



SWN PRODUCTION COMPANY, LLC



Location: Marshall County, WV
 Field: Marshall
 Facility: Betty Schafer MSH Pad

Slot: 5H
 Well: Betty Schafer MSH 5H
 Wellbore: Betty Schafer MSH 5H AWB

Plot reference wellpath is Betty Schafer MSH 5H awp Proj: 22018'	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to SDC 41 (KB)	North Reference: Grid north
Reference wellpath measured depths are referenced to SDC 41 (KB)	Scale: True distance
SDC 41 (KB) to Mean Sea Level: 874.7 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: 5H): -848.7 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: tranlam on 2024-03-25; Database: WA_MPL_EASTERNUS_Defn

Location Information

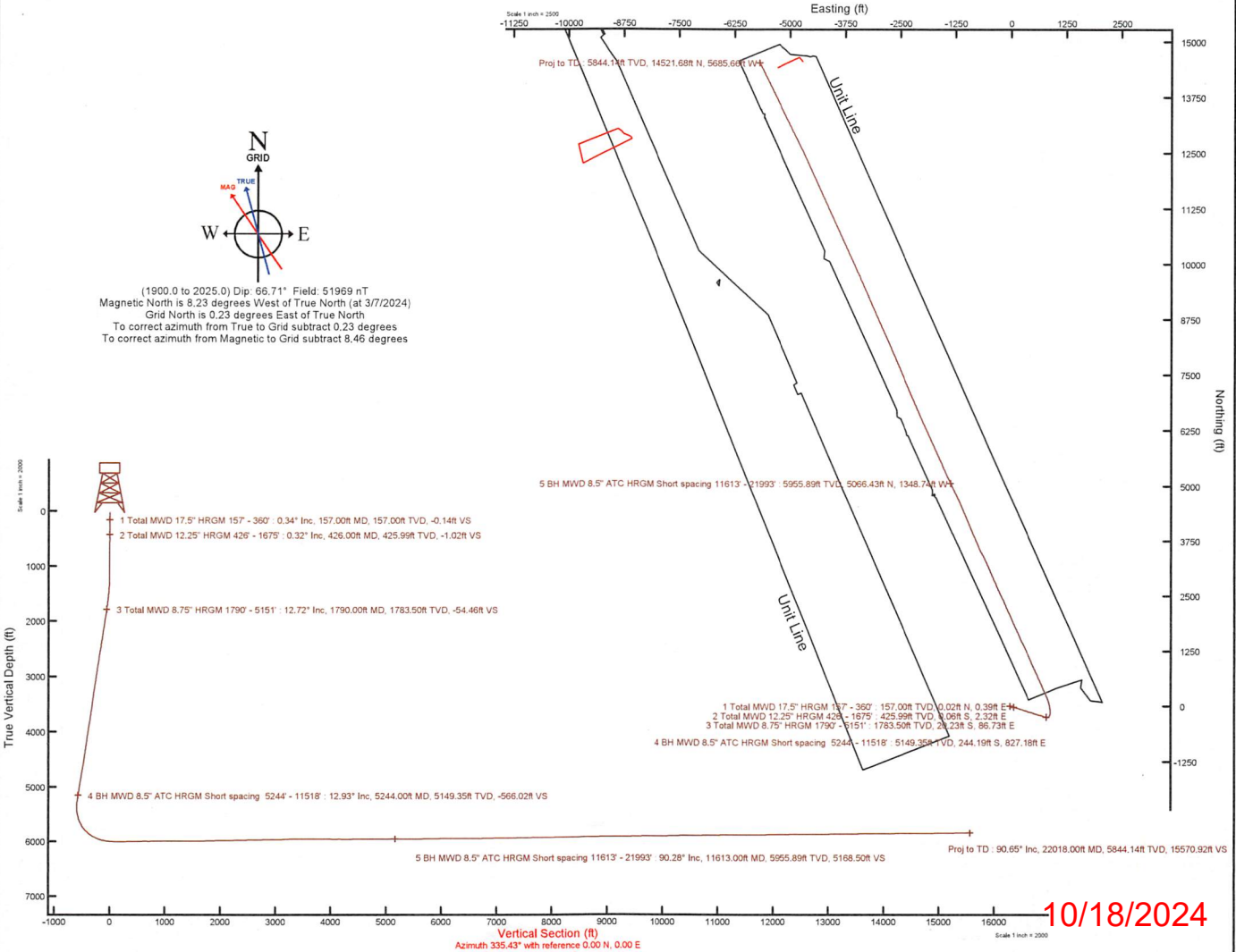
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Betty Schafer MSH Pad			1742491.842	14523656.697	39°59'27.5194"N	80°38'8.0179"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
5H	-30.45	-0.53	1742491.310	14523626.260	39°59'27.2186"N	80°38'8.0263"W
Comment	N 39 59 27.071 W 80 38 8.196 original SHL					
SDC 41 (KB) to Ground level (At Slot: 5H)						26ft
Mean Sea Level to Ground level (At Slot: 5H)						-848.7ft
SDC 41 (KB) to Mean Sea Level						874.7ft

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
22018.00	90.650	333.330	5844.14	14521.68	-5685.66	1736807.86	14538142.27	40°01'50.9486"N	80°39'20.3539"W

API: 47051025060000
 BH JOB: 112078035
 DURATION: 03.16.2024 to 03.21.2024
 RIG: SDC 41

RECEIVED
 Office of Oil and Gas
 JUL 16 2024
 WV Department of
 Environmental Protection



10/18/2024

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Betty Schafer MSH 5H
Field	Marshall	API	47051025060000
Facility	Betty Schafer MSH Pad	Wellbore	Betty Schafer MSH 5H AWB
Slot	5H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Tranlam
Scale	0.999612	Report Generated	3/25/2024 at 9:43:20 AM
Convergence at slot	0.23° East	Database	WA_MPL_EASTERNUS_Defn

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-30.45	-0.53	1742491.31	14523626.26	39°59'27.2186"N	80°38'8.0263"W
Facility Reference Pt			1742491.84	14523656.70	39°59'27.5194"N	80°38'8.0179"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.4780"W

WELLPATH DATUM			
Calculation method	Minimum curvature	SDC 41 (KB) to Facility Vertical Datum	874.70ft
Horizontal Reference Pt	Slot	SDC 41 (KB) to Mean Sea Level	874.70ft
Vertical Reference Pt	SDC 41 (KB)	SDC 41 (KB) to Ground Level at Slot (5H)	26.00ft
MD Reference Pt	SDC 41 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	335.43°

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Betty Schafer MSH 5H
Field	Marshall	API	47051025060000
Facility	Betty Schafer MSH Pad	Wellbore	Betty Schafer MSH 5H AWB
Slot	5H		

WELLPATH DATA (232 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]
0.00†	0.000	86.340	0.00	0.00	0.00	0.00	1742491.31	14523626.26	39°59'27.2186"N	80°38'8.0263"W	0.00	0.000	0.00
26.00	0.000	86.340	26.00	0.00	0.00	0.00	1742491.31	14523626.26	39°59'27.2186"N	80°38'8.0263"W	0.00	0.000	0.00
157.00	0.340	86.340	157.00	-0.14	0.02	0.39	1742491.70	14523626.28	39°59'27.2188"N	80°38'8.0213"W	0.39	86.340	0.26
230.00	0.570	79.440	230.00	-0.30	0.11	0.96	1742492.27	14523626.37	39°59'27.2196"N	80°38'8.0139"W	0.97	83.754	0.32
319.00	0.460	98.250	318.99	-0.60	0.14	1.75	1742493.06	14523626.39	39°59'27.2198"N	80°38'8.0038"W	1.75	85.587	0.23
360.00	0.280	110.440	359.99	-0.76	0.08	2.01	1742493.32	14523626.34	39°59'27.2192"N	80°38'8.0005"W	2.01	87.818	0.48
426.00	0.320	116.220	425.99	-1.02	-0.06	2.32	1742493.63	14523626.20	39°59'27.2179"N	80°38'7.9965"W	2.32	91.512	0.08
519.00	0.520	90.180	518.99	-1.40	-0.18	2.98	1742494.29	14523626.08	39°59'27.2167"N	80°38'7.9880"W	2.98	93.409	0.29
607.00	0.760	98.800	606.98	-1.89	-0.27	3.95	1742495.26	14523625.99	39°59'27.2157"N	80°38'7.9755"W	3.96	93.876	0.29
696.00	1.030	98.980	695.97	-2.65	-0.48	5.33	1742496.64	14523625.78	39°59'27.2136"N	80°38'7.9579"W	5.35	95.181	0.30
784.00	0.540	74.510	783.96	-3.16	-0.50	6.51	1742497.82	14523625.76	39°59'27.2134"N	80°38'7.9427"W	6.53	94.356	0.66
871.00	0.500	50.260	870.96	-3.12	-0.14	7.20	1742498.50	14523626.12	39°59'27.2168"N	80°38'7.9339"W	7.20	91.143	0.26
963.00	0.450	34.570	962.96	-2.83	0.41	7.71	1742499.02	14523626.67	39°59'27.2223"N	80°38'7.9272"W	7.72	86.952	0.15
1053.00	0.620	39.170	1052.95	-2.44	1.08	8.22	1742499.52	14523627.34	39°59'27.2289"N	80°38'7.9207"W	8.29	82.519	0.19
1144.00	0.950	76.400	1143.95	-2.36	1.64	9.26	1742500.57	14523627.90	39°59'27.2344"N	80°38'7.9072"W	9.41	79.969	0.65
1233.00	2.390	105.840	1232.91	-3.70	1.31	11.76	1742503.07	14523627.56	39°59'27.2310"N	80°38'7.8751"W	11.84	83.669	1.83
1325.00	4.100	106.550	1324.76	-7.11	-0.16	16.76	1742508.07	14523626.10	39°59'27.2163"N	80°38'7.8109"W	16.76	90.531	1.86
1415.00	5.900	108.060	1414.41	-12.36	-2.51	24.24	1742515.55	14523623.75	39°59'27.1928"N	80°38'7.7149"W	24.37	95.902	2.01
1507.00	8.290	107.980	1505.70	-20.05	-6.02	35.05	1742526.35	14523620.24	39°59'27.1576"N	80°38'7.5763"W	35.56	99.745	2.60
1597.00	10.330	107.390	1594.51	-29.83	-10.43	48.92	1742540.21	14523615.83	39°59'27.1135"N	80°38'7.3983"W	50.02	102.040	2.27
1675.00	11.610	105.190	1671.08	-39.53	-14.58	63.17	1742554.46	14523611.68	39°59'27.0719"N	80°38'7.2154"W	64.83	102.998	1.73
1790.00	12.720	101.930	1783.50	-54.46	-20.23	86.73	1742578.00	14523606.04	39°59'27.0151"N	80°38'6.9131"W	89.06	103.131	1.13
1882.00	12.640	106.050	1873.26	-67.04	-25.11	106.31	1742597.58	14523601.16	39°59'26.9661"N	80°38'6.6617"W	109.24	103.288	0.99
1971.00	12.980	109.200	1960.04	-80.29	-31.09	125.11	1742616.37	14523595.18	39°59'26.9063"N	80°38'6.4205"W	128.91	103.954	0.87
2057.00	12.920	108.500	2043.86	-93.54	-37.31	143.35	1742634.60	14523588.96	39°59'26.8440"N	80°38'6.1865"W	148.13	104.591	0.20
2148.00	13.030	105.260	2132.53	-107.06	-43.24	162.89	1742654.14	14523583.03	39°59'26.7846"N	80°38'5.9357"W	168.54	104.867	0.81
2237.00	12.900	108.540	2219.27	-120.27	-49.04	181.99	1742673.23	14523577.24	39°59'26.7265"N	80°38'5.6907"W	188.48	105.082	0.84
2416.00	13.410	105.610	2393.57	-147.32	-60.98	220.93	1742712.15	14523565.30	39°59'26.6070"N	80°38'5.1911"W	229.19	105.431	0.47
2598.00	12.860	109.620	2570.81	-175.06	-73.46	260.33	1742751.54	14523552.83	39°59'26.4821"N	80°38'4.6855"W	270.50	105.758	0.58
2689.00	12.830	107.550	2659.53	-188.89	-79.91	279.50	1742770.71	14523546.38	39°59'26.4176"N	80°38'4.4395"W	290.70	105.955	0.51

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Betty Schafer MSH 5H
Field	Marshall	API	47051025060000
Facility	Betty Schafer MSH Pad	Wellbore	Betty Schafer MSH 5H AWB
Slot	5H		

WELLPATH DATA (232 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]
5710.00	23.450	11.880	5599.28	-551.31	-191.26	907.56	1743398.52	14523435.07	39°59'25.2916"N	80°37'56.3763"W	927.50	101.901	7.24
5805.00	30.970	1.980	5683.75	-514.17	-148.25	912.31	1743403.26	14523478.06	39°59'25.7165"N	80°37'56.3130"W	924.27	99.230	9.22
5900.00	37.960	354.750	5762.06	-464.65	-94.64	910.47	1743401.43	14523531.66	39°59'26.2463"N	80°37'56.3337"W	915.38	95.934	8.51
5995.00	48.360	351.170	5831.28	-402.73	-30.28	902.33	1743393.29	14523595.99	39°59'26.8827"N	80°37'56.4350"W	902.84	91.922	11.24
6091.00	57.850	346.250	5888.87	-328.09	44.84	887.12	1743378.08	14523671.08	39°59'27.6257"N	80°37'56.6264"W	888.25	87.106	10.70
6186.00	64.450	341.940	5934.70	-245.89	124.77	864.24	1743355.22	14523750.98	39°59'28.4165"N	80°37'56.9161"W	873.20	81.785	8.00
6281.00	73.490	338.450	5968.76	-157.62	208.06	834.16	1743325.14	14523834.24	39°59'29.2408"N	80°37'57.2982"W	859.72	75.995	10.11
6376.00	81.440	335.660	5989.37	-65.01	293.37	798.01	1743289.01	14523919.52	39°59'30.0853"N	80°37'57.7581"W	850.22	69.815	8.84
6471.00	87.260	335.680	5998.72	29.49	379.48	759.07	1743250.09	14524005.59	39°59'30.9378"N	80°37'58.2538"W	848.64	63.439	6.13
6567.00	90.220	335.740	6000.83	125.45	466.95	719.60	1743210.63	14524093.02	39°59'31.8039"N	80°37'58.7563"W	857.82	57.021	3.08
6662.00	90.150	335.550	6000.52	220.45	553.49	680.42	1743171.47	14524179.54	39°59'32.6607"N	80°37'59.2551"W	877.11	50.873	0.21
6757.00	90.340	335.970	6000.11	315.45	640.11	641.42	1743132.48	14524266.12	39°59'33.5183"N	80°37'59.7516"W	906.18	45.058	0.49
6852.00	90.860	337.140	5999.12	410.42	727.26	603.62	1743094.70	14524353.24	39°59'34.3811"N	80°38'0.2326"W	945.13	39.692	1.35
7043.00	90.520	333.710	5996.82	601.38	900.92	524.21	1743015.31	14524526.83	39°59'36.1005"N	80°38'1.2438"W	1042.33	30.193	1.80
7138.00	89.410	336.880	5996.88	696.37	987.22	484.51	1742975.63	14524613.09	39°59'36.9549"N	80°38'1.7493"W	1099.70	26.141	3.54
7233.00	92.590	336.380	5995.22	791.32	1074.40	446.84	1742937.97	14524700.24	39°59'37.8179"N	80°38'2.2287"W	1163.61	22.582	3.39
7328.00	91.850	333.330	5991.54	886.23	1160.32	406.50	1742897.66	14524786.13	39°59'38.6687"N	80°38'2.7424"W	1229.47	19.307	3.30
7423.00	89.290	332.930	5990.59	981.14	1245.05	363.57	1742854.74	14524870.83	39°59'39.5078"N	80°38'3.2895"W	1297.05	16.279	2.73
7518.00	90.860	337.390	5990.47	1076.11	1331.24	323.68	1742814.86	14524956.98	39°59'40.3611"N	80°38'3.7976"W	1370.02	13.666	4.98
7614.00	88.520	329.730	5990.99	1171.98	1417.13	280.97	1742772.17	14525042.83	39°59'41.2116"N	80°38'4.3418"W	1444.71	11.214	8.34
7709.00	86.980	335.790	5994.72	1266.76	1501.48	237.54	1742728.75	14525127.16	39°59'42.0470"N	80°38'4.8954"W	1520.16	8.990	6.58
7804.00	90.800	338.460	5996.56	1361.67	1588.97	200.63	1742691.86	14525214.61	39°59'42.9131"N	80°38'5.3651"W	1601.59	7.196	4.91
7899.00	91.540	334.640	5994.62	1456.62	1676.09	162.84	1742654.08	14525301.70	39°59'43.7755"N	80°38'5.8460"W	1683.98	5.549	4.09
7995.00	89.850	334.530	5993.46	1552.60	1762.79	121.64	1742612.90	14525388.36	39°59'44.6340"N	80°38'6.3708"W	1766.98	3.947	1.76
8090.00	91.200	336.410	5992.59	1647.59	1849.21	82.20	1742573.48	14525474.74	39°59'45.4895"N	80°38'6.8729"W	1851.03	2.545	2.44
8185.00	92.030	336.860	5989.91	1742.53	1936.38	44.54	1742535.84	14525561.88	39°59'46.3525"N	80°38'7.3522"W	1936.89	1.318	0.99
8280.00	90.460	335.820	5987.85	1837.49	2023.37	6.43	1742497.74	14525648.84	39°59'47.2137"N	80°38'7.8374"W	2023.38	0.182	1.98
8376.00	91.320	336.700	5986.35	1933.46	2111.23	-32.21	1742459.11	14525736.67	39°59'48.0836"N	80°38'8.3293"W	2111.48	359.126	1.28
8471.00	90.400	335.420	5984.93	2028.45	2198.05	-70.76	1742420.58	14525823.45	39°59'48.9431"N	80°38'8.8200"W	2199.19	358.156	1.66
8566.00	89.910	338.170	5984.67	2123.41	2285.35	-108.18	1742383.17	14525910.72	39°59'49.8074"N	80°38'9.2963"W	2287.91	357.290	2.94

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Betty Schafer MSH 5H
Field	Marshall	API	47051025060000
Facility	Betty Schafer MSH Pad	Wellbore	Betty Schafer MSH 5H AWB
Slot	5H		

WELLPATH DATA (232 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]
8661.00	93.050	336.670	5982.22	2218.31	2373.03	-144.64	1742346.72	14525998.36	39°59'50.6753"N	80°38'9.7602"W	2377.43	356.512	3.66
8756.00	92.770	333.780	5977.39	2313.17	2459.17	-184.40	1742306.98	14526084.47	39°59'51.5281"N	80°38'10.2665"W	2466.07	355.712	3.05
8851.00	90.310	333.110	5974.84	2408.07	2544.11	-226.85	1742264.55	14526169.37	39°59'52.3692"N	80°38'10.8075"W	2554.20	354.905	2.68
8946.00	91.570	337.630	5973.28	2503.03	2630.43	-266.43	1742224.99	14526255.66	39°59'53.2238"N	80°38'11.3115"W	2643.88	354.216	4.94
9042.00	90.520	336.360	5971.53	2598.98	2718.77	-303.94	1742187.49	14526343.97	39°59'54.0984"N	80°38'11.7888"W	2735.71	353.621	1.72
9137.00	90.400	336.380	5970.77	2693.96	2805.81	-342.01	1742149.43	14526430.97	39°59'54.9600"N	80°38'12.2735"W	2826.57	353.050	0.13
9232.00	90.620	336.590	5969.92	2788.94	2892.91	-379.92	1742111.54	14526518.04	39°59'55.8224"N	80°38'12.7560"W	2917.75	352.518	0.32
9327.00	90.710	336.530	5968.82	2883.92	2980.07	-417.70	1742073.77	14526605.17	39°59'56.6852"N	80°38'13.2370"W	3009.20	352.021	0.11
9422.00	91.420	337.220	5967.05	2978.87	3067.42	-455.01	1742036.48	14526692.48	39°59'57.5499"N	80°38'13.7117"W	3100.98	351.563	1.04
9518.00	91.320	336.740	5964.76	3074.81	3155.75	-492.54	1741998.96	14526780.78	39°59'58.4243"N	80°38'14.1894"W	3193.95	351.129	0.51
9613.00	91.450	336.100	5962.46	3169.76	3242.79	-530.53	1741960.99	14526867.78	39°59'59.2860"N	80°38'14.6730"W	3285.90	350.709	0.69
9708.00	91.540	333.800	5959.98	3264.72	3328.82	-570.74	1741920.80	14526953.78	40°00'0.1378"N	80°38'15.1851"W	3377.39	350.271	2.42
9803.00	92.120	331.570	5956.95	3359.56	3413.18	-614.31	1741877.24	14527038.11	40°00'0.9732"N	80°38'15.7406"W	3468.02	349.797	2.42
9899.00	90.180	330.790	5955.02	3455.27	3497.26	-660.57	1741831.00	14527122.16	40°00'1.8060"N	80°38'16.3307"W	3559.10	349.304	2.18
9994.00	89.320	337.670	5955.44	3550.19	3582.76	-701.85	1741789.74	14527207.63	40°00'2.6526"N	80°38'16.8566"W	3650.86	348.916	7.30
10089.00	90.250	337.550	5955.79	3645.12	3670.60	-738.03	1741753.56	14527295.43	40°00'3.5220"N	80°38'17.3170"W	3744.06	348.631	0.99
10184.00	89.600	336.100	5955.92	3740.09	3757.93	-775.42	1741716.19	14527382.73	40°00'4.3866"N	80°38'17.7928"W	3837.10	348.341	1.67
10280.00	88.610	337.120	5957.42	3836.05	3846.03	-813.52	1741678.10	14527470.79	40°00'5.2587"N	80°38'18.2779"W	3931.13	348.057	1.48
10375.00	89.200	337.310	5959.23	3930.99	3933.60	-850.31	1741641.33	14527558.33	40°00'6.1256"N	80°38'18.7460"W	4024.45	347.802	0.65
10470.00	89.720	337.430	5960.13	4025.93	4021.28	-886.86	1741604.80	14527645.97	40°00'6.9935"N	80°38'19.2111"W	4117.92	347.563	0.56
10566.00	90.250	338.210	5960.15	4121.85	4110.18	-923.10	1741568.57	14527734.83	40°00'7.8735"N	80°38'19.6722"W	4212.56	347.342	0.98
10661.00	89.600	337.220	5960.28	4216.77	4198.08	-959.13	1741532.56	14527822.70	40°00'8.7436"N	80°38'20.1305"W	4306.25	347.131	1.25
10765.00	89.450	337.440	5961.14	4320.71	4294.04	-999.21	1741492.49	14527918.63	40°00'9.6935"N	80°38'20.6406"W	4408.76	346.901	0.26
10851.00	92.030	335.670	5960.03	4406.67	4372.92	-1033.42	1741458.29	14527997.48	40°00'10.4744"N	80°38'21.0761"W	4493.38	346.704	3.64
10947.00	90.180	337.220	5958.18	4502.63	4460.90	-1071.77	1741419.96	14528085.42	40°00'11.3454"N	80°38'21.5643"W	4587.85	346.490	2.51
11042.00	90.460	337.790	5957.65	4597.57	4548.67	-1108.12	1741383.62	14528173.16	40°00'12.2142"N	80°38'22.0268"W	4681.70	346.309	0.67
11137.00	89.850	335.090	5957.39	4692.55	4635.75	-1146.09	1741345.67	14528260.20	40°00'13.0762"N	80°38'22.5102"W	4775.32	346.113	2.91
11232.00	89.910	335.260	5957.59	4787.54	4721.97	-1185.97	1741305.80	14528346.38	40°00'13.9298"N	80°38'23.0183"W	4868.62	345.901	0.19
11328.00	89.940	335.270	5957.72	4883.54	4809.16	-1226.14	1741265.65	14528433.54	40°00'14.7931"N	80°38'23.5299"W	4963.01	345.697	0.03
11423.00	90.680	333.950	5957.20	4978.53	4894.98	-1266.87	1741224.93	14528519.33	40°00'15.6428"N	80°38'24.0489"W	5056.26	345.490	1.59



Actual Wellpath Report

Betty Schafer MSH 5H awp Proj: 22018'

Page 6 of 10

RECEIVED
Office of Oil and Gas

JUL 16 2024

WV Department of
Environmental Protection



REFERENCE WELLPATH IDENTIFICATION				
Operator	SWN PRODUCTION COMPANY, LLC		Well	Betty Schafer MSH 5H
Field	Marshall		API	47051025060000
Facility	Betty Schafer MSH Pad		Wellbore	Betty Schafer MSH 5H AWB
Slot	5H			

WELLPATH DATA (232 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]
11518.00	90.310	334.630	5956.38	5073.51	4980.57	-1308.08	1741183.74	14528604.89	40°00'16.4903"N	80°38'24.5740"W	5149.48	345.284	0.81
11613.00	90.280	334.690	5955.89	5168.50	5066.43	-1348.74	1741143.09	14528690.71	40°00'17.3404"N	80°38'25.0920"W	5242.88	345.093	0.07
11709.00	90.120	334.950	5955.56	5264.49	5153.31	-1389.59	1741102.27	14528777.56	40°00'18.2006"N	80°38'25.6124"W	5337.37	344.909	0.32
11804.00	90.370	335.070	5955.15	5359.49	5239.41	-1429.72	1741062.15	14528863.63	40°00'19.0531"N	80°38'26.1237"W	5430.98	344.737	0.29
11899.00	90.250	335.310	5954.64	5454.48	5325.64	-1469.58	1741022.30	14528949.82	40°00'19.9068"N	80°38'26.6315"W	5524.68	344.573	0.28
11994.00	90.120	335.260	5954.33	5549.48	5411.94	-1509.30	1740982.60	14529036.09	40°00'20.7612"N	80°38'27.1374"W	5618.46	344.417	0.15
12090.00	90.550	336.430	5953.77	5645.48	5499.53	-1548.58	1740943.33	14529123.64	40°00'21.6284"N	80°38'27.6377"W	5713.40	344.274	1.30
12184.00	90.800	335.650	5952.66	5739.47	5585.42	-1586.75	1740905.17	14529209.50	40°00'22.4787"N	80°38'28.1237"W	5806.44	344.141	0.87
12280.00	90.680	335.390	5951.42	5835.46	5672.79	-1626.53	1740865.41	14529296.83	40°00'23.3436"N	80°38'28.6304"W	5901.36	344.001	0.30
12375.00	90.520	335.430	5950.43	5930.45	5759.17	-1666.06	1740825.90	14529383.18	40°00'24.1988"N	80°38'29.1339"W	5995.31	343.865	0.17
12471.00	90.370	335.470	5949.68	6026.45	5846.48	-1705.95	1740786.03	14529470.46	40°00'25.0633"N	80°38'29.6420"W	6090.29	343.733	0.16
12566.00	90.490	335.500	5948.97	6121.45	5932.92	-1745.36	1740746.63	14529556.86	40°00'25.9190"N	80°38'30.1440"W	6184.32	343.607	0.13
12661.00	90.580	335.000	5948.08	6216.44	6019.19	-1785.13	1740706.87	14529643.10	40°00'26.7731"N	80°38'30.6507"W	6278.32	343.481	0.53
12756.00	91.230	335.800	5946.58	6311.43	6105.55	-1824.68	1740667.35	14529729.43	40°00'27.6282"N	80°38'31.1544"W	6372.38	343.361	1.08
12852.00	90.400	335.600	5945.21	6407.42	6193.04	-1864.18	1740627.86	14529816.88	40°00'28.4943"N	80°38'31.6575"W	6467.52	343.248	0.89
12947.00	89.540	334.950	5945.26	6502.41	6279.33	-1903.91	1740588.14	14529903.14	40°00'29.3486"N	80°38'32.1636"W	6561.62	343.133	1.13
13042.00	90.680	335.540	5945.08	6597.41	6365.60	-1943.69	1740548.38	14529989.37	40°00'30.2027"N	80°38'32.6704"W	6655.73	343.020	1.35
13137.00	90.370	334.700	5944.21	6692.41	6451.77	-1983.66	1740508.43	14530075.52	40°00'31.0559"N	80°38'33.1796"W	6749.84	342.909	0.94
13233.00	91.230	336.870	5942.87	6788.39	6539.31	-2023.03	1740469.07	14530163.02	40°00'31.9226"N	80°38'33.6810"W	6845.09	342.810	2.43
13328.00	90.830	336.820	5941.16	6883.34	6626.65	-2060.38	1740431.74	14530250.32	40°00'32.7871"N	80°38'34.1565"W	6939.57	342.728	0.42
13423.00	90.860	336.230	5939.76	6978.32	6713.77	-2098.21	1740393.91	14530337.41	40°00'33.6496"N	80°38'34.6383"W	7034.01	342.645	0.62
13519.00	90.770	336.520	5938.40	7074.29	6801.72	-2136.68	1740355.46	14530425.33	40°00'34.5202"N	80°38'35.1281"W	7129.43	342.560	0.32
13614.00	90.950	336.150	5936.97	7169.27	6888.72	-2174.81	1740317.35	14530512.29	40°00'35.3815"N	80°38'35.6136"W	7223.87	342.479	0.43
13709.00	91.020	336.370	5935.34	7264.25	6975.67	-2213.05	1740279.12	14530599.21	40°00'36.2423"N	80°38'36.1006"W	7318.30	342.398	0.24
13804.00	90.920	335.950	5933.73	7359.22	7062.55	-2251.44	1740240.75	14530686.06	40°00'37.1024"N	80°38'36.5895"W	7412.73	342.318	0.45
13900.00	90.550	336.470	5932.50	7455.21	7150.39	-2290.16	1740202.04	14530773.86	40°00'37.9719"N	80°38'37.0826"W	7508.19	342.240	0.66
13995.00	90.860	336.470	5931.33	7550.18	7237.48	-2328.09	1740164.13	14530860.92	40°00'38.8341"N	80°38'37.5655"W	7602.70	342.169	0.33
14090.00	90.920	336.180	5929.85	7645.16	7324.47	-2366.23	1740126.00	14530947.88	40°00'39.6953"N	80°38'38.0513"W	7697.20	342.097	0.31
14186.00	91.020	336.520	5928.23	7741.13	7412.40	-2404.73	1740087.51	14531035.77	40°00'40.5657"N	80°38'38.5416"W	7792.71	342.026	0.37
14281.00	90.830	336.350	5926.69	7836.11	7499.46	-2442.71	1740049.55	14531122.80	40°00'41.4276"N	80°38'39.0252"W	7887.26	341.959	0.27



Actual Wellpath Report

Betty Schafer MSH 5H awp Proj: 22018'
Page 7 of 10

RECEIVED
Office of Oil and Gas

JUL 16 2024

WV Department of
Environmental Protection



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Betty Schafer MSH 5H
Field	Marshall	API	47051025060000
Facility	Betty Schafer MSH Pad	Wellbore	Betty Schafer MSH 5H AWB
Slot	5H		

WELLPATH DATA (232 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]
14376.00	90.980	336.560	5925.19	7931.08	7586.54	-2480.65	1740011.62	14531209.84	40°00'42.2896"N	80°38'39.5084"W	7981.81	341.893	0.27
14471.00	90.710	336.600	5923.79	8026.05	7673.71	-2518.41	1739973.88	14531296.97	40°00'43.1525"N	80°38'39.9891"W	8076.40	341.831	0.29
14567.00	90.830	336.370	5922.50	8122.03	7761.73	-2556.71	1739935.60	14531384.96	40°00'44.0239"N	80°38'40.4768"W	8171.98	341.768	0.27
14662.00	91.080	336.590	5920.92	8217.00	7848.82	-2594.62	1739897.71	14531472.02	40°00'44.8860"N	80°38'40.9595"W	8266.56	341.707	0.35
14757.00	90.310	335.820	5919.77	8311.98	7935.74	-2632.94	1739859.40	14531558.90	40°00'45.7465"N	80°38'41.4476"W	8361.12	341.645	1.15
14852.00	91.020	336.430	5918.66	8406.96	8022.60	-2671.39	1739820.96	14531645.73	40°00'46.6064"N	80°38'41.9373"W	8455.68	341.583	0.99
14947.00	90.680	336.860	5917.26	8501.93	8109.81	-2709.05	1739783.32	14531732.91	40°00'47.4697"N	80°38'42.4168"W	8550.32	341.528	0.58
15043.00	90.980	337.070	5915.86	8597.89	8198.15	-2746.61	1739745.78	14531821.21	40°00'48.3441"N	80°38'42.8950"W	8646.01	341.478	0.38
15138.00	90.370	336.040	5914.75	8692.86	8285.30	-2784.40	1739708.00	14531908.32	40°00'49.2068"N	80°38'43.3763"W	8740.65	341.424	1.26
15233.00	90.490	336.060	5914.03	8787.85	8372.11	-2822.96	1739669.45	14531995.11	40°00'50.0663"N	80°38'43.8675"W	8835.24	341.367	0.13
15329.00	90.310	335.640	5913.36	8883.85	8459.71	-2862.24	1739630.19	14532082.67	40°00'50.9335"N	80°38'44.3677"W	8930.79	341.307	0.48
15424.00	90.800	335.710	5912.44	8978.84	8546.27	-2901.37	1739591.07	14532169.20	40°00'51.7904"N	80°38'44.8662"W	9025.34	341.248	0.52
15519.00	90.800	337.120	5911.12	9073.82	8633.32	-2939.37	1739553.08	14532256.22	40°00'52.6522"N	80°38'45.3502"W	9119.99	341.198	1.48
15614.00	90.250	335.660	5910.25	9168.80	8720.37	-2977.42	1739515.05	14532343.22	40°00'53.5139"N	80°38'45.8348"W	9214.65	341.148	1.64
15710.00	90.460	335.750	5909.65	9264.79	8807.86	-3016.92	1739475.57	14532430.69	40°00'54.3801"N	80°38'46.3379"W	9310.22	341.092	0.24
15805.00	90.950	337.030	5908.48	9359.77	8894.90	-3054.96	1739437.54	14532517.69	40°00'55.2417"N	80°38'46.8225"W	9404.90	341.045	1.44
15900.00	91.080	336.420	5906.80	9454.73	8982.16	-3092.49	1739400.02	14532604.91	40°00'56.1055"N	80°38'47.3004"W	9499.61	341.002	0.66
15995.00	91.050	336.660	5905.03	9549.70	9069.29	-3130.31	1739362.22	14532692.01	40°00'56.9680"N	80°38'47.7820"W	9594.31	340.958	0.25
16091.00	90.980	336.480	5903.33	9645.66	9157.36	-3168.47	1739324.07	14532780.05	40°00'57.8398"N	80°38'48.2680"W	9690.02	340.914	0.20
16186.00	90.980	336.990	5901.71	9740.62	9244.62	-3205.99	1739286.57	14532867.28	40°00'58.7037"N	80°38'48.7458"W	9784.75	340.874	0.54
16281.00	90.490	336.500	5900.49	9835.59	9331.90	-3243.50	1739249.08	14532954.52	40°00'59.5676"N	80°38'49.2233"W	9879.50	340.834	0.73
16376.00	90.550	336.420	5899.63	9930.57	9418.99	-3281.44	1739211.15	14533041.57	40°01'0.4297"N	80°38'49.7066"W	9974.22	340.792	0.11
16472.00	90.980	336.690	5898.35	10026.54	9507.05	-3319.63	1739172.98	14533129.60	40°01'1.3015"N	80°38'50.1929"W	10069.95	340.752	0.53
16567.00	91.020	336.430	5896.69	10121.51	9594.20	-3357.41	1739135.21	14533216.72	40°01'2.1642"N	80°38'50.6741"W	10164.69	340.713	0.28
16662.00	90.920	336.390	5895.08	10216.48	9681.25	-3395.42	1739097.21	14533303.73	40°01'3.0259"N	80°38'51.1583"W	10259.41	340.673	0.11
16757.00	90.980	335.030	5893.50	10311.47	9767.82	-3434.50	1739058.15	14533390.27	40°01'3.8830"N	80°38'51.6561"W	10354.04	340.628	1.43
16853.00	90.740	335.320	5892.06	10407.45	9854.94	-3474.80	1739017.87	14533477.36	40°01'4.7455"N	80°38'52.1696"W	10449.60	340.578	0.39
16949.00	91.140	335.830	5890.49	10503.44	9942.34	-3514.49	1738978.19	14533564.72	40°01'5.6107"N	80°38'52.6753"W	10545.22	340.532	0.68
17045.00	90.620	335.420	5889.01	10599.43	10029.77	-3554.10	1738938.59	14533652.12	40°01'6.4763"N	80°38'53.1801"W	10640.86	340.488	0.69
17142.00	91.260	335.140	5887.42	10696.41	10117.87	-3594.66	1738898.05	14533740.18	40°01'7.3485"N	80°38'53.6969"W	10737.45	340.441	0.72

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Betty Schafer MSH 5H
Field	Marshall	API	47051025060000
Facility	Betty Schafer MSH Pad	Wellbore	Betty Schafer MSH 5H AWB
Slot	5H		

WELLPATH DATA (232 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]
17239.00	90.400	335.210	5886.02	10793.40	10205.90	-3635.38	1738857.35	14533828.18	40°01'8.2200"N	80°38'54.2158"W	10834.04	340.394	0.89
17335.00	90.680	335.680	5885.11	10889.40	10293.21	-3675.28	1738817.47	14533915.46	40°01'9.0844"N	80°38'54.7241"W	10929.68	340.350	0.57
17431.00	90.550	335.780	5884.08	10985.39	10380.72	-3714.73	1738778.03	14534002.93	40°01'9.9507"N	80°38'55.2268"W	11025.36	340.310	0.17
17528.00	90.400	335.760	5883.28	11082.39	10469.17	-3754.54	1738738.23	14534091.35	40°01'10.8264"N	80°38'55.7340"W	11122.06	340.271	0.16
17624.00	90.490	335.700	5882.53	11178.38	10556.69	-3794.00	1738698.79	14534178.83	40°01'11.6927"N	80°38'56.2367"W	11217.76	340.232	0.11
17721.00	90.150	335.110	5881.99	11275.38	10644.88	-3834.37	1738658.44	14534266.99	40°01'12.5659"N	80°38'56.7512"W	11314.41	340.191	0.70
17817.00	90.550	335.650	5881.40	11371.38	10732.15	-3874.36	1738618.46	14534354.23	40°01'13.4299"N	80°38'57.2608"W	11410.07	340.150	0.70
17913.00	90.460	335.500	5880.56	11467.37	10819.56	-3914.06	1738578.78	14534441.60	40°01'14.2952"N	80°38'57.7666"W	11505.77	340.112	0.18
18008.00	90.520	335.680	5879.75	11562.37	10906.06	-3953.31	1738539.54	14534528.07	40°01'15.1515"N	80°38'58.2668"W	11600.47	340.075	0.20
18103.00	90.550	335.760	5878.86	11657.36	10992.66	-3992.38	1738500.49	14534614.63	40°01'16.0088"N	80°38'58.7645"W	11695.19	340.040	0.09
18199.00	90.580	335.640	5877.91	11753.36	11080.15	-4031.88	1738461.00	14534702.09	40°01'16.8749"N	80°38'59.2679"W	11790.92	340.004	0.13
18294.00	90.430	335.340	5877.07	11848.35	11166.58	-4071.29	1738421.61	14534788.49	40°01'17.7306"N	80°38'59.7700"W	11885.62	339.968	0.35
18389.00	90.460	335.720	5876.34	11943.35	11253.05	-4110.64	1738382.27	14534874.92	40°01'18.5866"N	80°39'0.2715"W	11980.33	339.933	0.40
18484.00	90.340	335.580	5875.67	12038.35	11339.59	-4149.81	1738343.12	14534961.43	40°01'19.4434"N	80°39'0.7705"W	12075.07	339.900	0.19
18580.00	90.580	335.530	5874.90	12134.34	11426.99	-4189.53	1738303.41	14535048.79	40°01'20.3086"N	80°39'1.2768"W	12170.79	339.865	0.26
18675.00	90.430	335.350	5874.07	12229.34	11513.39	-4229.02	1738263.94	14535135.16	40°01'21.1640"N	80°39'1.7799"W	12265.51	339.831	0.25
18770.00	90.520	335.820	5873.28	12324.34	11599.89	-4268.28	1738224.69	14535221.62	40°01'22.0203"N	80°39'2.2803"W	12360.25	339.798	0.50
18865.00	90.580	335.430	5872.37	12419.33	11686.42	-4307.49	1738185.50	14535308.12	40°01'22.8769"N	80°39'2.7799"W	12454.99	339.767	0.42
18960.00	90.400	335.910	5871.55	12514.33	11772.98	-4346.63	1738146.38	14535394.64	40°01'23.7338"N	80°39'3.2786"W	12549.75	339.736	0.54
19056.00	90.430	335.580	5870.86	12610.32	11860.50	-4386.06	1738106.96	14535482.13	40°01'24.6003"N	80°39'3.7811"W	12645.51	339.705	0.35
19151.00	90.520	335.370	5870.07	12705.32	11946.93	-4425.49	1738067.54	14535568.53	40°01'25.4559"N	80°39'4.2836"W	12740.25	339.674	0.24
19246.00	90.520	335.200	5869.21	12800.32	12033.22	-4465.21	1738027.84	14535654.79	40°01'26.3102"N	80°39'4.7898"W	12834.97	339.641	0.18
19341.00	90.770	335.720	5868.14	12895.31	12119.63	-4504.67	1737988.40	14535741.17	40°01'27.1657"N	80°39'5.2926"W	12929.71	339.611	0.61
19437.00	90.370	335.460	5867.18	12991.30	12207.05	-4544.34	1737948.75	14535828.55	40°01'28.0311"N	80°39'5.7981"W	13025.47	339.581	0.50
19532.00	90.770	335.420	5866.24	13086.30	12293.45	-4583.82	1737909.28	14535914.91	40°01'28.8864"N	80°39'6.3013"W	13120.22	339.551	0.42
19627.00	90.830	335.650	5864.91	13181.29	12379.91	-4623.16	1737869.95	14536001.34	40°01'29.7424"N	80°39'6.8026"W	13214.98	339.522	0.25
19723.00	91.140	334.600	5863.26	13277.27	12466.99	-4663.54	1737829.59	14536088.39	40°01'30.6045"N	80°39'7.3173"W	13310.69	339.491	1.14
19818.00	90.340	333.550	5862.03	13372.24	12552.42	-4705.06	1737788.08	14536173.78	40°01'31.4503"N	80°39'7.8468"W	13405.26	339.452	1.39
19915.00	90.740	333.540	5861.12	13469.18	12639.26	-4748.28	1737744.89	14536260.59	40°01'32.3101"N	80°39'8.3979"W	13501.74	339.410	0.41
20010.00	90.620	333.850	5859.99	13564.13	12724.41	-4790.37	1737702.81	14536345.71	40°01'33.1533"N	80°39'8.9347"W	13596.26	339.370	0.35

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Betty Schafer MSH 5H
Field	Marshall	API	47051025060000
Facility	Betty Schafer MSH Pad	Wellbore	Betty Schafer MSH 5H AWB
Slot	5H		

WELLPATH DATA (232 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]
20105.00	90.400	333.600	5859.15	13659.08	12809.60	-4832.42	1737660.77	14536430.86	40°01'33.9967"N	80°39'9.4710"W	13690.80	339.331	0.35
20200.00	89.140	333.050	5859.53	13754.02	12894.48	-4875.07	1737618.14	14536515.71	40°01'34.8372"N	80°39'10.0150"W	13785.28	339.290	1.45
20296.00	90.460	333.680	5859.86	13849.95	12980.29	-4918.11	1737575.12	14536601.49	40°01'35.6868"N	80°39'10.5639"W	13880.77	339.249	1.52
20391.00	90.550	333.580	5859.03	13944.90	13065.40	-4960.30	1737532.94	14536686.57	40°01'36.5296"N	80°39'11.1020"W	13975.31	339.211	0.14
20486.00	90.520	333.500	5858.14	14039.84	13150.45	-5002.63	1737490.63	14536771.58	40°01'37.3716"N	80°39'11.6419"W	14069.85	339.172	0.09
20582.00	90.400	333.760	5857.37	14135.79	13236.46	-5045.27	1737448.01	14536857.55	40°01'38.2232"N	80°39'12.1857"W	14165.40	339.135	0.30
20677.00	90.430	333.790	5856.68	14230.75	13321.67	-5087.25	1737406.05	14536942.74	40°01'39.0670"N	80°39'12.7210"W	14259.98	339.099	0.04
20772.00	90.460	333.440	5855.94	14325.70	13406.78	-5129.46	1737363.85	14537027.81	40°01'39.9096"N	80°39'13.2595"W	14354.55	339.063	0.37
20868.00	90.550	333.340	5855.10	14421.64	13492.60	-5172.46	1737320.87	14537113.60	40°01'40.7594"N	80°39'13.8079"W	14450.08	339.025	0.14
20963.00	90.520	333.560	5854.21	14516.57	13577.58	-5214.92	1737278.42	14537198.55	40°01'41.6008"N	80°39'14.3495"W	14544.63	338.989	0.23
21058.00	90.490	333.450	5853.37	14611.52	13662.60	-5257.30	1737236.06	14537283.53	40°01'42.4426"N	80°39'14.8900"W	14639.19	338.954	0.12
21153.00	90.430	333.320	5852.61	14706.45	13747.53	-5299.86	1737193.52	14537368.43	40°01'43.2835"N	80°39'15.4329"W	14733.74	338.918	0.15
21249.00	90.830	333.440	5851.55	14802.39	13833.35	-5342.87	1737150.52	14537454.21	40°01'44.1333"N	80°39'15.9815"W	14829.29	338.882	0.44
21344.00	90.460	333.480	5850.48	14897.32	13918.33	-5385.32	1737108.09	14537539.16	40°01'44.9747"N	80°39'16.5229"W	14923.86	338.847	0.39
21439.00	90.580	333.370	5849.62	14992.26	14003.29	-5427.82	1737065.61	14537624.09	40°01'45.8159"N	80°39'17.0650"W	15018.44	338.813	0.17
21535.00	90.580	333.630	5848.65	15088.20	14089.20	-5470.65	1737022.80	14537709.97	40°01'46.6665"N	80°39'17.6113"W	15114.02	338.779	0.27
21630.00	90.460	333.370	5847.79	15183.14	14174.22	-5513.04	1736980.42	14537794.95	40°01'47.5083"N	80°39'18.1520"W	15208.62	338.747	0.30
21725.00	90.680	333.820	5846.84	15278.09	14259.30	-5555.28	1736938.20	14537880.00	40°01'48.3507"N	80°39'18.6908"W	15303.23	338.715	0.53
21820.00	90.490	333.660	5845.87	15373.04	14344.49	-5597.31	1736896.18	14537965.16	40°01'49.1942"N	80°39'19.2269"W	15397.87	338.684	0.26
21916.00	90.400	333.530	5845.13	15468.99	14430.48	-5640.00	1736853.51	14538051.11	40°01'50.0456"N	80°39'19.7714"W	15493.49	338.652	0.16
21993.00	90.650	333.330	5844.42	15545.94	14499.34	-5674.44	1736819.08	14538119.94	40°01'50.7274"N	80°39'20.2107"W	15570.17	338.627	0.42
22018.00‡	90.650	333.330	5844.14	15570.92	14521.68	-5685.66	1736807.86	14538142.27	40°01'50.9486"N	80°39'20.3539"W	15595.06	338.618	0.00



Actual Wellpath Report

Betty Schafer MSH 5H awp Proj: 22018'
Page 10 of 10

RECEIVED
Office of Oil and Gas

JUL 16 2024

WV Department of
Environmental Protection



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Betty Schafer MSH 5H
Field	Marshall	API	47051025060000
Facility	Betty Schafer MSH Pad	Wellbore	Betty Schafer MSH 5H AWB
Slot	5H		

HOLE & CASING SECTIONS - Ref Wellbore: Betty Schafer MSH 5H AWB Ref Wellpath: Betty Schafer MSH 5H awp Proj: 22018'									
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]
13.375in Casing	26.00	413.00	387.00	26.00	412.99	0.00	0.00	-0.03	2.26
9.625in Casing	26.00	1745.00	1719.00	26.00	1739.57	0.00	0.00	-18.12	77.22
5.5in Casing	26.00	22018.00	21992.00	26.00	5844.14	0.00	0.00	14521.68	-5685.66

TARGETS									
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape	
Betty Schafer MSH 5H BHL Rev 8	5845.00	14516.43	-5696.65	1736796.89	14538137.02	40°01'50.8971"N	80°39'20.4953"W	point	
Betty Schafer MSH 5H wp1	5845.00	12421.51	-4642.97	1737850.16	14536042.92	40°01'30.1542"N	80°39'7.0551"W	point	
Betty Schafer MSH 5H LP Rev-7	6004.00	394.96	757.22	1743248.24	14524021.07	39°59'31.0910"N	80°37'58.2767"W	point	

WELLPATH COMPOSITION - Ref Wellbore: Betty Schafer MSH 5H AWB Ref Wellpath: Betty Schafer MSH 5H awp Proj: 22018'									
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date				
26.00	360.00	OWSG MWD rev2 + HRGM	1 Total MWD 17.5" HRGM 157' - 360'	Betty Schafer MSH 5H AWB	3/15/2024				
360.00	1675.00	OWSG MWD rev2 + HRGM	2 Total MWD 12.25" HRGM 426' - 1675'	Betty Schafer MSH 5H AWB	3/15/2024				
1675.00	5151.00	OWSG MWD rev2 + HRGM	3 Total MWD 8.75" HRGM 1790' - 5151'	Betty Schafer MSH 5H AWB	3/15/2024				
5151.00	11518.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	4 BH MWD 8.5" ATC HRGM Short spacing 5244' - 11518'	Betty Schafer MSH 5H AWB	3/15/2024				
11518.00	22018.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	5 BH MWD 8.5" ATC HRGM Short spacing 11613' - 21993'	Betty Schafer MSH 5H AWB	3/25/2024				