



SWN PRODUCTION COMPANY, LLC



Location: Brooke County, WV
 Field: Brooke
 Facility: Samuel Jones BRK Pad

Slot: 10H
 Well: Samuel Jones BRK 10H
 Wellbore: Samuel Jones BRK 10H AWB

Plot reference wellpath is Samuel Jones BRK 10H awp Proj: 22201'	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: 1232.2 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: 10H): -1206.2 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: tranlam on 2023-07-25; Database: WA_MPL_EASTERNUS_Defn

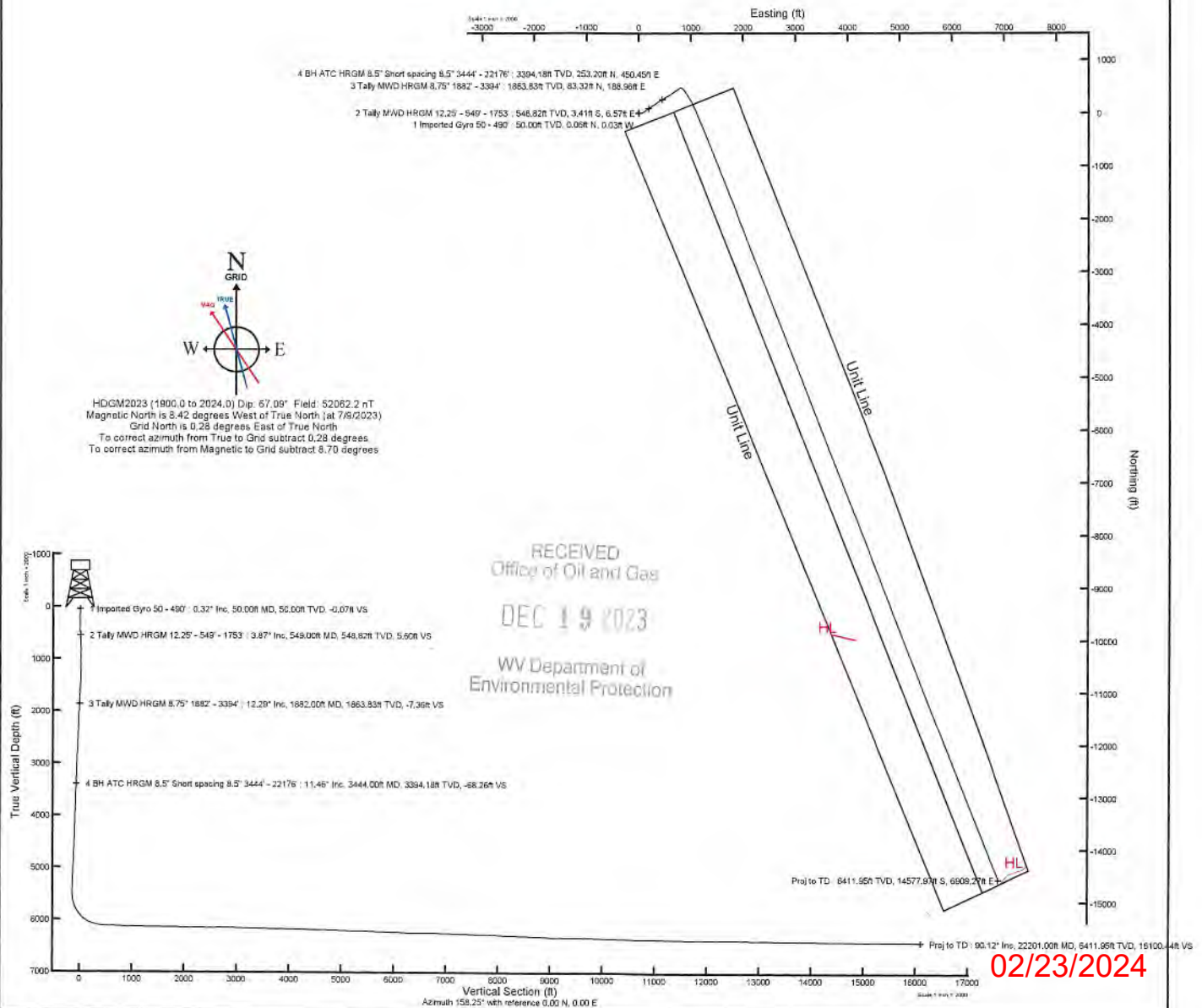
Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Samuel Jones BRK Pad			1762985.776	14596395.998	40°11'25.6980"N	80°33'40.0020"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
10H	1.90	27.84	1763013.610	14596397.900	40°11'25.7154"N	80°33'39.6431"W
SDC 40 (KB) to Ground level (At Slot: 10H)					26ft	
Mean Sea Level to Ground level (At Slot: 10H)					-1206.2ft	
SDC 40 (KB) to Mean Sea Level					1232.2ft	

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
22201.00	90.120	158.570	64111.95	-14577.97	6909.27	1769920.22	14581825.54	40°09'1.3106"N	80°32'11.5950"W

API: 47009003370000
BH JOB: 111880300
DURATION: 07.18.2023 to 07.22.2023
RIG: SDC 40



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 Environmental Protection

02/23/2024

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Samuel Jones BRK 10H
Field	Brooke	API	47009003370000
Facility	Samuel Jones BRK Pad	Wellbore	Samuel Jones BRK 10H AWB
Slot	10H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Tranlam
Scale	0.999617	Report Generated	7/25/2023 at 11:01:30 AM
Convergence at slot	0.28° 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	1.90	27.84	1763013.61	14596397.90	40°11'25.7154"N	80°33'39.6431"W
Facility Reference Pt			1762985.78	14596396.00	40°11'25.6980"N	80°33'40.0020"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	1232.20ft
Horizontal Reference Pt	Slot	SDC 40 (KB) to Mean Sea Level	1232.20ft
Vertical Reference Pt	SDC 40 (KB)	SDC 40 (KB) to Ground Level at Slot (10H)	26.00ft
MD Reference Pt	SDC 40 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	158.25°

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Field	Brooke		API	47009003370000
Facility	Samuel Jones BRK Pad		Wellbore	Samuel Jones BRK 10H AWB
Slot	10H			

WELLPATH DATA (252 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	335.880	0.00	0.00	0.00	0.00	1763013.61	14596397.90	40°11'25.7154"N	80°33'39.6431"W	0.00	0.000	0.00	
26.00	0.000	335.880	26.00	0.00	0.00	0.00	1763013.61	14596397.90	40°11'25.7154"N	80°33'39.6431"W	0.00	0.000	0.00	
50.00	0.320	335.880	50.00	-0.07	0.06	-0.03	1763013.58	14596397.96	40°11'25.7160"N	80°33'39.6434"W	0.07	335.880	1.33	
75.00	0.300	29.350	75.00	-0.18	0.18	-0.02	1763013.59	14596398.08	40°11'25.7172"N	80°33'39.6434"W	0.18	352.536	1.12	
100.00	0.350	27.220	100.00	-0.27	0.31	0.04	1763013.65	14596398.21	40°11'25.7185"N	80°33'39.6425"W	0.31	8.007	0.21	
125.00	0.260	23.170	125.00	-0.36	0.43	0.10	1763013.71	14596398.33	40°11'25.7197"N	80°33'39.6418"W	0.44	13.235	0.37	
150.00	0.180	32.000	150.00	-0.42	0.51	0.14	1763013.75	14596398.41	40°11'25.7205"N	80°33'39.6412"W	0.53	15.650	0.35	
175.00	0.270	9.800	175.00	-0.50	0.60	0.17	1763013.78	14596398.50	40°11'25.7214"N	80°33'39.6408"W	0.63	16.110	0.49	
200.00	0.380	336.820	200.00	-0.63	0.74	0.15	1763013.76	14596398.64	40°11'25.7227"N	80°33'39.6411"W	0.75	11.621	0.85	
225.00	0.320	332.360	225.00	-0.78	0.88	0.09	1763013.70	14596398.78	40°11'25.7241"N	80°33'39.6419"W	0.88	5.655	0.26	
250.00	0.150	345.510	250.00	-0.88	0.97	0.05	1763013.66	14596398.87	40°11'25.7250"N	80°33'39.6424"W	0.97	2.727	0.71	
270.00	0.110	6.320	270.00	-0.93	1.01	0.04	1763013.65	14596398.91	40°11'25.7255"N	80°33'39.6425"W	1.01	2.357	0.31	
300.00	0.190	10.430	300.00	-0.99	1.09	0.05	1763013.66	14596398.99	40°11'25.7262"N	80°33'39.6423"W	1.09	2.828	0.27	
325.00	0.180	27.850	325.00	-1.05	1.17	0.08	1763013.69	14596399.07	40°11'25.7270"N	80°33'39.6420"W	1.17	3.910	0.23	
350.00	0.520	110.560	350.00	-1.00	1.16	0.20	1763013.81	14596399.06	40°11'25.7269"N	80°33'39.6404"W	1.18	9.974	2.11	
375.00	1.310	114.390	374.99	-0.72	1.00	0.57	1763014.18	14596398.90	40°11'25.7253"N	80°33'39.6357"W	1.15	29.619	3.17	
399.00	1.520	116.970	398.99	-0.28	0.75	1.10	1763014.71	14596398.65	40°11'25.7228"N	80°33'39.6288"W	1.33	55.946	0.91	
425.00	1.860	116.890	424.97	0.29	0.40	1.79	1763015.40	14596398.30	40°11'25.7193"N	80°33'39.6200"W	1.83	77.415	1.31	
450.00	2.190	124.240	449.96	0.99	-0.05	2.54	1763016.15	14596397.85	40°11'25.7148"N	80°33'39.6103"W	2.55	91.195	1.68	
475.00	2.620	127.980	474.94	1.88	-0.67	3.39	1763017.00	14596397.23	40°11'25.7086"N	80°33'39.5994"W	3.46	101.236	1.83	
490.00	2.890	129.370	489.92	2.51	-1.12	3.95	1763017.56	14596396.78	40°11'25.7041"N	80°33'39.5922"W	4.11	105.878	1.85	
549.00	3.870	132.330	548.82	5.60	-3.41	6.57	1763020.18	14596394.49	40°11'25.6814"N	80°33'39.5586"W	7.41	117.405	1.69	
594.00	4.480	134.160	593.70	8.57	-5.66	8.96	1763022.56	14596392.25	40°11'25.6591"N	80°33'39.5280"W	10.59	122.266	1.39	
685.00	4.850	113.090	684.40	14.53	-9.64	15.05	1763028.65	14596388.26	40°11'25.6194"N	80°33'39.4498"W	17.87	122.648	1.91	
775.00	5.830	88.050	774.02	18.76	-10.98	23.12	1763036.72	14596386.93	40°11'25.6058"N	80°33'39.3459"W	25.59	115.402	2.78	
866.00	7.070	70.290	864.45	20.53	-8.93	33.01	1763046.61	14596388.97	40°11'25.6256"N	80°33'39.2183"W	34.20	105.140	2.57	
956.00	8.990	65.080	953.57	20.34	-4.10	44.60	1763058.19	14596393.80	40°11'25.6727"N	80°33'39.0686"W	44.79	95.252	2.28	
1046.00	9.980	68.750	1042.34	20.01	1.69	58.25	1763071.83	14596399.59	40°11'25.7293"N	80°33'38.8924"W	58.27	88.338	1.29	
1137.00	9.900	70.890	1131.97	20.44	7.11	72.99	1763086.57	14596405.01	40°11'25.7821"N	80°33'38.7022"W	73.33	84.437	0.42	
1227.00	10.380	63.930	1220.57	20.19	13.21	87.58	1763101.16	14596411.10	40°11'25.8417"N	80°33'38.5137"W	88.57	81.426	1.46	

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Field	Brooke	API	47009003370000
Facility	Samuel Jones BRK Pad	Wellbore	Samuel Jones BRK 10H AWB
Slot	10H		

WELLPATH DATA (252 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
1318.00	11.170	56.740	1309.97	17.81	21.64	102.32	1763115.89	14596419.53	40°11'25.9243"N	80°33'38.3233"W	104.58	78.057	1.71	
1409.00	10.970	54.740	1399.27	14.03	31.48	116.76	1763130.32	14596429.36	40°11'26.0208"N	80°33'38.1366"W	120.93	74.913	0.48	
1499.00	10.660	55.340	1487.68	10.17	41.15	130.60	1763144.16	14596439.04	40°11'26.1157"N	80°33'37.9577"W	136.93	72.510	0.37	
1590.00	10.510	55.820	1577.13	6.50	50.60	144.39	1763157.94	14596448.48	40°11'26.2084"N	80°33'37.7794"W	153.00	70.686	0.19	
1680.00	10.310	54.730	1665.65	2.85	59.86	157.75	1763171.30	14596457.74	40°11'26.2993"N	80°33'37.6066"W	168.73	69.219	0.31	
1753.00	10.720	53.820	1737.42	-0.36	67.64	168.57	1763182.11	14596465.52	40°11'26.3756"N	80°33'37.4667"W	181.63	68.135	0.61	
1882.00	12.290	51.280	1863.83	-7.36	83.32	188.96	1763202.50	14596481.18	40°11'26.5295"N	80°33'37.2029"W	206.52	66.207	1.28	
1974.00	12.260	57.010	1953.73	-12.12	94.76	204.80	1763218.33	14596492.62	40°11'26.6418"N	80°33'36.9982"W	225.66	65.170	1.32	
2064.00	11.200	59.460	2041.85	-15.32	104.40	220.34	1763233.87	14596502.26	40°11'26.7364"N	80°33'36.7973"W	243.82	64.647	1.30	
2155.00	9.590	56.860	2131.35	-18.17	113.04	234.30	1763247.82	14596510.90	40°11'26.8210"N	80°33'36.6168"W	260.14	64.245	1.84	
2246.00	10.520	53.750	2220.95	-21.75	122.10	247.35	1763260.86	14596519.95	40°11'26.9099"N	80°33'36.4481"W	275.84	63.728	1.18	
2336.00	11.410	58.210	2309.31	-25.36	131.64	261.54	1763275.05	14596529.49	40°11'27.0035"N	80°33'36.2646"W	292.80	63.282	1.37	
2428.00	11.720	58.830	2399.44	-28.47	141.27	277.27	1763290.77	14596539.12	40°11'27.0979"N	80°33'36.0613"W	311.19	63.000	0.36	
2522.00	12.230	56.820	2491.40	-32.01	151.66	293.77	1763307.27	14596549.51	40°11'27.1998"N	80°33'35.8480"W	330.61	62.694	0.70	
2614.00	11.110	56.960	2581.49	-35.67	161.83	309.36	1763322.85	14596559.67	40°11'27.2995"N	80°33'35.6466"W	349.13	62.385	1.22	
2704.00	10.640	54.960	2669.88	-39.28	171.33	323.43	1763336.92	14596569.16	40°11'27.3927"N	80°33'35.4646"W	366.01	62.089	0.67	
2794.00	10.400	50.600	2758.36	-43.66	181.26	336.51	1763349.99	14596579.09	40°11'27.4901"N	80°33'35.2954"W	382.22	61.692	0.92	
2884.00	11.660	52.210	2846.70	-48.63	191.99	349.98	1763363.45	14596589.81	40°11'27.5955"N	80°33'35.1213"W	399.18	61.252	1.44	
2975.00	12.440	59.270	2935.70	-52.70	202.63	365.67	1763379.14	14596600.45	40°11'27.6999"N	80°33'34.9184"W	418.06	61.008	1.83	
3067.00	12.540	59.180	3025.52	-55.83	212.81	382.76	1763396.22	14596610.63	40°11'27.7997"N	80°33'34.6975"W	437.95	60.926	0.11	
3157.00	12.260	57.270	3113.42	-59.19	222.99	399.19	1763412.65	14596620.80	40°11'27.8994"N	80°33'34.4851"W	457.25	60.812	0.55	
3248.00	12.090	60.520	3202.38	-62.31	232.90	415.61	1763429.06	14596630.71	40°11'27.9966"N	80°33'34.2729"W	476.42	60.735	0.78	
3338.00	11.940	60.940	3290.41	-64.77	242.06	431.96	1763445.40	14596639.87	40°11'28.0863"N	80°33'34.0617"W	495.16	60.734	0.19	
3394.00	11.800	58.400	3345.21	-66.48	247.88	441.90	1763455.34	14596645.68	40°11'28.1433"N	80°33'33.9332"W	506.67	60.710	0.97	
3444.00	11.460	57.770	3394.18	-68.26	253.20	450.45	1763463.89	14596651.01	40°11'28.1955"N	80°33'33.8226"W	516.74	60.659	0.73	
3537.00	11.210	59.260	3485.37	-71.35	262.75	466.04	1763479.47	14596660.55	40°11'28.2891"N	80°33'33.6212"W	535.01	60.586	0.41	
3627.00	11.100	59.650	3573.67	-74.02	271.60	481.03	1763494.46	14596669.40	40°11'28.3758"N	80°33'33.4274"W	552.41	60.550	0.15	
3718.00	11.210	59.700	3662.95	-76.64	280.49	496.23	1763509.65	14596678.28	40°11'28.4629"N	80°33'33.2310"W	570.02	60.523	0.12	
3810.00	11.150	60.340	3753.20	-79.19	289.40	511.68	1763525.09	14596687.19	40°11'28.5502"N	80°33'33.0314"W	587.85	60.508	0.15	
3900.00	11.210	59.690	3841.49	-81.69	298.13	526.80	1763540.20	14596695.91	40°11'28.6357"N	80°33'32.8361"W	605.30	60.493	0.16	

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Field	Brooke	API	47009003370000
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Slot	10H		

WELLPATH DATA (252 stations)

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3991.00	11.090	60.080	3930.78	-84.25	306.95	542.02	1763555.42	14596704.74	40°11'28.7222"N	80°33'32.6394"W	622.90	60.476	0.16	
4083.00	11.100	60.350	4021.06	-86.73	315.75	557.38	1763570.78	14596713.53	40°11'28.8083"N	80°33'32.4408"W	640.60	60.469	0.06	
4173.00	11.020	59.660	4109.39	-89.20	324.38	572.34	1763585.72	14596722.16	40°11'28.8929"N	80°33'32.2476"W	657.87	60.457	0.17	
4264.00	11.040	59.750	4198.71	-91.79	333.16	587.37	1763600.75	14596730.93	40°11'28.9789"N	80°33'32.0533"W	675.28	60.438	0.03	
4354.00	10.910	60.180	4287.06	-94.26	341.74	602.20	1763615.58	14596739.51	40°11'29.0630"N	80°33'31.8616"W	692.41	60.426	0.17	
4446.00	10.950	56.010	4377.39	-97.34	350.95	617.00	1763630.37	14596748.72	40°11'29.1533"N	80°33'31.6704"W	709.83	60.368	0.86	
4537.00	10.970	56.440	4466.73	-100.94	360.57	631.38	1763644.75	14596758.33	40°11'29.2476"N	80°33'31.4844"W	727.09	60.270	0.09	
4627.00	10.840	55.770	4555.11	-104.52	370.07	645.51	1763658.88	14596767.82	40°11'29.3408"N	80°33'31.3017"W	744.07	60.175	0.20	
4717.00	11.040	56.520	4643.47	-108.10	379.58	659.70	1763673.05	14596777.33	40°11'29.4341"N	80°33'31.1183"W	761.11	60.085	0.27	
4808.00	11.020	55.840	4732.79	-111.74	389.27	674.16	1763687.51	14596787.02	40°11'29.5291"N	80°33'30.9313"W	778.48	59.997	0.14	
4900.00	10.750	56.510	4823.13	-115.38	398.94	688.59	1763701.94	14596796.69	40°11'29.6240"N	80°33'30.7447"W	795.81	59.914	0.32	
4991.00	10.620	56.670	4912.56	-118.79	408.23	702.68	1763716.02	14596805.98	40°11'29.7151"N	80°33'30.5627"W	812.66	59.845	0.15	
5083.00	10.550	56.330	5002.99	-122.23	417.56	716.77	1763730.11	14596815.30	40°11'29.8066"N	80°33'30.3805"W	829.53	59.777	0.10	
5173.00	10.170	56.750	5091.52	-125.52	426.49	730.27	1763743.60	14596824.22	40°11'29.8941"N	80°33'30.2059"W	845.69	59.715	0.43	
5264.00	10.740	56.100	5181.01	-128.90	435.82	744.03	1763757.35	14596833.35	40°11'29.9837"N	80°33'30.0281"W	862.17	59.652	0.64	
5354.00	10.620	56.310	5269.45	-132.38	444.90	757.89	1763771.21	14596842.63	40°11'30.0747"N	80°33'29.8489"W	878.82	59.586	0.14	
5445.00	10.480	56.410	5358.92	-135.82	454.13	771.76	1763785.07	14596851.85	40°11'30.1652"N	80°33'29.6696"W	895.46	59.526	0.16	
5536.00	10.750	56.420	5448.36	-139.25	463.40	785.73	1763799.03	14596861.12	40°11'30.2562"N	80°33'29.4890"W	912.20	59.469	0.30	
5627.00	11.250	85.430	5537.75	-138.37	468.81	801.66	1763814.96	14596866.52	40°11'30.3088"N	80°33'29.2834"W	928.67	59.681	6.04	
5728.00	16.150	116.020	5635.97	-125.03	463.42	824.14	1763837.44	14596861.14	40°11'30.2545"N	80°33'28.9940"W	945.50	60.651	8.50	
5824.00	21.750	132.990	5726.80	-99.02	445.40	849.19	1763862.47	14596843.13	40°11'30.0752"N	80°33'28.6724"W	958.91	62.323	8.13	
5920.00	29.940	141.780	5813.16	-59.88	414.39	877.08	1763890.35	14596812.13	40°11'29.7674"N	80°33'28.3150"W	970.05	64.711	9.40	
6017.00	39.020	144.790	5893.04	-6.86	370.33	909.73	1763922.99	14596768.09	40°11'29.3304"N	80°33'27.8971"W	982.22	67.850	9.52	
6114.00	47.300	149.360	5963.75	58.18	314.60	945.57	1763958.82	14596712.38	40°11'28.7779"N	80°33'27.4388"W	996.54	71.597	9.12	
6210.00	57.960	149.650	6021.94	133.48	248.95	984.22	1763997.45	14596646.75	40°11'28.1273"N	80°33'26.9450"W	1015.22	75.805	11.11	
6307.00	67.690	152.130	6066.19	218.96	173.62	1026.08	1764039.29	14596571.45	40°11'27.3808"N	80°33'26.4106"W	1040.66	80.396	10.28	
6403.00	77.120	156.150	6095.19	310.12	91.35	1065.86	1764079.06	14596489.21	40°11'26.5658"N	80°33'25.9032"W	1069.77	85.102	10.60	
6500.00	81.160	154.980	6113.46	405.25	4.64	1105.26	1764118.45	14596402.54	40°11'25.7070"N	80°33'25.4011"W	1105.27	89.759	4.33	
6597.00	87.320	157.040	6123.19	501.64	-83.49	1144.47	1764157.64	14596314.44	40°11'24.8342"N	80°33'24.9015"W	1147.52	94.172	6.69	
6693.00	88.680	157.560	6126.54	597.57	-172.00	1181.50	1764194.65	14596225.97	40°11'23.9578"N	80°33'24.4301"W	1193.95	98.283	1.52	

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Samuel Jones BRK 10H
Field	Brooke	API	47009003370000
Facility	Samuel Jones BRK Pad	Wellbore	Samuel Jones BRK 10H AWB
Slot	10H		

WELLPATH DATA (252 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
6790.00	88.580	157.550	6128.86	694.53	-261.62	1218.52	1764231.66	14596136.38	40°11'23.0703"N	80°33'23.9589"W	1246.29	102.118	0.10	
6886.00	87.880	157.540	6131.83	790.48	-350.30	1255.17	1764268.30	14596047.73	40°11'22.1922"N	80°33'23.4923"W	1303.14	105.594	0.73	
6983.00	89.170	156.970	6134.32	887.43	-439.73	1292.66	1764305.77	14595958.34	40°11'21.3066"N	80°33'23.0150"W	1365.41	108.787	1.45	
7079.00	87.480	158.060	6137.13	983.37	-528.39	1329.36	1764342.46	14595869.72	40°11'20.4287"N	80°33'22.5479"W	1430.52	111.677	2.09	
7176.00	89.200	157.440	6139.94	1080.33	-618.12	1366.07	1764379.15	14595780.02	40°11'19.5401"N	80°33'22.0806"W	1499.41	114.346	1.88	
7272.00	89.110	158.820	6141.36	1176.31	-707.20	1401.83	1764414.90	14595690.97	40°11'18.6581"N	80°33'21.6256"W	1570.11	116.770	1.44	
7369.00	88.460	158.780	6143.41	1273.29	-797.62	1436.90	1764449.95	14595600.59	40°11'17.7629"N	80°33'21.1796"W	1643.43	119.035	0.67	
7466.00	90.150	156.240	6144.59	1370.26	-887.22	1473.99	1764487.04	14595511.02	40°11'16.8756"N	80°33'20.7074"W	1720.41	121.044	3.14	
7562.00	88.250	157.760	6145.93	1466.22	-975.57	1511.50	1764524.53	14595422.70	40°11'16.0006"N	80°33'20.2298"W	1798.99	122.840	2.53	
7659.00	89.570	161.250	6147.77	1563.16	-1066.40	1545.45	1764558.46	14595331.91	40°11'15.1014"N	80°33'19.7983"W	1877.66	124.607	3.85	
7755.00	91.660	156.590	6146.74	1659.12	-1155.94	1579.96	1764592.96	14595242.40	40°11'14.2149"N	80°33'19.3593"W	1957.67	126.190	5.32	
7852.00	88.150	156.770	6146.90	1756.07	-1245.01	1618.35	1764631.34	14595153.37	40°11'13.3329"N	80°33'18.8704"W	2041.84	127.571	3.62	
7948.00	89.600	159.040	6148.79	1852.04	-1333.93	1654.45	1764667.43	14595064.48	40°11'12.4523"N	80°33'18.4110"W	2125.23	128.878	2.81	
8045.00	88.520	157.860	6150.38	1949.02	-1424.13	1690.08	1764703.04	14594974.31	40°11'11.5592"N	80°33'17.9578"W	2210.09	130.119	1.65	
8141.00	89.050	159.350	6152.42	2044.99	-1513.50	1725.09	1764738.03	14594884.99	40°11'10.6744"N	80°33'17.5125"W	2294.91	131.262	1.65	
8238.00	87.880	156.660	6155.02	2141.95	-1603.39	1761.40	1764774.33	14594795.12	40°11'9.7842"N	80°33'17.0505"W	2381.89	132.311	3.02	
8334.00	90.250	157.650	6156.58	2237.91	-1691.84	1798.66	1764811.58	14594706.71	40°11'8.9083"N	80°33'16.5761"W	2469.32	133.247	2.68	
8431.00	89.600	159.060	6156.71	2334.91	-1782.00	1834.44	1764847.34	14594616.58	40°11'8.0156"N	80°33'16.1209"W	2557.48	134.169	1.60	
8527.00	86.640	158.510	6159.86	2430.84	-1871.44	1869.16	1764882.05	14594527.18	40°11'7.1301"N	80°33'15.6794"W	2645.00	135.035	3.14	
8624.00	90.620	162.070	6162.18	2527.71	-1962.70	1901.85	1764914.72	14594435.96	40°11'6.2267"N	80°33'15.2641"W	2732.98	135.902	5.50	
8720.00	94.440	158.780	6157.94	2623.52	-2053.03	1933.96	1764946.83	14594345.66	40°11'5.3324"N	80°33'14.8561"W	2820.49	136.711	5.25	
8817.00	88.920	155.920	6155.10	2720.42	-2142.47	1971.29	1764984.14	14594256.26	40°11'4.4468"N	80°33'14.3810"W	2911.38	137.383	6.41	
8913.00	89.450	158.350	6156.46	2816.38	-2230.91	2008.58	1765021.42	14594167.85	40°11'3.5710"N	80°33'13.9062"W	3001.89	138.002	2.59	
9010.00	88.950	157.800	6157.82	2913.37	-2320.88	2044.80	1765057.62	14594077.91	40°11'2.6800"N	80°33'13.4455"W	3093.17	138.619	0.77	
9107.00	88.610	158.630	6159.88	3010.35	-2410.93	2080.79	1765093.60	14593987.89	40°11'1.7884"N	80°33'12.9876"W	3184.70	139.204	0.92	
9204.00	88.710	158.270	6162.15	3107.32	-2501.13	2116.41	1765129.20	14593897.73	40°11'0.8953"N	80°33'12.5345"W	3276.40	139.763	0.39	
9300.00	89.540	159.400	6163.62	3203.30	-2590.64	2151.06	1765163.85	14593808.26	40°11'0.0090"N	80°33'12.0938"W	3367.27	140.296	1.46	
9397.00	88.030	158.080	6165.67	3300.27	-2681.01	2186.23	1765199.00	14593717.92	40°10'59.1142"N	80°33'11.6466"W	3459.40	140.805	2.07	
9494.00	88.610	158.200	6168.52	3397.23	-2771.00	2222.33	1765235.08	14593627.97	40°10'58.2232"N	80°33'11.1873"W	3552.07	141.271	0.61	
9590.00	89.290	157.800	6170.28	3493.21	-2859.99	2258.28	1765271.03	14593539.01	40°10'57.3420"N	80°33'10.7299"W	3644.09	141.705	0.82	

REFERENCE WELLPATH IDENTIFICATION				
Operator	SWN PRODUCTION COMPANY, LLC		Well	Samuel Jones BRK 10H
Field	Brooke		API	47009003370000
Facility	Samuel Jones BRK Pad		Wellbore	Samuel Jones BRK 10H AWB
Slot	10H			

WELLPATH DATA (252 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
9687.00	88.520	158.380	6172.13	3590.19	-2949.97	2294.47	1765307.20	14593449.06	40°10'56.4511"N	80°33'10.2694"W	3737.24	142.124	0.99	
9783.00	89.350	158.100	6173.91	3686.18	-3039.11	2330.06	1765342.77	14593359.96	40°10'55.5684"N	80°33'9.8168"W	3829.54	142.523	0.91	
9880.00	88.340	157.880	6175.87	3783.16	-3129.02	2366.40	1765379.10	14593270.08	40°10'54.6781"N	80°33'9.3544"W	3923.09	142.901	1.07	
9977.00	88.740	157.660	6178.34	3880.12	-3218.79	2403.09	1765415.77	14593180.35	40°10'53.7893"N	80°33'8.8876"W	4016.89	143.256	0.47	
10073.00	88.000	158.560	6181.07	3976.08	-3307.83	2438.86	1765451.53	14593091.35	40°10'52.8076"N	80°33'8.4324"W	4109.72	143.599	1.21	
10169.00	89.020	158.880	6183.57	4072.04	-3397.25	2473.69	1765486.35	14593001.96	40°10'52.0222"N	80°33'7.9895"W	4202.43	143.940	1.11	
10266.00	89.540	158.400	6184.79	4169.03	-3487.58	2509.02	1765521.66	14592911.66	40°10'51.1278"N	80°33'7.5402"W	4296.32	144.268	0.73	
10362.00	88.800	158.270	6186.18	4265.02	-3576.79	2544.45	1765557.09	14592822.49	40°10'50.2445"N	80°33'7.0895"W	4389.49	144.573	0.78	
10459.00	87.750	158.170	6189.10	4361.98	-3666.82	2580.43	1765593.05	14592732.49	40°10'49.3530"N	80°33'6.6318"W	4483.77	144.865	1.09	
10555.00	89.020	158.660	6191.80	4457.93	-3756.05	2615.73	1765628.33	14592643.29	40°10'48.4695"N	80°33'6.1828"W	4577.11	145.146	1.42	
10652.00	89.970	158.640	6192.66	4554.93	-3846.39	2651.04	1765663.63	14592552.99	40°10'47.5750"N	80°33'5.7338"W	4671.48	145.424	0.98	
10748.00	89.080	158.350	6193.45	4650.92	-3935.70	2686.23	1765698.81	14592463.71	40°10'46.6906"N	80°33'5.2862"W	4765.04	145.685	0.98	
10845.00	87.910	157.730	6196.00	4747.89	-4025.63	2722.49	1765735.06	14592373.82	40°10'45.8002"N	80°33'4.8249"W	4859.80	145.930	1.36	
10942.00	87.540	158.530	6199.85	4844.81	-4115.58	2758.60	1765771.15	14592283.90	40°10'44.9095"N	80°33'4.3656"W	4954.58	146.167	0.91	
11038.00	86.740	158.100	6204.64	4940.69	-4204.67	2794.03	1765806.66	14592194.84	40°10'44.0273"N	80°33'3.9150"W	5048.35	146.396	0.95	
11135.00	89.450	158.380	6207.87	5037.62	-4294.70	2829.96	1765842.48	14592104.85	40°10'43.1359"N	80°33'3.4579"W	5143.26	146.617	2.81	
11231.00	88.620	159.020	6209.48	5133.61	-4384.13	2864.83	1765877.34	14592015.46	40°10'42.2504"N	80°33'3.0145"W	5237.16	146.837	1.09	
11328.00	88.370	156.100	6212.03	5230.56	-4473.75	2901.84	1765914.33	14591925.88	40°10'41.3630"N	80°33'2.5436"W	5332.45	147.031	3.02	
11424.00	90.220	159.810	6213.21	5326.53	-4562.70	2937.86	1765950.34	14591836.95	40°10'40.4821"N	80°33'2.0853"W	5426.72	147.223	4.32	
11520.00	87.780	157.490	6214.89	5422.50	-4652.09	2972.80	1765985.26	14591747.60	40°10'39.5971"N	80°33'1.6410"W	5520.82	147.420	3.51	
11617.00	87.480	158.280	6218.90	5519.41	-4741.87	3009.28	1766021.74	14591657.85	40°10'38.7080"N	80°33'1.1769"W	5616.15	147.600	0.87	
11713.00	87.140	158.750	6223.40	5615.30	-4831.10	3044.41	1766056.84	14591568.66	40°10'37.8245"N	80°33'0.7302"W	5710.34	147.782	0.60	
11810.00	87.080	158.900	6228.29	5712.17	-4921.44	3079.40	1766091.82	14591478.35	40°10'36.9301"N	80°33'0.2853"W	5805.45	147.965	0.17	
11907.00	88.210	157.330	6232.28	5809.09	-5011.37	3115.52	1766127.94	14591388.46	40°10'36.0396"N	80°32'59.8258"W	5900.87	148.131	1.99	
12003.00	88.680	159.190	6234.89	5905.05	-5100.60	3151.07	1766163.46	14591299.36	40°10'35.1570"N	80°32'59.3737"W	5995.36	148.292	2.00	
12100.00	87.690	158.260	6237.96	6001.99	-5190.85	3186.24	1766198.63	14591209.05	40°10'34.2625"N	80°32'58.9264"W	6090.73	148.458	1.40	
12197.00	88.310	158.490	6241.34	6098.93	-5280.96	3221.97	1766234.34	14591118.97	40°10'33.3701"N	80°32'58.4721"W	6186.25	148.612	0.68	
12293.00	87.970	158.510	6244.46	6194.88	-5370.24	3257.14	1766269.49	14591029.73	40°10'32.4862"N	80°32'58.0249"W	6280.79	148.763	0.35	
12390.00	88.580	158.520	6247.38	6291.84	-5460.45	3292.65	1766304.99	14590939.55	40°10'31.5929"N	80°32'57.5733"W	6376.37	148.910	0.63	
12487.00	89.290	158.880	6249.18	6388.82	-5550.81	3327.87	1766340.20	14590849.22	40°10'30.6982"N	80°32'57.1254"W	6471.96	149.056	0.82	

REFERENCE WELLPATH IDENTIFICATION				
Operator	SWN PRODUCTION COMPANY, LLC		Well	Samuel Jones BRK 10H
Field	Brooke		API	47009003370000
Facility	Samuel Jones BRK Pad		Wellbore	Samuel Jones BRK 10H AWB
Slot	10H			

WELLPATH DATA (252 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
12583.00	89.910	157.920	6249.85	6484.81	-5640.07	3363.21	1766375.53	14590760.00	40°10'29.8144"N	80°32'56.6760"W	6566.70	149.192	1.19	
12680.00	90.740	158.260	6249.30	6581.81	-5730.06	3399.41	1766411.71	14590670.05	40°10'28.9233"N	80°32'56.2156"W	6662.55	149.321	0.92	
12776.00	89.200	159.980	6249.35	6677.79	-5819.75	3433.62	1766445.91	14590580.39	40°10'28.0353"N	80°32'55.7807"W	6757.16	149.460	2.40	
12873.00	87.780	158.470	6251.91	6774.74	-5910.40	3468.01	1766480.29	14590489.77	40°10'27.1377"N	80°32'55.3436"W	6852.74	149.597	2.14	
12969.00	88.490	158.650	6255.03	6870.69	-5999.71	3503.08	1766515.35	14590400.50	40°10'25.2534"N	80°32'54.8977"W	6947.53	149.720	0.76	
13066.00	88.180	158.140	6257.85	6967.64	-6089.86	3538.79	1766551.03	14590310.38	40°10'25.3608"N	80°32'54.4437"W	7043.39	149.839	0.62	
13163.00	88.120	158.920	6260.98	7064.59	-6180.08	3574.27	1766586.50	14590220.20	40°10'24.4675"N	80°32'53.9925"W	7139.24	149.957	0.81	
13259.00	87.970	158.340	6264.26	7160.53	-6269.43	3609.23	1766621.45	14590130.88	40°10'23.5828"N	80°32'53.5479"W	7234.11	150.072	0.62	
13356.00	88.030	158.480	6267.64	7257.47	-6359.57	3644.90	1766657.11	14590040.78	40°10'22.6903"N	80°32'53.0943"W	7330.04	150.181	0.16	
13452.00	88.550	157.790	6270.51	7353.43	-6448.62	3680.64	1766692.83	14589951.76	40°10'21.8084"N	80°32'52.6398"W	7425.08	150.284	0.90	
13549.00	88.370	158.380	6273.12	7450.39	-6538.58	3716.83	1766729.01	14589861.84	40°10'20.9177"N	80°32'52.1795"W	7521.16	150.384	0.64	
13646.00	88.800	158.100	6275.51	7547.36	-6628.64	3752.78	1766764.94	14589771.81	40°10'20.0259"N	80°32'51.7223"W	7617.23	150.484	0.53	
13742.00	88.250	158.250	6277.98	7643.33	-6717.73	3788.45	1766800.61	14589682.76	40°10'19.1437"N	80°32'51.2686"W	7712.35	150.579	0.59	
13838.00	88.400	158.480	6280.79	7739.29	-6806.93	3823.83	1766835.97	14589593.59	40°10'18.2605"N	80°32'50.8187"W	7807.43	150.675	0.29	
13935.00	87.940	158.250	6283.89	7836.24	-6897.05	3859.58	1766871.70	14589503.51	40°10'17.3681"N	80°32'50.3642"W	7903.52	150.769	0.53	
14031.00	88.120	158.270	6287.19	7932.18	-6986.17	3895.12	1766907.23	14589414.42	40°10'16.4857"N	80°32'49.9122"W	7998.65	150.858	0.19	
14128.00	88.150	158.590	6290.34	8029.13	-7076.33	3930.76	1766942.85	14589324.30	40°10'15.5929"N	80°32'49.4590"W	8094.77	150.949	0.33	
14225.00	87.850	158.610	6293.73	8126.07	-7166.58	3966.13	1766978.21	14589234.07	40°10'14.6992"N	80°32'49.0093"W	8190.85	151.039	0.31	
14321.00	88.210	158.390	6297.03	8222.01	-7255.85	4001.29	1767013.36	14589144.84	40°10'13.8153"N	80°32'48.5622"W	8285.99	151.125	0.44	
14417.00	87.630	157.950	6300.51	8317.95	-7344.91	4036.97	1767049.02	14589055.82	40°10'12.9335"N	80°32'48.1085"W	8381.21	151.208	0.76	
14514.00	88.180	157.880	6304.06	8414.88	-7434.73	4073.41	1767085.45	14588966.03	40°10'12.0440"N	80°32'47.6450"W	8477.49	151.282	0.57	
14610.00	88.180	158.120	6307.11	8510.83	-7523.69	4109.36	1767121.38	14588877.10	40°10'11.1631"N	80°32'47.1878"W	8572.79	151.357	0.25	
14707.00	88.000	158.040	6310.34	8607.78	-7613.63	4145.55	1767157.56	14588787.20	40°10'10.2725"N	80°32'46.7275"W	8669.08	151.432	0.20	
14803.00	88.340	158.220	6313.41	8703.73	-7702.68	4181.29	1767193.29	14588698.19	40°10'9.3908"N	80°32'46.2730"W	8764.38	151.505	0.40	
14900.00	87.750	158.070	6316.71	8800.67	-7792.65	4217.38	1767229.36	14588608.25	40°10'8.4998"N	80°32'45.8140"W	8860.68	151.578	0.63	
14996.00	87.910	158.440	6320.35	8896.60	-7881.76	4252.92	1767264.89	14588519.18	40°10'7.6175"N	80°32'45.3621"W	8955.97	151.649	0.42	
15093.00	88.120	158.450	6323.71	8993.54	-7971.92	4288.53	1767300.49	14588429.05	40°10'6.7247"N	80°32'44.9093"W	9052.24	151.722	0.22	
15189.00	89.080	157.820	6326.05	9089.51	-8060.99	4324.27	1767336.22	14588340.02	40°10'5.8428"N	80°32'44.4548"W	9147.61	151.789	1.20	
15286.00	88.430	158.380	6328.16	9186.49	-8150.96	4360.45	1767372.38	14588250.07	40°10'4.9518"N	80°32'43.9948"W	9244.01	151.855	0.88	
15382.00	88.250	158.080	6330.94	9282.45	-8240.08	4396.03	1767407.95	14588160.99	40°10'4.0694"N	80°32'43.5422"W	9339.38	151.920	0.36	

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Samuel Jones BRK 10H
Field	Brooke	API	47009003370000
Facility	Samuel Jones BRK Pad	Wellbore	Samuel Jones BRK 10H AWB
Slot	10H		

WELLPATH DATA (252 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
18374.00	89.880	158.600	6372.38	12273.80	-11025.27	5487.48	1768498.98	14585376.87	40°09'36.4910"N	80°32'29.6684"W	12315.40	153.540	0.18	
18470.00	89.720	158.470	6372.71	12369.80	-11114.61	5522.61	1768534.09	14585287.57	40°09'35.6063"N	80°32'29.2219"W	12411.03	153.578	0.21	
18567.00	89.380	158.230	6373.48	12466.80	-11204.76	5558.39	1768569.86	14585197.45	40°09'34.7136"N	80°32'28.7670"W	12507.70	153.615	0.43	
18664.00	89.170	159.100	6374.70	12563.78	-11295.11	5593.68	1768605.14	14585107.14	40°09'33.8190"N	80°32'28.3185"W	12604.31	153.654	0.92	
18760.00	88.880	158.080	6376.35	12659.77	-11384.46	5628.73	1768640.18	14585017.82	40°09'32.9343"N	80°32'27.8730"W	12699.95	153.691	1.13	
18857.00	88.890	156.900	6378.26	12756.74	-11474.05	5665.88	1768677.31	14584928.27	40°09'32.0471"N	80°32'27.4006"W	12796.72	153.720	1.20	
18953.00	89.020	158.100	6380.01	12852.71	-11562.72	5702.61	1768714.02	14584839.63	40°09'31.1689"N	80°32'26.9334"W	12892.49	153.748	1.26	
19050.00	89.320	157.590	6381.41	12949.70	-11652.55	5739.18	1768750.59	14584749.83	40°09'30.2794"N	80°32'26.4683"W	12989.23	153.779	0.61	
19146.00	89.570	156.760	6382.34	13045.68	-11741.03	5776.42	1768787.81	14584661.39	40°09'29.4032"N	80°32'25.9946"W	13085.06	153.803	0.90	
19243.00	88.800	158.430	6383.72	13142.86	-11830.69	5813.39	1768824.76	14584571.76	40°09'28.5152"N	80°32'25.5245"W	13181.84	153.831	1.90	
19339.00	89.230	158.880	6385.37	13238.64	-11920.10	5848.33	1768859.69	14584482.39	40°09'27.6300"N	80°32'25.0805"W	13277.48	153.866	0.65	
19436.00	88.890	157.740	6386.96	13335.62	-12010.21	5884.17	1768895.52	14584392.31	40°09'26.7376"N	80°32'24.6249"W	13374.18	153.898	1.23	
19532.00	89.480	158.040	6388.33	13431.61	-12099.15	5920.30	1768931.63	14584303.41	40°09'25.8569"N	80°32'24.1655"W	13469.94	153.927	0.69	
19628.00	88.800	158.910	6389.77	13527.60	-12188.44	5955.52	1768966.84	14584214.15	40°09'24.9728"N	80°32'23.7179"W	13565.63	153.959	1.15	
19725.00	89.510	158.980	6391.20	13624.58	-12278.95	5990.36	1769001.87	14584123.67	40°09'24.0765"N	80°32'23.2751"W	13662.25	153.994	0.74	
19822.00	89.320	158.160	6392.19	13721.57	-12369.24	6025.80	1769037.09	14584033.42	40°09'23.1825"N	80°32'22.8248"W	13758.94	154.027	0.87	
19918.00	89.540	157.910	6393.15	13817.57	-12458.27	6061.71	1769072.98	14583944.43	40°09'22.3009"N	80°32'22.3683"W	13854.70	154.054	0.35	
20015.00	89.320	158.410	6394.11	13914.56	-12548.30	6097.79	1769109.05	14583854.43	40°09'21.4094"N	80°32'21.9096"W	13951.45	154.083	0.56	
20111.00	89.480	158.040	6395.12	14010.56	-12637.45	6133.40	1769144.65	14583765.32	40°09'20.5266"N	80°32'21.4569"W	14047.19	154.111	0.42	
20208.00	89.720	158.120	6395.79	14107.55	-12727.43	6169.61	1769180.85	14583675.37	40°09'19.6355"N	80°32'20.9966"W	14143.96	154.138	0.26	
20304.00	89.510	158.470	6396.44	14203.55	-12816.62	6205.11	1769216.34	14583586.21	40°09'18.7523"N	80°32'20.5453"W	14239.71	154.166	0.43	
20401.00	89.880	158.730	6396.96	14300.55	-12906.93	6240.51	1769251.71	14583495.93	40°09'17.8581"N	80°32'20.0955"W	14336.42	154.196	0.47	
20497.00	89.290	157.920	6397.65	14396.54	-12996.14	6275.96	1769287.16	14583406.76	40°09'16.9747"N	80°32'19.6449"W	14432.17	154.224	1.04	
20594.00	89.230	158.540	6398.90	14493.54	-13086.22	6311.93	1769323.12	14583316.72	40°09'16.0827"N	80°32'19.1876"W	14528.92	154.250	0.64	
20690.00	89.450	158.150	6400.01	14589.53	-13175.43	6347.36	1769358.52	14583227.54	40°09'15.1993"N	80°32'18.7374"W	14624.67	154.277	0.47	
20787.00	89.290	157.620	6401.08	14686.52	-13265.29	6383.87	1769395.03	14583137.71	40°09'14.3094"N	80°32'18.2732"W	14721.47	154.301	0.57	
20883.00	89.510	158.370	6402.08	14782.51	-13354.29	6419.84	1769430.98	14583048.75	40°09'13.4281"N	80°32'17.8159"W	14817.27	154.325	0.81	
20980.00	89.660	157.860	6402.78	14879.51	-13444.30	6455.99	1769467.12	14582958.77	40°09'12.5368"N	80°32'17.3563"W	14914.06	154.350	0.55	
21076.00	89.720	156.950	6403.30	14975.50	-13532.93	6492.88	1769503.99	14582870.18	40°09'11.6591"N	80°32'16.8872"W	15009.92	154.369	0.95	
21173.00	90.000	158.780	6403.54	15072.49	-13622.77	6529.44	1769540.54	14582780.37	40°09'10.7694"N	80°32'16.4224"W	15106.74	154.391	1.89	

Actual Wellpath Report

Samuel Jones BRK 10H awp Proj: 22201'
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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Samuel Jones BRK 10H
Field	Brooke	API	47009003370000
Facility	Samuel Jones BRK Pad	Wellbore	Samuel Jones BRK 10H AWB
Slot	10H		

WELLPATH DATA (252 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
21270.00	89.480	158.090	6403.98	15169.49	-13712.97	6565.11	1769576.19	14582690.21	40°09'9.8762"N	80°32'15.9691"W	15203.49	154.417	0.87	
21366.00	89.290	158.570	6405.01	15265.48	-13802.18	6600.56	1769611.63	14582601.03	40°09'8.9928"N	80°32'15.5186"W	15299.27	154.442	0.54	
21463.00	89.450	158.240	6406.08	15362.48	-13892.37	6636.25	1769647.31	14582510.88	40°09'8.0998"N	80°32'15.0649"W	15396.03	154.467	0.38	
21559.00	89.850	158.290	6406.66	15458.47	-13981.54	6671.80	1769682.85	14582421.74	40°09'7.2167"N	80°32'14.6131"W	15491.82	154.490	0.42	
21656.00	89.630	158.350	6407.10	15555.47	-14071.68	6707.64	1769718.67	14582331.64	40°09'6.3242"N	80°32'14.1577"W	15588.60	154.514	0.24	
21752.00	89.230	158.630	6408.06	15651.47	-14160.99	6742.83	1769753.85	14582242.36	40°09'5.4398"N	80°32'13.7104"W	15684.37	154.538	0.51	
21849.00	89.660	158.360	6409.00	15748.46	-14251.23	6778.39	1769789.39	14582152.15	40°09'4.5462"N	80°32'13.2585"W	15781.13	154.563	0.52	
21945.00	89.020	157.760	6410.11	15844.45	-14340.27	6814.26	1769825.25	14582063.15	40°09'3.6645"N	80°32'12.8026"W	15876.95	154.584	0.91	
22042.00	89.600	158.210	6411.27	15941.45	-14430.19	6850.62	1769861.59	14581973.26	40°09'2.7740"N	80°32'12.3405"W	15973.77	154.604	0.76	
22138.00	89.630	158.310	6411.92	16037.44	-14519.36	6886.17	1769897.13	14581884.13	40°09'1.8910"N	80°32'11.8885"W	16069.57	154.626	0.11	
22176.00	90.120	158.570	6412.00	16075.44	-14554.70	6900.14	1769911.09	14581848.80	40°09'1.5411"N	80°32'11.7111"W	16107.49	154.635	1.46	
22201.00‡	90.120	158.570	6411.95	16100.44	-14577.97	6909.27	1769920.22	14581825.54	40°09'1.3106"N	80°32'11.5950"W	16132.43	154.641	0.00	

HOLE & CASING SECTIONS - Ref Wellbore: Samuel Jones BRK 10H AWB Ref Wellpath: Samuel Jones BRK 10H awp Proj: 22201'

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	346.00	320.00	26.00	346.00	0.00	0.00	1.17	0.17
9.625in Casing	26.00	1753.00	1727.00	26.00	1737.42	0.00	0.00	67.64	168.57
5.5in Casing	26.00	22201.00	22175.00	26.00	6411.95	0.00	0.00	-14577.97	6909.27

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Actual Wellpath Report

Samuel Jones BRK 10H awp Proj: 22201'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Samuel Jones BRK 10H
Field	Brooke	API	47009003370000
Facility	Samuel Jones BRK Pad	Wellbore	Samuel Jones BRK 10H AWB
Slot	10H		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Samuel Jones BRK 10H LP rev 2	6124.00	-61.84	1136.68	1764149.86	14596336.09	40°11'25.0486"N	80°33'25.0005"W	point
Samuel Jones BRK 10H BHL rev4	6394.95	-14572.56	6922.77	1769933.72	14581830.95	40°09'1.3635"N	80°32'11.4208"W	point

WELLPATH COMPOSITION - Ref Wellbore: Samuel Jones BRK 10H AWB Ref Wellpath: Samuel Jones BRK 10H awp Proj: 22201'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	490.00	Gyrodata 2015 - GC+WIR+DPIPE	1 Imported Gyro 50 - 490'	Samuel Jones BRK 10H AWB	7/17/2023
490.00	1753.00	OWSG MWD rev2 + HRGM	2 Tally MWD HRGM 12.25' - 549' - 1753'	Samuel Jones BRK 10H AWB	7/17/2023
1753.00	3394.00	OWSG MWD rev2 + HRGM	3 Tally MWD HRGM 8.75" 1882' - 3394'	Samuel Jones BRK 10H AWB	7/18/2023
3394.00	22201.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	4 BH ATC HRGM 8.5" Short spacing 8.5" 3444' - 22176'	Samuel Jones BRK 10H AWB	7/17/2023