

SWN PRODUCTION COMPANY, LLC

Location: Brooke County, WV Slot: Slot 206H
 Field: Brooke Well: Violet Coss BRK 206H
 Facility: Violet Coss BRK Pad Wellbore: Violet Coss BRK 206H PWB

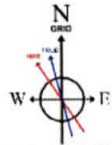


Location Information

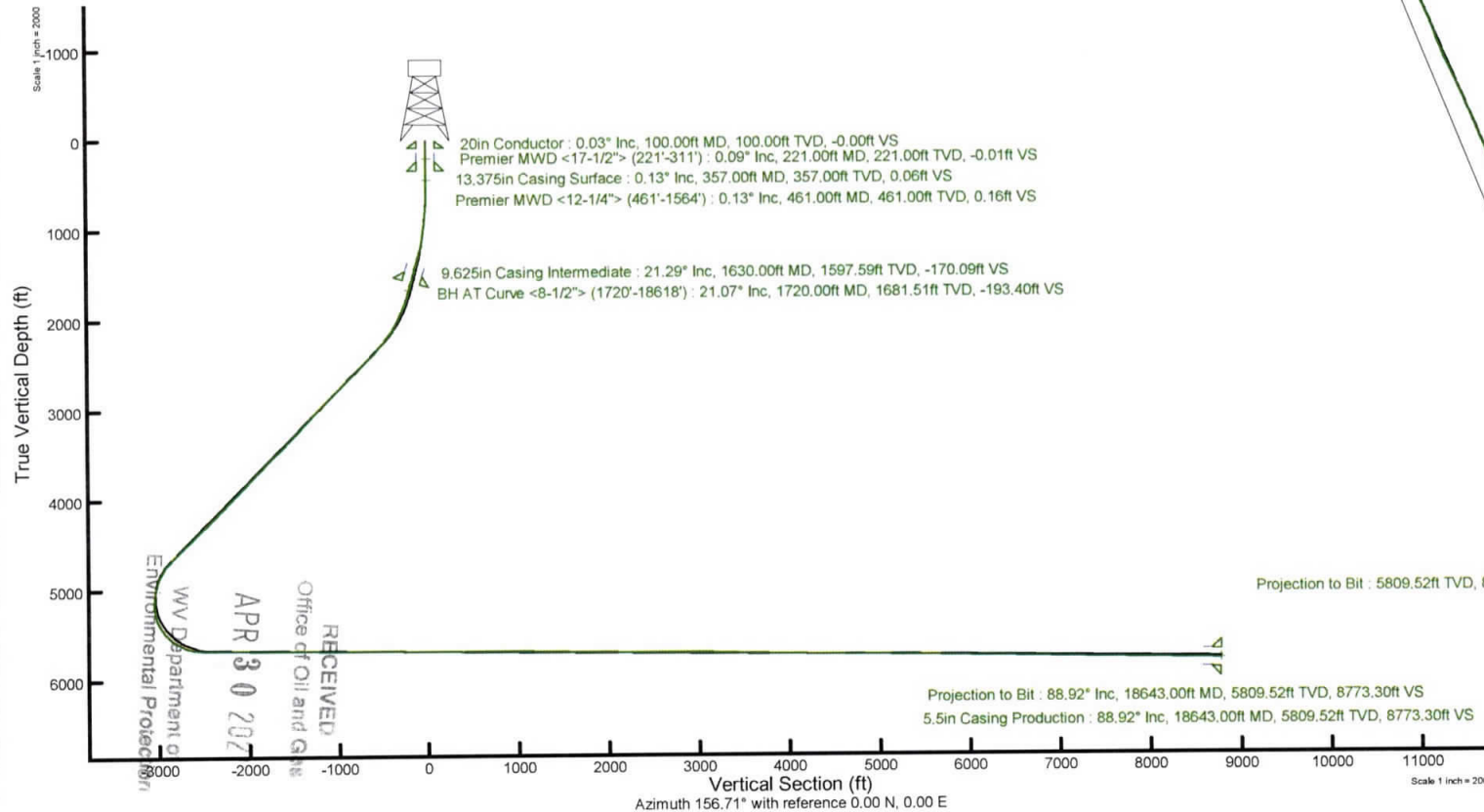
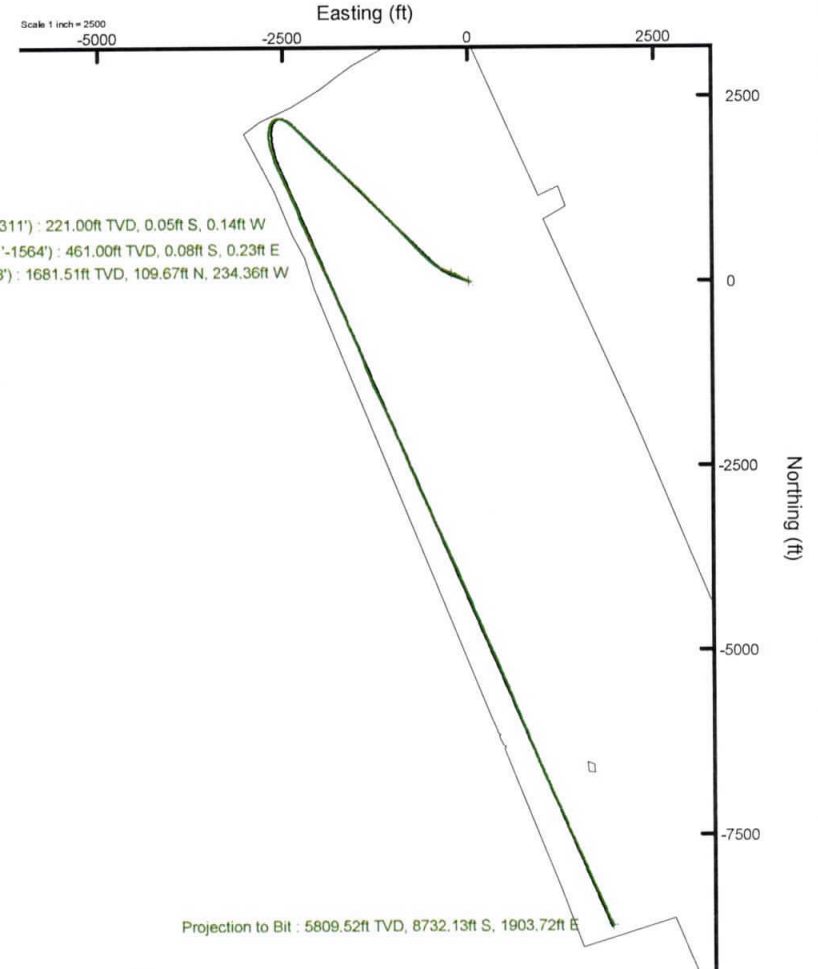
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Violet Coss BRK Pad		1745871.450	14618637.315	40°15'6.3470"N	80°37'19.3910"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot 206H	30.14	-15.68	1745855.780	14618667.440	40°15'6.6455"N	80°37'19.5915"W
SDC 40 (RKB) to Ground level (At Slot: Slot 206H)				26ft		
Mean Sea Level to Ground level (At Slot: Slot 206H)				-1172.8ft		
SDC 40 (RKB) to Mean Sea Level				1198.8ft		

API: 47-009-00241-0000
 BH Job #: 110685741
 Rig: SDC 40
 Duration: 12/30/2020 - 01/05/2021

Plot reference wellpath is Violet Coss BRK 206H PWB Rev-A.0	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to SDC 40 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to SDC 40 (RKB)	Scale: True distance
SDC 40 (RKB) to Mean Sea Level: 1198.8 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot 206H): -1172.8 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: alterjen on 2021-01-06; Database: WA_MPL_EASTERNUS_Defn



User specified Dip: 67.38° Field: 52274 nT
 Magnetic North is 8.25 degrees West of True North (at 12/21/2020)
 Grid North is 0.24 degrees East of True North
 To correct azimuth from True to Grid subtract 0.24 degrees
 To correct azimuth from Magnetic to Grid subtract 8.49 degrees



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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Violet Coss BRK 206H
Field	Brooke	API/Legal	
Facility	Violet Coss BRK Pad	Wellbore	Violet Coss BRK 206H AWB
Slot	Slot 206H		

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Atenjen
Scale	0.999613	Report Generated	1/6/2021 at 8:01:49 AM
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	30.14	-15.68	1745855.78	14618667.44	40°15'6.6455"N	80°37'19.5915"W
Facility Reference Pt			1745871.45	14618637.32	40°15'6.3470"N	80°37'19.3910"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.4780"W

WELLPATH DATUM

Calculation method	Minimum curvature	SDC 40 (RKB) to Facility Vertical Datum	1198.80ft
Horizontal Reference Pt	Slot	SDC 40 (RKB) to Mean Sea Level	1198.80ft
Vertical Reference Pt	SDC 40 (RKB)	SDC 40 (RKB) to Ground Level at Slot (Slot 206H)	26.00ft
MD Reference Pt	SDC 40 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	156.71°

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Violet Coss BRK 206H AWP Proj: 18643'
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Facility	Violet Coss BRK Pad	Wellbore	Violet Coss BRK 206H AWB
Slot	Slot 206H		

WELLPATH DATA (206 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	250.470	0.00	0.00	0.00	0.00	1745855.78	14618667.44	40°15'6.6455"N	80°37'19.5915"W	0.00	0.000	0.00	0.00	0.00
26.00	0.000	250.470	26.00	0.00	0.00	0.00	1745855.78	14618667.44	40°15'6.6455"N	80°37'19.5915"W	0.00	0.000	0.00	0.00	0.00
221.00	0.090	250.470	221.00	-0.01	-0.05	-0.14	1745855.64	14618667.39	40°15'6.6450"N	80°37'19.5934"W	0.15	250.470	0.05	0.05	0.00
311.00	0.130	88.980	311.00	0.02	-0.07	-0.11	1745855.67	14618667.37	40°15'6.6447"N	80°37'19.5929"W	0.13	236.154	0.24	0.04	-179.43
461.00	0.130	93.080	461.00	0.16	-0.08	0.23	1745856.01	14618667.36	40°15'6.6447"N	80°37'19.5885"W	0.24	108.894	0.01	0.00	2.73
522.00	0.160	87.930	522.00	0.23	-0.08	0.39	1745856.17	14618667.36	40°15'6.6447"N	80°37'19.5865"W	0.39	101.693	0.05	0.05	-8.44
612.00	1.340	307.430	611.99	-0.65	0.56	-0.32	1745855.46	14618668.00	40°15'6.6511"N	80°37'19.5957"W	0.65	330.088	1.63	1.31	-156.11
703.00	3.020	301.610	702.92	-3.54	2.47	-3.21	1745852.57	14618669.91	40°15'6.6700"N	80°37'19.6328"W	4.05	307.540	1.86	1.85	-6.40
793.00	5.730	295.190	792.65	-8.84	5.62	-9.30	1745846.49	14618673.06	40°15'6.7014"N	80°37'19.7111"W	10.87	301.167	3.06	3.01	-7.13
884.00	7.590	294.690	883.03	-16.71	10.07	-18.87	1745836.92	14618677.50	40°15'6.7457"N	80°37'19.8343"W	21.39	298.082	2.04	2.04	-0.55
976.00	9.790	293.420	973.97	-26.92	15.71	-31.57	1745824.22	14618683.15	40°15'6.8021"N	80°37'19.9978"W	35.26	296.464	2.40	2.39	-1.38
1066.00	11.130	294.790	1062.48	-38.95	22.40	-46.48	1745809.32	14618689.83	40°15'6.8688"N	80°37'20.1897"W	51.59	295.731	1.51	1.49	1.52
1157.00	13.040	292.540	1151.46	-52.85	30.02	-63.93	1745791.87	14618697.45	40°15'6.9448"N	80°37'20.4144"W	70.63	295.150	2.16	2.10	-2.47
1248.00	17.030	297.760	1239.33	-70.59	40.16	-85.22	1745770.60	14618707.59	40°15'7.0459"N	80°37'20.6884"W	94.21	295.235	4.63	4.38	5.74
1336.00	19.310	299.040	1322.93	-92.13	53.23	-109.34	1745746.48	14618720.65	40°15'7.1761"N	80°37'20.9988"W	121.61	295.958	2.63	2.59	1.45
1427.00	20.820	297.860	1408.41	-116.63	68.09	-136.80	1745719.03	14618735.51	40°15'7.3241"N	80°37'21.3521"W	152.81	296.462	1.72	1.66	-1.30
1519.00	21.400	294.200	1494.24	-141.74	82.61	-166.56	1745689.28	14618750.02	40°15'7.4689"N	80°37'21.7352"W	185.93	296.381	1.57	0.63	-3.98
1564.00	21.470	289.780	1536.13	-153.42	88.77	-181.80	1745674.05	14618756.17	40°15'7.5303"N	80°37'21.9314"W	202.32	296.024	3.59	0.16	-9.82
1720.00	21.070	293.630	1681.51	-193.40	109.67	-234.36	1745621.51	14618777.07	40°15'7.7391"N	80°37'22.6081"W	258.75	295.077	0.93	-0.26	2.47
1811.00	23.800	294.020	1765.61	-218.84	123.70	-266.12	1745589.76	14618791.09	40°15'7.8791"N	80°37'23.0169"W	293.47	294.930	3.00	3.00	0.43
1902.00	28.530	292.170	1847.27	-247.85	139.39	-303.04	1745552.86	14618806.77	40°15'8.0356"N	80°37'23.4922"W	333.56	294.700	5.27	5.20	-2.03
1994.00	29.490	295.830	1927.73	-280.63	157.55	-343.77	1745512.14	14618824.92	40°15'8.2168"N	80°37'24.0166"W	378.16	294.621	2.19	1.04	3.98
2086.00	32.340	294.170	2006.65	-315.89	177.49	-386.62	1745469.31	14618844.86	40°15'8.4157"N	80°37'24.5680"W	425.41	294.659	3.23	3.10	-1.80
2176.00	36.100	301.280	2081.09	-355.26	201.13	-431.27	1745424.68	14618868.49	40°15'8.6511"N	80°37'25.1426"W	475.87	295.003	6.09	4.18	7.90
2268.00	38.390	308.980	2154.36	-402.66	233.20	-476.67	1745379.29	14618900.55	40°15'8.9699"N	80°37'25.7264"W	530.66	296.069	5.64	2.49	8.37
2359.00	40.630	313.380	2224.58	-454.90	271.33	-520.19	1745335.80	14618938.67	40°15'9.3486"N	80°37'26.2855"W	586.70	297.547	3.94	2.46	4.84
2450.00	43.440	313.550	2292.16	-510.88	313.25	-564.41	1745291.59	14618980.56	40°15'9.7646"N	80°37'26.8535"W	645.51	299.030	3.09	3.09	0.19
2541.00	44.880	312.780	2357.44	-568.99	356.61	-610.65	1745245.37	14619023.91	40°15'10.1951"N	80°37'27.4476"W	707.15	300.284	1.69	1.58	-0.85
2632.00	47.030	315.960	2420.71	-629.49	402.36	-657.37	1745198.67	14619069.64	40°15'10.6491"N	80°37'28.0476"W	770.73	301.470	3.45	2.36	3.49
2722.00	47.040	316.290	2482.05	-691.14	449.84	-703.01	1745153.04	14619117.10	40°15'11.1202"N	80°37'28.6337"W	834.61	302.614	0.27	0.01	0.37

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Field	Brooke	API/Legal	
Facility	Violet Coss BRK Pad	Wellbore	Violet Coss BRK 206H AWB
Slot	Slot 206H		

WELLPATH DATA (206 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]
2814.00	47.150	316.660	2544.68	-754.37	498.70	-749.42	1745106.65	14619165.94	40°15'11.6049"N	80°37'29.2296"W	900.18	303.641	0.32	0.12	0.40
2905.00	47.230	316.800	2606.52	-817.11	547.31	-795.18	1745060.91	14619214.53	40°15'12.0872"N	80°37'29.8171"W	965.33	304.539	0.14	0.09	0.15
2995.00	46.900	317.060	2667.83	-879.12	595.44	-840.18	1745015.93	14619262.65	40°15'12.5647"N	80°37'30.3948"W	1029.78	305.325	0.42	-0.37	0.29
3087.00	46.780	316.590	2730.76	-942.22	644.38	-886.10	1744970.03	14619311.57	40°15'13.0503"N	80°37'30.9844"W	1095.62	306.025	0.39	-0.13	-0.51
3178.00	46.900	315.990	2793.01	-1004.43	692.36	-931.96	1744924.18	14619359.53	40°15'13.5263"N	80°37'31.5734"W	1161.00	306.609	0.50	0.13	-0.66
3270.00	46.770	315.650	2855.95	-1067.12	740.49	-978.73	1744877.43	14619407.64	40°15'14.0038"N	80°37'32.1739"W	1227.29	307.110	0.30	-0.14	-0.37
3361.00	46.950	315.480	2918.17	-1129.05	787.90	-1025.22	1744830.96	14619455.03	40°15'14.4743"N	80°37'32.7709"W	1293.00	307.543	0.24	0.20	-0.19
3452.00	46.610	315.840	2980.49	-1190.94	835.33	-1071.57	1744784.63	14619502.44	40°15'14.9449"N	80°37'33.3661"W	1358.68	307.938	0.47	-0.37	0.40
3544.00	46.260	315.040	3043.89	-1253.06	882.83	-1118.34	1744737.88	14619549.92	40°15'15.4162"N	80°37'33.9667"W	1424.80	308.288	0.74	-0.38	-0.87
3634.00	45.980	315.200	3106.28	-1313.38	928.79	-1164.11	1744692.12	14619595.87	40°15'15.8724"N	80°37'34.5546"W	1489.23	308.585	0.34	-0.31	0.18
3725.00	44.450	314.420	3170.38	-1373.31	974.31	-1209.93	1744646.32	14619641.37	40°15'16.3241"N	80°37'35.1430"W	1553.45	308.843	1.79	-1.68	-0.86
3817.00	45.590	315.850	3235.41	-1433.82	1020.44	-1255.83	1744600.44	14619687.48	40°15'16.7818"N	80°37'35.7325"W	1618.15	309.096	1.66	1.24	1.55
3907.00	46.220	315.510	3298.04	-1494.16	1066.68	-1300.99	1744555.30	14619733.71	40°15'17.2407"N	80°37'36.3125"W	1682.37	309.348	0.75	0.70	-0.38
3998.00	46.640	315.220	3360.76	-1555.57	1113.60	-1347.31	1744508.99	14619780.61	40°15'17.7062"N	80°37'36.9074"W	1747.96	309.575	0.52	0.46	-0.32
4089.00	47.200	315.630	3422.91	-1617.50	1160.95	-1393.96	1744462.36	14619827.93	40°15'18.1760"N	80°37'37.5065"W	1814.09	309.789	0.70	0.62	0.45
4181.00	47.150	315.420	3485.45	-1680.41	1209.09	-1441.23	1744415.11	14619876.06	40°15'18.6538"N	80°37'38.1136"W	1881.24	309.994	0.18	-0.05	-0.23
4273.00	47.140	314.260	3548.02	-1743.00	1256.65	-1489.05	1744367.31	14619923.60	40°15'19.1257"N	80°37'38.7278"W	1948.45	310.162	0.92	-0.01	-1.26
4364.00	45.540	314.120	3610.85	-1803.81	1302.54	-1536.25	1744320.12	14619969.47	40°15'19.5811"N	80°37'39.3341"W	2014.12	310.293	1.76	-1.76	-0.15
4455.00	46.390	314.090	3674.10	-1864.21	1348.07	-1583.23	1744273.17	14620014.98	40°15'20.0330"N	80°37'39.9375"W	2079.40	310.413	0.93	0.93	-0.03
4548.00	45.850	314.330	3738.56	-1926.14	1394.81	-1631.28	1744225.13	14620061.71	40°15'20.4969"N	80°37'40.5547"W	2146.29	310.532	0.61	-0.58	0.26
4638.00	46.060	311.920	3801.14	-1985.42	1439.02	-1678.49	1744177.94	14620105.90	40°15'20.9357"N	80°37'41.1612"W	2210.91	310.608	1.94	0.23	-2.68
4731.00	47.870	312.670	3864.60	-2047.31	1484.77	-1728.77	1744127.69	14620151.63	40°15'21.3899"N	80°37'41.8072"W	2278.85	310.658	2.03	1.95	0.81
4823.00	47.380	312.360	3926.61	-2109.31	1530.70	-1778.86	1744077.61	14620197.55	40°15'21.8458"N	80°37'42.4508"W	2346.78	310.712	0.59	-0.53	-0.34
4916.00	47.520	313.680	3989.50	-2172.04	1577.44	-1828.95	1744027.54	14620244.27	40°15'22.3098"N	80°37'43.0943"W	2415.24	310.777	1.06	0.15	1.42
5009.00	44.350	313.290	4054.17	-2233.45	1623.43	-1877.42	1743979.09	14620290.24	40°15'22.7662"N	80°37'43.7171"W	2481.98	310.850	3.42	-3.41	-0.42
5101.00	45.750	313.890	4119.17	-2293.33	1668.32	-1924.58	1743931.95	14620335.11	40°15'23.2118"N	80°37'44.3228"W	2547.02	310.920	1.59	1.52	0.65
5192.00	48.190	314.600	4181.26	-2354.80	1714.74	-1972.22	1743884.33	14620381.51	40°15'23.6724"N	80°37'44.9348"W	2613.42	311.005	2.74	2.68	0.78
5284.00	47.620	315.440	4242.93	-2418.23	1763.02	-2020.48	1743836.09	14620429.78	40°15'24.1516"N	80°37'45.5546"W	2681.53	311.107	0.92	-0.62	0.91
5375.00	48.160	314.750	4303.95	-2480.99	1810.84	-2068.14	1743788.45	14620477.57	40°15'24.6260"N	80°37'46.1667"W	2748.88	311.205	0.82	0.59	-0.76
5466.00	48.150	315.080	4364.66	-2543.94	1858.70	-2116.14	1743740.46	14620525.42	40°15'25.1010"N	80°37'46.7833"W	2816.53	311.294	0.27	-0.01	0.36

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Slot	Slot 206H		

WELLPATH DATA (206 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]
5559.00	47.900	314.710	4426.86	-2608.12	1907.50	-2165.12	1743691.50	14620574.20	40°15'25.5853"N	80°37'47.4124"W	2885.53	311.380	0.40	-0.27	-0.40
5650.00	47.750	315.210	4487.96	-2670.76	1955.15	-2212.84	1743643.80	14620621.83	40°15'26.0581"N	80°37'48.0254"W	2952.84	311.462	0.44	-0.16	0.55
5741.00	48.100	314.820	4548.94	-2733.52	2002.93	-2260.59	1743596.07	14620669.59	40°15'26.5322"N	80°37'48.6387"W	3020.26	311.542	0.50	0.38	-0.43
5833.00	47.370	315.300	4610.81	-2796.80	2051.12	-2308.68	1743548.00	14620717.76	40°15'27.0104"N	80°37'49.2564"W	3088.22	311.619	0.88	-0.79	0.52
5924.00	47.160	315.340	4672.57	-2859.04	2098.65	-2355.68	1743501.02	14620765.27	40°15'27.4820"N	80°37'49.8600"W	3154.92	311.697	0.23	-0.23	0.04
6014.00	40.700	310.070	4737.37	-2916.08	2141.06	-2401.39	1743455.32	14620807.67	40°15'27.9030"N	80°37'50.4474"W	3217.27	311.720	8.24	-7.18	-5.86
6106.00	33.080	303.040	4810.93	-2963.88	2174.13	-2445.48	1743411.25	14620840.72	40°15'28.2316"N	80°37'51.0142"W	3272.19	311.638	9.46	-8.28	-7.64
6199.00	28.560	290.760	4890.86	-3000.51	2195.88	-2487.61	1743369.14	14620862.46	40°15'28.4482"N	80°37'51.5564"W	3318.14	311.436	8.31	-4.86	-13.20
6290.00	22.870	278.160	4972.87	-3024.90	2206.11	-2525.51	1743331.25	14620872.69	40°15'28.5509"N	80°37'52.0448"W	3353.38	311.138	8.64	-6.25	-13.85
6381.00	23.560	269.340	5056.53	-3041.13	2208.41	-2561.21	1743295.56	14620874.99	40°15'28.5751"N	80°37'52.5051"W	3381.85	310.770	3.89	0.76	-9.69
6472.00	23.600	249.050	5140.07	-3048.88	2201.68	-2596.47	1743260.32	14620868.26	40°15'28.5100"N	80°37'52.9602"W	3404.27	310.296	8.88	0.04	-22.30
6562.00	24.920	229.250	5222.26	-3043.92	2182.83	-2627.71	1743229.09	14620849.42	40°15'28.3251"N	80°37'53.3642"W	3416.08	309.716	9.12	1.47	-22.00
6654.00	28.660	211.600	5304.50	-3025.38	2151.33	-2654.01	1743202.81	14620817.93	40°15'28.0148"N	80°37'53.7050"W	3416.42	309.028	9.51	4.07	-19.18
6746.00	34.240	196.450	5383.07	-2992.71	2107.61	-2672.94	1743183.88	14620774.23	40°15'27.5836"N	80°37'53.9516"W	3403.91	308.256	10.48	6.07	-16.47
6836.00	41.140	188.950	5454.29	-2948.12	2053.99	-2684.74	1743172.09	14620720.63	40°15'27.0542"N	80°37'54.1066"W	3380.34	307.418	9.19	7.67	-8.33
6928.00	48.830	180.620	5519.37	-2890.73	1989.31	-2689.83	1743167.00	14620655.98	40°15'26.4153"N	80°37'54.1758"W	3345.53	306.485	10.51	8.36	-9.05
7019.00	55.680	171.440	5575.11	-2822.91	1917.72	-2684.60	1743172.23	14620584.42	40°15'25.7077"N	80°37'54.1121"W	3299.20	305.540	10.96	7.53	-10.09
7109.00	64.250	168.180	5620.13	-2747.09	1841.14	-2670.73	1743186.09	14620507.87	40°15'24.9503"N	80°37'53.9374"W	3243.86	304.581	10.02	9.52	-3.62
7200.00	74.260	162.790	5652.34	-2663.11	1758.93	-2649.31	1743207.50	14620425.69	40°15'24.1371"N	80°37'53.6655"W	3180.05	303.581	12.31	11.00	-5.92
7291.00	83.500	162.760	5669.87	-2574.41	1673.74	-2622.90	1743233.90	14620340.53	40°15'23.2941"N	80°37'53.3294"W	3111.43	302.543	10.15	10.15	-0.03
7382.00	89.630	158.520	5675.33	-2483.85	1588.10	-2592.80	1743263.99	14620254.93	40°15'22.4467"N	80°37'52.9458"W	3040.51	301.488	8.18	6.74	-4.66
7474.00	89.420	155.630	5676.09	-2391.87	1503.38	-2556.97	1743299.81	14620170.24	40°15'21.6080"N	80°37'52.4882"W	2966.18	300.454	3.15	-0.23	-3.14
7567.00	89.450	155.770	5677.01	-2298.89	1418.63	-2518.70	1743338.06	14620085.51	40°15'20.7689"N	80°37'51.9991"W	2890.73	299.390	0.15	0.03	0.15
7658.00	89.320	155.550	5677.98	-2207.91	1335.72	-2481.19	1743375.55	14620002.64	40°15'19.9481"N	80°37'51.5199"W	2817.88	298.295	0.28	-0.14	-0.24
7750.00	89.140	155.390	5679.22	-2115.94	1252.03	-2443.00	1743413.73	14619918.98	40°15'19.1195"N	80°37'51.0318"W	2745.15	297.135	0.26	-0.20	-0.17
7842.00	88.920	154.800	5680.78	-2023.99	1168.60	-2404.26	1743452.45	14619835.58	40°15'18.2934"N	80°37'50.5366"W	2673.22	295.922	0.68	-0.24	-0.64
7933.00	89.480	154.970	5682.05	-1933.04	1086.21	-2365.65	1743491.06	14619753.23	40°15'17.4777"N	80°37'50.0430"W	2603.10	294.663	0.64	0.62	0.19
8024.00	87.410	155.630	5684.52	-1842.11	1003.57	-2327.64	1743529.05	14619670.62	40°15'16.6595"N	80°37'49.5572"W	2534.77	293.324	2.39	-2.27	0.73
8116.00	90.770	162.620	5685.98	-1750.27	917.69	-2294.88	1743561.79	14619584.77	40°15'15.8095"N	80°37'49.1394"W	2471.57	291.796	8.43	3.65	7.60
8208.00	91.380	157.510	5684.25	-1658.48	831.24	-2263.53	1743593.13	14619498.36	40°15'14.9540"N	80°37'48.7397"W	2411.34	290.165	5.59	0.66	-5.55

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Violet Coss BRK 206H AWP Proj: 18643'
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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Violet Coss BRK 206H
Field	Brooke	API/Legal	
Facility	Violet Coss BRK Pad	Wellbore	Violet Coss BRK 206H AWB
Slot	Slot 206H		

WELLPATH DATA (206 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]
8301.00	89.080	155.370	5683.88	-1565.49	746.01	-2226.36	1743630.28	14619413.16	40°15'14.1101"N	80°37'48.2649"W	2348.03	288.525	3.38	-2.47	-2.30
8391.00	89.320	156.040	5685.14	-1475.51	663.99	-2189.34	1743667.29	14619331.17	40°15'13.2981"N	80°37'47.7918"W	2287.81	286.872	0.79	0.27	0.74
8482.00	89.170	155.570	5686.33	-1384.53	580.99	-2152.05	1743704.57	14619248.20	40°15'12.4764"N	80°37'47.3153"W	2229.09	285.108	0.54	-0.16	-0.52
8573.00	89.720	155.560	5687.22	-1293.56	498.14	-2114.41	1743742.20	14619165.39	40°15'11.6562"N	80°37'46.8342"W	2172.29	283.257	0.60	0.60	-0.01
8663.00	89.450	156.580	5687.87	-1203.56	415.88	-2077.90	1743778.69	14619083.16	40°15'10.8418"N	80°37'46.3679"W	2119.11	281.318	1.17	-0.30	1.13
8755.00	89.320	155.720	5688.86	-1111.58	331.74	-2040.70	1743815.87	14618999.05	40°15'10.0088"N	80°37'45.8927"W	2067.49	279.233	0.95	-0.14	-0.93
8847.00	90.150	155.010	5689.28	-1019.60	248.12	-2002.36	1743854.20	14618915.46	40°15'9.1809"N	80°37'45.4026"W	2017.67	277.064	1.19	0.90	-0.77
8938.00	89.750	155.930	5689.36	-928.63	165.33	-1964.58	1743891.97	14618832.71	40°15'8.3612"N	80°37'44.9198"W	1971.52	274.811	1.10	-0.44	1.01
9028.00	89.420	155.690	5690.01	-838.64	83.24	-1927.70	1743928.83	14618750.65	40°15'7.5485"N	80°37'44.4486"W	1929.50	272.473	0.45	-0.37	-0.27
9120.00	89.480	154.900	5690.90	-746.67	-0.34	-1889.25	1743967.27	14618667.10	40°15'6.7210"N	80°37'43.9573"W	1889.25	269.990	0.86	0.07	-0.86
9212.00	90.430	155.980	5690.97	-654.70	-84.01	-1851.01	1744005.49	14618583.46	40°15'5.8926"N	80°37'43.4686"W	1852.92	267.401	1.56	1.03	1.17
9303.00	89.450	155.580	5691.06	-563.71	-167.00	-1813.68	1744042.81	14618500.51	40°15'5.0709"N	80°37'42.9916"W	1821.35	264.739	1.16	-1.08	-0.44
9394.00	90.030	157.000	5691.48	-472.72	-250.31	-1777.09	1744079.38	14618417.22	40°15'4.2461"N	80°37'42.5242"W	1794.63	261.982	1.69	0.64	1.56
9486.00	89.050	157.300	5692.21	-380.72	-335.09	-1741.37	1744115.09	14618332.48	40°15'3.4069"N	80°37'42.0681"W	1773.31	259.108	1.11	-1.07	0.33
9578.00	89.050	156.110	5693.74	-288.74	-419.58	-1704.99	1744151.45	14618248.02	40°15'2.5705"N	80°37'41.6035"W	1755.86	256.175	1.29	0.00	-1.29
9668.00	90.150	156.530	5694.37	-198.74	-502.00	-1668.84	1744187.59	14618165.64	40°15'1.7546"N	80°37'41.1418"W	1742.71	253.258	1.31	1.22	0.47
9759.00	89.140	157.050	5694.93	-107.75	-585.63	-1632.98	1744223.43	14618082.04	40°15'0.9266"N	80°37'40.6838"W	1734.82	250.271	1.25	-1.11	0.57
9851.00	89.020	156.680	5696.41	-15.76	-670.22	-1596.84	1744259.56	14617997.48	40°15'0.0892"N	80°37'40.2223"W	1731.79	247.231	0.42	-0.13	-0.40
9942.00	89.420	156.820	5697.65	75.23	-753.82	-1560.92	1744295.47	14617913.91	40°14'59.2616"N	80°37'39.7636"W	1733.41	244.223	0.47	0.44	0.15
10034.00	88.950	156.620	5698.96	167.22	-838.32	-1524.56	1744331.81	14617829.44	40°14'58.4251"N	80°37'39.2993"W	1739.85	241.195	0.56	-0.51	-0.22
10125.00	89.880	157.100	5699.89	258.22	-922.00	-1488.81	1744367.55	14617745.80	40°14'57.5967"N	80°37'38.8426"W	1751.18	238.231	1.15	1.02	0.53
10215.00	89.080	156.510	5700.70	348.21	-1004.72	-1453.36	1744402.99	14617663.11	40°14'56.7778"N	80°37'38.3900"W	1766.84	235.344	1.10	-0.89	-0.66
10306.00	91.140	164.150	5700.53	438.96	-1090.34	-1422.75	1744433.58	14617577.53	40°14'55.9305"N	80°37'37.9999"W	1792.50	232.535	8.69	2.26	8.40
10397.00	90.490	160.240	5699.23	529.51	-1176.95	-1394.94	1744461.39	14617490.94	40°14'55.0734"N	80°37'37.6459"W	1825.12	229.845	4.36	-0.71	-4.30
10487.00	89.380	156.290	5699.33	619.46	-1260.54	-1361.62	1744494.70	14617407.39	40°14'54.2460"N	80°37'37.2207"W	1855.52	227.208	4.56	-1.23	-4.39
10579.00	90.400	156.060	5699.51	711.46	-1344.70	-1324.45	1744531.84	14617323.27	40°14'53.4129"N	80°37'36.7460"W	1887.43	224.565	1.14	1.11	-0.25
10670.00	89.720	155.550	5699.42	802.44	-1427.70	-1287.16	1744569.12	14617240.29	40°14'52.5911"N	80°37'36.2695"W	1922.27	222.037	0.93	-0.75	-0.56
10761.00	90.490	154.810	5699.25	893.41	-1510.29	-1248.96	1744607.31	14617157.73	40°14'51.7733"N	80°37'35.7814"W	1959.82	219.590	1.17	0.85	-0.81
10852.00	89.290	155.460	5699.42	984.37	-1592.86	-1210.70	1744645.56	14617075.20	40°14'50.9559"N	80°37'35.2924"W	2000.74	217.238	1.50	-1.32	0.71
10943.00	89.750	155.090	5700.19	1075.34	-1675.51	-1172.64	1744683.60	14616992.58	40°14'50.1375"N	80°37'34.8061"W	2045.09	214.987	0.65	0.51	-0.41

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Violet Coss BRK 206H
Field	Brooke	API/Legal	
Facility	Violet Coss BRK Pad	Wellbore	Violet Coss BRK 206H AWB
Slot	Slot 206H		

WELLPATH DATA (206 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]
11034.00	89.320	155.240	5700.92	1166.30	-1758.09	-1134.42	1744721.81	14616910.03	40°14'49.3198"N	80°37'34.3177"W	2092.32	212.832	0.50	-0.47	0.16
11125.00	89.020	155.190	5702.24	1257.26	-1840.70	-1096.27	1744759.93	14616827.45	40°14'48.5019"N	80°37'33.8303"W	2142.43	210.777	0.33	-0.33	-0.05
11216.00	89.540	155.090	5703.39	1348.22	-1923.26	-1058.02	1744798.17	14616744.93	40°14'47.6845"N	80°37'33.3414"W	2195.07	208.816	0.58	0.57	-0.11
11309.00	88.920	156.160	5704.64	1441.19	-2007.96	-1019.64	1744836.54	14616660.26	40°14'46.8459"N	80°37'32.8511"W	2252.02	206.921	1.33	-0.67	1.15
11401.00	87.690	156.110	5707.36	1533.15	-2092.06	-982.44	1744873.73	14616576.20	40°14'46.0133"N	80°37'32.3759"W	2311.25	205.155	1.34	-1.34	-0.05
11491.00	88.830	156.350	5710.09	1623.10	-2174.39	-946.18	1744909.97	14616493.90	40°14'45.1983"N	80°37'31.9128"W	2371.33	203.516	1.29	1.27	0.27
11582.00	89.260	157.590	5711.61	1714.09	-2258.12	-910.58	1744945.55	14616410.20	40°14'44.3693"N	80°37'31.4584"W	2434.80	201.962	1.44	0.47	1.36
11673.00	90.400	158.010	5711.88	1805.07	-2342.37	-876.20	1744979.92	14616325.98	40°14'43.5353"N	80°37'31.0195"W	2500.89	200.509	1.34	1.25	0.46
11763.00	88.980	156.350	5712.36	1895.06	-2425.32	-841.30	1745014.81	14616243.06	40°14'42.7142"N	80°37'30.5740"W	2567.09	199.131	2.43	-1.58	-1.84
11855.00	89.600	157.890	5713.50	1987.05	-2510.07	-805.53	1745050.56	14616158.34	40°14'41.8752"N	80°37'30.1174"W	2636.16	197.792	1.80	0.67	1.67
11948.00	89.480	156.300	5714.25	2080.04	-2595.73	-769.34	1745086.74	14616072.72	40°14'41.0272"N	80°37'29.6553"W	2707.35	196.509	1.71	-0.13	-1.71
12039.00	90.120	157.230	5714.57	2171.04	-2679.35	-733.44	1745122.63	14615989.13	40°14'40.1994"N	80°37'29.1969"W	2777.92	195.309	1.24	0.70	1.02
12129.00	88.980	156.330	5715.28	2261.03	-2762.06	-697.96	1745158.09	14615906.46	40°14'39.3806"N	80°37'28.7439"W	2848.88	194.181	1.61	-1.27	-1.00
12220.00	90.680	158.740	5715.55	2352.01	-2846.14	-663.19	1745192.85	14615822.41	40°14'38.5483"N	80°37'28.3001"W	2922.39	193.117	3.24	1.87	2.65
12311.00	90.400	153.700	5714.69	2442.97	-2929.39	-626.51	1745229.52	14615739.20	40°14'37.7241"N	80°37'27.8316"W	2995.63	192.072	5.55	-0.31	-5.54
12401.00	89.540	155.500	5714.73	2532.91	-3010.68	-587.91	1745268.10	14615657.93	40°14'36.9192"N	80°37'27.3383"W	3067.55	191.049	2.22	-0.96	2.00
12492.00	89.290	155.240	5715.66	2623.88	-3093.40	-549.98	1745306.01	14615575.25	40°14'36.1002"N	80°37'26.8538"W	3141.91	190.081	0.40	-0.27	-0.29
12583.00	89.660	155.370	5716.50	2714.85	-3176.07	-511.97	1745344.01	14615492.60	40°14'35.2816"N	80°37'26.3680"W	3217.07	189.157	0.43	0.41	0.14
12675.00	88.860	155.500	5717.69	2806.82	-3259.74	-473.72	1745382.24	14615408.97	40°14'34.4533"N	80°37'25.8795"W	3293.98	188.269	0.88	-0.87	0.14
12766.00	89.720	155.190	5718.81	2897.78	-3342.43	-435.77	1745420.18	14615326.31	40°14'33.6345"N	80°37'25.3945"W	3370.72	187.428	1.00	0.95	-0.34
12857.00	89.630	154.760	5719.33	2988.74	-3424.89	-397.27	1745458.66	14615243.88	40°14'32.8181"N	80°37'24.9026"W	3447.85	186.616	0.48	-0.10	-0.47
12947.00	89.420	156.480	5720.08	3078.72	-3506.86	-360.12	1745495.80	14615161.95	40°14'32.0065"N	80°37'24.4281"W	3525.30	185.863	1.93	-0.23	1.91
13038.00	89.080	154.880	5721.27	3169.69	-3589.77	-322.65	1745533.25	14615079.06	40°14'31.1856"N	80°37'23.9494"W	3604.24	185.136	1.80	-0.37	-1.76
13129.00	88.580	155.520	5723.12	3260.64	-3672.36	-284.49	1745571.40	14614996.51	40°14'30.3678"N	80°37'23.4618"W	3683.37	184.430	0.89	-0.55	0.70
13220.00	88.590	155.940	5725.37	3351.60	-3755.29	-247.10	1745608.78	14614913.61	40°14'29.5468"N	80°37'22.9842"W	3763.41	183.765	0.46	0.01	0.46
13311.00	88.430	156.340	5727.74	3442.56	-3838.49	-210.30	1745645.56	14614830.45	40°14'28.7231"N	80°37'22.5143"W	3844.25	183.136	0.47	-0.18	0.44
13402.00	88.460	156.460	5730.21	3533.53	-3921.85	-173.88	1745681.97	14614747.12	40°14'27.8978"N	80°37'22.0492"W	3925.70	182.539	0.14	0.03	0.13
13493.00	88.580	156.520	5732.56	3624.50	-4005.27	-137.59	1745718.24	14614663.73	40°14'27.0720"N	80°37'21.5858"W	4007.63	181.968	0.15	0.13	0.07
13583.00	89.820	157.750	5733.81	3714.48	-4088.18	-102.63	1745753.19	14614580.85	40°14'26.2511"N	80°37'21.1395"W	4089.47	181.438	1.94	1.38	1.37
13674.00	88.650	155.950	5735.03	3805.47	-4171.84	-66.86	1745788.95	14614497.22	40°14'25.4229"N	80°37'20.6829"W	4172.38	180.918	2.36	-1.29	-1.98

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Actual Wellpath Report

Violet Coss BRK 206H AWP Proj: 18643'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Violet Coss BRK 206H
Field	Brooke	API/Legal	
Facility	Violet Coss BRK Pad	Wellbore	Violet Coss BRK 206H AWP
Slot	Slot 206H		

WELLPATH DATA (206 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]
13767.00	89.140	156.680	5736.82	3898.45	-4256.99	-29.51	1745826.29	14614412.10	40°14'24.5799"N	80°37'20.2059"W	4257.09	180.397	0.95	0.53	0.78
13858.00	89.080	155.400	5738.24	3989.43	-4340.14	7.44	1745863.22	14614328.99	40°14'23.7567"N	80°37'19.7340"W	4340.15	179.902	1.41	-0.07	-1.41
13949.00	89.510	158.110	5739.36	4080.41	-4423.74	43.35	1745899.12	14614245.42	40°14'22.9291"N	80°37'19.2756"W	4423.95	179.439	3.02	0.47	2.98
14040.00	88.890	155.190	5740.63	4171.39	-4507.27	79.41	1745935.16	14614161.93	40°14'22.1022"N	80°37'18.8152"W	4507.97	178.991	3.28	-0.68	-3.21
14131.00	89.940	158.430	5741.56	4262.37	-4590.90	115.24	1745970.97	14614078.33	40°14'21.2742"N	80°37'18.3578"W	4592.34	178.562	3.74	1.15	3.56
14222.00	88.280	155.460	5742.97	4353.35	-4674.61	150.87	1746006.59	14613994.65	40°14'20.4455"N	80°37'17.9030"W	4677.04	178.152	3.74	-1.82	-3.26
14312.00	89.850	157.290	5744.44	4443.33	-4757.05	186.93	1746042.63	14613912.24	40°14'19.6293"N	80°37'17.4426"W	4760.72	177.750	2.68	1.74	2.03
14403.00	88.150	156.660	5746.03	4534.31	-4840.78	222.51	1746078.20	14613828.54	40°14'18.8004"N	80°37'16.9883"W	4845.89	177.368	1.99	-1.87	-0.69
14496.00	89.660	156.010	5747.80	4627.29	-4925.94	259.83	1746115.51	14613743.41	40°14'17.9573"N	80°37'16.5118"W	4932.79	176.981	1.77	1.62	-0.70
14588.00	88.000	156.750	5749.68	4719.26	-5010.21	296.68	1746152.35	14613659.18	40°14'17.1230"N	80°37'16.0412"W	5018.99	176.611	1.98	-1.80	0.80
14678.00	90.030	156.520	5751.23	4809.25	-5092.82	332.37	1746188.02	14613576.61	40°14'16.3052"N	80°37'15.5856"W	5103.65	176.266	2.27	2.26	-0.26
14769.00	88.400	155.590	5752.48	4900.23	-5175.97	369.30	1746224.93	14613493.48	40°14'15.4819"N	80°37'15.1140"W	5189.13	175.919	2.06	-1.79	-1.02
14859.00	89.880	157.220	5753.83	4990.21	-5258.44	405.32	1746260.94	14613411.05	40°14'14.6655"N	80°37'14.6542"W	5274.03	175.592	2.45	1.64	1.81
14950.00	89.880	156.900	5754.02	5081.21	-5342.24	440.79	1746296.39	14613327.28	40°14'13.8359"N	80°37'14.2014"W	5360.39	175.283	0.35	0.00	-0.35
15041.00	88.980	157.550	5754.92	5172.20	-5426.14	476.01	1746331.60	14613243.41	40°14'13.0053"N	80°37'13.7519"W	5446.98	174.987	1.22	-0.99	0.71
15131.00	89.910	157.230	5755.80	5262.19	-5509.22	510.61	1746366.19	14613160.37	40°14'12.1829"N	80°37'13.3103"W	5532.83	174.705	1.09	1.03	-0.36
15222.00	89.850	159.290	5755.99	5353.15	-5593.74	544.31	1746399.88	14613075.88	40°14'11.3462"N	80°37'12.8804"W	5620.16	174.442	2.26	-0.07	2.26
15312.00	88.620	156.680	5757.19	5443.11	-5677.16	578.04	1746433.60	14612992.49	40°14'10.5204"N	80°37'12.4501"W	5706.51	174.186	3.21	-1.37	-2.90
15403.00	88.950	157.400	5759.12	5534.09	-5760.93	613.53	1746469.07	14612908.75	40°14'9.6911"N	80°37'11.9971"W	5793.51	173.921	0.87	0.36	0.79
15495.00	89.320	157.830	5760.51	5626.06	-5845.99	648.56	1746504.09	14612823.73	40°14'8.8491"N	80°37'11.5501"W	5881.86	173.669	0.62	0.40	0.47
15585.00	88.950	157.380	5761.86	5716.04	-5929.19	682.85	1746538.36	14612740.56	40°14'8.0255"N	80°37'11.1126"W	5968.38	173.430	0.65	-0.41	-0.50
15676.00	89.320	157.210	5763.24	5807.03	-6013.13	717.97	1746573.47	14612656.65	40°14'7.1945"N	80°37'10.6644"W	6055.84	173.191	0.45	0.41	-0.19
15767.00	88.890	157.620	5764.66	5898.01	-6097.14	752.91	1746608.40	14612572.67	40°14'6.3629"N	80°37'10.2185"W	6143.45	172.960	0.65	-0.47	0.45
15857.00	88.180	157.200	5766.96	5987.97	-6180.21	787.48	1746642.95	14612489.64	40°14'5.5405"N	80°37'9.7775"W	6230.17	172.739	0.92	-0.79	-0.47
15949.00	88.800	156.730	5769.39	6079.94	-6264.84	823.46	1746678.92	14612405.04	40°14'4.7027"N	80°37'9.3182"W	6318.73	172.512	0.85	0.67	-0.51
16039.00	90.000	160.190	5770.33	6169.88	-6348.54	856.50	1746711.94	14612321.37	40°14'3.8742"N	80°37'8.8969"W	6406.05	172.316	4.07	1.33	3.84
16132.00	88.680	157.100	5771.40	6262.80	-6435.13	890.36	1746745.79	14612234.81	40°14'3.0170"N	80°37'8.4651"W	6496.44	172.123	3.61	-1.42	-3.32
16223.00	89.510	157.440	5772.84	6353.79	-6519.06	925.51	1746780.93	14612150.92	40°14'2.1862"N	80°37'8.0165"W	6584.43	171.920	0.99	0.91	0.37
16313.00	89.570	156.780	5773.56	6443.78	-6601.97	960.52	1746815.92	14612068.04	40°14'1.3654"N	80°37'7.5697"W	6671.47	171.722	0.74	0.07	-0.73
16405.00	88.520	155.480	5775.09	6535.76	-6686.08	997.74	1746853.13	14611983.96	40°14'0.5326"N	80°37'7.0944"W	6760.12	171.513	1.82	-1.14	-1.41

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Violet Coss BRK 206H AWP Proj: 18643'
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Operator	SWN PRODUCTION COMPANY, LLC	Well	Violet Coss BRK 206H
Field	Brooke	API/Legal	
Facility	Violet Coss BRK Pad	Wellbore	Violet Coss BRK 206H AWB
Slot	Slot 206H		

WELLPATH DATA (206 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]
16495.00	88.890	156.500	5777.13	6625.73	-6768.27	1034.35	1746889.73	14611901.80	40°13'59.7189"N	80°37'6.6270"W	6846.85	171.311	1.21	0.41	1.13
16586.00	88.830	155.580	5778.94	6716.70	-6851.41	1071.30	1746926.66	14611818.69	40°13'58.8957"N	80°37'6.1552"W	6934.66	171.113	1.01	-0.07	-1.01
16677.00	89.420	155.640	5780.33	6807.68	-6934.28	1108.87	1746964.22	14611735.86	40°13'58.0752"N	80°37'5.6753"W	7022.38	170.915	0.65	0.65	0.07
16767.00	89.600	156.070	5781.10	6897.66	-7016.40	1145.68	1747001.02	14611653.77	40°13'57.2622"N	80°37'5.2052"W	7109.33	170.726	0.52	0.20	0.48
16858.00	88.800	156.060	5782.37	6988.65	-7099.57	1182.60	1747037.92	14611570.63	40°13'56.4388"N	80°37'4.7339"W	7197.39	170.543	0.88	-0.88	-0.01
16948.00	88.950	156.360	5784.13	7078.63	-7181.91	1218.90	1747074.20	14611488.33	40°13'55.6236"N	80°37'4.2705"W	7284.61	170.368	0.37	0.17	0.33
17039.00	89.020	155.760	5785.75	7169.61	-7265.07	1255.82	1747111.11	14611405.20	40°13'54.8002"N	80°37'3.7991"W	7372.80	170.193	0.66	0.08	-0.66
17131.00	88.860	156.530	5787.45	7261.58	-7349.19	1293.02	1747148.29	14611321.11	40°13'53.9674"N	80°37'3.3241"W	7462.07	170.022	0.85	-0.17	0.84
17221.00	88.770	155.900	5789.31	7351.56	-7431.53	1329.31	1747184.57	14611238.80	40°13'53.1522"N	80°37'2.8608"W	7549.48	169.859	0.71	-0.10	-0.70
17312.00	89.750	157.190	5790.48	7442.55	-7515.00	1365.52	1747220.77	14611155.37	40°13'52.3258"N	80°37'2.3985"W	7638.05	169.701	1.78	1.08	1.42
17403.00	88.920	155.320	5791.54	7533.54	-7598.29	1402.16	1747257.39	14611072.11	40°13'51.5012"N	80°37'1.9308"W	7726.58	169.544	2.25	-0.91	-2.05
17493.00	89.660	157.290	5792.66	7623.52	-7680.69	1438.32	1747293.54	14610989.74	40°13'50.6854"N	80°37'1.4691"W	7814.20	169.393	2.34	0.82	2.19
17585.00	88.620	155.990	5794.04	7715.51	-7765.13	1474.80	1747330.00	14610905.33	40°13'49.8493"N	80°37'1.0036"W	7903.94	169.246	1.81	-1.13	-1.41
17676.00	89.230	155.770	5795.74	7806.48	-7848.17	1511.98	1747367.17	14610822.32	40°13'49.0271"N	80°37'0.5288"W	7992.49	169.095	0.71	0.67	-0.24
17767.00	89.230	155.920	5796.97	7897.46	-7931.20	1549.21	1747404.39	14610739.33	40°13'48.2051"N	80°37'0.0534"W	8081.09	168.948	0.16	0.00	0.16
17858.00	89.140	156.520	5798.26	7988.45	-8014.46	1585.90	1747441.06	14610656.10	40°13'47.3807"N	80°36'59.5850"W	8169.87	168.807	0.67	-0.10	0.66
17949.00	88.980	156.190	5799.75	8079.44	-8097.81	1622.39	1747477.54	14610572.78	40°13'46.5555"N	80°36'59.1191"W	8258.74	168.671	0.40	-0.18	-0.36
18039.00	89.820	156.420	5800.70	8169.43	-8180.22	1658.56	1747513.69	14610490.40	40°13'45.7397"N	80°36'58.6575"W	8346.67	168.539	0.97	0.93	0.26
18130.00	89.450	156.210	5801.28	8260.42	-8263.55	1695.11	1747550.23	14610407.10	40°13'44.9146"N	80°36'58.1908"W	8435.62	168.408	0.47	-0.41	-0.23
18221.00	89.450	155.710	5802.15	8351.41	-8346.66	1732.18	1747587.29	14610324.03	40°13'44.0918"N	80°36'57.7175"W	8524.50	168.276	0.55	0.00	-0.55
18311.00	89.510	156.420	5802.97	8441.40	-8428.91	1768.69	1747623.79	14610241.81	40°13'43.2774"N	80°36'57.2514"W	8612.48	168.149	0.79	0.07	0.79
18402.00	89.140	156.330	5804.04	8532.39	-8512.28	1805.16	1747660.24	14610158.47	40°13'42.4520"N	80°36'56.7859"W	8701.58	168.027	0.42	-0.41	-0.10
18494.00	88.490	155.400	5805.94	8624.36	-8596.22	1842.77	1747697.83	14610074.57	40°13'41.6209"N	80°36'56.3057"W	8791.52	167.901	1.23	-0.71	-1.01
18584.00	88.520	156.000	5808.29	8714.32	-8678.22	1879.79	1747734.84	14609992.60	40°13'40.8091"N	80°36'55.8330"W	8879.47	167.778	0.67	0.03	0.67
18618.00	88.920	156.090	5809.05	8748.31	-8709.28	1893.59	1747748.64	14609961.55	40°13'40.5015"N	80°36'55.6568"W	8912.76	167.734	1.21	1.18	0.26
18643.00†	88.920	156.090	5809.52	8773.30	-8732.13	1903.72	1747758.76	14609938.71	40°13'40.2753"N	80°36'55.5275"W	8937.24	167.701	0.00	0.00	0.00

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Field	Brooke	API/Legal	
Facility	Violet Coss BRK Pad	Wellbore	Violet Coss BRK 206H AWB
Slot	Slot 206H		

HOLE & CASING SECTIONS - Ref Wellbore: Violet Coss BRK 206H AWB Ref Wellpath: Violet Coss BRK 206H AWP Proj: 18643'									
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	100.00	74.00	26.00	100.00	0.00	0.00	-0.01	-0.02
17.5in Open Hole	100.00	357.00	257.00	100.00	357.00	-0.01	-0.02	-0.07	0.00
13.375in Casing Surface	26.00	357.00	331.00	26.00	357.00	0.00	0.00	-0.07	0.00
12.25in Open Hole	357.00	1657.00	1300.00	357.00	1622.75	-0.07	0.00	100.85	-213.42
9.625in Casing Intermediate	26.00	1630.00	1604.00	26.00	1597.59	0.00	0.00	97.22	-204.33
8.5in Open Hole	1657.00	18643.00	16986.00	1622.75	5809.52	100.85	-213.42	-8732.13	1903.72
5.5in Casing Production	26.00	18643.00	18617.00	26.00	5809.52	0.00	0.00	-8732.13	1903.72

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Violet Coss BRK 206H LP Rev-5	5672.00	1530.61	-2538.63	1743318.13	14620197.45	40°15'21.8762"N	80°37'52.2503"W	point
Violet Coss BRK 206H BHL Rev-5	5789.13	-8742.42	1883.51	1747738.56	14609928.42	40°13'40.1744"N	80°36'55.7887"W	point

WELLPATH COMPOSITION - Ref Wellbore: Violet Coss BRK 206H AWB Ref Wellpath: Violet Coss BRK 206H AWP Proj: 18643'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	311.00	OWSG MWD rev2 + HRGM	01 Premier MWD <17-1/2"> (221'-311')	Violet Coss BRK 206H AWB	12/29/2020
311.00	1564.00	OWSG MWD rev2 + HRGM	02 Premier MWD <12-1/4"> (461'-1564')	Violet Coss BRK 206H AWB	12/29/2020
1564.00	18643.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	03 BH AT Curve <8-1/2"> (1720'-18618')	Violet Coss BRK 206H AWB	12/29/2020

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Slot	Slot 206H		

COMMENTS
<p>Wellpath general comments API: 47-009-00241-0000 BH Job #: 110685741 Rig: SDC 40 Duration: 12/30/2020 - 01/05/2021</p>

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