



# SWN PRODUCTION COMPANY, LLC



Location: Marshall County, WV  
 Field: Marshall  
 Facility: BW Edge MSH Pad

Slot: 6H  
 Well: BW Edge MSH 6H  
 Wellbore: BW Edge MSH 6H AWB

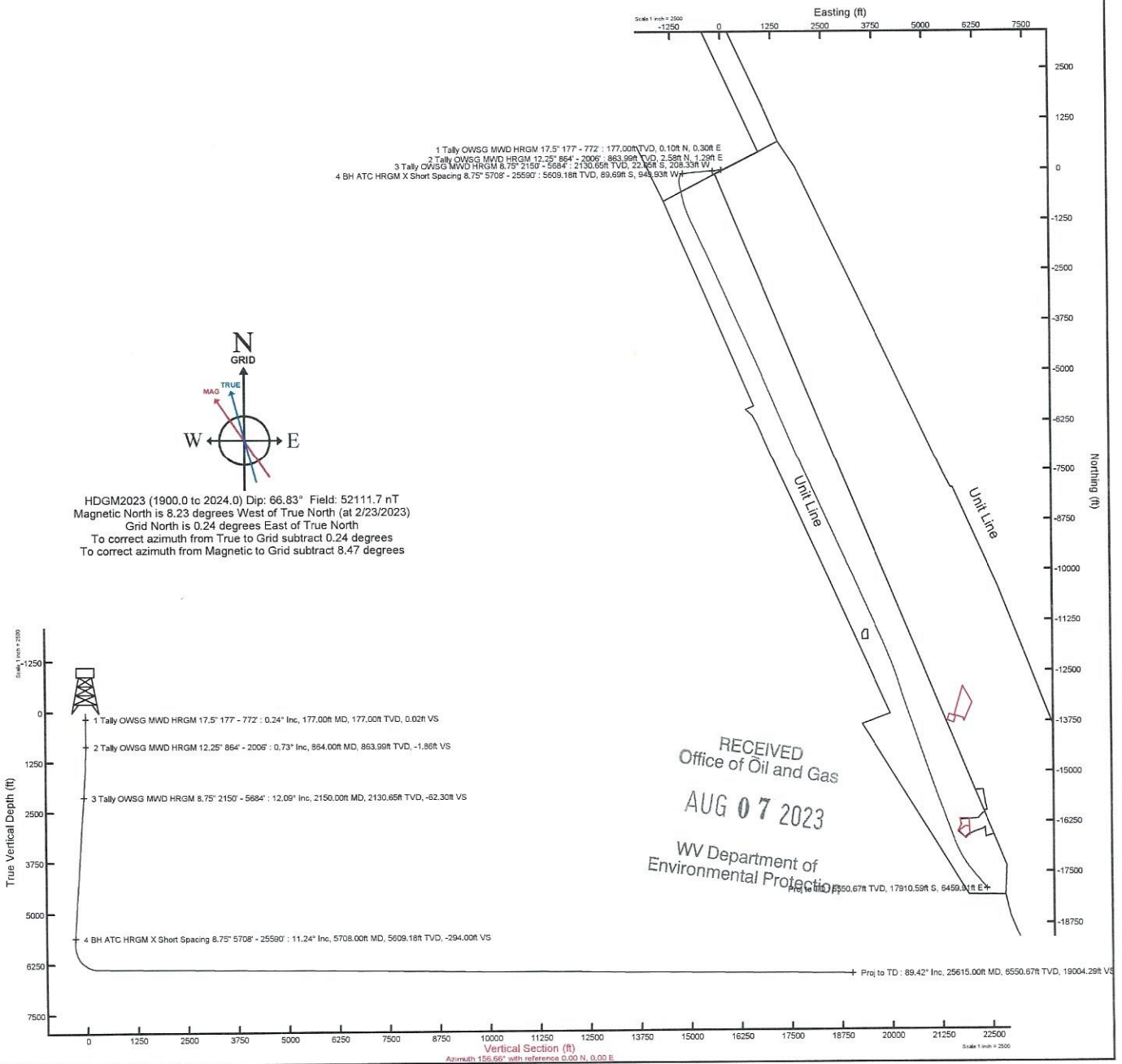
### Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
BW Edge MSH Pad			1744732.480	14529346.800	40°00'23.6808"N	80°37'38.9136"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
6H	-30.84	-28.72	1744703.770	14529315.970	40°00'23.3772"N	80°37'39.2844"W
SDC 40 (KB) to Ground level (At Slot: 6H)					26ft	
Mean Sea Level to Ground level (At Slot: 6H)					-1253.7ft	
SDC 40 (KB) to Mean Sea Level					1279.7ft	
Plot reference wellpath is BW Edge MSH 6H awp Proj: 25615'				Grid System: NAD83 / UTM Zone 17 North, US feet		
True vertical depths are referenced to SDC 40 (KB)				North Reference: Grid north		
Reference wellpath measured depths are referenced to SDC 40 (KB)				Scale: True distance		
SDC 40 (KB) to Mean Sea Level: 1279.7 feet				Coordinates are in feet referenced to Slot		
Mean Sea Level to Ground level (At Slot: 6H): -1253.7 feet				Depths are in feet		
Offset wellpath MDs are referenced to each path's default MD datum				Created by: tranlam on 2023-03-15; Database: WA_MPL_EASTERNUS_Defn		

### 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
25615.00	89.420	140.160	6550.67	-17910.59	6459.91	1751161.16	14511412.36	39°57'26.1054"N	80°36'17.2901"W

API: 47051024720000  
 BH JOB: 111670430  
 DURATION: 03.06.2023 to 03.12.2023  
 RIG: SDC 40



03/15/2024

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	BW Edge MSH 6H
Field	Marshall	API	47051024720000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

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	3/15/2023 at 10:32:58 PM
Convergence at slot	0.24° 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	-30.84	-28.72	1744703.77	14529315.97	40°00'23.3772"N	80°37'39.2844"W
Facility Reference Pt			1744732.48	14529346.80	40°00'23.6808"N	80°37'38.9136"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	1279.70ft
Horizontal Reference Pt	Slot	SDC 40 (KB) to Mean Sea Level	1279.70ft
Vertical Reference Pt	SDC 40 (KB)	SDC 40 (KB) to Ground Level at Slot (6H)	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	156.66°

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Field	Marshall	API	47051024720000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

WELLPATH DATA (277 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	70.650	0.00	0.00	0.00	0.00	1744703.77	14529315.97	40°00'23.3772"N	80°37'39.2844"W	0.00	0.000	0.00	
26.00	0.000	70.650	26.00	0.00	0.00	0.00	1744703.77	14529315.97	40°00'23.3772"N	80°37'39.2844"W	0.00	0.000	0.00	
177.00	0.240	70.650	177.00	0.02	0.10	0.30	1744704.07	14529316.07	40°00'23.3782"N	80°37'39.2806"W	0.32	70.650	0.16	
237.00	0.260	58.830	237.00	0.01	0.22	0.53	1744704.30	14529316.19	40°00'23.3793"N	80°37'39.2775"W	0.58	67.874	0.09	
326.00	0.190	49.320	326.00	-0.06	0.42	0.82	1744704.59	14529316.39	40°00'23.3812"N	80°37'39.2739"W	0.92	62.959	0.09	
415.00	0.190	23.670	415.00	-0.20	0.65	0.99	1744704.76	14529316.62	40°00'23.3835"N	80°37'39.2716"W	1.18	56.737	0.09	
505.00	0.210	21.830	505.00	-0.42	0.94	1.11	1744704.88	14529316.91	40°00'23.3864"N	80°37'39.2701"W	1.45	49.793	0.02	
597.00	0.180	56.280	597.00	-0.57	1.18	1.29	1744705.06	14529317.14	40°00'23.3887"N	80°37'39.2677"W	1.75	47.736	0.13	
663.00	0.290	19.260	663.00	-0.71	1.39	1.43	1744705.20	14529317.36	40°00'23.3908"N	80°37'39.2659"W	2.00	45.894	0.28	
732.00	0.370	18.280	732.00	-1.00	1.77	1.56	1744705.33	14529317.74	40°00'23.3946"N	80°37'39.2642"W	2.36	41.479	0.12	
772.00	0.360	26.240	771.99	-1.18	2.00	1.66	1744705.43	14529317.97	40°00'23.3969"N	80°37'39.2630"W	2.60	39.630	0.13	
864.00	0.730	302.730	863.99	-1.86	2.58	1.29	1744705.06	14529318.55	40°00'23.4026"N	80°37'39.2676"W	2.88	26.632	0.84	
956.00	3.140	273.080	955.93	-3.46	3.03	-1.72	1744702.05	14529319.00	40°00'23.4072"N	80°37'39.3063"W	3.48	330.475	2.75	
1046.00	6.280	268.030	1045.62	-6.35	2.99	-9.10	1744694.67	14529318.96	40°00'23.4071"N	80°37'39.4012"W	9.58	288.214	3.52	
1137.00	8.400	265.800	1135.87	-10.35	2.34	-20.70	1744683.07	14529318.31	40°00'23.4011"N	80°37'39.5503"W	20.84	276.438	2.35	
1227.00	8.390	259.760	1224.91	-13.99	0.69	-33.72	1744670.06	14529316.66	40°00'23.3853"N	80°37'39.7177"W	33.73	271.168	0.98	
1318.00	8.480	253.610	1314.92	-16.31	-2.39	-46.69	1744657.10	14529313.58	40°00'23.3555"N	80°37'39.8845"W	46.75	267.074	1.00	
1408.00	10.060	255.750	1403.74	-18.35	-6.19	-60.68	1744643.12	14529309.78	40°00'23.3184"N	80°37'40.0645"W	60.99	264.172	1.80	
1499.00	12.140	262.060	1493.04	-22.15	-9.47	-77.86	1744625.94	14529306.50	40°00'23.2868"N	80°37'40.2855"W	78.43	263.064	2.64	
1589.00	12.780	265.290	1580.92	-27.84	-11.60	-97.15	1744606.65	14529304.38	40°00'23.2666"N	80°37'40.5335"W	97.84	263.193	1.05	
1680.00	11.940	267.810	1669.81	-34.46	-12.78	-116.59	1744587.22	14529303.19	40°00'23.2556"N	80°37'40.7834"W	117.29	263.743	1.10	
1770.00	11.030	264.980	1758.01	-40.52	-13.89	-134.47	1744569.35	14529302.08	40°00'23.2454"N	80°37'41.0132"W	135.19	264.102	1.19	
1861.00	10.510	262.250	1847.41	-45.49	-15.77	-151.37	1744552.46	14529300.20	40°00'23.2275"N	80°37'41.2304"W	152.19	264.051	0.80	
1952.00	11.130	264.760	1936.79	-50.45	-17.69	-168.34	1744535.50	14529298.28	40°00'23.2092"N	80°37'41.4486"W	169.27	263.999	0.86	
2006.00	11.660	266.810	1989.73	-53.95	-18.47	-178.98	1744524.86	14529297.50	40°00'23.2020"N	80°37'41.5854"W	179.93	264.107	1.24	
2150.00	12.090	259.450	2130.65	-62.30	-22.05	-208.33	1744495.52	14529293.93	40°00'23.1679"N	80°37'41.9628"W	209.50	263.960	1.09	
2244.00	12.300	261.350	2222.53	-67.02	-25.35	-227.91	1744475.95	14529290.63	40°00'23.1360"N	80°37'42.2146"W	229.32	263.652	0.48	
2334.00	12.330	265.080	2310.46	-72.48	-27.62	-246.96	1744456.90	14529288.36	40°00'23.1144"N	80°37'42.4595"W	248.50	263.619	0.88	
2425.00	12.850	266.960	2399.27	-79.06	-28.99	-266.75	1744437.13	14529286.99	40°00'23.1017"N	80°37'42.7138"W	268.32	263.798	0.73	
2516.00	12.490	267.020	2488.06	-86.00	-30.04	-286.68	1744417.20	14529285.94	40°00'23.0921"N	80°37'42.9700"W	288.25	264.018	0.40	

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Operator	SWN PRODUCTION COMPANY, LLC	Well	BW Edge MSH 6H
Field	Marshall	API	47051024720000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

WELLPATH DATA (277 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
2608.00	11.790	269.330	2578.00	-93.08	-30.67	-306.01	1744397.88	14529285.32	40°00'23.0867"N	80°37'43.2185"W	307.55	264.278	0.93	
2699.00	12.140	269.040	2667.02	-100.31	-30.93	-324.88	1744379.02	14529285.05	40°00'23.0849"N	80°37'43.4609"W	326.35	264.561	0.39	
2791.00	11.940	266.130	2757.00	-107.16	-31.74	-344.04	1744359.86	14529284.24	40°00'23.0777"N	80°37'43.7073"W	345.50	264.729	0.69	
2882.00	11.700	264.840	2846.07	-113.18	-33.20	-362.63	1744341.29	14529282.78	40°00'23.0640"N	80°37'43.9462"W	364.14	264.768	0.39	
2973.00	12.120	263.760	2935.11	-118.87	-35.07	-381.31	1744322.61	14529280.91	40°00'23.0463"N	80°37'44.1864"W	382.92	264.745	0.52	
3064.00	11.770	262.290	3024.14	-124.18	-37.36	-400.01	1744303.92	14529278.63	40°00'23.0245"N	80°37'44.4268"W	401.75	264.665	0.51	
3155.00	11.540	261.600	3113.26	-129.03	-39.93	-418.21	1744285.73	14529276.06	40°00'22.9998"N	80°37'44.6608"W	420.11	264.546	0.30	
3249.00	10.990	265.280	3205.45	-134.31	-42.04	-436.44	1744267.50	14529273.95	40°00'22.9797"N	80°37'44.8952"W	438.46	264.498	0.96	
3338.00	11.660	265.970	3292.72	-139.99	-43.37	-453.87	1744250.08	14529272.62	40°00'22.9672"N	80°37'45.1192"W	455.93	264.541	0.77	
3429.00	13.050	264.700	3381.61	-146.22	-44.97	-473.27	1744230.69	14529271.02	40°00'22.9523"N	80°37'45.3687"W	475.40	264.572	1.56	
3520.00	13.090	263.270	3470.25	-152.34	-47.12	-493.73	1744210.23	14529268.87	40°00'22.9318"N	80°37'45.6317"W	495.98	264.548	0.36	
3610.00	11.840	261.830	3558.13	-157.67	-49.63	-512.99	1744190.97	14529266.36	40°00'22.9078"N	80°37'45.8794"W	515.39	264.474	1.43	
3703.00	10.880	264.100	3649.31	-162.80	-51.89	-531.17	1744172.81	14529264.10	40°00'22.8863"N	80°37'46.1131"W	533.70	264.421	1.14	
3793.00	11.050	262.870	3737.67	-167.75	-53.83	-548.18	1744155.81	14529262.16	40°00'22.8678"N	80°37'46.3317"W	550.81	264.391	0.32	
3888.00	11.050	264.370	3830.90	-173.06	-55.85	-566.27	1744137.72	14529260.14	40°00'22.8485"N	80°37'46.5644"W	569.02	264.367	0.30	
3976.00	9.320	267.350	3917.51	-178.15	-57.01	-581.78	1744122.21	14529258.98	40°00'22.8377"N	80°37'46.7638"W	584.57	264.403	2.05	
4066.00	9.860	268.470	4006.26	-183.59	-57.55	-596.77	1744107.24	14529258.44	40°00'22.8330"N	80°37'46.9564"W	599.54	264.491	0.63	
4157.00	10.860	270.430	4095.77	-189.94	-57.70	-613.13	1744090.88	14529258.29	40°00'22.8322"N	80°37'47.1666"W	615.84	264.624	1.17	
4249.00	11.930	269.900	4185.96	-197.18	-57.65	-631.30	1744072.71	14529258.34	40°00'22.8334"N	80°37'47.4002"W	633.93	264.782	1.17	
4342.00	13.350	267.100	4276.70	-204.72	-58.21	-651.64	1744052.38	14529257.78	40°00'22.8287"N	80°37'47.6616"W	654.24	264.895	1.66	
4433.00	13.760	262.980	4365.17	-211.43	-60.06	-672.87	1744031.16	14529255.93	40°00'22.8113"N	80°37'47.9345"W	675.55	264.899	1.15	
4523.00	14.560	261.430	4452.43	-217.33	-63.06	-694.68	1744009.36	14529252.94	40°00'22.7826"N	80°37'48.2150"W	697.54	264.813	0.98	
4614.00	13.820	263.870	4540.66	-223.46	-65.92	-716.80	1743987.25	14529250.07	40°00'22.7552"N	80°37'48.4994"W	719.83	264.745	1.05	
4704.00	12.650	264.860	4628.27	-229.72	-67.95	-737.31	1743966.75	14529248.04	40°00'22.7360"N	80°37'48.7629"W	740.43	264.734	1.32	
4794.00	12.800	266.980	4716.06	-236.26	-69.36	-757.08	1743946.99	14529246.63	40°00'22.7229"N	80°37'49.0171"W	760.25	264.765	0.54	
4885.00	12.320	265.020	4804.88	-242.82	-70.74	-776.82	1743927.26	14529245.26	40°00'22.7101"N	80°37'49.2708"W	780.03	264.797	0.71	
4975.00	12.500	263.020	4892.78	-248.58	-72.75	-796.05	1743908.03	14529243.25	40°00'22.6909"N	80°37'49.5181"W	799.37	264.778	0.52	
5066.00	12.990	260.530	4981.53	-253.81	-75.63	-815.91	1743888.18	14529240.37	40°00'22.6633"N	80°37'49.7735"W	819.41	264.704	0.81	
5157.00	12.520	264.740	5070.29	-259.32	-78.22	-835.82	1743868.27	14529237.78	40°00'22.6385"N	80°37'50.0295"W	839.48	264.654	1.14	
5247.00	12.360	265.330	5158.48	-265.43	-79.90	-855.14	1743848.97	14529236.10	40°00'22.6227"N	80°37'50.2778"W	858.86	264.662	0.23	

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Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

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5338.00	12.740	262.780	5247.00	-271.34	-81.95	-874.80	1743829.31	14529234.05	40°00'22.6033"N	80°37'50.5306"W	878.63	264.648	0.74	
5428.00	12.780	262.120	5334.78	-276.75	-84.56	-894.50	1743809.61	14529231.44	40°00'22.5783"N	80°37'50.7839"W	898.49	264.599	0.17	
5519.00	11.240	265.390	5423.79	-282.28	-86.66	-913.32	1743790.81	14529229.35	40°00'22.5583"N	80°37'51.0258"W	917.42	264.580	1.85	
5610.00	11.200	265.200	5513.05	-287.94	-88.11	-930.96	1743773.17	14529227.89	40°00'22.5447"N	80°37'51.2526"W	935.12	264.593	0.06	
5684.00	11.190	265.400	5585.64	-292.53	-89.29	-945.28	1743758.86	14529226.72	40°00'22.5337"N	80°37'51.4367"W	949.49	264.604	0.05	
5708.00	11.240	264.590	5609.18	-294.00	-89.69	-949.93	1743754.21	14529226.31	40°00'22.5298"N	80°37'51.4965"W	954.16	264.606	0.69	
5797.00	11.110	264.240	5696.49	-299.26	-91.37	-967.10	1743737.05	14529224.63	40°00'22.5139"N	80°37'51.7172"W	971.41	264.603	0.16	
5888.00	12.060	240.850	5785.69	-300.94	-96.89	-984.13	1743720.02	14529219.12	40°00'22.4602"N	80°37'51.9364"W	988.89	264.377	5.23	
5978.00	13.120	203.890	5873.66	-293.04	-110.83	-996.50	1743707.66	14529205.19	40°00'22.3229"N	80°37'52.0961"W	1002.65	263.654	8.87	
6070.00	21.650	199.050	5961.38	-273.38	-136.47	-1006.29	1743697.87	14529179.56	40°00'22.0699"N	80°37'52.2232"W	1015.50	262.277	9.40	
6160.00	29.360	201.890	6042.56	-245.54	-172.69	-1019.95	1743684.21	14529143.35	40°00'21.7125"N	80°37'52.4007"W	1034.47	260.390	8.67	
6251.00	37.140	191.740	6118.66	-207.26	-220.39	-1033.89	1743670.28	14529095.66	40°00'21.2417"N	80°37'52.5824"W	1057.12	257.966	10.49	
6342.00	44.680	177.360	6187.53	-154.65	-279.47	-1038.02	1743666.15	14529036.61	40°00'20.6581"N	80°37'52.6386"W	1074.99	254.932	13.22	
6432.00	53.280	170.840	6246.58	-89.92	-346.85	-1030.81	1743673.36	14528969.25	40°00'19.9918"N	80°37'52.5495"W	1087.60	251.403	11.00	
6524.00	60.660	167.140	6296.71	-14.62	-422.47	-1015.99	1743688.18	14528893.66	40°00'19.2439"N	80°37'52.3631"W	1100.32	247.421	8.70	
6614.00	67.640	167.740	6335.93	64.89	-501.48	-998.40	1743705.76	14528814.68	40°00'18.4624"N	80°37'52.1412"W	1117.27	243.330	7.78	
6706.00	76.690	167.790	6364.07	150.74	-586.98	-979.86	1743724.29	14528729.22	40°00'17.6167"N	80°37'51.9075"W	1142.22	239.076	9.84	
6796.00	87.290	168.930	6376.60	237.88	-674.15	-961.91	1743742.23	14528642.09	40°00'16.7546"N	80°37'51.6816"W	1174.63	234.976	11.84	
6887.00	89.320	166.630	6379.29	327.13	-763.04	-942.66	1743761.47	14528553.23	40°00'15.8754"N	80°37'51.4389"W	1212.78	231.012	3.37	
6978.00	89.170	164.100	6380.49	417.06	-851.07	-919.67	1743784.45	14528465.23	40°00'15.0045"N	80°37'51.1482"W	1253.04	227.219	2.78	
7069.00	89.230	161.210	6381.76	507.55	-937.91	-892.55	1743811.57	14528378.42	40°00'14.1452"N	80°37'50.8043"W	1294.73	223.580	3.18	
7160.00	89.940	158.700	6382.42	598.39	-1023.39	-861.36	1743842.74	14528292.98	40°00'13.2992"N	80°37'50.4080"W	1337.64	220.087	2.87	
7251.00	89.970	158.060	6382.49	689.34	-1107.99	-827.83	1743876.26	14528208.41	40°00'12.4618"N	80°37'49.9817"W	1383.09	216.765	0.70	
7342.00	89.110	157.590	6383.22	780.32	-1192.25	-793.49	1743910.59	14528124.18	40°00'11.6277"N	80°37'49.5448"W	1432.16	213.645	1.08	
7433.00	89.200	154.440	6384.56	871.29	-1275.38	-756.51	1743947.56	14528041.09	40°00'10.8047"N	80°37'49.0740"W	1482.86	210.675	3.46	
7524.00	90.520	154.980	6384.79	962.24	-1357.65	-717.63	1743986.42	14527958.85	40°00'9.9901"N	80°37'48.5789"W	1535.65	207.860	1.57	
7615.00	89.820	155.240	6384.52	1053.20	-1440.20	-679.33	1744024.70	14527876.33	40°00'9.1727"N	80°37'48.0912"W	1592.38	205.253	0.82	
7706.00	89.630	155.080	6384.95	1144.17	-1522.78	-641.11	1744062.91	14527793.78	40°00'8.3551"N	80°37'47.6043"W	1652.23	202.832	0.27	
7797.00	89.510	154.940	6385.64	1235.13	-1605.26	-602.66	1744101.34	14527711.34	40°00'7.5384"N	80°37'47.1148"W	1714.66	200.578	0.20	
7887.00	90.060	155.750	6385.97	1325.11	-1687.05	-565.12	1744138.87	14527629.58	40°00'6.7286"N	80°37'46.6367"W	1779.19	198.520	1.09	

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	SWN PRODUCTION COMPANY, LLC	Well	BW Edge MSH 6H
Field	Marshall	API	4705102472000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

**WELLPATH DATA (277 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
7978.00	88.860	156.050	6386.83	1416.09	-1770.11	-527.96	1744176.01	14527546.55	40°00'5.9062"N	80°37'46.1637"W	1847.17	196.608	1.36	
8069.00	88.920	154.380	6388.59	1507.04	-1852.71	-489.82	1744214.14	14527463.98	40°00'5.0884"N	80°37'45.6780"W	1916.37	194.809	1.84	
8159.00	89.720	153.900	6389.66	1596.95	-1933.69	-450.57	1744253.37	14527383.03	40°00'4.2865"N	80°37'45.1779"W	1985.49	193.116	1.04	
8251.00	89.850	155.070	6390.01	1688.88	-2016.72	-410.94	1744292.99	14527300.04	40°00'3.4644"N	80°37'44.6732"W	2058.16	191.517	1.28	
8342.00	90.120	156.260	6390.03	1779.87	-2099.63	-373.45	1744330.47	14527217.16	40°00'2.6435"N	80°37'44.1958"W	2132.58	190.085	1.34	
8433.00	89.690	156.790	6390.18	1870.86	-2183.10	-337.20	1744366.70	14527133.72	40°00'1.8172"N	80°37'43.7345"W	2208.99	188.780	0.75	
8524.00	89.690	156.110	6390.67	1961.86	-2266.52	-300.84	1744403.05	14527050.33	40°00'0.9913"N	80°37'43.2717"W	2286.40	187.561	0.75	
8615.00	89.850	156.100	6391.04	2052.86	-2349.72	-263.98	1744439.89	14526967.17	40°00'0.1676"N	80°37'42.8025"W	2364.50	186.410	0.18	
8706.00	89.630	156.200	6391.45	2143.85	-2432.95	-227.18	1744476.68	14526883.97	39°59'59.3436"N	80°37'42.3342"W	2443.53	185.335	0.27	
8797.00	90.090	156.240	6391.68	2234.85	-2516.22	-190.49	1744513.35	14526800.73	39°59'58.5191"N	80°37'41.8672"W	2523.42	184.329	0.51	
8887.00	89.420	155.800	6392.06	2324.84	-2598.45	-153.91	1744549.92	14526718.53	39°59'57.7050"N	80°37'41.4016"W	2603.01	183.390	0.89	
8978.00	89.820	157.410	6392.66	2415.84	-2681.97	-117.78	1744586.03	14526635.05	39°59'56.8782"N	80°37'40.9418"W	2684.55	182.515	1.82	
9069.00	89.110	156.060	6393.51	2506.83	-2765.56	-81.84	1744621.96	14526551.49	39°59'56.0506"N	80°37'40.4845"W	2766.77	181.695	1.68	
9160.00	89.780	155.970	6394.39	2597.82	-2848.70	-44.85	1744658.94	14526468.38	39°59'55.2275"N	80°37'40.0136"W	2849.05	180.902	0.74	
9251.00	89.630	155.720	6394.86	2688.81	-2931.73	-7.61	1744696.16	14526385.38	39°59'54.4054"N	80°37'39.5396"W	2931.74	180.149	0.32	
9340.00	89.420	155.860	6395.60	2777.80	-3012.90	28.88	1744732.64	14526304.25	39°59'53.6018"N	80°37'39.0750"W	3013.04	179.451	0.28	
9432.00	89.880	156.190	6396.16	2869.79	-3096.96	66.26	1744770.01	14526220.22	39°59'52.7696"N	80°37'38.5992"W	3097.67	178.774	0.62	
9524.00	89.820	156.220	6396.40	2961.78	-3181.14	103.38	1744807.11	14526136.07	39°59'51.9361"N	80°37'38.1268"W	3182.82	178.139	0.07	
9616.00	88.950	156.300	6397.39	3053.78	-3265.35	140.42	1744844.13	14526051.89	39°59'51.1024"N	80°37'37.6555"W	3268.37	177.538	0.95	
9707.00	89.110	156.370	6398.93	3144.76	-3348.68	176.94	1744880.64	14525968.59	39°59'50.2774"N	80°37'37.1907"W	3353.35	176.975	0.19	
9799.00	89.660	155.290	6399.92	3236.74	-3432.61	214.61	1744918.29	14525884.70	39°59'49.4464"N	80°37'36.7112"W	3439.31	176.423	1.32	
9889.00	90.250	156.840	6399.99	3326.74	-3514.87	251.12	1744954.79	14525802.47	39°59'48.6320"N	80°37'36.2465"W	3523.83	175.913	1.84	
9981.00	88.710	156.680	6400.83	3418.73	-3599.40	287.42	1744991.07	14525717.97	39°59'47.7952"N	80°37'35.7847"W	3610.86	175.435	1.68	
10073.00	89.170	155.280	6402.53	3510.71	-3683.41	324.86	1745028.50	14525633.99	39°59'46.9634"N	80°37'35.3081"W	3697.71	174.960	1.60	
10165.00	90.120	155.300	6403.10	3602.68	-3766.99	363.32	1745066.94	14525550.45	39°59'46.1359"N	80°37'34.8185"W	3784.47	174.491	1.03	
10256.00	89.540	155.680	6403.37	3693.66	-3849.79	401.07	1745104.68	14525467.68	39°59'45.3161"N	80°37'34.3379"W	3870.62	174.052	0.76	
10348.00	89.420	156.140	6404.20	3785.64	-3933.77	438.62	1745142.22	14525383.73	39°59'44.4846"N	80°37'33.8599"W	3958.15	173.638	0.52	
10438.00	89.200	156.110	6405.29	3875.63	-4016.06	475.04	1745178.63	14525301.47	39°59'43.6698"N	80°37'33.3964"W	4044.06	173.254	0.25	
10529.00	88.340	155.320	6407.24	3966.60	-4098.99	512.46	1745216.03	14525218.58	39°59'42.8488"N	80°37'32.9201"W	4130.90	172.874	1.28	
10620.00	89.450	155.340	6408.99	4057.55	-4181.60	550.58	1745254.13	14525136.00	39°59'42.0308"N	80°37'32.4347"W	4217.69	172.499	1.24	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	BW Edge MSH 6H
Field	Marshall	API	47051024720000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

WELLPATH DATA (277 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
10710.00	90.150	155.420	6409.31	4147.52	-4263.35	588.21	1745291.75	14525054.28	39°59'41.2213"N	80°37'31.9556"W	4303.74	172.145	0.84	
10800.00	89.450	157.910	6409.62	4237.52	-4345.98	623.86	1745327.39	14524971.68	39°59'40.4033"N	80°37'31.5020"W	4390.53	171.831	2.87	
10892.00	89.690	153.390	6410.31	4329.48	-4429.78	661.78	1745365.29	14524887.92	39°59'39.5737"N	80°37'31.0193"W	4478.94	171.503	4.92	
10982.00	89.140	157.020	6411.23	4419.43	-4511.46	699.52	1745403.01	14524806.27	39°59'38.7649"N	80°37'30.5389"W	4565.37	171.186	4.08	
11073.00	89.660	154.360	6412.19	4510.40	-4594.38	736.97	1745440.46	14524723.38	39°59'37.9439"N	80°37'30.0621"W	4653.11	170.887	2.98	
11163.00	90.960	156.050	6411.70	4600.36	-4676.08	774.71	1745478.18	14524641.71	39°59'37.1350"N	80°37'29.5816"W	4739.82	170.593	2.37	
11254.00	89.110	157.260	6411.64	4691.36	-4759.62	810.77	1745514.23	14524558.20	39°59'36.3079"N	80°37'29.1229"W	4828.18	170.333	2.43	
11345.00	89.170	155.240	6413.01	4782.34	-4842.90	847.42	1745550.86	14524474.95	39°59'35.4833"N	80°37'28.6566"W	4916.48	170.075	2.22	
11436.00	89.720	155.450	6413.89	4873.31	-4925.60	885.37	1745588.80	14524392.29	39°59'34.6645"N	80°37'28.1733"W	5004.54	169.810	0.65	
11536.00	89.970	157.170	6414.16	4973.31	-5017.17	925.55	1745628.96	14524300.75	39°59'33.7579"N	80°37'27.6621"W	5101.83	169.548	1.74	
11633.00	89.690	157.010	6414.45	5070.30	-5106.52	963.31	1745666.71	14524211.44	39°59'32.8734"N	80°37'27.1818"W	5196.59	169.317	0.33	
11730.00	89.940	156.490	6414.76	5167.30	-5195.64	1001.60	1745704.98	14524122.35	39°59'31.9911"N	80°37'26.6947"W	5291.30	169.089	0.59	
11826.00	89.690	157.240	6415.07	5263.30	-5283.92	1039.32	1745742.68	14524034.11	39°59'31.1171"N	80°37'26.2148"W	5385.16	168.872	0.82	
11923.00	88.860	156.440	6416.30	5360.29	-5373.09	1077.47	1745780.82	14523944.97	39°59'30.2343"N	80°37'25.7296"W	5480.06	168.661	1.19	
12019.00	89.630	156.620	6417.56	5456.28	-5461.14	1115.70	1745819.03	14523856.95	39°59'29.3625"N	80°37'25.2432"W	5573.94	168.454	0.82	
12116.00	89.260	157.130	6418.50	5553.28	-5550.34	1153.79	1745857.11	14523767.79	39°59'28.4794"N	80°37'24.7586"W	5669.00	168.257	0.65	
12212.00	89.170	157.110	6419.82	5649.26	-5638.78	1191.11	1745894.42	14523679.38	39°59'27.6039"N	80°37'24.2839"W	5763.21	168.072	0.10	
12309.00	89.170	157.460	6421.22	5746.25	-5728.25	1228.56	1745931.86	14523589.95	39°59'26.7182"N	80°37'23.8075"W	5858.52	167.895	0.36	
12405.00	89.050	157.630	6422.72	5842.22	-5816.96	1265.23	1745968.50	14523501.28	39°59'25.8400"N	80°37'23.3413"W	5952.97	167.729	0.22	
12502.00	88.580	156.760	6424.72	5939.20	-5906.36	1302.82	1746006.08	14523411.91	39°59'24.9550"N	80°37'22.8633"W	6048.34	167.561	1.02	
12598.00	89.290	157.430	6426.51	6035.18	-5994.77	1340.17	1746043.42	14523323.53	39°59'24.0797"N	80°37'22.3881"W	6142.75	167.398	1.02	
12695.00	89.410	156.800	6427.61	6132.17	-6084.13	1377.89	1746081.12	14523234.21	39°59'23.1951"N	80°37'21.9084"W	6238.21	167.239	0.66	
12792.00	89.450	156.170	6428.57	6229.16	-6173.07	1416.59	1746119.81	14523145.30	39°59'22.3145"N	80°37'21.4160"W	6333.52	167.076	0.65	
12888.00	89.720	156.680	6429.27	6325.16	-6261.06	1454.98	1746158.19	14523057.35	39°59'21.4434"N	80°37'20.9275"W	6427.89	166.917	0.60	
12985.00	89.480	156.340	6429.94	6422.16	-6350.01	1493.65	1746196.84	14522968.43	39°59'20.5627"N	80°37'20.4357"W	6523.32	166.764	0.43	
13082.00	89.820	157.330	6430.54	6519.15	-6439.19	1531.80	1746234.98	14522879.29	39°59'19.6798"N	80°37'19.9503"W	6618.88	166.619	1.08	
13179.00	89.260	157.430	6431.32	6616.14	-6528.73	1569.11	1746272.27	14522789.79	39°59'18.7935"N	80°37'19.4759"W	6714.64	166.486	0.59	
13276.00	89.570	157.180	6432.31	6713.13	-6618.21	1606.53	1746309.68	14522700.34	39°59'17.9076"N	80°37'19.0000"W	6810.41	166.356	0.41	
13372.00	89.320	156.360	6433.24	6809.12	-6706.42	1644.40	1746347.53	14522612.16	39°59'17.0343"N	80°37'18.5183"W	6905.08	166.223	0.89	
13468.00	89.540	157.320	6434.19	6905.12	-6794.68	1682.15	1746385.26	14522523.94	39°59'16.1605"N	80°37'18.0381"W	6999.81	166.095	1.03	

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Field	Marshall	API	47051024720000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

WELLPATH DATA (277 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
13565.00	89.510	157.910	6434.99	7002.10	-6884.37	1719.09	1746422.19	14522434.28	39°59'15.2726"N	80°37'17.5684"W	7095.76	165.979	0.61	
13662.00	89.970	156.300	6435.44	7099.09	-6973.72	1756.82	1746459.91	14522344.96	39°59'14.3880"N	80°37'17.0885"W	7191.61	165.860	1.73	
13758.00	89.170	154.840	6436.16	7195.07	-7061.12	1796.53	1746499.60	14522257.60	39°59'13.5227"N	80°37'16.5832"W	7286.08	165.725	1.73	
13855.00	88.830	155.650	6437.85	7292.02	-7149.19	1837.14	1746540.19	14522169.56	39°59'12.6506"N	80°37'16.0663"W	7381.47	165.588	0.91	
13951.00	88.990	155.930	6439.67	7388.00	-7236.73	1876.50	1746579.54	14522082.05	39°59'11.7839"N	80°37'15.5654"W	7476.07	165.463	0.34	
14048.00	89.510	156.220	6440.94	7484.98	-7325.39	1915.83	1746618.86	14521993.43	39°59'10.9061"N	80°37'15.0649"W	7571.77	165.344	0.61	
14145.00	89.850	155.510	6441.49	7581.97	-7413.91	1955.49	1746658.50	14521904.95	39°59'10.0296"N	80°37'14.5603"W	7667.46	165.224	0.81	
14242.00	89.600	155.830	6441.95	7678.95	-7502.29	1995.46	1746698.45	14521816.60	39°59'9.1545"N	80°37'14.0517"W	7763.13	165.105	0.42	
14338.00	88.830	155.000	6443.27	7774.92	-7589.58	2035.39	1746738.37	14521729.34	39°59'8.2903"N	80°37'13.5434"W	7857.77	164.988	1.18	
14435.00	89.080	155.730	6445.04	7871.88	-7677.74	2075.82	1746778.78	14521641.22	39°59'7.4174"N	80°37'13.0289"W	7953.41	164.871	0.80	
14531.00	88.990	156.040	6446.65	7967.86	-7765.35	2115.03	1746817.98	14521553.65	39°59'6.5499"N	80°37'12.5299"W	8048.23	164.764	0.34	
14628.00	89.350	156.580	6448.06	8064.84	-7854.16	2154.00	1746856.93	14521464.87	39°59'5.6706"N	80°37'12.0341"W	8144.18	164.664	0.67	
14725.00	89.200	156.090	6449.29	8161.83	-7943.00	2192.93	1746895.85	14521376.07	39°59'4.7911"N	80°37'11.5388"W	8240.16	164.566	0.53	
14821.00	89.510	155.570	6450.37	8257.82	-8030.58	2232.24	1746935.14	14521288.52	39°59'3.9239"N	80°37'11.0387"W	8335.05	164.466	0.63	
14918.00	89.320	156.390	6451.36	8354.81	-8119.17	2271.72	1746974.61	14521199.96	39°59'3.0468"N	80°37'10.5364"W	8430.99	164.369	0.87	
15014.00	89.140	155.650	6452.65	8450.79	-8206.88	2310.73	1747013.60	14521112.29	39°59'2.1784"N	80°37'10.0400"W	8525.98	164.275	0.79	
15111.00	89.140	155.940	6454.10	8547.77	-8295.34	2350.50	1747053.35	14521023.86	39°59'1.3025"N	80°37'9.5340"W	8621.92	164.180	0.30	
15208.00	89.410	155.400	6455.33	8644.75	-8383.72	2390.46	1747093.30	14520935.52	39°59'0.4274"N	80°37'9.0255"W	8717.86	164.086	0.62	
15304.00	89.420	155.380	6456.31	8740.72	-8470.99	2430.43	1747133.26	14520848.28	39°58'59.5633"N	80°37'8.5167"W	8812.76	163.991	0.02	
15401.00	89.660	155.340	6457.09	8837.69	-8559.16	2470.87	1747173.68	14520760.15	39°58'58.6903"N	80°37'8.0021"W	8908.67	163.898	0.25	
15498.00	89.420	155.450	6457.87	8934.66	-8647.35	2511.26	1747214.05	14520671.99	39°58'57.8171"N	80°37'7.4881"W	9004.61	163.806	0.27	
15594.00	88.710	155.700	6459.43	9030.63	-8734.74	2550.95	1747253.73	14520584.63	39°58'56.9517"N	80°37'6.9830"W	9099.62	163.720	0.78	
15690.00	88.740	155.790	6461.57	9126.60	-8822.25	2590.38	1747293.14	14520497.16	39°58'56.0853"N	80°37'6.4814"W	9194.68	163.637	0.10	
15787.00	89.170	156.330	6463.34	9223.57	-8910.89	2629.73	1747332.48	14520408.55	39°58'55.2077"N	80°37'5.9807"W	9290.82	163.558	0.71	
15883.00	89.050	154.990	6464.83	9319.54	-8998.34	2669.29	1747372.02	14520321.13	39°58'54.3418"N	80°37'5.4773"W	9385.91	163.477	1.40	
15980.00	88.950	155.760	6466.52	9416.50	-9086.51	2709.70	1747412.42	14520233.00	39°58'53.4688"N	80°37'4.9630"W	9481.93	163.395	0.80	
16077.00	89.910	156.230	6467.49	9513.49	-9175.11	2749.16	1747451.86	14520144.43	39°58'52.5915"N	80°37'4.4610"W	9578.13	163.320	1.10	
16173.00	89.510	155.930	6467.97	9609.49	-9262.86	2788.09	1747490.77	14520056.71	39°58'51.7227"N	80°37'3.9658"W	9673.37	163.248	0.52	
16270.00	89.420	156.240	6468.88	9706.48	-9351.53	2827.41	1747530.07	14519968.08	39°58'50.8448"N	80°37'3.4656"W	9769.61	163.177	0.33	
16367.00	89.230	156.270	6470.02	9803.47	-9440.31	2866.46	1747569.11	14519879.33	39°58'49.9657"N	80°37'2.9688"W	9865.91	163.110	0.20	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	BW Edge MSH 6H
Field	Marshall	API	47051024720000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

WELLPATH DATA (277 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
16463.00	89.850	155.830	6470.79	9899.46	-9528.05	2905.43	1747608.07	14519791.64	39°58'49.0971"N	80°37'2.4731"W	9961.18	163.042	0.79	
16559.00	89.570	155.080	6471.28	9995.43	-9615.37	2945.31	1747647.93	14519704.35	39°58'48.2325"N	80°37'1.9656"W	10056.35	162.970	0.83	
16656.00	89.750	155.480	6471.85	10092.40	-9703.48	2985.87	1747688.48	14519616.27	39°58'47.3600"N	80°37'1.4494"W	10152.48	162.896	0.45	
16752.00	90.430	156.020	6471.70	10188.39	-9791.01	3025.30	1747727.89	14519528.78	39°58'46.4934"N	80°37'0.9477"W	10247.74	162.829	0.90	
16849.00	90.280	155.220	6471.10	10285.37	-9879.35	3065.34	1747767.92	14519440.46	39°58'45.6186"N	80°37'0.4383"W	10343.98	162.762	0.84	
16945.00	89.450	155.060	6471.33	10381.34	-9966.46	3105.70	1747808.26	14519353.40	39°58'44.7561"N	80°36'59.9247"W	10439.14	162.692	0.88	
17042.00	89.350	155.270	6472.35	10478.30	-10054.48	3146.44	1747848.98	14519265.40	39°58'43.8845"N	80°36'59.4062"W	10535.31	162.623	0.24	
17139.00	89.820	154.550	6473.05	10575.25	-10142.33	3187.57	1747890.09	14519177.59	39°58'43.0147"N	80°36'58.8827"W	10631.43	162.553	0.89	
17236.00	90.400	158.080	6472.86	10672.23	-10231.14	3226.53	1747929.04	14519088.81	39°58'42.1353"N	80°36'58.3872"W	10727.85	162.497	3.69	
17332.00	89.420	155.440	6473.01	10768.22	-10319.34	3264.40	1747966.90	14519000.65	39°58'41.2621"N	80°36'57.9055"W	10823.36	162.446	2.93	
17429.00	89.880	156.030	6473.60	10865.21	-10407.77	3304.26	1748006.75	14518912.25	39°58'40.3865"N	80°36'57.3984"W	10919.70	162.386	0.77	
17525.00	89.970	155.810	6473.73	10961.20	-10495.42	3343.43	1748045.90	14518824.64	39°58'39.5187"N	80°36'56.9001"W	11015.09	162.330	0.25	
17622.00	89.410	156.210	6474.26	11058.19	-10584.04	3382.87	1748085.32	14518736.06	39°58'38.6413"N	80°36'56.3984"W	11111.51	162.275	0.71	
17719.00	89.230	155.540	6475.41	11155.18	-10672.56	3422.51	1748124.95	14518647.57	39°58'37.7648"N	80°36'55.8941"W	11207.90	162.220	0.72	
17815.00	89.600	156.190	6476.39	11251.16	-10760.16	3461.76	1748164.19	14518560.00	39°58'36.8974"N	80°36'55.3947"W	11303.31	162.166	0.78	
17912.00	89.390	155.540	6477.24	11348.15	-10848.68	3501.42	1748203.83	14518471.52	39°58'36.0210"N	80°36'54.8902"W	11399.73	162.112	0.70	
18009.00	89.630	155.990	6478.07	11445.13	-10937.12	3541.24	1748243.63	14518383.11	39°58'35.1452"N	80°36'54.3837"W	11496.13	162.059	0.53	
18105.00	89.200	156.230	6479.05	11541.12	-11024.89	3580.12	1748282.49	14518295.37	39°58'34.2762"N	80°36'53.8892"W	11591.61	162.010	0.51	
18203.00	89.660	156.200	6480.03	11639.11	-11114.57	3619.64	1748322.00	14518205.73	39°58'33.3883"N	80°36'53.3865"W	11689.11	161.961	0.47	
18299.00	89.350	155.640	6480.86	11735.10	-11202.21	3658.81	1748361.15	14518118.13	39°58'32.5205"N	80°36'52.8883"W	11784.58	161.912	0.67	
18396.00	89.380	155.820	6481.93	11832.08	-11290.63	3698.67	1748401.00	14518029.74	39°58'31.6450"N	80°36'52.3811"W	11881.01	161.862	0.19	
18492.00	89.630	156.060	6482.76	11928.07	-11378.29	3737.81	1748440.12	14517942.12	39°58'30.7771"N	80°36'51.8832"W	11976.50	161.814	0.36	
18589.00	89.350	155.600	6483.62	12025.06	-11466.78	3777.52	1748479.82	14517853.66	39°58'29.9009"N	80°36'51.3780"W	12072.97	161.766	0.56	
18686.00	89.510	155.540	6484.59	12122.03	-11555.09	3817.64	1748519.92	14517765.38	39°58'29.0265"N	80°36'50.8676"W	12169.41	161.717	0.18	
18782.00	89.290	155.700	6485.59	12218.01	-11642.52	3857.27	1748559.53	14517677.98	39°58'28.1608"N	80°36'50.3635"W	12264.86	161.670	0.28	
18878.00	88.980	156.190	6487.04	12313.99	-11730.18	3896.39	1748598.64	14517590.36	39°58'27.2929"N	80°36'49.8658"W	12360.38	161.625	0.60	
18975.00	88.980	157.790	6488.77	12410.97	-11819.44	3934.30	1748636.54	14517501.13	39°58'26.4091"N	80°36'49.3839"W	12457.04	161.589	1.65	
19072.00	88.740	157.740	6490.70	12507.94	-11909.21	3971.00	1748673.22	14517411.40	39°58'25.5204"N	80°36'48.9175"W	12553.81	161.560	0.25	
19169.00	88.890	157.930	6492.71	12604.90	-11999.02	4007.59	1748709.80	14517321.62	39°58'24.6313"N	80°36'48.4525"W	12650.59	161.531	0.25	
19265.00	89.260	158.090	6494.26	12700.86	-12088.03	4043.53	1748745.72	14517232.65	39°58'23.7502"N	80°36'47.9958"W	12746.39	161.505	0.42	

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Operator	SWN PRODUCTION COMPANY, LLC	Well	BW Edge MSH 6H
Field	Marshall	API	47051024720000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

WELLPATH DATA (277 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
19362.00	89.170	157.910	6495.58	12797.82	-12177.96	4079.86	1748782.04	14517142.76	39°58'22.8599"N	80°36'47.5342"W	12843.20	161.478	0.21	
19458.00	88.890	158.010	6497.21	12893.78	-12266.93	4115.88	1748818.05	14517053.82	39°58'21.9792"N	80°36'47.0765"W	12939.01	161.452	0.31	
19555.00	89.140	160.170	6498.88	12990.67	-12357.52	4150.49	1748852.65	14516963.26	39°58'21.0824"N	80°36'46.6369"W	13035.91	161.434	2.24	
19651.00	89.750	159.550	6499.81	13086.52	-12447.65	4183.55	1748885.69	14516873.17	39°58'20.1904"N	80°36'46.2174"W	13131.87	161.423	0.91	
19747.00	89.630	159.250	6500.33	13182.41	-12537.51	4217.32	1748919.45	14516783.35	39°58'19.3009"N	80°36'45.7886"W	13227.81	161.408	0.34	
19844.00	88.740	162.200	6501.71	13279.14	-12629.05	4249.34	1748951.45	14516691.84	39°58'18.3949"N	80°36'45.3825"W	13324.78	161.403	3.18	
19940.00	89.050	162.560	6503.56	13374.65	-12720.53	4278.39	1748980.49	14516600.40	39°58'17.4896"N	80°36'45.0145"W	13420.75	161.410	0.49	
20037.00	89.480	163.080	6504.80	13471.08	-12813.19	4307.04	1749009.13	14516507.77	39°58'16.5726"N	80°36'44.6517"W	13517.71	161.420	0.70	
20133.00	89.660	162.790	6505.52	13566.50	-12904.96	4335.21	1749037.29	14516416.04	39°58'15.6645"N	80°36'44.2950"W	13613.67	161.431	0.36	
20230.00	89.170	162.970	6506.51	13662.92	-12997.66	4363.76	1749065.83	14516323.38	39°58'14.7472"N	80°36'43.9334"W	13710.64	161.441	0.54	
20326.00	89.720	162.410	6507.44	13758.39	-13089.30	4392.32	1749094.38	14516231.76	39°58'13.8403"N	80°36'43.5717"W	13806.61	161.450	0.82	
20423.00	89.480	161.200	6508.12	13854.99	-13181.45	4422.61	1749124.66	14516139.65	39°58'12.9284"N	80°36'43.1878"W	13903.60	161.452	1.27	
20519.00	89.940	161.150	6508.61	13950.69	-13272.31	4453.59	1749155.62	14516048.83	39°58'12.0292"N	80°36'42.7950"W	13999.60	161.451	0.48	
20616.00	89.880	161.340	6508.76	14047.38	-13364.16	4484.78	1749186.80	14515957.01	39°58'11.1201"N	80°36'42.3996"W	14096.60	161.449	0.21	
20713.00	89.820	160.730	6509.01	14144.10	-13455.90	4516.30	1749218.31	14515865.31	39°58'10.2122"N	80°36'41.9998"W	14193.59	161.446	0.63	
20809.00	89.230	160.630	6509.81	14239.86	-13546.49	4548.06	1749250.06	14515774.76	39°58'9.3156"N	80°36'41.5970"W	14289.58	161.441	0.62	
20906.00	89.750	161.250	6510.67	14336.58	-13638.17	4579.73	1749281.72	14515683.12	39°58'8.4083"N	80°36'41.1953"W	14386.57	161.438	0.83	
21002.00	89.570	161.050	6511.24	14432.29	-13729.01	4610.75	1749312.72	14515592.30	39°58'7.5091"N	80°36'40.8020"W	14482.57	161.436	0.28	
21099.00	89.690	161.260	6511.87	14528.99	-13820.81	4642.08	1749344.04	14515500.54	39°58'6.6006"N	80°36'40.4047"W	14579.57	161.434	0.25	
21195.00	89.660	161.630	6512.41	14624.65	-13911.82	4672.63	1749374.58	14515409.57	39°58'5.6999"N	80°36'40.0175"W	14675.57	161.434	0.39	
21291.00	89.320	161.460	6513.27	14720.30	-14002.88	4703.02	1749404.96	14515318.54	39°58'4.7988"N	80°36'39.6323"W	14771.56	161.435	0.40	
21387.00	89.780	161.160	6514.02	14815.98	-14093.82	4733.78	1749435.71	14515227.65	39°58'3.8988"N	80°36'39.2423"W	14867.56	161.434	0.57	
21483.00	89.320	161.190	6514.77	14911.68	-14184.68	4764.76	1749466.67	14515136.82	39°58'2.9995"N	80°36'38.8496"W	14963.55	161.432	0.48	
21580.00	89.570	160.920	6515.71	15008.39	-14276.42	4796.25	1749498.15	14515045.11	39°58'2.0916"N	80°36'38.4503"W	15060.55	161.430	0.38	
21676.00	89.380	161.450	6516.59	15104.08	-14367.28	4827.21	1749529.10	14514954.28	39°58'1.1923"N	80°36'38.0577"W	15156.54	161.428	0.59	
21773.00	89.050	161.080	6517.92	15200.76	-14459.14	4858.36	1749560.24	14514862.47	39°58'0.2832"N	80°36'37.6628"W	15253.53	161.427	0.51	
21869.00	89.450	161.040	6519.18	15296.47	-14549.93	4889.52	1749591.38	14514771.71	39°57'59.3846"N	80°36'37.2677"W	15349.52	161.425	0.42	
21966.00	89.480	160.380	6520.09	15393.22	-14641.48	4921.56	1749623.41	14514680.19	39°57'58.4785"N	80°36'36.8613"W	15446.51	161.421	0.68	
22062.00	89.540	161.240	6520.91	15488.97	-14732.14	4953.11	1749654.95	14514589.57	39°57'57.5812"N	80°36'36.4612"W	15542.50	161.417	0.90	
22159.00	89.480	160.690	6521.74	15585.69	-14823.83	4984.75	1749686.57	14514497.91	39°57'56.6737"N	80°36'36.0600"W	15639.49	161.414	0.57	

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Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

**WELLPATH DATA (277 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
22255.00	89.510	160.950	6522.58	15681.43	-14914.50	5016.28	1749718.10	14514407.28	39°57'55.7764"N	80°36'35.6601"W	15735.48	161.410	0.27	
22352.00	89.510	160.600	6523.41	15778.18	-15006.09	5048.22	1749750.03	14514315.73	39°57'54.8699"N	80°36'35.2550"W	15832.47	161.406	0.36	
22448.00	89.690	160.780	6524.08	15873.94	-15096.69	5079.97	1749781.76	14514225.17	39°57'53.9732"N	80°36'34.8524"W	15928.46	161.402	0.27	
22545.00	89.750	161.240	6524.56	15970.66	-15188.40	5111.53	1749813.31	14514133.48	39°57'53.0654"N	80°36'34.4522"W	16025.46	161.400	0.48	
22642.00	89.690	160.790	6525.03	16067.38	-15280.13	5143.09	1749844.85	14514041.80	39°57'52.1577"N	80°36'34.0521"W	16122.46	161.397	0.47	
22738.00	89.450	161.160	6525.75	16163.10	-15370.88	5174.38	1749876.13	14513951.08	39°57'51.2595"N	80°36'33.6553"W	16218.45	161.395	0.46	
22834.00	89.690	161.160	6526.47	16258.80	-15461.73	5205.38	1749907.12	14513860.26	39°57'50.3603"N	80°36'33.2623"W	16314.45	161.394	0.25	
22931.00	89.910	160.200	6526.81	16355.56	-15553.27	5237.47	1749939.20	14513768.76	39°57'49.4543"N	80°36'32.8553"W	16411.44	161.389	1.02	
23027.00	89.540	158.620	6527.27	16451.45	-15643.13	5271.23	1749972.95	14513678.93	39°57'48.5648"N	80°36'32.4268"W	16507.38	161.378	1.69	
23123.00	89.450	159.190	6528.12	16547.37	-15732.70	5305.78	1750007.48	14513589.40	39°57'47.6782"N	80°36'31.9881"W	16603.28	161.364	0.60	
23220.00	89.720	159.000	6528.82	16644.28	-15823.31	5340.39	1750042.08	14513498.83	39°57'46.7812"N	80°36'31.5487"W	16700.21	161.350	0.34	
23317.00	89.450	160.120	6529.52	16741.15	-15914.20	5374.27	1750075.94	14513407.97	39°57'45.8816"N	80°36'31.1188"W	16797.16	161.340	1.19	
23413.00	89.390	160.160	6530.49	16836.97	-16004.48	5406.88	1750108.54	14513317.72	39°57'44.9879"N	80°36'30.7051"W	16893.13	161.333	0.08	
23510.00	89.230	160.090	6531.66	16933.78	-16095.70	5439.85	1750141.50	14513226.54	39°57'44.0851"N	80°36'30.2868"W	16990.10	161.326	0.18	
23606.00	89.630	159.860	6532.62	17029.62	-16185.89	5472.72	1750174.36	14513136.38	39°57'43.1924"N	80°36'29.8697"W	17086.07	161.319	0.48	
23702.00	89.880	160.400	6533.03	17125.44	-16276.17	5505.35	1750206.98	14513046.14	39°57'42.2987"N	80°36'29.4558"W	17182.05	161.312	0.62	
23799.00	89.720	160.250	6533.37	17222.24	-16367.51	5538.01	1750239.62	14512954.84	39°57'41.3947"N	80°36'29.0415"W	17279.03	161.307	0.23	
23895.00	89.510	160.120	6534.01	17318.06	-16457.82	5570.55	1750272.15	14512864.56	39°57'40.5008"N	80°36'28.6287"W	17375.01	161.300	0.26	
23992.00	89.570	160.050	6534.79	17414.88	-16549.02	5603.59	1750305.18	14512773.40	39°57'39.5981"N	80°36'28.2095"W	17471.99	161.294	0.10	
24088.00	89.540	160.920	6535.53	17510.67	-16639.50	5635.66	1750337.23	14512682.95	39°57'38.7026"N	80°36'27.8028"W	17567.97	161.289	0.91	
24184.00	89.820	160.460	6536.07	17606.43	-16730.10	5667.40	1750368.97	14512592.39	39°57'37.8059"N	80°36'27.4003"W	17663.97	161.286	0.56	
24281.00	88.920	157.120	6537.14	17703.34	-16820.51	5702.49	1750404.04	14512502.01	39°57'36.9109"N	80°36'26.9548"W	17760.85	161.272	3.57	
24377.00	89.230	154.800	6538.69	17799.31	-16908.17	5741.59	1750443.12	14512414.39	39°57'36.0430"N	80°36'26.4576"W	17856.43	161.244	2.44	
24474.00	89.450	153.200	6539.81	17896.20	-16995.34	5784.11	1750485.62	14512327.25	39°57'35.1796"N	80°36'25.9166"W	17952.65	161.205	1.66	
24570.00	89.690	151.060	6540.53	17991.89	-17080.20	5828.98	1750530.48	14512242.43	39°57'34.3391"N	80°36'25.3451"W	18047.44	161.157	2.24	
24667.00	89.080	148.870	6541.57	18088.22	-17164.16	5877.53	1750579.01	14512158.49	39°57'33.5072"N	80°36'24.7264"W	18142.60	161.097	2.34	
24764.00	89.260	147.120	6542.97	18184.10	-17246.41	5928.93	1750630.39	14512076.28	39°57'32.6922"N	80°36'24.0710"W	18237.07	161.028	1.81	
24860.00	89.320	145.120	6544.16	18278.46	-17326.10	5982.44	1750683.88	14511996.62	39°57'31.9024"N	80°36'23.3884"W	18329.84	160.951	2.08	
24957.00	89.320	143.260	6545.31	18373.16	-17404.75	6039.19	1750740.60	14511918.00	39°57'31.1226"N	80°36'22.6641"W	18422.73	160.864	1.92	
25054.00	89.290	139.210	6546.49	18466.64	-17480.36	6099.90	1750801.30	14511842.42	39°57'30.3727"N	80°36'21.8886"W	18514.10	160.763	4.18	

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	BW Edge MSH 6H
Field	Marshall	API	47051024720000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

WELLPATH DATA (277 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
25150.00	89.750	140.240	6547.29	18558.48	-17553.60	6161.96	1750863.33	14511769.21	39°57'29.6463"N	80°36'21.0959"W	18603.73	160.657	1.18	
25247.00	89.570	140.360	6547.87	18651.55	-17628.23	6223.92	1750925.26	14511694.61	39°57'28.9060"N	80°36'20.3045"W	18694.70	160.554	0.22	
25343.00	89.570	139.790	6548.59	18743.55	-17701.85	6285.53	1750986.85	14511621.02	39°57'28.1758"N	80°36'19.5175"W	18784.66	160.451	0.59	
25440.00	89.630	140.270	6549.27	18836.49	-17776.19	6347.84	1751049.13	14511546.71	39°57'27.4385"N	80°36'18.7215"W	18875.59	160.348	0.50	
25537.00	89.570	140.130	6549.94	18929.51	-17850.71	6409.93	1751111.20	14511472.21	39°57'26.6993"N	80°36'17.9285"W	18966.68	160.248	0.16	
25590.00	89.420	140.160	6550.41	18980.32	-17891.39	6443.89	1751145.15	14511431.55	39°57'26.2958"N	80°36'17.4946"W	19016.46	160.193	0.29	
25615.00‡	89.420	140.160	6550.67	19004.29	-17910.59	6459.91	1751161.16	14511412.36	39°57'26.1054"N	80°36'17.2901"W	19039.95	160.167	0.00	

HOLE & CASING SECTIONS - Ref Wellbore: BW Edge MSH 6H AWB Ref Wellpath: BW Edge MSH 6H awp Proj: 25615'									
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	800.00	774.00	26.00	799.99	0.00	0.00	2.17	1.68
9.625in Casing	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00
5.5in Casing	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00

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# Actual Wellpath Report

BW Edge MSH 6H awp Proj: 25615'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	BW Edge MSH 6H
Field	Marshall	API	47051024720000
Facility	BW Edge MSH Pad	Wellbore	BW Edge MSH 6H AWB
Slot	6H		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
BW Edge MSH 6H LP Rev 5	6379.00	-741.96	-949.53	1743754.61	14528574.30	40°00'16.0840"N	80°37'51.5260"W	point
BW Edge MSH 6H wp1	6395.00	-1143.22	-809.48	1743894.61	14528173.20	40°00'12.1129"N	80°37'49.7477"W	point
BW Edge MSH 6H wp2	6496.00	-12244.80	4108.21	1748810.38	14517075.94	39°58'22.1982"N	80°36'47.1738"W	point
BW Edge MSH 6H wp6	6532.00	-16587.53	5497.97	1750199.60	14512734.90	39°57'39.2221"N	80°36'29.5681"W	point
BW Edge MSH 6H BHL Rev 7	6541.00	-17913.39	6458.66	1751159.91	14511409.56	39°57'26.0777"N	80°36'17.3062"W	point

WELLPATH COMPOSITION - Ref Wellbore: BW Edge MSH 6H AWB Ref Wellpath: BW Edge MSH 6H awp Proj: 25615'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	772.00	OWSG MWD rev2 + HRGM	1 Tally OWSG MWD HRGM 17.5" 177' - 772'	BW Edge MSH 6H AWB	2/28/2023
772.00	2006.00	OWSG MWD rev2 + HRGM	2 Tally OWSG MWD HRGM 12.25" 864' - 2006'	BW Edge MSH 6H AWB	2/28/2023
2006.00	5684.00	OWSG MWD rev2 + HRGM	3 Tally OWSG MWD HRGM 8.75" 2150' - 5684'	BW Edge MSH 6H AWB	2/28/2023
5684.00	25615.00	BH AutoTrak Curve/eXpress (2019) (HRGM, X Short spacing)	4 BH ATC HRGM X Short Spacing 8.75" 5708' - 25590'	BW Edge MSH 6H AWB	2/28/2023

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