

SWN PRODUCTION COMPANY, LLC
 Location: Brooke County, WV
 Field: Brooke
 Facility: Robert Bone BRK Pad
 Slot: Slot 210H
 Well: Robert Bone BRK 210H
 Wellbore: Robert Bone BRK 210H PWB

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (*/100ft)	VS (ft)
Tie On	26.00	0.000	85.000	26.00	0.00	0.00	0.00	0.00
End of Tangent	700.00	0.000	85.000	700.00	0.00	0.00	0.00	0.00
Nudge for 3H AC	1150.00	9.000	85.000	1148.15	3.07	35.14	2.00	10.43
End of 3D Arc	1537.36	15.700	66.033	1526.48	27.04	113.33	2.00	17.78
Int Casing	1737.36	15.700	66.033	1719.02	49.02	162.78	0.00	16.12
Build	2457.26	30.098	66.033	2380.44	162.51	418.08	2.00	7.50
Tangent	5731.10	30.098	66.033	5212.87	829.40	1918.29	0.00	-43.11
End of 3D Arc	6331.82	60.000	127.000	5687.28	748.45	2254.94	7.00	159.04
Landing Point	6888.36	89.340	157.797	5874.00	352.70	2537.35	9.00	632.16
Total Depth	17082.53	89.340	157.797	5991.65	-9103.50	6396.63	0.00	10845.65

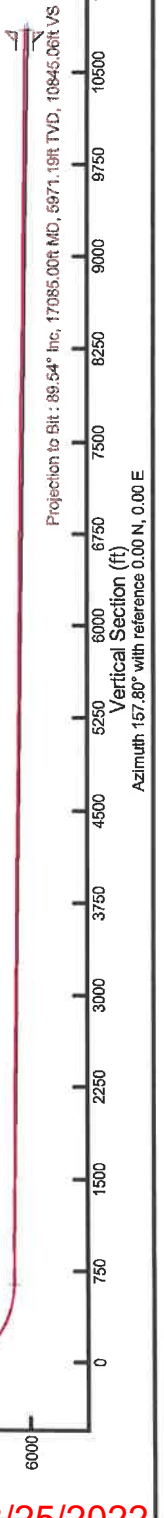
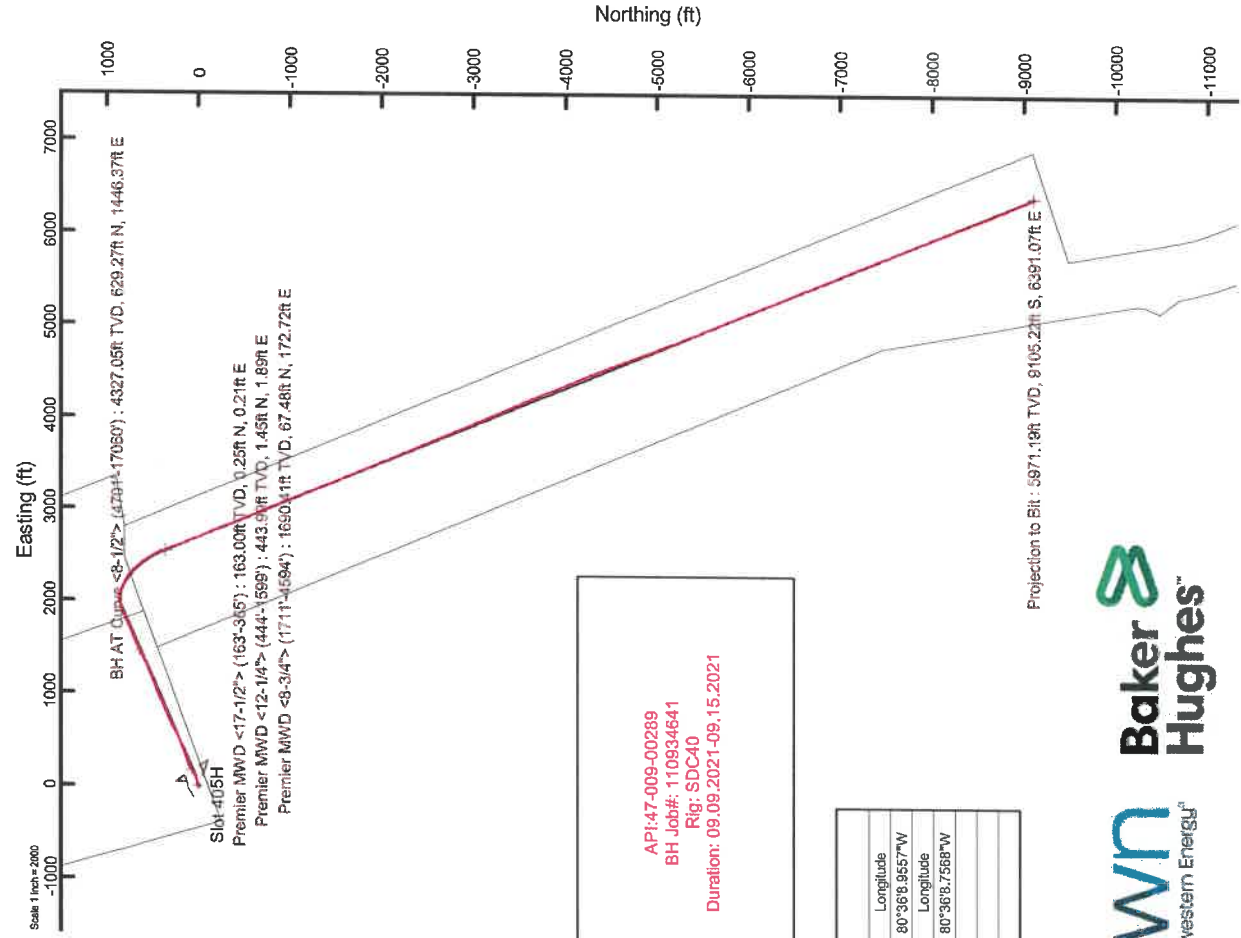
Rich reference wellpath is Robert Bone BRK 210H PWB Rev-A-2
 True vertical depths are referenced to SDC 40 (RKB)
 Reference wellpath measured depths are referenced to SDC 40 (RKB)
 SDC 40 (RKB) to Mean Sea Level: 1174.6 feet
 Mean Sea Level to Ground level (At Slot: Slot 210H): -1148.6 feet
 Offset wellpath MDs are referenced to each path's default MD datum
 Grid System: NAD83 / UTM Zone 17 North, US feet
 North Reference: Grid north
 Scale: True distance
 Coordinates are in feet referenced to Slot
 Depths are in feet
 Created by: manojit on 2021-09-16; Database: WA_MPL_EASTERNUS_Defn

API: 47-009-00289
 BH Job#: 110834641
 Rig: SDC40
 Duration: 09.09.2021-09.15.2021

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Robert Bone BRK Pad	1751384.200	14606698.310	40°13'8.0838"N	80°36'8.9557"W
Slot 210H	30.76	1751389.490	40°13'8.3871"N	80°36'8.7568"W
SDC 40 (RKB) to Ground level (At Slot: Slot 210H)			28ft	
Mean Sea Level to Ground level (At Slot: Slot 210H)			-1148.6ft	
SDC 40 (RKB) to Mean Sea Level			1174.6ft	

BH AT Curve <8-1/2"> (4701-17060) : 29.91° Inc, 4701.00ft MD, 4327.05ft TVD, -36.13ft VS



REFERENCE WELLPATH IDENTIFICATION		
Operator	SWN PRODUCTION COMPANY, LLC	Well
Field	Brooke	API
Facility	Robert Bone BRK Pad	Wellbore
Slot	Slot 210H	
		Robert Bone BRK 210H
		47-009-00289-0000
		Robert Bone BRK 210H AWB

REPORT SETUP INFORMATION		
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System
North Reference	Grid	User
Scale	0.999614	Report Generated
Convergence at slot	0.26° East	Database
		WellArchitect® 6.0
		Manajohj
		9/16/2021 at 12:19:45 PM
		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	30.76	15.30	1751399.49	14606729.06	40°13'8.3871"N	80°36'8.7568"W
Facility Reference Pt			1751384.20	14606698.31	40°13'8.0838"N	80°36'8.9557"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
Horizontal Reference Pt	Slot	SDC 40 (RKB) to Mean Sea Level
Vertical Reference Pt	SDC 40 (RKB)	SDC 40 (RKB) to Ground Level at Slot (Slot 210H)
MD Reference Pt	SDC 40 (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth
		1174.60ft
		1174.60ft
		26.00ft
		N 0.00, E 0.00 ft
		157.80°

Actual Wellpath Report

Robert Bone BRK 210H AWB Proj:17085'

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REFERENCE WELLPATH IDENTIFICATION		Well	Robert Bone BRK 210H
Operator	SWN PRODUCTION COMPANY, LLC	API	47-009-00289-0000
Field	Brooke	Wellbore	Robert Bone BRK 210H AWB
Facility	Robert Bone BRK Pad		
Slot	Slot 210H		

WELLPATH DATA (182 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	39.610	0.00	0.00	0.00	0.00	1751399.49	14606729.06	40°13'8.3871"N	80°36'8.7568"W	0.00	0.000	0.00	0.00	0.00
26.00	0.000	39.610	26.00	0.00	0.00	0.00	1751399.49	14606729.06	40°13'8.3871"N	80°36'8.7568"W	0.00	0.000	0.00	0.00	0.00
163.00	0.270	39.610	163.00	-0.15	0.25	0.21	1751399.70	14606729.31	40°13'8.3895"N	80°36'8.7541"W	0.32	39.610	0.20	0.20	0.00
226.00	0.460	51.020	226.00	-0.30	0.52	0.50	1751399.99	14606729.58	40°13'8.3922"N	80°36'8.7504"W	0.72	43.590	0.32	0.30	18.11
317.00	0.440	70.270	317.00	-0.39	0.87	1.11	1751400.60	14606729.93	40°13'8.3956"N	80°36'8.7424"W	1.41	51.913	0.17	-0.02	21.15
365.00	0.540	51.080	364.99	-0.44	1.07	1.46	1751400.95	14606730.13	40°13'8.3976"N	80°36'8.7379"W	1.81	53.644	0.40	0.21	-39.98
444.00	0.290	44.540	443.99	-0.63	1.45	1.89	1751401.38	14606730.51	40°13'8.4013"N	80°36'8.7324"W	2.38	52.483	0.32	-0.32	-8.28
496.00	0.470	49.740	495.99	-0.75	1.68	2.14	1751401.63	14606730.74	40°13'8.4036"N	80°36'8.7291"W	2.73	51.886	0.35	0.35	10.00
595.00	0.480	35.960	594.99	-1.09	2.28	2.70	1751402.19	14606731.34	40°13'8.4095"N	80°36'8.7219"W	3.53	49.793	0.12	0.01	-13.92
692.00	0.750	52.270	691.98	-1.48	3.00	3.44	1751402.93	14606732.06	40°13'8.4165"N	80°36'8.7123"W	4.56	48.917	0.33	0.28	16.81
788.00	3.010	90.620	787.93	-0.67	3.35	6.46	1751405.94	14606732.41	40°13'8.4199"N	80°36'8.6734"W	7.28	62.541	2.57	2.35	39.95
884.00	5.650	91.160	883.64	2.18	3.23	13.70	1751413.19	14606732.29	40°13'8.4184"N	80°36'8.5800"W	14.08	76.728	2.75	2.75	0.56
979.00	7.430	88.550	978.02	6.22	3.29	24.52	1751424.00	14606732.35	40°13'8.4185"N	80°36'8.4405"W	24.74	82.352	1.90	1.87	-2.75
1075.00	9.430	83.420	1072.98	10.53	4.35	38.54	1751438.01	14606733.41	40°13'8.4284"N	80°36'8.2597"W	38.78	83.558	2.22	2.08	-5.34
1172.00	10.920	79.820	1168.45	14.59	6.89	55.48	1751454.95	14606735.94	40°13'8.4527"N	80°36'8.0413"W	55.90	82.925	1.67	1.54	-3.71
1268.00	12.130	74.150	1262.52	17.60	11.25	74.13	1751473.59	14606740.30	40°13'8.4949"N	80°36'7.8005"W	74.98	81.372	1.73	1.26	-5.91
1364.00	12.890	63.740	1356.25	17.95	18.74	93.44	1751492.89	14606747.79	40°13'8.5681"N	80°36'7.5512"W	95.30	78.659	2.47	0.79	-10.84
1460.00	14.480	58.110	1449.53	15.17	29.82	113.23	1751512.68	14606758.87	40°13'8.6767"N	80°36'7.2954"W	117.10	75.246	2.16	1.66	-5.86
1556.00	15.920	58.240	1542.17	10.97	43.09	134.62	1751534.06	14606772.14	40°13'8.8069"N	80°36'7.0189"W	141.35	72.250	1.50	1.50	0.14
1599.00	16.530	58.590	1583.45	9.01	49.38	144.86	1751544.29	14606778.43	40°13'8.8687"N	80°36'6.8866"W	153.04	71.175	1.44	1.42	0.81
1711.00	17.990	55.530	1690.41	2.78	67.48	172.72	1751572.14	14606796.51	40°13'9.0462"N	80°36'6.5265"W	185.43	68.660	1.53	1.30	-2.73
1807.00	17.830	61.980	1781.77	-1.86	82.77	197.91	1751597.33	14606811.80	40°13'9.1963"N	80°36'6.2007"W	214.53	67.304	2.07	-0.17	6.72
1903.00	18.210	65.910	1873.06	-3.84	95.80	224.58	1751623.99	14606824.83	40°13'9.3238"N	80°36'5.8562"W	244.16	66.898	1.33	0.40	4.09
2000.00	19.230	70.070	1964.93	-3.71	107.43	283.44	1751652.83	14606836.45	40°13'9.4375"N	80°36'5.4835"W	275.27	67.028	1.73	1.05	4.29
2096.00	20.860	72.280	2055.12	-1.75	118.03	344.59	1751683.96	14606847.04	40°13'9.5408"N	80°36'5.0814"W	308.09	67.475	1.87	1.70	2.30
2192.00	21.960	70.250	2144.49	0.35	129.30	317.76	1751717.13	14606858.30	40°13'9.6507"N	80°36'4.6531"W	343.06	67.859	1.38	1.15	-2.11
2288.00	24.860	69.990	2232.58	1.89	142.27	353.63	1751752.98	14606871.27	40°13'9.7773"N	80°36'4.1900"W	381.17	68.084	3.02	3.02	-0.27
2384.00	27.220	70.690	2318.83	3.77	156.44	393.31	1751792.65	14606885.44	40°13'9.9155"N	80°36'3.6776"W	423.28	68.310	2.48	2.46	0.73
2480.00	29.980	69.260	2403.11	5.49	172.19	436.47	1751835.79	14606901.19	40°13'10.0693"N	80°36'3.1203"W	469.21	68.470	2.96	2.88	-1.49
2576.00	31.090	67.020	2485.80	5.76	190.37	481.73	1751881.03	14606919.35	40°13'10.2469"N	80°36'2.5359"W	517.98	68.437	1.66	1.16	-2.33

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Field	Brooke	API	47-009-00289-0000
Facility	Robert Bone BRK Pad	Wellbore	Robert Bone BRK 210H AWB
Slot	Slot 210H		

WELLPATH DATA (182 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 [°]	D.L.S. ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]
2672.00	29.620	64.060	2568.64	3.88	210.42	525.88	1751925.17	14606939.40	40°13'10.4431"N	80°36'1.9655"W	566.42	68.192	2.18	-1.53	-3.08
2768.00	29.960	61.120	2651.96	-0.46	232.38	568.21	1751967.48	14606961.35	40°13'10.6582"N	80°36'1.4186"W	613.89	67.757	1.56	0.35	-3.06
2864.00	28.880	61.630	2735.57	-5.74	254.97	609.60	1752008.85	14606983.93	40°13'10.8796"N	80°36'0.8838"W	660.77	67.302	1.15	-1.13	0.53
2960.00	28.900	63.330	2819.63	-10.04	276.40	650.73	1752049.97	14607005.35	40°13'11.0895"N	80°36'0.3523"W	707.00	66.986	0.86	0.02	1.77
3056.00	29.160	65.330	2903.57	-12.85	296.57	692.71	1752091.93	14607025.52	40°13'11.2870"N	80°35'59.8100"W	753.53	66.823	1.05	0.27	2.08
3152.00	29.320	65.860	2987.34	-14.66	315.95	735.42	1752134.62	14607044.89	40°13'11.4766"N	80°35'59.2583"W	800.41	66.751	0.82	0.17	0.55
3248.00	29.840	67.030	3070.83	-15.78	334.88	778.86	1752178.04	14607063.81	40°13'11.6617"N	80°35'58.6973"W	847.80	66.734	0.54	0.54	1.22
3344.00	29.740	68.050	3154.14	-15.99	353.10	822.93	1752222.10	14607082.03	40°13'11.8398"N	80°35'58.1280"W	895.49	66.777	0.54	-0.10	1.06
3441.00	28.950	63.880	3238.70	-17.49	372.44	866.33	1752265.48	14607101.35	40°13'12.0289"N	80°35'57.5674"W	942.99	66.737	2.26	-0.81	-4.30
3537.00	29.960	63.990	3322.29	-20.67	393.18	908.74	1752307.87	14607122.08	40°13'12.2320"N	80°35'57.0196"W	990.15	66.604	1.05	1.05	0.11
3633.00	29.890	65.230	3405.49	-23.34	413.71	952.00	1752351.12	14607142.61	40°13'12.4330"N	80°35'56.4607"W	1038.01	66.512	0.65	-0.07	1.29
3729.00	30.010	65.870	3488.67	-25.22	433.55	995.63	1752394.73	14607162.44	40°13'12.6270"N	80°35'55.8971"W	1085.93	66.469	0.36	0.13	0.67
3825.00	29.540	67.360	3572.00	-26.21	452.47	1039.38	1752438.47	14607181.36	40°13'12.8121"N	80°35'55.3320"W	1133.60	66.475	0.91	-0.49	1.55
3921.00	30.120	69.050	3655.28	-25.87	470.19	1083.72	1752482.79	14607199.07	40°13'12.9852"N	80°35'54.7594"W	1181.32	66.545	1.06	0.60	1.76
4017.00	31.700	69.850	3737.65	-24.44	487.50	1129.89	1752528.95	14607216.37	40°13'13.1542"N	80°35'54.1631"W	1230.57	66.662	1.70	1.65	0.83
4113.00	30.310	66.280	3819.94	-24.18	505.93	1175.76	1752574.79	14607234.80	40°13'13.3343"N	80°35'53.5708"W	1279.99	66.718	2.40	-1.45	-3.72
4210.00	30.760	66.350	3903.48	-25.46	525.73	1220.89	1752619.90	14607254.59	40°13'13.5279"N	80°35'52.9879"W	1329.27	66.703	0.47	0.46	0.07
4306.00	31.180	67.650	3985.80	-26.14	545.03	1266.36	1752665.36	14607273.88	40°13'13.7166"N	80°35'52.4006"W	1378.67	66.713	0.82	0.44	1.35
4402.00	31.240	66.000	4067.91	-26.99	564.60	1312.09	1752711.07	14607293.44	40°13'13.9080"N	80°35'51.8100"W	1428.41	66.717	0.89	0.06	-1.72
4498.00	29.890	65.390	4150.56	-28.78	584.69	1356.58	1752755.54	14607313.52	40°13'14.1045"N	80°35'51.2353"W	1477.22	66.684	1.44	-1.41	-0.64
4594.00	29.340	64.880	4234.02	-30.98	604.64	1399.62	1752798.57	14607333.46	40°13'14.2996"N	80°35'50.6792"W	1524.64	66.636	0.63	-0.57	-0.53
4701.00	29.910	59.590	4327.05	-36.13	629.27	1446.37	1752845.30	14607358.09	40°13'14.5410"N	80°35'50.0751"W	1577.33	66.488	2.50	0.53	-4.94
4797.00	30.450	66.750	4410.07	-39.99	651.00	1489.38	1752888.29	14607379.81	40°13'14.7637"N	80°35'49.5194"W	1625.44	66.390	3.79	0.56	7.46
4893.00	31.060	66.590	4492.57	-40.96	670.44	1534.46	1752933.35	14607399.24	40°13'14.9438"N	80°35'48.9372"W	1674.53	66.398	0.64	0.64	-0.17
4989.00	30.650	66.650	4574.98	-41.98	689.98	1579.65	1752978.53	14607418.77	40°13'15.1349"N	80°35'48.3535"W	1723.76	66.405	0.43	-0.43	0.06
5085.00	29.980	66.650	4657.85	-42.95	709.18	1624.14	1753023.00	14607437.97	40°13'15.3227"N	80°35'47.7789"W	1772.22	66.411	0.70	-0.70	0.00
5181.00	30.150	66.570	4740.93	-43.95	728.28	1668.28	1753067.12	14607457.05	40°13'15.5094"N	80°35'47.2087"W	1820.31	66.417	0.18	0.18	-0.08
5277.00	29.700	66.730	4824.14	-44.91	747.26	1712.25	1753111.07	14607476.03	40°13'15.6950"N	80°35'46.6408"W	1868.20	66.423	0.48	-0.47	0.17
5373.00	27.620	67.590	4908.37	-45.43	765.14	1754.67	1753153.48	14607493.90	40°13'15.8698"N	80°35'46.0928"W	1914.24	66.440	2.21	-2.17	0.90
5469.00	30.060	66.570	4992.46	-46.03	783.19	1797.31	1753196.10	14607511.94	40°13'16.0462"N	80°35'45.5421"W	1960.54	66.455	2.59	2.54	-1.06

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Field	Brooke	API	47-009-00289-0000
Facility	Robert Bone BRK Pad	Wellbore	Robert Bone BRK 210H AWB
Slot	Slot 210H		

WELLPATH DATA (182 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]
5665.00	29.900	67.010	5075.61	-46.88	802.09	1841.40	1753240.18	14607530.84	40°13'16.2310"N	80°35'44.9726"W	2008.51	66.463	0.28	-0.17	0.46
5661.00	30.300	65.600	5158.67	-48.14	821.44	1885.48	1753284.24	14607550.18	40°13'16.4202"N	80°35'44.4032"W	2056.65	66.459	0.85	0.42	-1.47
5758.00	30.280	70.840	5242.44	-47.78	839.58	1930.87	1753329.62	14607568.31	40°13'16.5974"N	80°35'43.8170"W	2105.51	66.500	2.72	-0.02	5.40
5854.00	32.390	82.220	5324.51	-40.09	851.02	1979.26	1753377.98	14607579.75	40°13'16.7083"N	80°35'43.1926"W	2154.46	66.734	6.53	2.20	11.85
5950.00	34.550	95.360	5404.69	-21.06	851.95	2031.92	1753430.62	14607580.68	40°13'16.7152"N	80°35'42.5137"W	2203.29	67.252	7.86	2.25	13.69
6046.00	37.540	106.490	5482.39	9.86	841.10	2087.14	1753485.82	14607569.83	40°13'16.6054"N	80°35'41.8025"W	2250.24	68.051	7.49	3.11	11.59
6142.00	41.000	113.040	5556.73	50.53	820.45	2144.20	1753542.86	14607549.20	40°13'16.3988"N	80°35'41.0681"W	2295.81	69.061	5.62	3.60	6.82
6238.00	45.720	118.020	5626.52	99.34	791.96	2203.57	1753602.20	14607520.71	40°13'16.1146"N	80°35'40.3045"W	2341.56	70.232	6.07	4.92	5.19
6334.00	50.520	127.010	5690.67	157.68	753.45	2263.59	1753662.20	14607482.22	40°13'15.7313"N	80°35'39.5329"W	2385.69	71.590	8.57	5.00	9.36
6430.00	55.190	134.810	5748.67	225.89	703.30	2321.22	1753719.81	14607432.08	40°13'15.2331"N	80°35'38.7929"W	2425.43	73.144	8.09	4.86	8.12
6526.00	64.150	140.600	5797.13	303.64	641.98	2376.75	1753775.32	14607370.79	40°13'14.6246"N	80°35'38.0808"W	2461.93	74.885	10.68	9.33	6.03
6622.00	72.270	144.570	5832.75	389.59	571.20	2430.78	1753829.33	14607300.04	40°13'13.9228"N	80°35'37.3884"W	2496.99	76.776	9.29	8.46	4.14
6718.00	79.230	149.600	5856.38	480.94	493.13	2481.24	1753879.77	14607222.00	40°13'13.1490"N	80°35'36.7426"W	2529.77	78.759	8.85	7.25	5.24
6814.00	85.900	157.450	5868.82	575.74	408.02	2523.58	1753922.09	14607136.92	40°13'12.3060"N	80°35'36.2018"W	2556.35	80.816	10.67	6.95	8.18
6910.00	89.200	159.300	5872.92	671.63	318.87	2558.91	1753957.41	14607047.81	40°13'11.4235"N	80°35'35.7516"W	2578.71	82.897	3.94	3.44	1.93
7006.00	89.420	158.780	5874.08	767.60	229.23	2593.25	1753991.74	14606958.20	40°13'11.5361"N	80°35'35.3142"W	2603.36	84.948	0.59	0.23	-0.54
7103.00	90.310	158.870	5874.31	864.58	138.78	2628.29	1754026.76	14606867.79	40°13'9.6407"N	80°35'34.8679"W	2631.95	86.977	0.92	0.92	0.09
7199.00	90.620	158.950	5873.53	960.56	49.21	2662.83	1754061.29	14606778.26	40°13'8.7541"N	80°35'34.4279"W	2663.29	88.941	0.33	0.32	0.08
7295.00	88.740	157.120	5874.06	1056.55	-39.81	2698.74	1754097.18	14606689.27	40°13'7.8728"N	80°35'33.9703"W	2699.03	90.845	2.73	-1.96	-1.91
7391.00	88.800	156.950	5876.12	1152.52	-128.18	2736.18	1754134.61	14606600.93	40°13'6.9978"N	80°35'33.4928"W	2739.19	92.682	0.19	0.06	-0.18
7487.00	89.420	156.000	5877.61	1248.48	-216.19	2774.50	1754172.91	14606512.96	40°13'6.1264"N	80°35'33.0042"W	2782.91	94.455	1.18	0.65	-0.99
7583.00	89.630	158.990	5878.41	1344.46	-304.86	2811.24	1754209.64	14606424.31	40°13'5.2484"N	80°35'32.5358"W	2827.72	96.189	3.12	0.22	3.11
7680.00	89.600	158.190	5879.06	1441.45	-395.17	2846.65	1754245.03	14606334.05	40°13'4.3544"N	80°35'32.0847"W	2873.94	97.903	0.83	-0.03	-0.82
7776.00	89.480	157.280	5879.83	1537.45	-484.01	2883.02	1754281.39	14606245.24	40°13'3.4749"N	80°35'31.6212"W	2923.36	99.530	0.96	-0.12	-0.95
7872.00	89.540	157.540	5880.65	1633.44	-572.64	2919.89	1754318.25	14606156.65	40°13'2.5974"N	80°35'31.1511"W	2975.51	101.096	0.28	0.06	0.27
7968.00	91.050	157.430	5880.16	1729.44	-661.32	2956.65	1754355.00	14606068.00	40°13'1.7194"N	80°35'30.6825"W	3029.71	102.608	1.58	1.57	-0.11
8064.00	89.850	158.320	5879.41	1825.43	-750.24	2992.81	1754391.14	14605979.11	40°13'0.8390"N	80°35'30.2217"W	3085.41	104.073	1.56	-1.25	0.93
8161.00	89.630	157.220	5879.85	1922.43	-840.03	3029.50	1754427.82	14605889.36	40°12'59.9501"N	80°35'29.7540"W	3143.81	105.498	1.16	-0.23	-1.13
8257.00	89.690	157.580	5880.42	2018.42	-928.66	3066.39	1754464.70	14605800.76	40°12'59.0726"N	80°35'29.2837"W	3203.93	106.849	0.38	0.06	0.38
8353.00	89.540	157.470	5881.06	2114.42	-1017.36	3103.09	1754501.38	14605712.09	40°12'58.1943"N	80°35'28.8159"W	3265.61	108.152	0.19	-0.16	-0.11



Actual Wellpath Report

Robert Bone BRK 210H AWB Proj:17085'

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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Robert Bone BRK 210H
Field	Brooke	API	47-009-00289-0000
Facility	Robert Bone BRK Pad	Wellbore	Robert Bone BRK 210H AWB
Slot	Slot 210H		

WELLPATH DATA (182 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]
8449.00	89.540	158.110	5881.83	2210.42	-1106.24	3139.38	1754537.65	14605623.25	40°12'57.3145"N	80°35'28.3535"W	3328.58	109.411	0.67	0.00	0.67
8545.00	89.230	158.050	5882.86	2306.41	-1195.29	3175.22	1754573.47	14605534.23	40°12'56.4328"N	80°35'27.8968"W	3392.74	110.629	0.33	-0.32	-0.06
8641.00	89.080	157.730	5884.28	2402.40	-1284.22	3211.34	1754609.59	14605445.34	40°12'55.5524"N	80°35'27.4364"W	3458.61	111.797	0.37	-0.16	-0.33
8737.00	88.920	157.920	5885.95	2498.39	-1373.11	3247.57	1754645.80	14605356.49	40°12'54.6724"N	80°35'26.9747"W	3525.93	112.919	0.26	-0.17	0.20
8834.00	89.320	157.960	5887.44	2595.37	-1463.00	3284.00	1754682.22	14605266.63	40°12'53.7824"N	80°35'26.5105"W	3595.14	114.013	0.41	0.41	0.04
8930.00	89.420	157.590	5888.50	2691.37	-1551.86	3320.31	1754718.51	14605177.80	40°12'52.9027"N	80°35'26.0478"W	3665.07	115.051	0.40	0.10	-0.39
9026.00	89.380	157.630	5889.50	2787.36	-1640.62	3356.87	1754755.06	14605089.08	40°12'52.0239"N	80°35'25.5817"W	3736.34	116.046	0.06	-0.04	0.04
9123.00	89.600	157.450	5890.37	2884.36	-1730.25	3393.93	1754792.10	14604999.48	40°12'51.1364"N	80°35'25.1094"W	3809.53	117.013	0.29	0.23	-0.19
9219.00	89.350	157.790	5891.25	2980.35	-1819.02	3430.48	1754828.64	14604910.75	40°12'50.2576"N	80°35'24.6436"W	3882.91	117.935	0.44	-0.26	0.35
9315.00	89.290	157.630	5892.39	3076.34	-1907.84	3466.89	1754865.04	14604821.96	40°12'49.3782"N	80°35'24.1795"W	3957.17	118.824	0.18	-0.06	-0.17
9411.00	89.420	157.490	5893.47	3172.34	-1996.56	3503.53	1754901.66	14604733.27	40°12'48.4998"N	80°35'23.7125"W	4032.49	119.678	0.20	0.14	-0.15
9507.00	89.630	157.090	5894.26	3268.33	-2085.12	3540.59	1754938.71	14604644.75	40°12'47.6230"N	80°35'23.2401"W	4108.96	120.495	0.47	0.22	-0.42
9603.00	89.230	157.270	5895.22	3364.32	-2173.60	3577.82	1754975.93	14604556.30	40°12'46.7469"N	80°35'22.7655"W	4186.33	121.280	0.46	-0.42	0.19
9699.00	89.450	157.400	5896.32	3460.31	-2262.18	3614.81	1755012.90	14604467.76	40°12'45.8699"N	80°35'22.2940"W	4264.31	122.039	0.27	0.23	0.14
9795.00	89.170	157.490	5897.48	3556.30	-2350.83	3651.63	1755049.71	14604379.14	40°12'44.9922"N	80°35'21.8246"W	4342.91	122.772	0.31	-0.29	0.09
9892.00	89.260	157.070	5898.81	3653.29	-2440.30	3689.09	1755087.15	14604289.71	40°12'44.1064"N	80°35'21.3471"W	4423.17	123.484	0.44	0.09	-0.43
9988.00	89.380	157.090	5899.95	3749.27	-2528.71	3726.48	1755124.52	14604201.33	40°12'43.2310"N	80°35'20.8705"W	4503.45	124.160	0.13	0.12	0.02
10084.00	89.260	157.290	5901.09	3845.26	-2617.20	3763.69	1755161.72	14604112.88	40°12'42.3549"N	80°35'20.3962"W	4584.22	124.814	0.24	-0.12	0.21
10180.00	89.600	157.670	5902.04	3941.25	-2705.87	3800.46	1755198.48	14604024.24	40°12'41.4769"N	80°35'19.9276"W	4665.32	125.450	0.53	0.35	0.40
10276.00	89.510	157.060	5902.79	4037.25	-2794.47	3837.41	1755235.41	14603935.67	40°12'40.5997"N	80°35'19.4566"W	4747.08	126.063	0.64	-0.09	-0.64
10372.00	88.800	157.430	5904.20	4133.23	-2882.99	3874.53	1755272.52	14603847.19	40°12'39.7233"N	80°35'18.9834"W	4829.46	126.652	0.83	-0.74	0.39
10468.00	89.230	157.310	5905.85	4229.22	-2971.59	3911.47	1755309.44	14603758.63	40°12'38.8461"N	80°35'18.5126"W	4912.22	127.224	0.47	0.45	-0.13
10564.00	89.260	157.770	5907.12	4325.21	-3060.30	3948.14	1755346.10	14603669.95	40°12'37.9678"N	80°35'18.0453"W	4995.32	127.780	0.48	0.03	0.48
10660.00	89.260	157.030	5908.36	4421.20	-3148.92	3985.03	1755382.97	14603581.36	40°12'37.0904"N	80°35'17.5751"W	5078.99	128.315	0.77	0.00	-0.77
10756.00	89.510	157.040	5909.39	4517.18	-3237.30	4022.48	1755420.47	14603493.01	40°12'36.2152"N	80°35'17.0976"W	5163.38	128.827	0.26	0.26	0.01
10852.00	89.850	156.870	5909.93	4613.17	-3325.64	4060.06	1755457.98	14603404.71	40°12'35.3406"N	80°35'16.6186"W	5248.24	129.321	0.40	0.35	-0.18
10948.00	88.550	155.920	5911.28	4710.13	-3414.51	4098.90	1755496.80	14603315.87	40°12'34.4606"N	80°35'16.1233"W	5334.78	129.795	1.66	-1.34	-0.98
11045.00	88.490	157.060	5913.76	4806.07	-3502.51	4137.18	1755535.06	14603227.91	40°12'33.5892"N	80°35'15.6352"W	5420.69	130.251	1.19	-0.06	1.19
11141.00	89.050	157.170	5915.82	4902.04	-3590.94	4174.50	1755572.37	14603139.52	40°12'32.7137"N	80°35'15.1594"W	5506.48	130.702	0.59	0.58	0.11
11237.00	89.660	156.670	5916.90	4998.02	-3679.25	4212.13	1755609.99	14603051.24	40°12'31.8393"N	80°35'14.6797"W	5592.76	131.137	0.82	0.64	-0.52

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Robert Bone BRK 210H
Field	Brooke	API	47-009-00289-0000
Facility	Robert Bone BRK Pad	Wellbore	Robert Bone BRK 210H AWB
Slot	Slot 210H		

WELLPATH DATA (182 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]
1133.00	89.750	157.950	5917.40	5094.01	-3767.81	4249.16	1755647.01	14602962.71	40°12'30.9624"N	80°35'14.2077"W	5679.07	131.564	1.34	0.09	1.33
11428.00	89.720	157.960	5917.83	5189.01	-3855.87	4284.82	1755682.65	14602874.69	40°12'30.0906"N	80°35'13.7534"W	5764.32	131.984	0.03	-0.03	0.01
11524.00	89.110	157.000	5918.81	5285.00	-3944.54	4321.59	1755719.40	14602786.05	40°12'29.2127"N	80°35'13.2849"W	5851.11	132.388	1.18	-0.64	-1.00
11620.00	89.510	157.280	5919.97	5380.99	-4032.99	4358.88	1755756.68	14602697.63	40°12'28.3369"N	80°35'12.8095"W	5938.42	132.776	0.51	0.42	0.29
11717.00	89.660	157.690	5920.67	5477.99	-4122.60	4396.02	1755793.80	14602608.06	40°12'27.4497"N	80°35'12.3362"W	6026.67	133.162	0.45	0.15	0.42
11813.00	89.450	157.640	5921.42	5573.98	-4211.39	4432.50	1755830.27	14602519.30	40°12'26.5706"N	80°35'11.8713"W	6114.15	133.535	0.22	-0.22	-0.05
11909.00	89.540	158.920	5922.27	5669.97	-4300.57	4468.03	1755865.78	14602430.16	40°12'25.6877"N	80°35'11.4188"W	6201.46	133.906	1.34	0.09	1.33
12005.00	89.600	158.800	5922.99	5765.96	-4390.11	4502.65	1755900.39	14602340.66	40°12'24.8013"N	80°35'10.9780"W	6288.63	134.275	0.14	0.06	-0.12
12101.00	89.880	159.010	5923.42	5861.94	-4479.67	4537.20	1755934.93	14602251.12	40°12'23.9147"N	80°35'10.5381"W	6376.02	134.634	0.36	0.29	0.22
12197.00	89.940	159.230	5923.57	5957.91	-4569.37	4571.41	1755969.13	14602161.46	40°12'23.0267"N	80°35'10.1025"W	6463.51	134.987	0.24	0.06	0.23
12293.00	89.780	158.740	5923.81	6053.89	-4658.98	4605.84	1756003.54	14602071.88	40°12'22.1396"N	80°35'9.6642"W	6551.33	135.329	0.54	-0.17	-0.51
12389.00	89.660	158.590	5924.28	6149.88	-4748.40	4640.77	1756038.46	14601982.50	40°12'21.2543"N	80°35'9.2194"W	6639.58	135.657	0.20	-0.12	-0.16
12485.00	90.280	159.720	5924.33	6245.85	-4838.12	4674.93	1756072.60	14601892.82	40°12'20.3662"N	80°35'8.7845"W	6727.73	135.983	1.34	0.65	1.18
12581.00	89.260	159.410	5924.71	6341.80	-4928.07	4708.44	1756106.11	14601802.90	40°12'19.4757"N	80°35'8.3580"W	6815.82	136.306	1.11	-1.06	-0.32
12677.00	89.320	159.150	5925.90	6437.76	-5017.86	4742.41	1756140.06	14601713.15	40°12'18.5869"N	80°35'7.9257"W	6904.30	136.617	0.28	0.06	-0.27
12774.00	89.480	159.390	5926.92	6534.72	-5108.57	4776.74	1756174.38	14601622.47	40°12'17.6889"N	80°35'7.4886"W	6993.91	136.923	0.30	0.16	0.25
12870.00	89.540	158.810	5927.74	6630.70	-5198.25	4810.98	1756208.61	14601532.82	40°12'16.8011"N	80°35'7.0527"W	7082.90	137.216	0.61	0.06	-0.60
12966.00	89.540	159.180	5928.51	6726.67	-5287.87	4845.39	1756243.00	14601443.24	40°12'15.9140"N	80°35'6.6146"W	7172.13	137.500	0.39	0.00	0.39
13062.00	89.600	158.930	5929.23	6822.65	-5377.52	4879.71	1756277.31	14601353.62	40°12'15.0264"N	80°35'6.1777"W	7261.50	137.779	0.27	0.06	-0.26
13159.00	89.970	158.130	5929.59	6919.64	-5467.79	4915.21	1756312.80	14601263.39	40°12'14.1328"N	80°35'5.7256"W	7352.28	138.046	0.91	0.38	-0.82
13255.00	89.110	157.330	5930.36	7015.63	-5556.63	4951.59	1756349.16	14601174.59	40°12'13.2532"N	80°35'5.2621"W	7442.74	138.295	1.22	-0.90	-0.83
13351.00	89.660	157.390	5931.39	7111.62	-5645.22	4988.54	1756386.10	14601086.03	40°12'12.3760"N	80°35'4.7912"W	7533.53	138.534	0.58	0.57	0.06
13447.00	90.030	158.530	5931.65	7207.62	-5734.21	5024.57	1756422.11	14600997.08	40°12'11.4951"N	80°35'4.3323"W	7624.13	138.774	1.25	0.39	1.19
13543.00	88.800	157.930	5932.63	7303.61	-5823.35	5060.17	1756457.70	14600907.97	40°12'10.6125"N	80°35'3.8789"W	7714.71	139.011	1.43	-1.28	-0.62
13639.00	88.860	156.590	5934.59	7399.58	-5911.87	5097.27	1756494.78	14600819.48	40°12'9.7360"N	80°35'3.4061"W	7805.92	139.232	1.40	0.06	-1.40
13735.00	89.850	157.170	5935.67	7495.56	-6000.15	5134.96	1756532.46	14600731.23	40°12'8.8619"N	80°35'2.9256"W	7897.45	139.443	1.20	1.03	0.60
13831.00	89.290	158.560	5936.40	7591.56	-6089.07	5171.13	1756568.62	14600642.35	40°12'7.9815"N	80°35'2.4649"W	7988.58	139.660	1.56	-0.58	1.45
13927.00	89.880	158.140	5937.09	7687.55	-6178.30	5206.55	1756604.02	14600553.16	40°12'7.0982"N	80°35'2.0138"W	8079.57	139.879	0.75	0.61	-0.44
14024.00	89.690	159.050	5937.45	7784.54	-6268.61	5241.95	1756639.41	14600462.89	40°12'6.2041"N	80°35'1.5631"W	8171.50	140.097	0.96	-0.20	0.94
14120.00	88.620	156.920	5938.87	7880.52	-6357.59	5277.93	1756675.37	14600373.94	40°12'5.3231"N	80°35'1.1048"W	8262.90	140.301	2.48	-1.11	-2.22

Actual Wellpath Report

Robert Bone BRK 210H AWB Proj:17085
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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Robert Bone BRK 210H
Field	Brooke	API	47-009-00289-0000
Facility	Robert Bone BRK Pad	Wellbore	Robert Bone BRK 210H AWB
Slot	Slot 210H		

WELLPATH DATA (182 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]
14216.00	87.880	157.780	5941.80	7976.47	-6446.14	5314.88	1756712.31	14600285.42	40°12'4.4464"N	80°35'0.6339"W	8354.68	140.494	1.18	-0.77	0.90
14312.00	89.570	156.330	5943.94	8072.43	-6534.52	5352.29	1756749.71	14600197.08	40°12'3.5713"N	80°35'0.1571"W	8446.72	140.680	2.32	1.76	-1.51
14408.00	89.720	158.890	5944.53	8168.42	-6623.27	5388.86	1756786.26	14600108.36	40°12'2.6926"N	80°34'59.6912"W	8538.59	140.867	2.67	0.16	2.67
14504.00	88.180	158.330	5946.29	8264.39	-6712.64	5423.86	1756821.25	14600019.02	40°12'1.8076"N	80°34'59.2455"W	8630.06	141.062	1.71	-1.60	-0.58
14600.00	89.140	156.210	5948.54	8360.36	-6801.16	5460.94	1756858.32	14599930.54	40°12'0.9314"N	80°34'58.7730"W	8722.25	141.238	2.42	1.00	-2.21
14696.00	89.880	158.370	5949.36	8456.34	-6889.70	5498.00	1756895.36	14599842.03	40°12'0.0547"N	80°34'58.3008"W	8814.54	141.410	2.38	0.77	2.25
14792.00	89.200	158.330	5950.13	8552.34	-6978.93	5533.42	1756930.76	14599752.84	40°11'59.1713"N	80°34'57.8498"W	8906.41	141.590	0.71	-0.71	-0.04
14888.00	89.350	157.360	5951.34	8648.33	-7067.83	5569.62	1756966.95	14599663.97	40°11'58.2911"N	80°34'57.3887"W	8998.61	141.761	1.02	0.16	-1.01
14984.00	90.220	157.200	5951.70	8744.32	-7156.38	5606.70	1757004.01	14599575.45	40°11'57.4143"N	80°34'56.9162"W	9091.14	141.923	0.92	0.91	-0.17
15080.00	89.880	157.480	5951.62	8840.32	-7244.97	5643.68	1757040.98	14599486.90	40°11'56.5372"N	80°34'56.4450"W	9183.72	142.082	0.46	-0.35	0.29
15176.00	89.820	158.570	5951.87	8936.32	-7333.99	5679.60	1757076.89	14599397.91	40°11'55.6558"N	80°34'55.9874"W	9276.06	142.245	1.14	-0.06	1.14
15272.00	89.940	159.360	5952.07	9032.29	-7423.60	5714.06	1757111.33	14599308.34	40°11'54.7688"N	80°34'55.5488"W	9368.05	142.414	0.83	0.12	0.82
15368.00	88.920	158.150	5953.03	9128.27	-7513.06	5748.84	1757146.10	14599218.91	40°11'53.8830"N	80°34'55.1060"W	9460.20	142.578	1.65	-1.06	-1.26
15464.00	89.170	158.050	5954.63	9224.26	-7602.12	5784.65	1757181.89	14599129.88	40°11'53.0013"N	80°34'54.6500"W	9552.72	142.732	0.28	0.26	-0.10
15560.00	88.680	156.680	5956.43	9320.24	-7690.71	5821.59	1757218.82	14599041.33	40°11'52.1242"N	80°34'54.1794"W	9645.62	142.876	1.52	-0.51	-1.43
15656.00	89.660	157.670	5957.82	9416.22	-7779.18	5858.82	1757256.04	14598952.89	40°11'51.2482"N	80°34'53.7049"W	9738.66	143.015	1.45	1.02	1.03
15752.00	89.690	159.390	5958.36	9512.21	-7868.52	5893.96	1757291.16	14598863.59	40°11'50.3637"N	80°34'53.2576"W	9831.19	143.165	1.79	0.03	1.79
15848.00	89.510	158.390	5959.03	9608.18	-7958.07	5928.53	1757325.72	14598774.08	40°11'49.4772"N	80°34'52.8175"W	9923.63	143.315	1.06	-0.19	-1.04
15944.00	89.600	158.440	5959.78	9704.18	-8047.34	5963.85	1757361.02	14598684.85	40°11'48.5934"N	80°34'52.3678"W	10016.34	143.458	0.11	0.09	0.05
16040.00	88.710	158.440	5961.20	9800.16	-8136.61	5999.12	1757396.28	14598595.61	40°11'47.7096"N	80°34'51.9187"W	10109.10	143.599	0.93	-0.93	0.00
16136.00	89.570	158.320	5962.64	9896.14	-8225.84	6034.49	1757431.63	14598506.41	40°11'46.8261"N	80°34'51.4683"W	10201.94	143.736	0.90	0.90	-0.13
16233.00	89.880	159.290	5963.10	9993.12	-8316.28	6069.55	1757466.69	14598416.01	40°11'45.9308"N	80°34'51.0219"W	10295.63	143.877	1.05	0.32	1.00
16329.00	89.750	158.240	5963.41	10089.11	-8405.76	6104.32	1757501.45	14598326.56	40°11'45.0450"N	80°34'50.5793"W	10388.44	144.013	1.10	-0.14	-1.09
16425.00	89.320	157.710	5964.19	10185.11	-8494.75	6140.32	1757537.43	14598237.60	40°11'44.1639"N	80°34'50.1208"W	10481.62	144.139	0.71	-0.45	-0.56
16521.00	89.380	157.940	5965.28	10281.10	-8583.64	6176.56	1757573.65	14598148.74	40°11'43.2838"N	80°34'49.6594"W	10574.91	144.262	0.25	0.06	0.24
16617.00	89.480	157.550	5966.24	10377.09	-8672.49	6212.91	1757609.99	14598059.94	40°11'42.4041"N	80°34'49.1963"W	10668.29	144.382	0.42	0.10	-0.41
16713.00	89.880	157.860	5966.77	10473.09	-8761.31	6249.33	1757646.40	14597971.15	40°11'41.5247"N	80°34'48.7324"W	10761.72	144.500	0.53	0.42	0.32
16809.00	89.200	157.220	5967.54	10569.09	-8850.02	6286.01	1757683.06	14597882.47	40°11'40.6463"N	80°34'48.2652"W	10855.27	144.615	0.97	-0.71	-0.67
16906.00	89.110	157.710	5968.97	10666.07	-8939.61	6323.18	1757720.21	14597792.92	40°11'39.7593"N	80°34'47.7917"W	10949.85	144.727	0.51	-0.09	0.51
17002.00	89.230	157.660	5970.36	10762.06	-9028.41	6359.62	1757756.65	14597704.15	40°11'38.8801"N	80°34'47.3274"W	11043.41	144.839	0.14	0.12	-0.05



Actual Wellpath Report

Robert Bone BRK 210H AWB Proj:17085'

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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Robert Bone BRK 210H
Field	Brooke	API	47-009-00289-0000
Facility	Robert Bone BRK Pad	Wellbore	Robert Bone BRK 210H AWB
Slot	Slot 210H		

WELLPATH DATA (182 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]
17060.00	89.540	157.780	5970.99	10820.06	-9082.08	6381.61	1757778.63	14597650.51	40°11'38.3488"N	80°34'47.0474"W	11099.96	144.906	0.57	0.53	0.21
17085.00	89.540	157.780	5971.19	10845.06	-9105.22	6391.07	1757788.08	14597627.37	40°11'38.1196"N	80°34'46.9269"W	11124.33	144.935	0.00	0.00	0.00

HOLE & CASING SECTIONS - Ref Wellbore: Robert Bone BRK 210H AWB Ref Wellpath: Robert Bone BRK 210H AWB Proj:17085'

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	0.11
17.5in Open Hole	126.00	441.00	315.00	126.00	440.99	0.13	0.11	1.44	1.88
13.375in Casing Surface	26.00	421.00	395.00	26.00	420.99	0.00	0.00	1.36	1.79
12.25in Open Hole	441.00	1685.00	1244.00	440.99	1665.66	1.44	1.88	63.01	166.13
9.625in Casing Intermediate	26.00	1665.00	1639.00	26.00	1646.58	0.00	0.00	59.69	161.11
8.75in Open Hole	1685.00	4662.00	2977.00	1665.66	4293.21	63.01	166.13	619.74	1429.50
8.5in Open Hole	4662.00	17085.00	12423.00	4293.21	5971.19	619.74	1429.50	-9105.22	6391.07
5.5in Casing Production	26.00	17060.00	17034.00	26.00	5970.99	0.00	0.00	-9082.08	6381.61

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Robert Bone BRK 210H LP Rev-4	5874.00	352.70	2537.35	1753935.85	14607081.63	40°13'11.7588"N	80°35'36.0276"W	point
Robert Bone BRK 210H BHL Rev-4	5991.65	-9103.50	6396.83	1757793.84	14597629.09	40°11'38.1363"N	80°34'46.8525"W	point

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Robert Bone BRK 210H
Field	Brooke	API	47-009-00289-0000
Facility	Robert Bone BRK Pad	Wellbore	Robert Bone BRK 210H AWB
Slot	Slot 210H		

WELLPATH COMPOSITION - Ref Wellbore: Robert Bone BRK 210H AWB Ref Wellpath: Robert Bone BRK 210H AWB Proj:17085'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	365.00	OWSG MWD rev2 + HRGM	01 Premier MWD <17-1/2"> (163'-365')	Robert Bone BRK 210H AWB	7/8/2021
365.00	1599.00	OWSG MWD rev2 + HRGM	02 Premier MWD <12-1/4"> (444'-1599')	Robert Bone BRK 210H AWB	7/8/2021
1599.00	4594.00	OWSG MWD rev2 + HRGM	03 Premier MWD <8-3/4"> (1711'-4594')	Robert Bone BRK 210H AWB	7/8/2021
4594.00	17085.00	BH AutoTrak Curve/Xpress (2019) (HRGM, Short spacing)	04 BH AT Curve <8-1/2"> (4701'-17060')	Robert Bone BRK 210H AWB	9/9/2021

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Robert Bone BRK 210H
Field	Brooke	API	47-009-00289-0000
Facility	Robert Bone BRK Pad	Wellbore	Robert Bone BRK 210H AWB
Slot	Slot 210H		

COMMENTS

Wellpath general comments
API:47-009-00289
BH Job#: 110934641
Rig: SDC40
Duration: 09.09.2021-09.15.2021