.00 MD |

| WELLPATH DATA (250 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] | Comments |
| 16343.00 | 91.510 | 336.850 | 6122.44 | 8167.46 | 7198.57 | -4005.18 | 1748833.84 | 14563104.60 | 40°05'57.2368"N | 80°36'44.2979"W | 8237.77 | 330.909 | 0.27 | |
| 16439.00 | 91.420 | 336.540 | 6119.99 | 8263.39 | 7286.71 | -4043.14 | 1748795.88 | 14563192.70 | 40°05'58.1095"N | 80°36'44.7816"W | 8333.25 | 330.976 | 0.34 | |
| 16535.00 | 91.420 | 336.530 | 6117.61 | 8359.31 | 7374.74 | -4081.36 | 1748757.68 | 14563280.70 | 40°05'58.9811"N | 80°36'45.2684"W | 8428.78 | 331.039 | 0.01 | |
| 16632.00 | 91.540 | 336.730 | 6115.10 | 8456.23 | 7463.75 | -4119.82 | 1748719.24 | 14563369.68 | 40°05'59.8624"N | 80°36'45.7584"W | 8525.29 | 331.102 | 0.24 | |
| 16728.00 | 91.660 | 336.710 | 6112.42 | 8552.15 | 7551.90 | -4157.75 | 1748681.32 | 14563457.80 | 40°06'0.7351"N | 80°36'46.2415"W | 8620.80 | 331.165 | 0.13 | |
| 16825.00 | 91.450 | 337.030 | 6109.79 | 8649.08 | 7641.07 | -4195.84 | 1748643.25 | 14563546.93 | 40°06'1.6179"N | 80°36'46.7266"W | 8717.28 | 331.228 | 0.39 | |
| 16921.00 | 91.320 | 336.460 | 6107.47 | 8745.01 | 7729.25 | -4233.73 | 1748605.37 | 14563635.07 | 40°06'2.4909"N | 80°36'47.2093"W | 8812.82 | 331.288 | 0.61 | |
| 17018.00 | 91.480 | 336.580 | 6105.10 | 8841.93 | 7818.19 | -4272.37 | 1748566.75 | 14563723.98 | 40°06'3.3715"N | 80°36'47.7015"W | 8909.39 | 331.345 | 0.21 | |
| 17114.00 | 91.350 | 336.710 | 6102.73 | 8937.86 | 7906.30 | -4310.41 | 1748528.72 | 14563812.05 | 40°06'4.2438"N | 80°36'48.1862"W | 9004.95 | 331.401 | 0.19 | |
| 17211.00 | 91.720 | 337.560 | 6100.13 | 9034.80 | 7995.64 | -4348.09 | 1748491.06 | 14563901.36 | 40°06'5.1283"N | 80°36'48.6660"W | 9101.44 | 331.462 | 0.96 | |
| 17307.00 | 91.230 | 334.700 | 6097.66 | 9130.68 | 8083.39 | -4386.92 | 1748452.24 | 14563989.08 | 40°06'5.9971"N | 80°36'49.1608"W | 9197.08 | 331.511 | 3.02 | |
| 17404.00 | 91.380 | 335.750 | 6095.45 | 9227.50 | 8171.44 | -4427.56 | 1748411.62 | 14564077.09 | 40°06'6.8690"N | 80°36'49.6788"W | 9293.85 | 331.550 | 1.09 | |
| 17500.00 | 91.480 | 335.950 | 6093.05 | 9323.38 | 8259.01 | -4466.82 | 1748372.37 | 14564164.63 | 40°06'7.7360"N | 80°36'50.1792"W | 9389.55 | 331.594 | 0.23 | |
| 17596.00 | 91.540 | 336.710 | 6090.53 | 9419.28 | 8346.90 | -4505.35 | 1748333.86 | 14564252.49 | 40°06'8.6063"N | 80°36'50.6701"W | 9485.20 | 331.641 | 0.79 | |
| 17693.00 | 91.260 | 334.400 | 6088.15 | 9516.13 | 8435.17 | -4545.47 | 1748293.75 | 14564340.73 | 40°06'9.4803"N | 80°36'51.1816"W | 9581.94 | 331.681 | 2.40 | |
| 17790.00 | 91.750 | 336.110 | 6085.61 | 9612.94 | 8523.23 | -4586.06 | 1748253.18 | 14564428.75 | 40°06'10.3522"N | 80°36'51.6990"W | 9678.71 | 331.717 | 1.83 | |
| 17886.00 | 91.820 | 337.240 | 6082.62 | 9708.85 | 8611.34 | -4624.05 | 1748215.20 | 14564516.83 | 40°06'11.2246"N | 80°36'52.1830"W | 9774.31 | 331.765 | 1.18 | |
| 17983.00 | 91.480 | 336.690 | 6079.82 | 9805.78 | 8700.57 | -4661.99 | 1748177.28 | 14564606.02 | 40°06'12.1080"N | 80°36'52.6662"W | 9870.87 | 331.816 | 0.67 | |
| 18079.00 | 91.480 | 337.280 | 6077.34 | 9901.72 | 8788.90 | -4699.51 | 1748139.77 | 14564694.32 | 40°06'12.9824"N | 80°36'53.1441"W | 9966.45 | 331.866 | 0.61 | |
| 18176.00 | 91.290 | 334.740 | 6075.00 | 9998.60 | 8877.49 | -4738.93 | 1748100.36 | 14564782.87 | 40°06'13.8595"N | 80°36'53.6465"W | 10063.17 | 331.906 | 2.63 | |
| 18272.00 | 91.450 | 337.170 | 6072.70 | 10094.48 | 8965.13 | -4778.04 | 1748061.28 | 14564870.47 | 40°06'14.7273"N | 80°36'54.1449"W | 10158.89 | 331.944 | 2.54 | |
| 18369.00 | 91.630 | 342.490 | 6070.09 | 10191.38 | 9056.11 | -4811.46 | 1748027.87 | 14564961.42 | 40°06'15.6278"N | 80°36'54.5699"W | 10254.92 | 332.019 | 5.49 | |
| 18465.00 | 91.050 | 343.120 | 6067.85 | 10287.07 | 9147.80 | -4839.83 | 1747999.51 | 14565053.07 | 40°06'16.5351"N | 80°36'54.9299"W | 10349.21 | 332.118 | 0.89 | |
| 18562.00 | 91.200 | 343.730 | 6065.95 | 10383.67 | 9240.75 | -4867.50 | 1747971.85 | 14565145.99 | 40°06'17.4548"N | 80°36'55.2808"W | 10444.32 | 332.222 | 0.65 | |
| 18658.00 | 91.080 | 343.490 | 6064.04 | 10479.26 | 9332.83 | -4894.58 | 1747944.78 | 14565238.03 | 40°06'18.3659"N | 80°36'55.6242"W | 10538.43 | 332.325 | 0.28 | |
| 18755.00 | 91.110 | 343.750 | 6062.18 | 10575.84 | 9425.87 | -4921.93 | 1747917.44 | 14565331.04 | 40°06'19.2865"N | 80°36'55.9710"W | 10633.55 | 332.428 | 0.27 | |
| 18852.00 | 91.110 | 343.870 | 6060.30 | 10672.39 | 9519.01 | -4948.97 | 1747890.41 | 14565424.14 | 40°06'20.2081"N | 80°36'56.3138"W | 10728.65 | 332.530 | 0.12 | |
| 18948.00 | 91.110 | 343.740 | 6058.44 | 10767.94 | 9611.18 | -4975.74 | 1747863.65 | 14565516.28 | 40°06'21.1201"N | 80°36'56.6532"W | 10822.79 | 332.629 | 0.14 | |
| 19045.00 | 90.990 | 343.670 | 6056.67 | 10864.51 | 9704.27 | -5002.95 | 1747836.45 | 14565609.33 | 40°06'22.0411"N | 80°36'56.9982"W | 10917.98 | 332.727 | 0.14 | |
| 19141.00 | 91.140 | 344.030 | 6054.88 | 10960.06 | 9796.47 | -5029.65 | 1747809.76 | 14565701.49 | 40°06'22.9534"N | 80°36'57.3367"W | 11012.18 | 332.823 | 0.41 | |

RECEIVED
Office of Oil and Gas
APR 14 2014
WV Department of Environmental Protection

Actual Wellpath Report

OCC A OHI 1H ST01 awp 2083' - 22910' Proj: 22935'
Page 9 of 11

REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|-----------------------------|----------------|--|
| Operator | SWN PRODUCTION COMPANY, LLC | Well | OCC A OHI 1H ST01 |
| Field | Ohio | API | 47069003400100 |
| Facility | OCC A OHI Pad | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | Sidetrack from | OCC A OHI 1H AWB_ awp 142' - 24020' Proj: 24045' at 1988.00 MD |

WELLPATH DATA (250 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] | Comments |
|----------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|-----------------|-----------------|-------------------|-----------------|---------------|----------|
| 19238.00 | 90.890 | 343.500 | 6053.16 | 11056.62 | 9889.58 | -5056.76 | 1747782.66 | 14565794.57 | 40°06'23.8747"N | 80°36'57.6805"W | 11107.42 | 332.918 | 0.60 | |
| 19334.00 | 91.050 | 343.640 | 6051.54 | 11152.22 | 9981.65 | -5083.91 | 1747755.52 | 14565886.60 | 40°06'24.7857"N | 80°36'58.0248"W | 11201.76 | 333.009 | 0.22 | |
| 19431.00 | 90.920 | 343.330 | 6049.87 | 11248.82 | 10074.63 | -5111.48 | 1747727.96 | 14565979.55 | 40°06'25.7057"N | 80°36'58.3744"W | 11297.15 | 333.099 | 0.35 | |
| 19527.00 | 91.170 | 344.020 | 6048.12 | 11344.40 | 10166.75 | -5138.46 | 1747700.99 | 14566071.63 | 40°06'26.6171"N | 80°36'58.7165"W | 11391.51 | 333.187 | 0.76 | |
| 19624.00 | 91.350 | 343.950 | 6045.99 | 11440.91 | 10259.96 | -5165.22 | 1747674.24 | 14566164.80 | 40°06'27.5394"N | 80°36'59.0557"W | 11486.79 | 333.278 | 0.20 | |
| 19720.00 | 91.170 | 343.730 | 6043.88 | 11536.46 | 10352.14 | -5191.93 | 1747647.54 | 14566256.95 | 40°06'28.4515"N | 80°36'59.3943"W | 11581.15 | 333.365 | 0.30 | |
| 19817.00 | 91.050 | 343.900 | 6042.00 | 11633.01 | 10445.28 | -5218.96 | 1747620.52 | 14566350.05 | 40°06'29.3731"N | 80°36'59.7371"W | 11676.54 | 333.451 | 0.21 | |
| 19913.00 | 91.170 | 343.820 | 6040.14 | 11728.55 | 10537.48 | -5245.64 | 1747593.85 | 14566442.22 | 40°06'30.2853"N | 80°37'0.0753"W | 11770.95 | 333.536 | 0.15 | |
| 20010.00 | 91.170 | 343.830 | 6038.16 | 11825.10 | 10630.62 | -5272.66 | 1747566.84 | 14566535.32 | 40°06'31.2069"N | 80°37'0.4179"W | 11866.38 | 333.619 | 0.01 | |
| 20106.00 | 91.230 | 343.920 | 6036.15 | 11920.64 | 10722.83 | -5299.32 | 1747540.20 | 14566627.49 | 40°06'32.1192"N | 80°37'0.7558"W | 11960.84 | 333.701 | 0.11 | |
| 20203.00 | 90.920 | 342.670 | 6034.33 | 12017.27 | 10815.71 | -5327.19 | 1747512.33 | 14566720.34 | 40°06'33.0383"N | 80°37'1.1095"W | 12056.48 | 333.778 | 1.33 | |
| 20299.00 | 91.140 | 344.320 | 6032.60 | 12112.87 | 10907.74 | -5354.46 | 1747485.07 | 14566812.33 | 40°06'33.9489"N | 80°37'1.4553"W | 12151.09 | 333.854 | 1.73 | |
| 20396.00 | 90.980 | 343.530 | 6030.81 | 12209.40 | 11000.93 | -5381.32 | 1747458.23 | 14566905.49 | 40°06'34.8709"N | 80°37'1.7958"W | 12246.59 | 333.934 | 0.83 | |
| 20506.00 | 91.050 | 344.700 | 6028.86 | 12318.83 | 11106.71 | -5411.42 | 1747428.14 | 14567011.23 | 40°06'35.9175"N | 80°37'2.1773"W | 12354.86 | 334.024 | 1.07 | |
| 20603.00 | 91.140 | 344.890 | 6027.00 | 12415.21 | 11200.30 | -5436.85 | 1747402.71 | 14567104.78 | 40°06'36.8435"N | 80°37'2.4995"W | 12450.14 | 334.107 | 0.22 | |
| 20699.00 | 91.320 | 345.090 | 6024.94 | 12510.56 | 11293.00 | -5461.71 | 1747377.87 | 14567197.44 | 40°06'37.7606"N | 80°37'2.8143"W | 12544.41 | 334.190 | 0.28 | |
| 20796.00 | 90.890 | 344.510 | 6023.07 | 12606.93 | 11386.59 | -5487.14 | 1747352.45 | 14567291.00 | 40°06'38.6865"N | 80°37'3.1364"W | 12639.74 | 334.271 | 0.74 | |
| 20893.00 | 91.110 | 344.810 | 6021.38 | 12703.34 | 11480.12 | -5512.80 | 1747326.80 | 14567384.49 | 40°06'39.6119"N | 80°37'3.4614"W | 12735.15 | 334.350 | 0.38 | |
| 20989.00 | 91.140 | 343.820 | 6019.49 | 12798.81 | 11572.53 | -5538.74 | 1747300.86 | 14567476.86 | 40°06'40.5262"N | 80°37'3.7903"W | 12829.69 | 334.424 | 1.03 | |
| 21086.00 | 90.800 | 343.190 | 6017.85 | 12895.41 | 11665.52 | -5566.28 | 1747273.34 | 14567569.82 | 40°06'41.4463"N | 80°37'4.1395"W | 12925.47 | 334.492 | 0.74 | |
| 21182.00 | 91.230 | 344.000 | 6016.15 | 12991.00 | 11757.60 | -5593.39 | 1747246.24 | 14567661.86 | 40°06'42.3574"N | 80°37'4.4833"W | 13020.26 | 334.558 | 0.96 | |
| 21279.00 | 91.140 | 343.550 | 6014.15 | 13087.55 | 11850.71 | -5620.49 | 1747219.15 | 14567754.94 | 40°06'43.2787"N | 80°37'4.8269"W | 13115.99 | 334.626 | 0.47 | |
| 21375.00 | 91.050 | 343.570 | 6012.31 | 13183.15 | 11942.77 | -5647.65 | 1747192.00 | 14567846.96 | 40°06'44.1896"N | 80°37'5.1715"W | 13210.82 | 334.691 | 0.10 | |
| 21472.00 | 91.140 | 342.740 | 6010.46 | 13279.79 | 12035.59 | -5675.75 | 1747163.91 | 14567939.75 | 40°06'45.1080"N | 80°37'5.5280"W | 13306.75 | 334.752 | 0.86 | |
| 21569.00 | 91.200 | 342.660 | 6008.48 | 13376.50 | 12128.18 | -5704.59 | 1747135.08 | 14568032.30 | 40°06'46.0242"N | 80°37'5.8941"W | 13402.81 | 334.810 | 0.10 | |
| 21665.00 | 91.110 | 342.860 | 6006.54 | 13472.20 | 12219.85 | -5733.04 | 1747106.64 | 14568123.94 | 40°06'46.9313"N | 80°37'6.2552"W | 13497.87 | 334.866 | 0.23 | |
| 21762.00 | 91.200 | 343.850 | 6004.59 | 13568.82 | 12312.77 | -5760.82 | 1747078.87 | 14568216.82 | 40°06'47.8507"N | 80°37'6.6076"W | 13593.80 | 334.926 | 1.02 | |
| 21859.00 | 91.170 | 344.070 | 6002.58 | 13665.34 | 12405.97 | -5787.61 | 1747052.09 | 14568309.98 | 40°06'48.7729"N | 80°37'6.9473"W | 13689.58 | 334.990 | 0.23 | |
| 21955.00 | 91.140 | 343.290 | 6000.64 | 13760.92 | 12498.08 | -5814.58 | 1747025.13 | 14568402.06 | 40°06'49.6843"N | 80°37'7.2894"W | 13784.47 | 335.050 | 0.81 | |
| 22052.00 | 91.200 | 344.030 | 5998.66 | 13857.49 | 12591.15 | -5841.87 | 1746997.86 | 14568495.09 | 40°06'50.6051"N | 80°37'7.6354"W | 13880.36 | 335.110 | 0.77 | |

| REFERENCE WELLPATH IDENTIFICATION | | | |
|-----------------------------------|-----------------------------|----------------|---|
| Operator | SWN PRODUCTION COMPANY, LLC | Well | OCC A OHI 1H ST01 |
| Field | Ohio | API | 47069003400100 |
| Facility | OCC A OHI Pad | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | Sidetrack from | OCC A OHI 1H AWB_awp 142' - 24020' Proj: 24045' at 1988.00 MD |

| WELLPATH DATA (250 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] | Comments |
| 22148.00 | 91.170 | 344.050 | 5996.68 | 13953.00 | 12683.43 | -5868.26 | 1746971.47 | 14568587.33 | 40°06'51.5181"N | 80°37'7.9700"W | 13975.18 | 335.171 | 0.04 | |
| 22245.00 | 90.800 | 342.700 | 5995.01 | 14049.62 | 12776.35 | -5896.01 | 1746943.74 | 14568680.22 | 40°06'52.4376"N | 80°37'8.3220"W | 14071.18 | 335.228 | 1.44 | |
| 22341.00 | 91.200 | 342.940 | 5993.34 | 14145.32 | 12868.06 | -5924.36 | 1746915.40 | 14568771.89 | 40°06'53.3450"N | 80°37'8.6819"W | 14166.33 | 335.279 | 0.49 | |
| 22438.00 | 91.110 | 341.880 | 5991.38 | 14242.06 | 12960.50 | -5953.67 | 1746886.10 | 14568864.30 | 40°06'54.2598"N | 80°37'9.0540"W | 14262.56 | 335.327 | 1.10 | |
| 22534.00 | 91.110 | 341.610 | 5989.52 | 14337.88 | 13051.65 | -5983.73 | 1746856.05 | 14568955.41 | 40°06'55.1618"N | 80°37'9.4360"W | 14357.95 | 335.370 | 0.28 | |
| 22631.00 | 91.170 | 342.040 | 5987.59 | 14434.69 | 13143.79 | -6013.98 | 1746825.81 | 14569047.52 | 40°06'56.0737"N | 80°37'9.8202"W | 14454.32 | 335.413 | 0.45 | |
| 22728.00 | 90.950 | 341.630 | 5985.80 | 14531.49 | 13235.94 | -6044.22 | 1746795.58 | 14569139.64 | 40°06'56.9856"N | 80°37'10.2043"W | 14550.70 | 335.456 | 0.48 | |
| 22825.00 | 90.830 | 341.530 | 5984.29 | 14628.33 | 13327.96 | -6074.86 | 1746764.95 | 14569231.62 | 40°06'57.8962"N | 80°37'10.5937"W | 14647.14 | 335.497 | 0.16 | |
| 22910.00 | 91.170 | 342.200 | 5982.81 | 14713.16 | 13408.73 | -6101.32 | 1746738.51 | 14569312.35 | 40°06'58.6954"N | 80°37'10.9298"W | 14731.60 | 335.533 | 0.88 | |
| 22935.00‡ | 91.170 | 342.200 | 5982.30 | 14738.10 | 13432.53 | -6108.96 | 1746730.87 | 14569336.14 | 40°06'58.9309"N | 80°37'11.0268"W | 14756.43 | 335.545 | 0.00 | Prj to TD |

| TARGETS | | | | | | | | |
|-----------------------------|----------------------|------------|-----------|-------------------|--------------------|-----------------|-----------------|--------|
| Name | TVD [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Shape |
| OCC A OHI 1H ST01 BHL rev 1 | 5995.00 | 13446.39 | -6149.11 | 1746690.73 | 14569350.00 | 40°06'59.0696"N | 80°37'11.5429"W | circle |
| | 2D Circle radius 50. | | | | | | | |
| OCC A OHI 1H ST01 LP rev 1 | 6233.00 | -1321.57 | -301.00 | 1752536.58 | 14554587.76 | 40°04'32.8779"N | 80°35'57.1259"W | point |

RECEIVED
 Office of Oil and Gas
 APR 14 2023
 WV Department of
 Environmental Protection

| REFERENCE WELLPATH IDENTIFICATION | | | |
|-----------------------------------|-----------------------------|----------------|---|
| Operator | SWN PRODUCTION COMPANY, LLC | Well | OCC A OHI 1H ST01 |
| Field | Ohio | API | 47069003400100 |
| Facility | OCC A OHI Pad | Wellbore | OCC A OHI 1H ST01 AWB |
| Slot | 1H | Sidetrack from | OCC A OHI 1H AWB_awp 142' - 24020' Proj: 24045' at 1988.00 MD |

| WELLPATH COMPOSITION - Ref Wellbore: OCC A OHI 1H ST01 AWB Ref Wellpath: OCC A OHI 1H ST01 awp 2083' - 22910' Proj: 22935' | | | | | |
|---|-------------|--|---------------------------|-----------------------|-------------|
| Start MD [ft] | End MD [ft] | Positional Uncertainty Model | Log Name/Comment | Wellbore | Survey Date |
| 26.00 | 495.00 | OWSG MWD rev2 + HRGM | 1 Tally MWD 142' - 495' | OCC A OHI 1H AWB | 7/15/2022 |
| 495.00 | 1830.00 | OWSG MWD rev2 + HRGM | 2 Tally MWD 594' - 1830' | OCC A OHI 1H AWB | 7/15/2022 |
| 1830.00 | 1988.00 | OWSG MWD rev2 + HRGM | 3 Tally MWD 1896' - 4453' | OCC A OHI 1H AWB | 7/15/2022 |
| 1988.00 | 5451.00 | BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing) | 1 BH MWD 2083' - 5451' | OCC A OHI 1H ST01 AWB | 7/28/2022 |
| 5451.00 | 22935.00 | BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing) | 2 BH MWD 5537' - 22910' | OCC A OHI 1H ST01 AWB | 8/15/2022 |

RECEIVED
 Office of Oil and Gas
 WV Department of
 Environmental Protection
 APR 14 2023

Location: Ohio County, WV
Field: Ohio
Facility: OCC A OHI Pad

Slot: 1H
Well: OCC A OHI 1H ST01
Wellbore: OCC A OHI 1H ST01 AWB

Location Information

| Facility Name | | | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
|--|--------------|--------------|-------------------|--------------------|-----------------|-----------------|
| OCC A OHI Pad | | | 1752836.900 | 14555922.760 | 40°04'46.0622"N | 80°35'53.1835"W |
| Slot | Local N (ft) | Local E (ft) | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
| 1H | -13.95 | 0.56 | 1752837.460 | 14555908.820 | 40°04'45.9244"N | 80°35'53.1772"W |
| SDC 40 (RKB) to Ground level (At Slot: 1H) | | | | | 26ft | |
| Mean Sea Level to Ground level (At Slot: 1H) | | | | | -1095.2ft | |
| SDC 40 (RKB) to Mean Sea Level | | | | | 1121.2ft | |

Bottom Hole Location

| MD (ft) | Inc (°) | Az (°) | TVD (ft) | Local N (ft) | Local E (ft) | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
|----------|---------|---------|----------|--------------|--------------|-------------------|--------------------|-----------------|-----------------|
| 22935.00 | 91.170 | 342.200 | 5982.30 | 13432.53 | -6108.96 | 1746730.87 | 14569336.14 | 40°06'58.9309"N | 80°37'11.0268"W |

Plot reference wellpath is OCC A OHI 1H ST01 awp 2083' - 22910' Proj: 22935'

True vertical depths are referenced to SDC 40 (RKB)

Reference wellpath measured depths are referenced to SDC 40 (RKB)

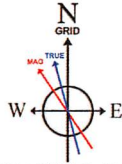
SDC 40 (RKB) to Mean Sea Level: 1121.2 feet

Mean Sea Level to Ground level (At Slot: 1H): -1095.2 feet

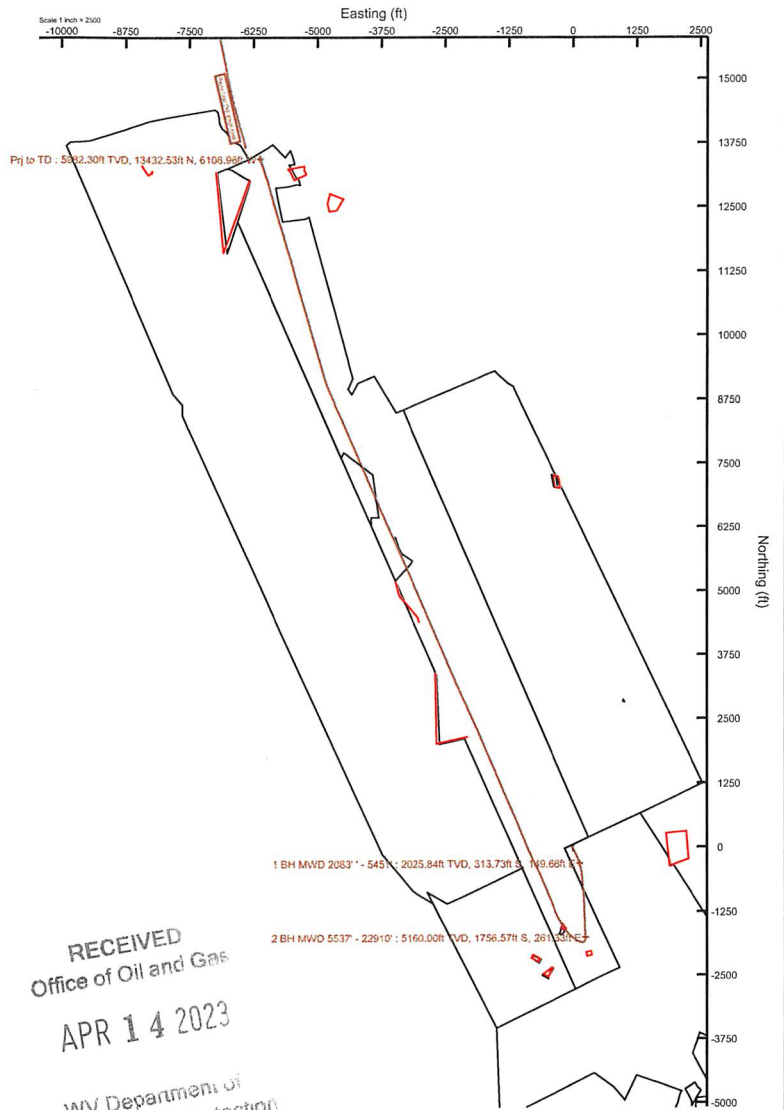
Offset wellpath MDs are referenced to each path's default MD datum

Grid System: NAD83 / UTM Zone 17 North, US feet
North Reference: Grid north
Scale: True distance
Coordinates are in feet referenced to Slot
Depths are in feet
Created by: tranlam on 2022-08-15; Database: WA_MPL_EASTERNUS_Defn

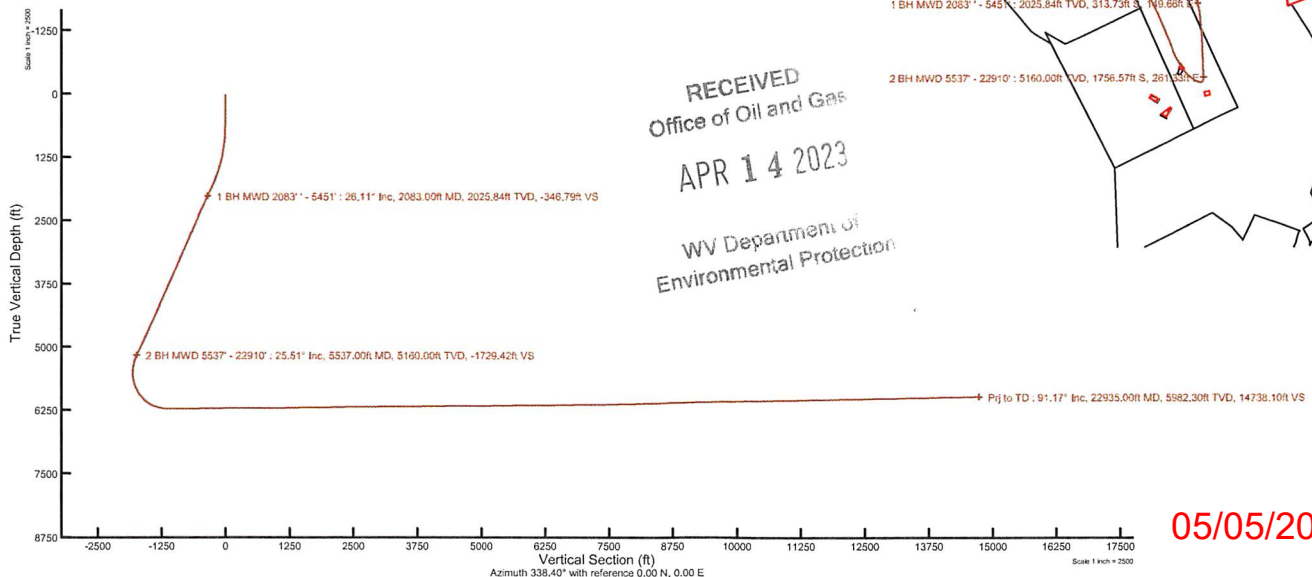
API: 47069003400100
BH JOB: 111411267
DURATION: 07.30.2022 to 09.11.2022
RIG: SDC 40



HDGM2022v1.0 (1900.0 to 2023.0) Dip: 67.02° Field: 52193.1 nT
Magnetic North is 8.28 degrees West of True North (at 7/25/2022)
Grid North is 0.26 degrees East of True North
To correct azimuth from True to Grid subtract 0.26 degrees
To correct azimuth from Magnetic to Grid subtract 8.54 degrees



RECEIVED
Office of Oil and Gas
APR 14 2023
WV Department of
Environmental Protection



05/05/2023