

SWN PRODUCTION COMPANY, LLC

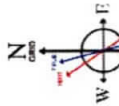
Location: Brooke County, WV
 Field: Brooke
 Facility: State of WV DNR C BRK Pad
 Slot: Slot 10H
 Well: State of WV DNR C BRK 10H
 Wellbore: State of WV DNR C BRK 10H PWB

Grid System: MADRS / UTM Zone 17 North, US feet
 North Reference: Grid north
 Scale: True distance
 Coordinates are in feet referenced to SDC
 Depths are in feet
 Created by: abergon on 2021-03-30; Draughts: WA, MPL, EASTERNUS, Dwh

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
State of WV DNR C BRK Pad	1769295.332	14637176.548	80°32'15.9300"W
Slot	Local E (ft)	Grid North (US ft)	Longitude
Slot 10H	-9.52	1769298.030	80°32'15.8829"W
Slot 40 (KB) to Ground level (At Slot: Slot 10H)	3.70	14637167.030	26ft
Mean Sea Level to Ground level (At Slot: Slot 10H)			-988.1ft
SDC-40 (KB) to Mean Sea Level			1014.1ft

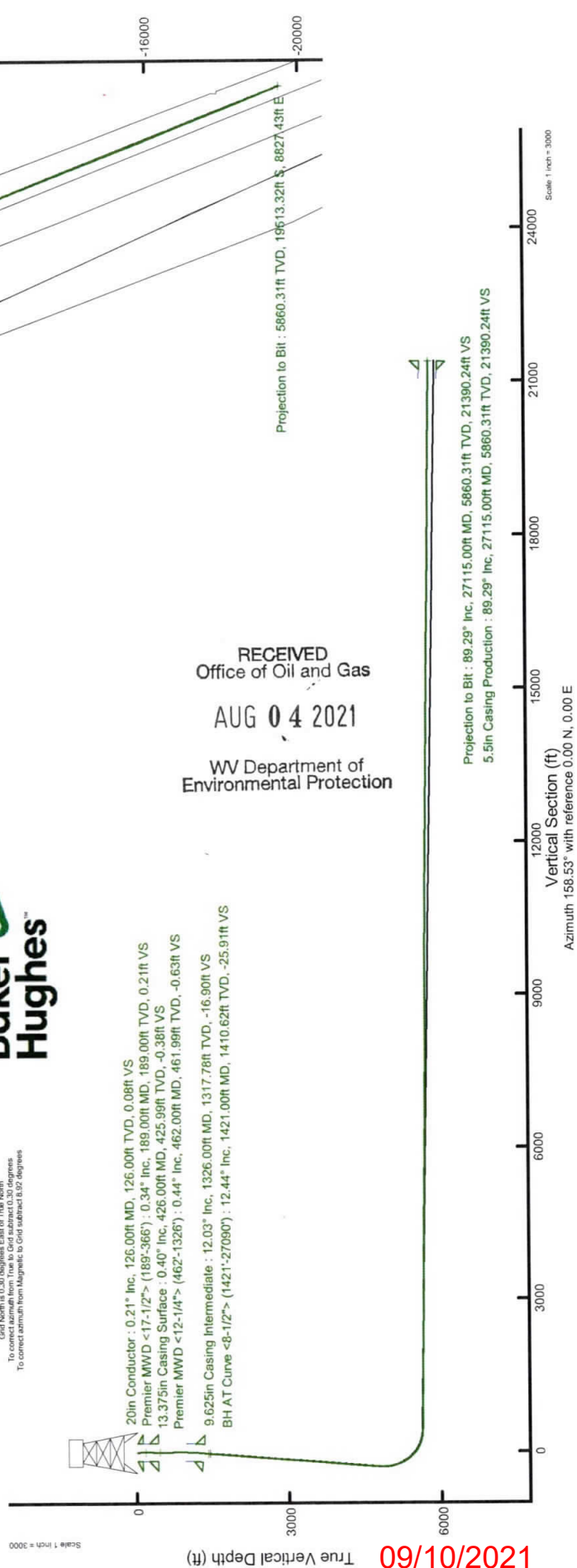
Comments

API: 47-009-00309-0000
 BH Job #: 110732171
 Rig: SDC-40
 Duration: 03/19/2021 - 03/26/2021



User specified Dip: 07.47° True: 52.52° ZT
 Magnetic North is 0.30 degrees East of True North
 Grid North is 0.30 degrees East of True North
 To correct azimuth from True to Grid subtract 0.30 degrees
 To correct azimuth from Magnetic to Grid subtract 0.30 degrees

20in Conductor : 0.21° Inc, 126.00ft MD, 126.00ft TVD, 0.08ft VS
 Premier MWD <17-1/2" > (189°-366°) : 0.34° Inc, 189.00ft MD, 189.00ft TVD, 0.21ft VS
 13.375in Casing Surface : 0.40° Inc, 426.00ft MD, 425.99ft TVD, -0.38ft VS
 Premier MWD <12-1/4" > (462°-1326°) : 0.44° Inc, 462.00ft MD, 461.99ft TVD, -0.63ft VS
 9.625in Casing Intermediate : 12.03° Inc, 1326.00ft MD, 1317.78ft TVD, -16.90ft VS
 BH AT Curve <8-1/2" > (1421°-27090°) : 12.44° Inc, 1421.00ft MD, 1410.62ft TVD, -25.91ft VS



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WV Department of
 Environmental Protection

202/10/60

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Atenjen
Scale	0.999619	Report Generated	3/30/2021 at 11:56:02 AM
Convergence at slot	0.30° 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	-9.52	3.70	1769299.03	14637167.03	40°18'8.4257"N	80°32'15.8829"W
Facility Reference Pt			1769295.33	14637176.55	40°18'8.5200"N	80°32'15.9300"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 (KB) to Facility Vertical Datum	1014.10ft
Horizontal Reference Pt	Slot	SDC 40 (KB) to Mean Sea Level	1014.10ft
Vertical Reference Pt	SDC 40 (KB)	SDC 40 (KB) to Ground Level at Slot (Slot 10H)	26.00ft
MD Reference Pt	SDC 40 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	158.53°

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Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

WELLPATH DATA (290 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
0.00	0.000	222.610	0.00	0.00	0.00	0.00	1769299.03	14637167.03	40°18'8.4257"N	80°32'15.8829"W	0.00	0.000	0.00	0.00	0.00
26.00	0.000	222.610	26.00	0.00	0.00	0.00	1769299.03	14637167.03	40°18'8.4257"N	80°32'15.8829"W	0.00	0.000	0.00	0.00	0.00
189.00	0.340	222.610	189.00	0.21	-0.36	-0.33	1769298.70	14637166.67	40°18'8.4222"N	80°32'15.8871"W	0.48	222.610	0.21	0.21	0.00
220.00	0.410	230.830	220.00	0.29	-0.49	-0.48	1769298.55	14637166.54	40°18'8.4209"N	80°32'15.8891"W	0.69	223.935	0.28	0.23	26.52
310.00	0.490	283.660	310.00	0.16	-0.61	-1.10	1769297.93	14637166.42	40°18'8.4198"N	80°32'15.8971"W	1.26	241.126	0.45	0.09	58.70
366.00	0.400	282.170	365.99	-0.08	-0.51	-1.52	1769297.51	14637166.52	40°18'8.4208"N	80°32'15.9026"W	1.61	251.539	0.16	-0.16	-2.66
462.00	0.440	325.190	461.99	-0.63	-0.14	-2.06	1769296.97	14637166.89	40°18'8.4245"N	80°32'15.9095"W	2.07	266.248	0.32	0.04	44.81
493.00	0.320	312.180	492.99	-0.82	0.02	-2.19	1769296.84	14637167.05	40°18'8.4260"N	80°32'15.9112"W	2.19	270.541	0.47	-0.39	-41.97
583.00	1.090	61.650	582.99	-1.15	0.60	-1.63	1769297.40	14637167.63	40°18'8.4317"N	80°32'15.9038"W	1.73	290.129	1.37	0.86	121.63
674.00	3.790	79.900	673.90	-0.66	1.53	2.10	1769301.13	14637168.56	40°18'8.4408"N	80°32'15.8557"W	2.60	53.808	3.05	2.97	20.05
765.00	6.560	78.250	764.52	0.81	3.12	10.15	1769309.18	14637170.15	40°18'8.4560"N	80°32'15.7517"W	10.62	72.907	3.05	3.04	-1.81
855.00	7.890	70.060	853.80	1.84	6.27	20.99	1769320.01	14637173.30	40°18'8.4866"N	80°32'15.6116"W	21.91	73.357	1.87	1.48	-9.10
946.00	8.690	62.540	943.85	1.29	11.58	32.96	1769331.98	14637178.60	40°18'8.5384"N	80°32'15.4567"W	34.94	70.651	1.48	0.88	-8.26
1037.00	9.590	56.290	1033.70	-1.03	18.95	45.37	1769344.38	14637185.98	40°18'8.6107"N	80°32'15.2961"W	49.17	67.328	1.47	0.99	-6.87
1127.00	10.290	53.890	1122.35	-4.65	27.85	58.10	1769357.11	14637194.87	40°18'8.6979"N	80°32'15.1312"W	64.43	64.389	0.90	0.78	-2.67
1218.00	10.640	50.490	1211.83	-9.31	37.99	71.15	1769370.15	14637205.00	40°18'8.7974"N	80°32'14.9621"W	80.65	61.902	0.78	0.38	-3.74
1309.00	11.540	45.240	1301.14	-15.51	49.74	84.09	1769383.09	14637216.75	40°18'8.9129"N	80°32'14.7942"W	97.70	59.396	1.49	0.99	-5.77
1326.00	12.030	44.610	1317.78	-16.90	52.20	86.54	1769385.54	14637219.21	40°18'8.9371"N	80°32'14.7624"W	101.07	58.904	2.98	2.88	-3.71
1421.00	12.440	39.340	1410.62	-25.91	67.16	99.98	1769398.97	14637234.17	40°18'9.0842"N	80°32'14.5879"W	120.45	56.110	1.25	0.43	-5.55
1516.00	13.200	46.290	1503.26	-35.00	82.57	114.31	1769413.30	14637249.57	40°18'9.2358"N	80°32'14.4020"W	141.01	54.158	1.81	0.80	7.32
1611.00	13.460	48.540	1595.70	-42.89	97.39	130.44	1769429.42	14637264.38	40°18'9.3813"N	80°32'14.1928"W	162.78	53.255	0.61	0.27	2.37
1706.00	13.420	48.310	1688.10	-50.48	112.04	146.96	1769445.93	14637279.03	40°18'9.5253"N	80°32'13.9786"W	184.79	52.678	0.07	-0.04	-0.24
1801.00	13.340	48.820	1780.52	-57.98	126.59	163.44	1769462.40	14637293.57	40°18'9.6682"N	80°32'13.7650"W	206.73	52.241	0.15	-0.08	0.54
1897.00	13.250	48.800	1873.95	-65.43	141.13	180.05	1769479.91	14637308.10	40°18'9.8110"N	80°32'13.5495"W	228.77	51.910	0.09	-0.09	-0.02
1992.00	13.210	48.670	1966.43	-72.80	155.47	196.39	1769495.35	14637322.44	40°18'9.9518"N	80°32'13.3377"W	250.48	51.635	0.05	-0.04	-0.14
2087.00	13.510	48.460	2058.86	-80.29	169.99	212.85	1769511.80	14637336.96	40°18'10.0945"N	80°32'13.1243"W	272.40	51.387	0.32	0.32	-0.22
2182.00	13.500	48.630	2151.23	-87.87	184.68	229.48	1769526.92	14637351.64	40°18'10.2388"N	80°32'12.9087"W	294.56	51.173	0.04	-0.01	0.18
2277.00	12.880	48.940	2243.72	-95.20	198.96	245.78	1769544.91	14637366.92	40°18'10.3791"N	80°32'12.6973"W	316.22	51.009	0.66	-0.65	0.33
2372.00	12.670	48.480	2336.37	-102.32	212.82	261.57	1769560.36	14637382.77	40°18'10.5153"N	80°32'12.4926"W	337.21	50.866	0.25	-0.22	-0.48
2467.00	12.570	48.370	2429.08	-109.45	226.60	277.09	1769576.02	14637398.54	40°18'10.6506"N	80°32'12.2913"W	357.95	50.725	0.11	-0.11	-0.12

† = interpolated, ‡ = extrapolated station

09/10/2021

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Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

WELLPATH DATA (290 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
2562.00	12.060	48.650	2521.89	-116.39	240.02	292.27	1769591.19	14637406.96	40°18'10.7825"N	80°32'12.0945"W	378.20	50.606	0.54	-0.54	0.29
2657.00	13.120	48.480	2614.60	-123.46	253.73	307.79	1769606.71	14637420.66	40°18'10.9171"N	80°32'11.8932"W	398.89	50.500	1.12	1.12	-0.18
2752.00	12.840	48.430	2707.18	-130.79	267.88	323.76	1769622.67	14637434.81	40°18'11.0561"N	80°32'11.6861"W	420.22	50.396	0.29	-0.29	-0.05
2847.00	13.500	48.520	2799.68	-138.21	282.23	339.97	1769638.87	14637449.15	40°18'11.1970"N	80°32'11.4760"W	441.85	50.302	0.70	0.69	0.09
2942.00	13.260	48.730	2892.10	-145.69	296.76	356.47	1769655.36	14637463.67	40°18'11.3398"N	80°32'11.2621"W	463.83	50.223	0.26	-0.26	0.22
3037.00	13.590	47.980	2984.50	-153.30	311.42	372.95	1769671.83	14637478.33	40°18'11.4838"N	80°32'11.0484"W	485.87	50.138	0.39	0.35	-0.79
3132.00	12.970	48.670	3076.96	-160.84	325.93	389.24	1769688.13	14637492.83	40°18'11.6263"N	80°32'10.8371"W	507.68	50.059	0.67	-0.65	0.73
3227.00	12.010	48.880	3169.71	-167.79	339.47	404.70	1769703.57	14637506.37	40°18'11.7593"N	80°32'10.6367"W	528.22	50.009	1.01	-1.01	0.22
3322.00	12.740	50.870	3262.50	-174.29	352.58	420.27	1769719.14	14637519.47	40°18'11.8881"N	80°32'10.4349"W	548.58	50.005	0.89	0.77	2.09
3417.00	13.520	48.970	3355.02	-181.19	366.48	436.77	1769735.63	14637533.37	40°18'12.0246"N	80°32'10.2209"W	570.16	50.001	0.94	0.82	-2.00
3512.00	13.640	48.380	3447.36	-188.76	381.21	453.52	1769752.38	14637548.09	40°18'12.1693"N	80°32'10.0037"W	592.46	49.951	0.19	0.13	-0.62
3607.00	13.030	48.800	3539.80	-196.24	395.70	469.95	1769768.80	14637562.58	40°18'12.3117"N	80°32'9.7907"W	614.36	49.902	0.65	-0.64	0.44
3703.00	13.430	49.700	3633.26	-203.49	410.04	486.60	1769785.44	14637576.92	40°18'12.4525"N	80°32'9.5749"W	636.33	49.880	0.47	0.42	0.94
3798.00	14.730	49.100	3725.40	-211.07	425.09	504.14	1769802.98	14637591.95	40°18'12.6002"N	80°32'9.3474"W	659.44	49.863	1.38	1.37	-0.63
3893.00	14.130	49.650	3817.40	-218.84	440.50	522.11	1769820.94	14637607.36	40°18'12.7516"N	80°32'9.1145"W	683.11	49.846	0.65	-0.63	0.58
3988.00	13.790	50.030	3909.60	-226.18	455.28	539.62	1769838.45	14637622.14	40°18'12.8968"N	80°32'8.8874"W	706.03	49.845	0.37	-0.36	0.40
4083.00	12.800	49.580	4002.05	-233.19	469.38	556.31	1769855.13	14637636.23	40°18'13.0352"N	80°32'8.6711"W	727.88	49.844	1.05	-1.04	-0.47
4178.00	13.360	50.180	4094.58	-240.06	483.23	572.75	1769871.57	14637650.08	40°18'13.1713"N	80°32'8.4579"W	749.37	49.846	0.61	0.59	0.63
4273.00	13.850	50.170	4186.92	-247.10	497.54	589.92	1769888.72	14637664.38	40°18'13.3118"N	80°32'8.2354"W	771.72	49.855	0.52	0.52	-0.01
4368.00	14.290	50.290	4279.07	-254.35	512.32	607.67	1769906.47	14637679.15	40°18'13.4569"N	80°32'8.0053"W	794.82	49.866	0.46	0.46	0.13
4463.00	13.700	50.380	4371.25	-261.53	526.98	625.35	1769924.14	14637693.81	40°18'13.6009"N	80°32'7.7761"W	817.79	49.879	0.62	-0.62	0.09
4558.00	14.570	51.170	4463.37	-268.60	541.65	643.33	1769942.11	14637708.47	40°18'13.7449"N	80°32'7.5431"W	840.98	49.904	0.94	0.92	0.83
4653.00	14.300	51.870	4555.37	-275.53	556.39	661.87	1769960.64	14637723.20	40°18'13.8895"N	80°32'7.3028"W	864.66	49.948	0.34	-0.28	0.74
4748.00	13.470	54.080	4647.59	-281.65	570.12	680.06	1769978.82	14637736.93	40°18'14.0243"N	80°32'7.0671"W	887.42	50.025	1.04	-0.87	2.33
4843.00	14.220	53.960	4739.83	-287.35	583.48	698.51	1769997.21	14637750.28	40°18'14.1553"N	80°32'6.8288"W	910.10	50.125	0.79	0.79	-0.13
4938.00	11.990	65.850	4832.37	-290.75	594.38	716.94	1770015.55	14637761.19	40°18'14.2621"N	80°32'6.5900"W	931.25	50.338	3.67	-2.35	12.52
5033.00	12.640	96.350	4925.28	-286.35	597.27	736.35	1770033.00	14637764.08	40°18'14.2897"N	80°32'6.3400"W	948.05	50.950	6.80	0.68	32.11
5128.00	14.860	111.310	5017.58	-273.22	591.70	757.35	1770050.58	14637758.50	40°18'14.2334"N	80°32'6.0604"W	961.55	52.022	4.39	2.34	15.75
5223.00	19.840	121.290	5108.25	-252.09	578.88	783.75	1770068.32	14637745.69	40°18'14.1056"N	80°32'5.7367"W	973.82	53.527	6.09	5.24	10.51
5318.00	25.490	132.290	5195.92	-220.89	556.73	812.02	1770116.74	14637723.55	40°18'13.8851"N	80°32'5.3648"W	984.54	55.565	7.41	5.95	11.58

Gas
21
of section

09/10/2021

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Slot	Slot 10H		

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5413.00	32.010	140.910	5279.20	-178.49	523.38	843.07	1770141.77	14637690.21	40°18'13.5540"N	80°32'4.9663"W	992.31	58.168	8.12	6.86	9.07
5508.00	38.680	144.750	5356.66	-125.59	479.54	876.12	1770174.81	14637646.39	40°18'13.1190"N	80°32'4.5427"W	998.77	61.306	7.40	7.02	4.04
5604.00	45.350	146.510	5427.94	-62.99	426.50	912.31	1770210.99	14637593.37	40°18'12.5931"N	80°32'4.0791"W	1007.09	64.944	7.05	6.95	1.83
5699.00	52.820	148.360	5490.12	7.42	366.01	950.87	1770249.54	14637532.90	40°18'11.9933"N	80°32'3.5856"W	1018.88	68.947	8.00	7.86	1.95
5794.00	61.720	149.700	5541.44	86.16	297.54	991.91	1770290.56	14637464.45	40°18'11.3145"N	80°32'3.0605"W	1035.57	73.303	9.44	9.37	1.41
5889.00	70.620	151.660	5579.78	172.17	221.82	1034.38	1770333.01	14637388.77	40°18'10.5641"N	80°32'2.5176"W	1057.89	77.896	9.56	9.37	2.06
5984.00	78.260	153.790	5605.25	263.14	140.53	1076.25	1770374.87	14637307.51	40°18'9.7587"N	80°32'1.9826"W	1085.39	82.561	8.33	8.04	2.24
6079.00	86.120	156.050	5618.15	357.00	55.35	1116.10	1770414.70	14637222.36	40°18'8.9149"N	80°32'1.4741"W	1117.47	87.161	8.60	8.27	2.38
6174.00	89.020	156.390	5622.18	451.82	-31.50	1154.37	1770452.95	14637135.55	40°18'8.0547"N	80°32'0.9861"W	1154.80	91.563	3.07	3.05	0.36
6275.00	89.200	158.280	5623.75	552.79	-124.68	1193.28	1770491.85	14637042.40	40°18'7.1318"N	80°32'0.4902"W	1199.77	95.965	1.88	0.18	1.87
6370.00	89.290	158.270	5625.00	647.78	-212.93	1228.44	1770527.00	14636954.19	40°18'6.2580"N	80°32'0.0424"W	1246.76	99.833	0.10	0.09	-0.01
6465.00	88.950	157.330	5626.46	742.76	-300.87	1264.33	1770562.88	14636866.27	40°18'5.3871"N	80°31'59.5852"W	1299.64	103.386	1.05	-0.36	-0.99
6560.00	89.140	157.410	5628.04	837.72	-388.55	1300.88	1770599.41	14636778.63	40°18'4.5188"N	80°31'59.1195"W	1357.67	106.630	0.22	0.20	0.08
6655.00	89.380	158.120	5629.27	932.71	-476.47	1336.82	1770635.34	14636690.74	40°18'3.6481"N	80°31'58.6615"W	1419.20	109.617	0.79	0.25	0.75
6750.00	89.230	158.200	5630.42	1027.70	-564.65	1372.16	1770670.67	14636602.60	40°18'2.7749"N	80°31'58.2114"W	1483.80	112.367	0.18	-0.16	0.08
6844.00	89.170	157.590	5631.73	1121.68	-651.73	1407.53	1770706.02	14636515.55	40°18'1.9126"N	80°31'57.7609"W	1551.10	114.846	0.65	-0.06	-0.65
6940.00	89.630	157.770	5632.74	1217.67	-740.53	1443.99	1770742.47	14636426.78	40°18'1.0331"N	80°31'57.2964"W	1622.80	117.150	0.51	0.48	0.19
7034.00	89.570	157.760	5633.39	1311.66	-827.54	1479.56	1770778.02	14636339.81	40°18'0.1715"N	80°31'56.8433"W	1695.26	119.219	0.06	-0.06	-0.01
7129.00	89.200	157.660	5634.41	1406.64	-915.44	1515.59	1770814.04	14636251.94	40°17'59.3011"N	80°31'56.3842"W	1770.60	121.133	0.40	-0.39	-0.11
7224.00	89.170	157.460	5635.77	1501.62	-1003.23	1551.85	1770850.28	14636164.18	40°17'58.4316"N	80°31'55.9223"W	1847.89	122.882	0.21	-0.03	-0.21
7319.00	89.290	157.560	5637.04	1596.59	-1091.00	1588.19	1770886.61	14636076.45	40°17'57.5624"N	80°31'55.4593"W	1926.81	124.487	0.16	0.13	0.11
7414.00	89.290	157.600	5638.22	1691.57	-1178.81	1624.41	1770922.82	14635988.67	40°17'56.6928"N	80°31'54.9977"W	2007.07	125.968	0.04	0.00	0.04
7509.00	89.110	157.520	5639.55	1786.55	-1266.61	1660.67	1770959.07	14635900.90	40°17'55.8233"N	80°31'54.5357"W	2088.57	127.333	0.21	-0.19	-0.08
7604.00	88.680	156.620	5641.38	1881.50	-1354.09	1697.68	1770996.06	14635813.46	40°17'54.9570"N	80°31'54.0641"W	2171.56	128.576	1.05	-0.45	-0.95
7699.00	88.890	156.860	5643.39	1976.43	-1441.35	1735.19	1771033.55	14635726.24	40°17'54.0927"N	80°31'53.5860"W	2255.74	129.715	0.34	0.22	0.25
7794.00	89.140	157.380	5645.03	2071.39	-1528.80	1772.19	1771070.47	14635638.76	40°17'53.2260"N	80°31'53.1153"W	2340.47	130.785	0.61	0.26	0.55
7889.00	88.550	157.870	5646.94	2166.36	-1616.65	1808.57	1771106.61	14635550.96	40°17'52.3563"N	80°31'52.6547"W	2425.60	131.798	0.81	-0.62	0.52
7984.00	89.350	158.270	5648.68	2261.34	-1704.85	1843.75	1771142.07	14635462.89	40°17'51.4837"N	80°31'52.2029"W	2511.12	132.758	0.94	0.84	0.42
8079.00	89.320	158.410	5649.80	2357.33	-1794.07	1879.18	1771177.49	14635373.70	40°17'50.6003"N	80°31'51.7518"W	2598.04	133.672	0.15	-0.03	0.15
8174.00	89.320	158.560	5650.92	2452.32	-1882.39	1914.92	1771212.31	14635285.36	40°17'49.7252"N	80°31'51.3082"W	2684.56	134.523	0.16	0.00	0.16

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

WELLPATH DATA (290 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]	Buidl Rate [°/100ft]	Turn Rate [°/100ft]
8270.00	89.510	158.820	5651.89	2547.32	-1970.89	1948.54	1771246.82	14635196.90	40°17'48.8488"N	80°31'50.8687"W	2771.50	135.327	0.34	0.20	0.27
8365.00	89.420	158.220	5652.78	2642.31	-2059.28	1983.32	1771281.59	14635108.53	40°17'47.9735"N	80°31'50.4258"W	2859.06	136.076	0.64	-0.09	-0.63
8460.00	89.600	158.280	5653.59	2737.31	-2147.52	2018.53	1771316.78	14635020.33	40°17'47.0998"N	80°31'49.9776"W	2947.25	136.773	0.20	0.19	0.06
8555.00	89.350	158.060	5654.46	2832.30	-2235.70	2053.85	1771352.09	14634932.18	40°17'46.2265"N	80°31'49.5277"W	3035.90	137.428	0.35	-0.26	-0.23
8650.00	89.170	158.000	5655.69	2927.29	-2323.80	2089.39	1771387.62	14634844.12	40°17'45.3541"N	80°31'49.0751"W	3124.99	138.040	0.20	-0.19	-0.06
8745.00	89.320	157.970	5656.94	3022.28	-2411.86	2125.00	1771423.21	14634756.09	40°17'44.4820"N	80°31'48.6216"W	3214.45	138.618	0.16	0.16	-0.03
8840.00	89.110	159.140	5658.24	3117.27	-2500.27	2159.72	1771457.93	14634667.71	40°17'42.7276"N	80°31'47.7493"W	3303.90	139.180	1.25	-0.22	1.23
8935.00	89.050	159.160	5659.77	3212.25	-2589.04	2193.53	1771491.72	14634578.98	40°17'41.8486"N	80°31'47.3193"W	3393.34	139.727	0.07	-0.06	0.02
9030.00	89.140	159.170	5661.27	3307.23	-2677.82	2227.32	1771525.50	14634490.24	40°17'40.9600"N	80°31'46.8857"W	3483.05	140.247	0.10	0.09	0.01
9126.00	89.230	159.240	5662.63	3403.22	-2767.56	2261.40	1771559.56	14634400.53	40°17'40.0806"N	80°31'46.4569"W	3573.97	140.747	0.12	0.09	0.07
9221.00	89.260	159.200	5663.89	3498.20	-2856.37	2295.10	1771593.25	14634311.76	40°17'39.2016"N	80°31'46.0269"W	3664.19	141.218	0.05	0.03	-0.04
9316.00	89.230	159.130	5665.14	3593.19	-2945.15	2328.88	1771627.02	14634223.01	40°17'38.3232"N	80°31'45.5947"W	3754.68	141.665	0.08	-0.03	-0.07
9411.00	89.050	158.970	5666.56	3688.17	-3033.86	2362.85	1771660.97	14634134.33	40°17'37.4449"N	80°31'45.1622"W	3845.43	142.088	0.25	-0.19	-0.17
9506.00	89.230	159.100	5667.99	3783.16	-3122.56	2396.84	1771694.95	14634045.67	40°17'36.5661"N	80°31'44.7313"W	3936.39	142.491	0.23	0.19	0.14
9601.00	89.200	159.130	5669.29	3878.14	-3211.31	2430.70	1771728.80	14633956.95	40°17'35.6864"N	80°31'44.3036"W	4027.51	142.877	0.04	-0.03	0.03
9696.00	89.230	159.420	5670.59	3973.13	-3300.13	2464.31	1771762.40	14633868.14	40°17'34.8071"N	80°31'43.8746"W	4118.72	143.250	0.31	0.03	0.31
9791.00	89.260	159.010	5671.84	4068.11	-3388.96	2498.02	1771796.10	14633779.37	40°17'33.9279"N	80°31'43.4449"W	4210.13	143.606	0.43	0.03	-0.43
9886.00	89.230	159.340	5673.10	4163.10	-3477.75	2531.79	1771829.86	14633690.61	40°17'33.0490"N	80°31'43.0145"W	4301.71	143.945	0.35	-0.03	0.35
9981.00	89.290	158.940	5674.32	4258.08	-3566.51	2565.62	1771863.67	14633601.88	40°17'32.1703"N	80°31'42.5832"W	4393.45	144.270	0.43	0.06	-0.42
10076.00	89.290	159.250	5675.50	4353.07	-3655.25	2599.52	1771897.55	14633513.18	40°17'31.2912"N	80°31'42.1534"W	4485.35	144.581	0.33	0.00	0.33
10171.00	89.140	159.090	5676.80	4448.06	-3744.04	2633.29	1771931.32	14633424.43	40°17'30.4132"N	80°31'41.7198"W	4577.34	144.880	0.23	-0.16	-0.17
10266.00	89.320	158.870	5678.08	4543.05	-3832.71	2667.37	1771965.37	14633335.79	40°17'29.5351"N	80°31'41.2865"W	4669.53	145.164	0.30	0.19	-0.23
10361.00	89.080	159.120	5679.41	4638.03	-3921.38	2701.42	1771999.41	14633247.15	40°17'28.6571"N	80°31'40.8532"W	4761.82	145.437	0.36	-0.25	0.26
10456.00	89.230	158.870	5680.81	4733.02	-4010.06	2735.46	1772033.45	14633158.50	40°17'27.7877"N	80°31'40.4208"W	4854.21	145.700	0.31	0.16	-0.26
10551.00	89.420	159.210	5681.93	4828.01	-4097.77	2769.45	1772067.41	14633069.83	40°17'26.9002"N	80°31'39.9890"W	4946.69	145.954	0.41	0.20	0.36
10646.00	88.980	158.930	5683.25	4922.99	-4185.49	2803.88	1772101.33	14632981.14	40°17'26.0227"N	80°31'39.5637"W	5039.25	146.199	0.55	-0.46	-0.29
10741.00	89.260	158.850	5684.71	5017.98	-4274.11	2837.92	1772135.53	14632892.56	40°17'25.1448"N	80°31'39.1199"W	5131.96	146.432	0.31	0.29	-0.08
10836.00	89.140	159.090	5686.04	5112.97	-4362.77	2871.94	1772169.61	14632803.93	40°17'24.2660"N	80°31'38.6888"W	5224.72	146.658	0.28	-0.13	0.25
10931.00	89.540	159.120	5687.13	5207.96	-4451.52	2905.96	1772203.47	14632715.22	40°17'23.3877"N	80°31'38.2564"W	5317.52	146.879	0.42	0.42	0.03
11026.00	89.140	158.960	5688.23	5302.95	-4540.22	2939.94	1772237.44	14632626.55	40°17'22.5092"N	80°31'37.8250"W	5410.42	147.091	0.45	-0.42	-0.17

Gas
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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

WELLPATH DATA (290 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]
11121.00	89.230	159.120	5689.58	5397.93	-4630.93	2973.52	1772271.41	14632537.88	40°17'22.5093"N	80°31'37.8240"W	5503.39	147.295	0.19	0.09	0.17
11216.00	89.320	159.060	5690.78	5492.92	-4719.66	3007.42	1772305.30	14632449.17	40°17'21.6307"N	80°31'37.3927"W	5596.41	147.494	0.11	0.09	-0.06
11312.00	89.230	159.130	5691.99	5588.91	-4809.34	3041.67	1772339.54	14632359.53	40°17'20.7427"N	80°31'36.9569"W	5690.48	147.689	0.12	-0.09	0.07
11407.00	89.350	158.960	5693.17	5683.90	-4898.05	3075.65	1772373.50	14632270.86	40°17'19.8643"N	80°31'36.5246"W	5783.64	147.874	0.22	0.13	-0.18
11502.00	89.290	158.910	5694.30	5778.89	-4986.69	3109.79	1772407.63	14632182.25	40°17'18.9866"N	80°31'36.0901"W	5876.90	148.052	0.08	-0.06	-0.05
11597.00	89.170	159.010	5695.58	5873.88	-5075.35	3143.89	1772441.72	14632093.62	40°17'18.1087"N	80°31'35.6562"W	5970.20	148.224	0.16	-0.13	0.11
11692.00	89.230	158.940	5696.90	5968.87	-5164.02	3177.97	1772475.79	14632004.99	40°17'17.2307"N	80°31'35.2225"W	6063.55	148.392	0.10	0.06	-0.07
11787.00	89.140	158.990	5698.25	6063.85	-5252.68	3212.07	1772509.87	14631916.36	40°17'16.3528"N	80°31'34.7887"W	6156.95	148.554	0.11	-0.09	0.05
11882.00	89.260	159.000	5699.58	6158.84	-5341.36	3246.12	1772543.90	14631827.72	40°17'15.4747"N	80°31'34.3554"W	6250.39	148.712	0.13	0.13	0.01
11977.00	89.290	158.970	5700.78	6253.83	-5430.03	3280.18	1772577.96	14631739.08	40°17'14.5967"N	80°31'33.9220"W	6343.88	148.865	0.04	0.03	-0.03
12072.00	89.140	158.590	5702.08	6348.82	-5518.58	3314.57	1772612.33	14631650.56	40°17'13.7198"N	80°31'33.4844"W	6437.48	149.010	0.43	-0.16	-0.40
12167.00	88.860	157.890	5703.74	6443.80	-5606.80	3349.78	1772647.52	14631562.38	40°17'12.8462"N	80°31'33.0361"W	6531.25	149.144	0.79	-0.29	-0.74
12262.00	89.450	158.930	5705.14	6538.79	-5695.12	3384.73	1772682.46	14631474.09	40°17'11.9716"N	80°31'32.5912"W	6625.01	149.276	1.26	0.62	1.09
12357.00	89.260	158.850	5706.21	6633.78	-5783.74	3418.94	1772716.66	14631385.50	40°17'11.0941"N	80°31'32.1559"W	6718.69	149.411	0.22	-0.20	-0.08
12452.00	89.320	158.910	5707.39	6728.78	-5872.35	3453.17	1772750.88	14631296.93	40°17'10.2166"N	80°31'31.7203"W	6812.41	149.543	0.09	0.06	0.06
12548.00	89.420	158.970	5708.44	6824.77	-5961.94	3487.67	1772785.36	14631207.38	40°17'9.3296"N	80°31'31.2814"W	6907.13	149.673	0.12	0.10	0.06
12643.00	89.750	158.810	5709.13	6919.76	-6050.56	3521.88	1772819.56	14631118.79	40°17'8.4520"N	80°31'30.8461"W	7000.92	149.797	0.39	0.35	-0.17
12738.00	89.630	158.720	5709.65	7014.76	-6139.11	3556.29	1772853.96	14631030.28	40°17'7.5752"N	80°31'30.4082"W	7094.77	149.917	0.16	-0.13	-0.09
12833.00	89.630	158.760	5710.26	7109.76	-6227.64	3590.73	1772888.39	14630941.78	40°17'6.6985"N	80°31'29.9699"W	7188.66	150.033	0.04	0.00	0.04
12928.00	89.750	158.900	5710.77	7204.75	-6316.23	3625.04	1772922.68	14630853.22	40°17'5.8213"N	80°31'29.5333"W	7282.56	150.147	0.19	0.13	0.15
13023.00	89.720	158.890	5711.21	7299.75	-6404.85	3659.25	1772956.88	14630764.63	40°17'4.9437"N	80°31'29.0981"W	7376.47	150.260	0.03	-0.03	-0.01
13118.00	89.720	158.760	5711.68	7394.75	-6493.44	3693.56	1772991.18	14630676.08	40°17'4.0665"N	80°31'28.6614"W	7470.42	150.368	0.14	0.00	-0.14
13213.00	89.720	158.920	5712.14	7489.75	-6582.03	3727.86	1773025.46	14630587.52	40°17'3.1893"N	80°31'28.2251"W	7564.39	150.474	0.17	0.00	0.17
13308.00	89.880	158.720	5712.47	7584.75	-6670.61	3762.18	1773059.77	14630498.97	40°17'2.3121"N	80°31'27.7883"W	7658.40	150.577	0.27	0.17	-0.21
13403.00	89.630	159.010	5712.88	7679.74	-6759.22	3796.43	1773094.01	14630410.40	40°17'1.4347"N	80°31'27.3525"W	7752.42	150.679	0.40	-0.26	0.31
13498.00	90.280	158.680	5712.95	7774.74	-6847.82	3830.75	1773128.28	14630321.83	40°17'0.5574"N	80°31'26.9163"W	7846.47	150.777	0.77	0.68	-0.35
13593.00	89.780	159.250	5712.90	7869.74	-6936.42	3864.82	1773162.37	14630233.20	40°16'59.6794"N	80°31'26.4824"W	7940.51	150.875	0.80	-0.53	0.60
13688.00	90.120	159.040	5712.99	7964.73	-7025.02	3898.90	1773196.17	14630144.46	40°16'58.8003"N	80°31'26.0522"W	8034.53	150.972	0.42	0.36	-0.22
13783.00	90.030	158.830	5712.86	8059.73	-7113.61	3932.97	1773230.31	14630055.84	40°16'57.9225"N	80°31'25.6178"W	8128.63	151.065	0.24	-0.09	-0.22
13878.00	90.000	158.730	5712.84	8154.73	-7202.20	3967.04	1773264.68	14629967.32	40°16'57.0455"N	80°31'25.1803"W	8222.78	151.154	0.11	-0.03	-0.11

Gas
Section

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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

WELLPATH DATA (290 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]	Buidl Rate ["/100ft]	Turn Rate ["/100ft]
13973.00	90.030	158.660	5712.81	8249.73	-7290.98	4001.68	1773299.18	14629878.84	40°16'56.1691"N	80°31'24.7410"W	8316.96	151.240	0.08	0.03	-0.07
14068.00	89.910	158.700	5712.86	8344.73	-7379.48	4036.22	1773333.71	14629790.38	40°16'55.2928"N	80°31'24.3015"W	8411.17	151.323	0.13	-0.13	0.04
14164.00	89.720	158.790	5713.17	8440.73	-7468.95	4071.03	1773368.50	14629700.94	40°16'54.4068"N	80°31'23.8587"W	8506.38	151.407	0.22	-0.20	0.09
14259.00	89.820	158.800	5713.55	8535.72	-7557.52	4105.39	1773402.84	14629612.41	40°16'53.5298"N	80°31'23.4215"W	8600.60	151.488	0.11	0.11	0.01
14354.00	89.420	158.740	5714.18	8630.72	-7646.07	4139.79	1773437.23	14629523.89	40°16'52.6529"N	80°31'22.9838"W	8694.84	151.568	0.43	-0.42	-0.06
14449.00	89.600	159.060	5715.00	8725.72	-7734.69	4173.99	1773471.42	14629435.30	40°16'51.7753"N	80°31'22.5487"W	8789.06	151.647	0.39	0.19	0.34
14544.00	89.750	158.810	5715.54	8820.71	-7823.34	4208.13	1773505.55	14629346.68	40°16'50.8975"N	80°31'22.1143"W	8883.30	151.724	0.31	0.16	-0.26
14639.00	89.750	159.080	5715.95	8915.71	-7912.00	4242.26	1773539.67	14629258.06	40°16'50.0196"N	80°31'21.6801"W	8977.56	151.801	0.28	0.00	0.28
14735.00	89.510	158.440	5716.57	9011.70	-8001.48	4277.04	1773574.43	14629168.62	40°16'49.1336"N	80°31'21.2376"W	9072.85	151.874	0.71	-0.25	-0.67
14830.00	89.820	158.980	5717.13	9106.70	-8089.99	4311.53	1773608.91	14629080.14	40°16'48.2571"N	80°31'20.7987"W	9167.18	151.945	0.66	0.33	0.57
14925.00	89.660	158.720	5717.56	9201.70	-8178.59	4345.81	1773643.17	14628991.57	40°16'47.3797"N	80°31'20.3627"W	9261.50	152.015	0.32	-0.17	-0.27
15020.00	89.690	158.930	5718.10	9296.70	-8267.18	4380.12	1773677.47	14628903.02	40°16'46.5025"N	80°31'19.9261"W	9355.84	152.084	0.22	0.03	0.22
15115.00	89.750	158.960	5718.56	9391.69	-8355.83	4414.25	1773711.59	14628814.40	40°16'45.6246"N	80°31'19.4919"W	9450.16	152.153	0.07	0.06	0.03
15210.00	89.820	158.970	5718.92	9486.69	-8444.50	4448.35	1773745.68	14628725.76	40°16'44.7466"N	80°31'19.0581"W	9544.50	152.221	0.07	0.07	0.01
15305.00	89.880	159.060	5719.16	9581.69	-8533.20	4482.37	1773779.69	14628637.10	40°16'44.8683"N	80°31'18.6253"W	9638.84	152.288	0.11	0.06	0.09
15400.00	89.780	158.880	5719.45	9676.68	-8621.87	4516.46	1773813.76	14628548.46	40°16'42.9903"N	80°31'18.1917"W	9733.20	152.353	0.22	-0.11	-0.19
15495.00	89.720	158.700	5719.86	9771.68	-8710.43	4550.83	1773848.12	14628459.93	40°16'42.1133"N	80°31'17.7544"W	9827.60	152.415	0.20	-0.06	-0.19
15590.00	89.720	158.880	5720.33	9866.68	-8799.00	4585.20	1773882.48	14628371.40	40°16'41.2363"N	80°31'17.3171"W	9922.02	152.476	0.19	0.00	0.19
15685.00	89.660	158.860	5720.84	9961.68	-8887.61	4619.45	1773916.71	14628282.82	40°16'40.3588"N	80°31'16.8815"W	10016.43	152.536	0.07	-0.06	-0.02
15780.00	89.690	158.850	5721.38	10056.67	-8976.21	4653.72	1773950.96	14628194.26	40°16'39.4815"N	80°31'16.4455"W	10110.86	152.596	0.03	0.03	-0.01
15875.00	89.780	159.140	5721.82	10151.67	-9064.90	4687.77	1773985.00	14628105.60	40°16'38.6033"N	80°31'16.0124"W	10205.27	152.655	0.32	0.09	0.31
15970.00	89.570	158.660	5722.36	10246.66	-9153.53	4721.97	1774019.19	14628017.01	40°16'37.7256"N	80°31'15.5773"W	10299.71	152.712	0.55	-0.22	-0.51
16065.00	89.480	158.620	5723.14	10341.66	-9242.00	4756.57	1774053.78	14627928.57	40°16'36.8495"N	80°31'15.1371"W	10394.20	152.767	0.10	-0.09	-0.04
16160.00	89.660	158.680	5723.86	10436.67	-9330.48	4791.15	1774088.35	14627840.13	40°16'35.9734"N	80°31'14.6971"W	10488.71	152.820	0.20	0.19	0.06
16255.00	89.660	158.830	5724.42	10531.67	-9419.02	4825.58	1774122.76	14627751.62	40°16'35.0966"N	80°31'14.2591"W	10583.20	152.873	0.16	0.00	0.16
16350.00	89.630	159.220	5725.01	10626.67	-9507.72	4859.58	1774156.75	14627662.95	40°16'34.2182"N	80°31'13.8266"W	10677.65	152.928	0.41	-0.03	0.41
16445.00	89.540	158.730	5725.70	10721.67	-9596.39	4893.66	1774190.82	14627574.31	40°16'33.3402"N	80°31'13.3931"W	10772.13	152.981	0.52	-0.09	-0.52
16540.00	89.540	158.740	5726.46	10816.67	-9685.02	4927.82	1774225.26	14627485.82	40°16'32.4635"N	80°31'12.9547"W	10866.65	153.031	0.01	0.00	0.01
16635.00	89.420	158.070	5727.32	10911.67	-9773.25	4963.08	1774260.21	14627397.52	40°16'31.5888"N	80°31'12.5098"W	10961.23	153.077	0.72	-0.13	-0.71
16730.00	89.380	158.950	5728.32	11006.67	-9861.64	4997.88	1774295.00	14627309.17	40°16'30.7135"N	80°31'12.0670"W	11055.80	153.124	0.93	-0.04	0.93

Gas
of
Production

09/10/2021

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

WELLPATH DATA (290 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
16826.00	89.420	158.390	5729.32	11102.62	-9951.06	5032.80	1774329.90	14627219.78	40°16'29.8280"N	80°31'11.6228"W	11151.35	153.172	0.58	0.04	-0.58
16921.00	89.350	158.810	5730.34	11197.62	-10039.50	5067.46	1774364.55	14627131.37	40°16'28.9522"N	80°31'11.1818"W	11245.92	153.218	0.45	-0.07	0.44
17016.00	89.480	158.860	5731.31	11292.61	-10128.09	5101.76	1774398.83	14627042.82	40°16'28.0750"N	80°31'10.7455"W	11340.47	153.265	0.15	0.14	0.05
17111.00	89.450	159.020	5732.20	11387.60	-10216.74	5135.89	1774432.96	14626954.20	40°16'27.1971"N	80°31'10.3113"W	11435.00	153.312	0.17	-0.03	0.17
17206.00	89.350	158.500	5733.19	11482.60	-10305.28	5170.31	1774467.36	14626865.69	40°16'26.3204"N	80°31'9.8735"W	11529.57	153.356	0.56	-0.11	-0.55
17301.00	89.230	158.790	5734.37	11577.59	-10393.75	5204.90	1774501.94	14626777.26	40°16'25.4443"N	80°31'9.4335"W	11624.16	153.400	0.33	-0.13	0.31
17396.00	89.290	158.830	5735.60	11672.58	-10482.32	5239.23	1774536.26	14626688.72	40°16'24.5672"N	80°31'8.9967"W	11718.73	153.443	0.08	0.06	0.04
17491.00	89.230	158.970	5736.83	11767.57	-10570.95	5273.43	1774570.44	14626600.13	40°16'23.6896"N	80°31'8.5617"W	11813.30	153.487	0.16	-0.06	0.15
17586.00	89.420	158.760	5737.94	11862.56	-10659.55	5307.68	1774604.68	14626511.56	40°16'22.8122"N	80°31'8.1260"W	11907.88	153.530	0.30	0.20	-0.22
17682.00	89.350	158.640	5738.97	11958.56	-10748.99	5342.55	1774639.54	14626422.16	40°16'21.9286"N	80°31'7.6825"W	12003.48	153.571	0.14	-0.07	-0.12
17777.00	89.290	157.300	5740.10	12053.54	-10837.04	5378.18	1774675.15	14626334.14	40°16'21.0545"N	80°31'7.2290"W	12098.20	153.606	1.41	-0.06	-1.41
17872.00	89.350	157.780	5741.23	12148.52	-10924.83	5414.47	1774711.43	14626246.38	40°16'20.1851"N	80°31'6.7669"W	12192.97	153.636	0.51	0.06	0.51
17966.00	89.480	157.870	5742.19	12242.51	-11011.87	5449.95	1774746.89	14626159.37	40°16'19.3230"N	80°31'6.3153"W	12286.71	153.668	0.17	0.14	0.10
18061.00	89.420	157.870	5743.10	12337.50	-11099.87	5485.74	1774782.67	14626071.41	40°16'18.4516"N	80°31'5.8598"W	12381.46	153.701	0.06	-0.06	0.00
18157.00	89.290	157.640	5744.18	12433.49	-11188.72	5522.08	1774818.99	14625982.59	40°16'17.5716"N	80°31'5.3973"W	12477.21	153.732	0.28	-0.14	-0.24
18252.00	89.260	157.560	5745.38	12528.47	-11276.55	5558.28	1774855.18	14625894.80	40°16'16.7018"N	80°31'4.9364"W	12571.99	153.761	0.09	-0.03	-0.08
18347.00	89.320	157.700	5746.56	12623.45	-11364.39	5594.43	1774891.32	14625806.99	40°16'15.8318"N	80°31'4.4762"W	12666.77	153.790	0.16	0.06	0.15
18442.00	89.140	157.680	5747.84	12718.43	-11452.27	5630.49	1774927.36	14625719.15	40°16'14.9615"N	80°31'4.0172"W	12761.54	153.819	0.19	-0.19	-0.02
18537.00	89.290	157.530	5749.14	12813.41	-11540.10	5666.68	1774963.54	14625631.35	40°16'14.0917"N	80°31'3.5565"W	12856.33	153.847	0.22	0.16	-0.16
18632.00	89.290	157.870	5750.32	12908.39	-11627.98	5702.73	1774999.57	14625543.50	40°16'13.2212"N	80°31'3.0976"W	12951.10	153.875	0.36	0.00	0.36
18728.00	89.320	157.550	5751.48	13004.37	-11716.80	5739.14	1775035.97	14625454.71	40°16'12.3416"N	80°31'2.6342"W	13046.88	153.903	0.33	0.03	-0.33
18823.00	89.380	157.960	5752.56	13099.36	-11804.73	5775.10	1775071.92	14625366.82	40°16'11.4708"N	80°31'2.1764"W	13141.66	153.931	0.44	0.06	0.43
18918.00	89.350	157.860	5753.61	13194.35	-11892.75	5810.82	1775107.63	14625278.84	40°16'10.5991"N	80°31'1.7218"W	13236.43	153.960	0.11	-0.03	-0.11
19013.00	89.420	157.840	5754.63	13289.33	-11980.73	5846.64	1775143.43	14625190.89	40°16'9.8277"N	80°31'1.2659"W	13331.21	153.987	0.08	0.07	-0.02
19108.00	89.200	157.650	5755.78	13384.32	-12068.65	5882.61	1775179.39	14625103.00	40°16'8.8570"N	80°31'1.8080"W	13426.00	154.014	0.31	-0.23	-0.20
19203.00	89.380	157.800	5756.95	13479.30	-12156.55	5918.62	1775215.38	14625015.13	40°16'7.9865"N	80°31'10.3497"W	13520.79	154.040	0.25	0.19	0.16
19298.00	89.230	157.750	5758.10	13574.29	-12244.49	5954.55	1775251.30	14624927.23	40°16'7.1156"N	80°30'59.8923"W	13615.59	154.066	0.17	-0.16	-0.05
19393.00	89.260	157.430	5759.36	13669.21	-12332.31	5990.77	1775287.50	14624839.45	40°16'6.2458"N	80°30'59.4314"W	13710.40	154.091	0.34	0.03	-0.34
19488.00	89.200	157.470	5760.65	13764.24	-12420.16	6027.58	1775323.30	14624750.83	40°16'5.3678"N	80°30'58.9627"W	13806.23	154.114	0.08	-0.06	0.04
19584.00	89.320	158.930	5761.87	13859.23	-12507.96	6062.85	1775359.56	14624662.67	40°16'4.4944"N	80°30'58.5139"W	13900.98	154.142	1.54	0.13	1.54

2021
Department of Conservation and Gas

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

WELLPATH DATA (290 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]
19679.00	89.350	158.390	5762.98	13955.22	-12597.64	6097.42	1775394.12	14624574.22	40°16'31.6182"N	80°30'58.0742"W	13995.68	154.172	0.57	0.03	-0.57
19774.00	89.380	159.060	5764.03	14050.21	-12686.16	6131.89	1775428.57	14624485.73	40°16'27.4116"N	80°30'57.6358"W	14090.37	154.203	0.71	0.03	0.71
19869.00	89.260	158.910	5765.16	14145.20	-12774.83	6165.95	1775462.62	14624397.09	40°16'11.8635"N	80°30'57.2026"W	14185.04	154.235	0.20	-0.13	-0.16
19964.00	89.260	158.800	5766.38	14240.19	-12863.43	6200.22	1775496.88	14624308.53	40°16'01.9882"N	80°30'56.7668"W	14279.72	154.266	0.12	0.00	-0.12
20059.00	89.380	158.880	5767.51	14335.18	-12952.02	6234.51	1775531.15	14624219.98	40°16'01.1089"N	80°30'56.3307"W	14374.42	154.296	0.15	0.13	0.08
20155.00	89.260	158.550	5768.65	14431.18	-13041.46	6269.36	1775565.99	14624130.56	40°15'59.2232"N	80°30'55.8875"W	14470.13	154.325	0.37	-0.12	-0.34
20250.00	89.320	158.820	5769.83	14526.17	-13129.96	6303.89	1775600.50	14624042.10	40°15'58.3468"N	80°30'55.4483"W	14564.85	154.354	0.29	0.06	0.28
20345.00	89.290	158.920	5770.98	14621.16	-13218.56	6338.13	1775634.73	14623953.53	40°15'57.4694"N	80°30'55.0128"W	14659.55	154.383	0.11	-0.03	0.11
20440.00	89.260	158.960	5772.18	14716.15	-13307.21	6372.27	1775668.85	14623864.92	40°15'56.5916"N	80°30'54.5788"W	14754.24	154.412	0.05	-0.03	0.04
20535.00	89.200	158.220	5773.46	14811.14	-13395.64	6406.94	1775703.52	14623776.52	40°15'55.7158"N	80°30'54.1377"W	14848.98	154.439	0.78	-0.06	-0.78
20630.00	89.320	159.000	5774.69	14906.13	-13484.09	6441.59	1775738.15	14623688.10	40°15'54.8399"N	80°30'53.6971"W	14943.72	154.465	0.83	0.13	0.82
20726.00	89.420	158.700	5775.74	15002.13	-13573.62	6476.22	1775772.77	14623598.61	40°15'53.9533"N	80°30'53.2566"W	15039.44	154.493	0.33	0.10	-0.31
20821.00	89.200	158.810	5776.89	15097.12	-13662.16	6510.64	1775807.18	14623510.10	40°15'53.0766"N	80°30'52.8188"W	15134.17	154.520	0.26	-0.23	0.12
20916.00	89.230	158.820	5778.19	15192.11	-13750.73	6544.97	1775841.49	14623421.57	40°15'52.1995"N	80°30'52.3823"W	15228.89	154.547	0.03	0.03	0.01
21011.00	89.230	158.440	5779.46	15287.10	-13839.19	6579.58	1775876.09	14623333.14	40°15'51.3235"N	80°30'51.9420"W	15323.64	154.572	0.40	0.00	-0.40
21106.00	89.020	158.830	5780.91	15382.09	-13927.65	6614.19	1775910.69	14623244.71	40°15'50.4475"N	80°30'51.5019"W	15418.40	154.597	0.47	-0.22	0.41
21201.00	89.170	158.940	5782.41	15477.07	-14016.26	6648.41	1775944.89	14623156.14	40°15'49.5700"N	80°30'51.0668"W	15513.12	154.623	0.20	0.16	0.12
21296.00	89.200	158.820	5783.77	15572.06	-14104.87	6682.64	1775979.11	14623067.56	40°15'48.6925"N	80°30'50.6315"W	15607.85	154.649	0.13	0.03	-0.13
21391.00	89.140	158.690	5785.14	15667.05	-14193.41	6717.06	1776013.51	14622979.06	40°15'47.8158"N	80°30'50.1938"W	15702.60	154.674	0.15	-0.06	-0.14
21486.00	89.320	158.880	5786.42	15762.04	-14281.96	6751.43	1776047.87	14622890.54	40°15'46.9388"N	80°30'49.7567"W	15797.35	154.699	0.28	0.19	0.20
21581.00	89.170	158.680	5787.67	15857.03	-14370.51	6785.81	1776082.24	14622802.02	40°15'46.0619"N	80°30'49.3194"W	15892.10	154.723	0.26	-0.16	-0.21
21676.00	88.890	158.740	5789.28	15952.02	-14459.01	6820.30	1776116.72	14622713.55	40°15'45.1855"N	80°30'48.8808"W	15986.86	154.747	0.30	-0.29	0.06
21771.00	88.860	158.710	5791.14	16047.00	-14547.52	6854.76	1776151.17	14622625.08	40°15'44.3090"N	80°30'48.4426"W	16081.61	154.770	0.04	-0.03	-0.03
21866.00	88.830	158.740	5793.06	16141.98	-14636.03	6889.23	1776185.62	14622536.61	40°15'43.4325"N	80°30'48.0043"W	16176.37	154.793	0.04	-0.03	0.03
21961.00	88.950	158.570	5794.90	16236.96	-14724.50	6923.80	1776220.18	14622448.17	40°15'42.5565"N	80°30'47.5646"W	16271.13	154.816	0.22	0.13	-0.18
22056.00	88.980	158.950	5796.62	16331.85	-14813.03	6958.21	1776254.57	14622359.67	40°15'41.6798"N	80°30'47.1270"W	16365.89	154.839	0.40	0.03	0.40
22151.00	89.110	159.070	5798.20	16426.93	-14901.71	6992.23	1776288.59	14622271.02	40°15'40.8016"N	80°30'46.6944"W	16460.63	154.863	0.19	0.14	0.13
22246.00	89.080	158.770	5799.70	16521.91	-14990.34	7026.40	1776322.74	14622182.43	40°15'39.9239"N	80°30'46.2600"W	16555.38	154.886	0.32	-0.03	-0.32
22341.00	89.170	158.850	5801.19	16616.90	-15078.91	7060.73	1776357.06	14622093.89	40°15'39.0468"N	80°30'45.8234"W	16650.15	154.909	0.13	0.09	0.08
22436.00	88.860	158.690	5802.89	16711.89	-15167.45	7095.13	1776391.44	14622005.39	40°15'38.1700"N	80°30'45.3861"W	16744.92	154.930	0.37	-0.33	-0.17

09/10/2021

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

WELLPATH DATA (290 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
22531.00	88.980	158.730	5804.57	16806.87	-15255.95	7129.62	1776425.92	14621916.92	40°15'37.2936"N	80°30'44.9475"W	16839.70	154.952	0.13	0.13	0.04
22626.00	89.050	158.930	5806.21	16901.85	-15344.53	7163.92	1776460.21	14621828.38	40°15'36.4165"N	80°30'44.5113"W	16934.47	154.973	0.22	0.22	0.21
22721.00	88.980	159.170	5807.84	16996.84	-15433.23	7197.88	1776494.16	14621739.71	40°15'35.5381"N	80°30'44.0796"W	17029.22	154.996	0.26	-0.07	0.25
22816.00	89.140	159.200	5809.40	17091.82	-15522.02	7231.64	1776527.50	14621650.95	40°15'34.6589"N	80°30'43.6505"W	17123.95	155.019	0.17	0.17	0.03
22911.00	89.320	159.350	5810.68	17186.80	-15610.87	7265.25	1776561.50	14621562.14	40°15'33.7791"N	80°30'43.2232"W	17218.68	155.043	0.25	0.19	0.16
23006.00	89.110	158.920	5811.98	17281.79	-15699.63	7299.08	1776595.32	14621473.42	40°15'32.9001"N	80°30'42.7931"W	17313.43	155.065	0.50	-0.22	-0.45
23101.00	88.830	158.390	5813.68	17376.77	-15788.10	7333.66	1776629.88	14621384.98	40°15'32.0240"N	80°30'42.3535"W	17408.23	155.085	0.63	-0.29	-0.56
23197.00	89.380	157.390	5815.18	17472.75	-15877.02	7369.78	1776665.99	14621296.09	40°15'31.1433"N	80°30'41.8938"W	17504.10	155.100	1.19	0.57	-1.04
23292.00	89.230	158.010	5816.34	17567.73	-15964.91	7405.83	1776702.02	14621208.23	40°15'30.2729"N	80°30'41.4351"W	17599.00	155.114	0.67	-0.16	0.65
23387.00	89.260	157.580	5817.59	17662.72	-16052.86	7441.73	1776737.91	14621120.32	40°15'29.4018"N	80°30'40.9784"W	17693.89	155.129	0.45	0.03	-0.45
23482.00	89.420	157.430	5818.68	17757.70	-16140.62	7478.07	1776774.24	14621032.59	40°15'28.5326"N	80°30'40.5158"W	17788.80	155.141	0.23	0.17	-0.16
23577.00	89.510	157.640	5819.57	17852.68	-16228.41	7514.37	1776810.53	14620944.83	40°15'27.6631"N	80°30'40.0539"W	17883.71	155.154	0.24	0.09	0.22
23672.00	89.290	157.820	5820.56	17947.66	-16316.32	7550.37	1776846.51	14620856.96	40°15'26.7925"N	80°30'39.5958"W	17978.61	155.168	0.30	-0.23	0.19
23767.00	89.630	157.650	5821.46	18042.65	-16404.23	7586.37	1776882.49	14620769.08	40°15'25.9218"N	80°30'39.1378"W	18073.51	155.181	0.40	0.36	-0.18
23862.00	89.660	157.770	5822.05	18137.64	-16492.13	7622.40	1776918.51	14620681.21	40°15'25.0512"N	80°30'38.6793"W	18168.42	155.194	0.13	0.03	0.13
23957.00	89.600	158.080	5822.66	18232.63	-16580.17	7658.10	1776954.20	14620593.21	40°15'24.1793"N	80°30'38.2251"W	18263.31	155.209	0.33	-0.06	0.33
24052.00	89.600	158.740	5823.32	18327.63	-16668.50	7693.06	1776989.14	14620504.92	40°15'23.3046"N	80°30'37.7805"W	18358.16	155.225	0.69	0.00	0.69
24146.00	89.510	158.660	5824.05	18421.62	-16756.07	7727.20	1777023.27	14620417.37	40°15'22.4373"N	80°30'37.3464"W	18451.98	155.243	0.13	-0.10	-0.09
24241.00	89.600	158.820	5824.79	18516.62	-16844.61	7761.65	1777057.71	14620328.87	40°15'21.5606"N	80°30'36.9084"W	18546.80	155.261	0.19	0.09	0.17
24336.00	89.630	158.640	5825.43	18611.62	-16933.13	7796.11	1777092.15	14620240.38	40°15'20.6839"N	80°30'36.4703"W	18641.63	155.278	0.19	0.03	-0.19
24431.00	89.600	158.800	5826.07	18706.61	-17021.65	7830.59	1777126.62	14620151.89	40°15'19.8073"N	80°30'36.0319"W	18736.46	155.296	0.17	-0.03	0.17
24526.00	89.630	159.130	5826.71	18801.61	-17110.32	7864.69	1777160.70	14620063.26	40°15'18.9292"N	80°30'35.5984"W	18831.26	155.314	0.35	0.03	0.35
24621.00	89.450	158.450	5827.47	18896.61	-17198.88	7899.05	1777195.06	14619974.73	40°15'18.0522"N	80°30'35.1615"W	18926.08	155.332	0.74	-0.19	-0.72
24716.00	89.540	158.690	5828.31	18991.60	-17287.31	7933.76	1777229.75	14619886.34	40°15'17.1765"N	80°30'34.7201"W	19020.93	155.348	0.27	0.09	0.25
24812.00	89.140	158.460	5829.07	19087.58	-17376.67	7968.83	1777264.80	14619797.01	40°15'16.2915"N	80°30'34.2743"W	19116.77	155.364	0.48	-0.42	-0.24
24907.00	89.230	158.570	5830.15	19182.58	-17465.06	8003.62	1777299.58	14619708.66	40°15'15.4162"N	80°30'33.8319"W	19211.62	155.380	0.15	0.09	0.12
25002.00	89.230	158.850	5830.84	19277.58	-17553.57	8038.11	1777334.06	14619620.18	40°15'14.5397"N	80°30'33.3933"W	19306.45	155.396	0.29	0.00	0.29
25097.00	89.290	158.940	5831.67	19372.57	-17642.19	8072.31	1777368.25	14619531.60	40°15'13.6621"N	80°30'32.9585"W	19401.27	155.413	0.11	0.06	0.09
25192.00	89.260	158.830	5832.47	19467.58	-17730.80	8106.53	1777402.46	14619443.02	40°15'12.7846"N	80°30'32.5235"W	19496.08	155.430	0.12	-0.03	-0.12
25287.00	89.170	158.800	5833.77	19562.55	-17819.38	8140.86	1777436.77	14619354.48	40°15'11.9075"N	80°30'32.0871"W	19590.91	155.447	0.10	-0.09	-0.03



Actual Wellpath Report

State of WV DNR C BRK 10H AWP Proj: 27115'
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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

WELLPATH DATA (290 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
25382.00	89.260	158.980	5837.07	19657.54	-17907.99	8175.07	1777470.97	14619265.90	40°15'11.0299"N	80°30'31.6522"W	19685.73	155.463	0.21	0.09	0.19
25477.00	89.230	159.000	5838.33	19752.52	-17996.67	8209.13	1777505.02	14619177.25	40°15'10.1518"N	80°30'31.2193"W	19780.54	155.480	0.04	-0.03	0.02
25572.00	89.230	157.870	5839.60	19847.51	-18085.01	8244.04	1777539.92	14619088.95	40°15'9.2769"N	80°30'30.7753"W	19875.41	155.494	1.19	0.00	-1.19
25667.00	89.170	157.730	5840.93	19942.50	-18172.96	8279.94	1777575.79	14619001.03	40°15'8.4058"N	80°30'30.3187"W	19970.32	155.505	0.16	-0.06	-0.15
25762.00	89.290	157.870	5842.21	20037.48	-18260.91	8315.83	1777611.67	14618913.12	40°15'7.5348"N	80°30'29.8621"W	20065.24	155.516	0.19	0.13	0.15
25857.00	89.230	157.830	5843.43	20132.47	-18348.89	8351.64	1777647.47	14618825.17	40°15'6.6634"N	80°30'29.4065"W	20160.15	155.527	0.08	-0.06	-0.04
25952.00	89.170	157.690	5844.76	20227.45	-18436.81	8387.59	1777683.41	14618737.28	40°15'5.7926"N	80°30'28.9491"W	20255.07	155.537	0.16	-0.06	-0.15
26047.00	89.260	157.890	5846.06	20322.43	-18524.76	8423.50	1777719.31	14618649.37	40°15'4.9216"N	80°30'28.4923"W	20349.99	155.548	0.23	0.09	0.21
26142.00	89.350	157.860	5847.21	20417.42	-18612.76	8459.28	1777755.07	14618561.40	40°15'4.0501"N	80°30'28.0372"W	20444.90	155.559	0.10	0.09	-0.03
26237.00	89.260	157.700	5848.36	20512.40	-18700.69	8495.20	1777790.98	14618473.50	40°15'3.1791"N	80°30'27.5802"W	20539.82	155.569	0.19	-0.09	-0.17
26332.00	89.290	157.830	5849.57	20607.39	-18788.62	8531.15	1777826.91	14618385.60	40°15'2.3082"N	80°30'27.1229"W	20634.75	155.579	0.14	0.03	0.14
26427.00	89.140	157.640	5850.87	20702.37	-18876.53	8567.14	1777862.89	14618297.73	40°15'1.4376"N	80°30'26.6650"W	20729.67	155.589	0.25	-0.16	-0.20
26522.00	89.260	157.850	5852.19	20797.35	-18964.45	8603.11	1777898.85	14618209.85	40°15'0.5669"N	80°30'26.2074"W	20824.60	155.599	0.25	0.13	0.22
26617.00	89.200	157.830	5853.47	20892.34	-19052.42	8638.94	1777934.67	14618121.91	40°14'59.6956"N	80°30'25.7516"W	20919.51	155.609	0.07	-0.06	-0.02
26712.00	89.260	157.750	5854.75	20987.32	-19140.36	8674.85	1777970.56	14618034.00	40°14'58.8245"N	80°30'25.2948"W	21014.44	155.619	0.11	0.06	-0.08
26807.00	89.230	157.690	5856.00	21082.30	-19228.26	8710.87	1778006.56	14617946.13	40°14'57.9540"N	80°30'24.8367"W	21109.37	155.628	0.07	-0.03	-0.06
26902.00	89.200	157.750	5857.30	21177.28	-19316.16	8746.88	1778042.56	14617858.26	40°14'57.0834"N	80°30'24.3785"W	21204.29	155.638	0.07	-0.03	0.06
26998.00	89.110	157.810	5858.72	21273.26	-19405.02	8783.18	1778078.85	14617769.44	40°14'56.2033"N	80°30'23.9168"W	21300.22	155.647	0.11	-0.09	0.06
27090.00	89.290	157.750	5860.00	21365.25	-19490.18	8817.97	1778113.62	14617684.31	40°14'55.3599"N	80°30'23.4742"W	21392.14	155.657	0.21	0.20	-0.07
27115.00#	89.290	157.750	5860.31	21390.24	-19513.32	8827.43	1778123.08	14617661.18	40°14'55.1307"N	80°30'23.3538"W	21417.13	155.659	0.00	0.00	0.00

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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

HOLE & CASING SECTIONS - Ref Wellbore: State of WV DNR C BRK 10H AWB Ref Wellpath: State of WV DNR C BRK 10H AWP Proj: 27115'

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]
20in Conductor	26.00	126.00	100.00	26.00	126.00	0.00	0.00	-0.13	-0.12
17.5in Open Hole	126.00	426.00	300.00	126.00	425.99	-0.13	-0.12	-0.33	-1.89
13.375in Casing Surface	26.00	426.00	400.00	26.00	425.99	0.00	0.00	-0.33	-1.89
12.25in Open Hole	426.00	1410.00	984.00	425.99	1399.88	-0.33	-1.89	65.34	98.47
9.625in Casing Intermediate	26.00	1326.00	1300.00	26.00	1317.78	0.00	0.00	52.20	86.54
8.5in Open Hole	1410.00	27115.00	25705.00	1399.88	5860.31	65.34	98.47	-19513.32	8827.43
5.5in Casing Production	26.00	27115.00	27089.00	26.00	5860.31	0.00	0.00	-19513.32	8827.43

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
State of WV DNR C BRK 10H LP Rev-5	5614.00	23.27	1136.53	1770435.13	14637190.30	40°18'8.5968"N	80°32'1.2126"W	point
State of WV DNR C BRK 10H BHL Rev-8	5980.50	-19515.51	8822.22	1778117.87	14617659.00	40°14'55.1094"N	80°30'23.4213"W	point

WELLPATH COMPOSITION - Ref Wellbore: State of WV DNR C BRK 10H AWB Ref Wellpath: State of WV DNR C BRK 10H AWP Proj: 27115'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	366.00	OWSG MWD rev 25 (HRGM)	01 Premier MWD <17-1/2"> (189'-366')	State of WV DNR C BRK 10H AWB	1/25/2021
366.00	1326.00	OWSG MWD rev 25 (HRGM)	02 Premier MWD <12-1/4"> (463'-1326')	State of WV DNR C BRK 10H AWB	1/25/2021
1326.00	27115.00	BH AutoTrak Curve/Express (26.4) (HRGM, Short spacing)	03 BH A T Curve <8-1/2"> (1421'-27090')	State of WV DNR C BRK 10H AWB	3/12/2021

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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	State of WV DNR C BRK 10H
Field	Brooke	API/Legal	
Facility	State of WV DNR C BRK Pad	Wellbore	State of WV DNR C BRK 10H AWB
Slot	Slot 10H		

COMMENTS

Wellpath general comments
 API: 47-009-00309-0000
 BH Job #: 110732171
 Rig: SDC 40
 Duration: 03/18/2021 - 03/26/2021

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