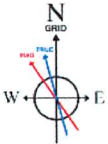


Plot reference wellbore is Vernon Johnson WTZ 201H AWP Proj 27385'	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to SDC41 (KB)	North Reference: Grid north
Reference wellbore measured depths are referenced to SDC41 (KB)	Scale: True distance
SDC41 (KB) to Mean Sea Level: 1457.8 feet	Coordinates are in feet referenced to Slot
Align Site Level to Ground level (At Slot: 201H): -1431.8 feet	Depth are in feet
Other wellbore MDs are referenced to each path's default MD datum	Created by: acouan on 2022-11-23 Database: WA_MPL_EASTERNUS_Defn

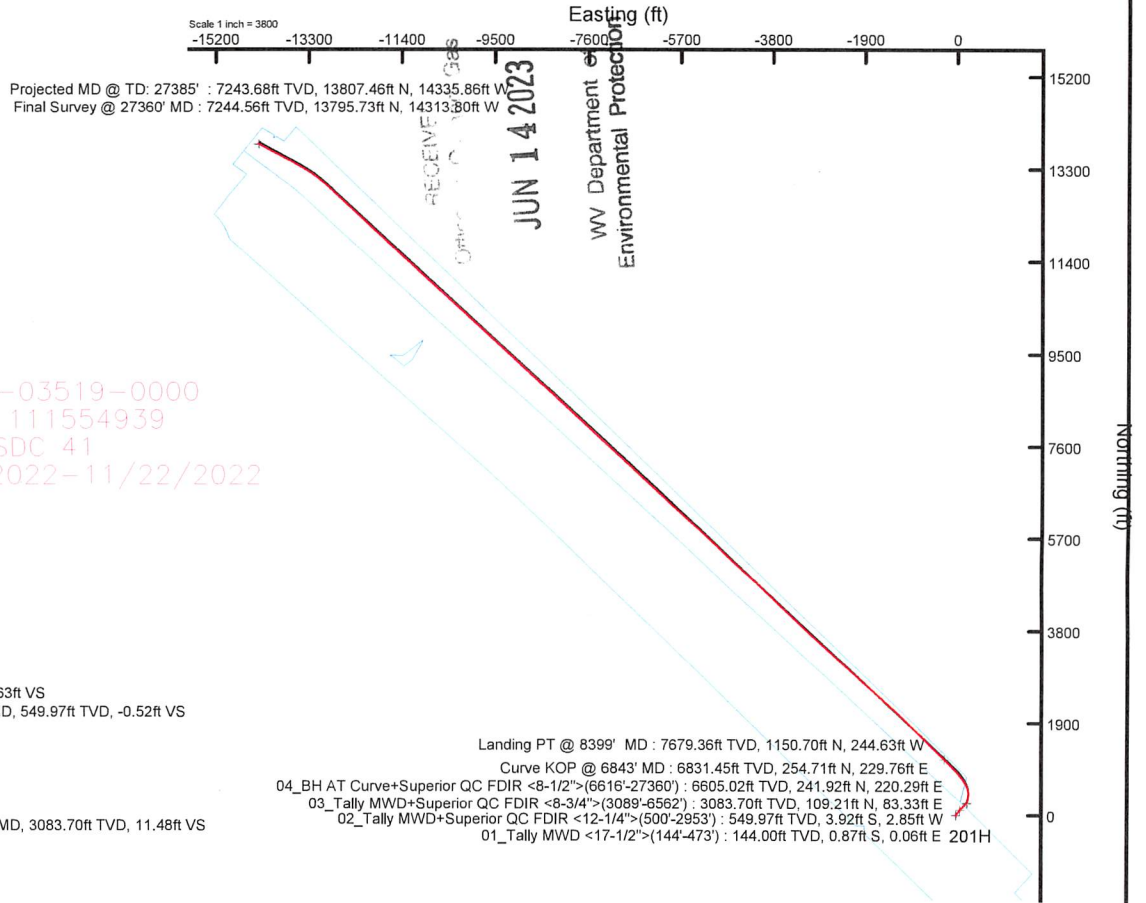
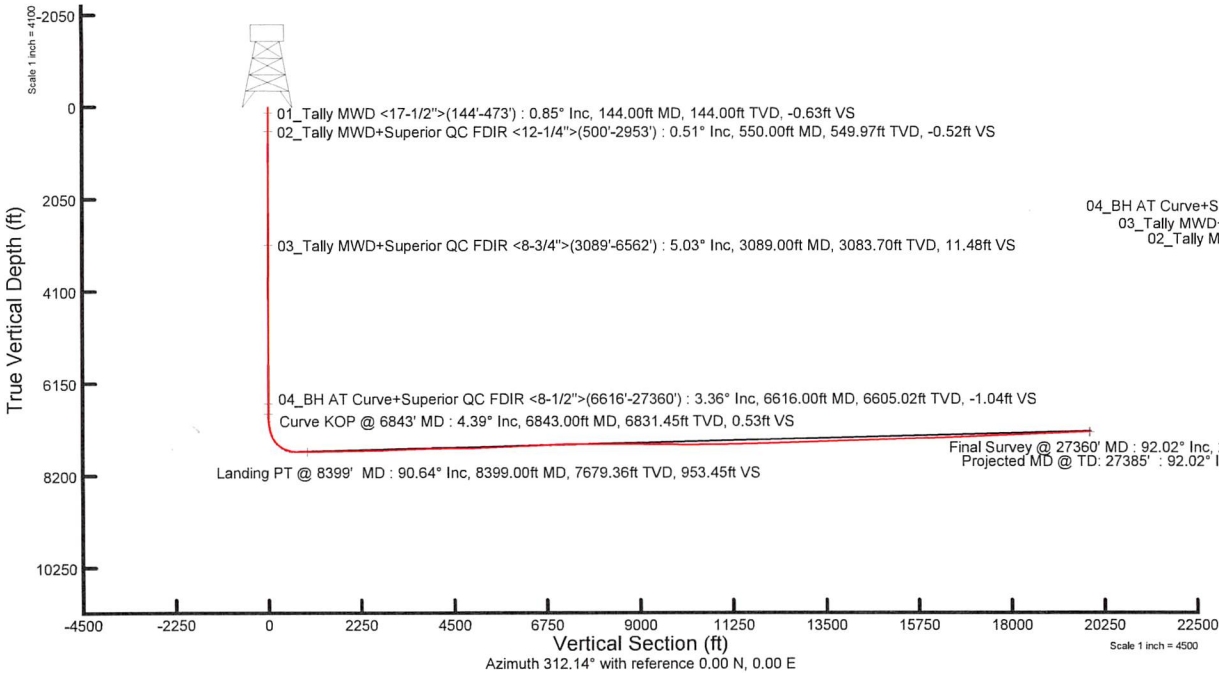
Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Vernon Johnson WTZ Pad	1768177.130	14424392.640	39°43'5.0033"N	80°32'44.3746"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
201H	-19.82	-40.25	1768136.900	14424372.830	39°43'4.8094"N 80°32'44.8909"W
SDC41 (KB) to Ground level (At Slot: 201H)					26ft
Mean Sea Level to Ground level (At Slot: 201H)					-1431.6ft
SDC41 (KB) to Mean Sea Level					1457.8ft

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
27385.00	92.020	298.020	7243.68	13897.46	-14335.86	1753896.54	14481875.00	39°45'21.9420"N	80°35'47.5521"W



HDGM2022v1.0 (1900.0 to 2023.0) Dip: 66.40° Field: 51836.3 nT
Magnetic North is 8.59 degrees West of True North (at 10/28/2022)
Grid North is 0.29 degrees East of True North
To correct azimuth from True to Grid subtract 0.29 degrees
To correct azimuth from Magnetic to Grid subtract 8.88 degrees

API: 47-103-03519-0000
BH Job #: 111554939
Rig: SDC 41
Duration: 11/15/2022 - 11/22/2022



01_Tally MWD <17-1/2">(144'-473') : 0.85° Inc, 144.00ft MD, 144.00ft TVD, -0.63ft VS
02_Tally MWD+Superior QC FDIR <12-1/4">(500'-2953') : 0.51° Inc, 550.00ft MD, 549.97ft TVD, -0.52ft VS

03_Tally MWD+Superior QC FDIR <8-3/4">(3089'-6562') : 5.03° Inc, 3089.00ft MD, 3083.70ft TVD, 11.48ft VS

04_BH AT Curve+Superior QC FDIR <8-1/2">(6616'-27360') : 3.36° Inc, 6616.00ft MD, 6605.02ft TVD, -1.04ft VS
Curve KOP @ 6843' MD : 4.39° Inc, 6843.00ft MD, 6831.45ft TVD, 0.53ft VS

Landing PT @ 8399' MD : 90.64° Inc, 8399.00ft MD, 7679.36ft TVD, 953.45ft VS

Final Survey @ 27360' MD : 92.02° Inc, 27360.00ft MD, 7244.56ft TVD, 19869.96ft VS
Projected MD @ TD: 27385' : 92.02° Inc, 27385.00ft MD, 7243.68ft TVD, 19894.19ft VS

Landing PT @ 8399' MD : 7679.36ft TVD, 1150.70ft N, 244.63ft W
Curve KOP @ 6843' MD : 6831.45ft TVD, 254.71ft N, 229.76ft E
04_BH AT Curve+Superior QC FDIR <8-1/2">(6616'-27360') : 6605.02ft TVD, 241.92ft N, 220.29ft E
03_Tally MWD+Superior QC FDIR <8-3/4">(3089'-6562') : 3083.70ft TVD, 109.21ft N, 83.33ft E
02_Tally MWD+Superior QC FDIR <12-1/4">(500'-2953') : 549.97ft TVD, 3.92ft S, 2.85ft W
01_Tally MWD <17-1/2">(144'-473') : 144.00ft TVD, 0.87ft S, 0.06ft E 201H



Actual Wellpath Report

Vernon Johnson WTZ 201H AWP Proj: 27385'
Page 1 of 14



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson WTZ 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad	Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Scurdan
Scale	0.999619	Report Generated	12/5/2022 at 9:55:53 AM
Convergence at slot	0.29° 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	-19.82	-40.25	1768136.90	14424372.83	39°43'4.8094"N	80°32'44.8909"W
Facility Reference Pt			1768177.13	14424392.64	39°43'5.0033"N	80°32'44.3746"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.4780"W

WELLPATH DATUM			
Calculation method	Minimum curvature	SDC41 (KB) to Facility Vertical Datum	1457.60ft
Horizontal Reference Pt	Slot	SDC41 (KB) to Mean Sea Level	1457.60ft
Vertical Reference Pt	SDC41 (KB)	SDC41 (KB) to Ground Level at Slot (201H)	26.00ft
MD Reference Pt	SDC41 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	312.14°

RECEIVED

Office of Environmental Compliance

JUN 14 2023

Environmental Compliance



Actual Wellpath Report

Vernon Johnson WTZ 201H AWP Proj: 27385'
Page 2 of 14



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson WTZ 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad	Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H		

WELLPATH DATA (300 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	176.210	0.00	0.00	0.00	0.00	1768136.90	14424372.83	39°43'4.8094"N	80°32'44.8909"W	0.00	0.000	0.00	0.00	0.00
26.00	0.000	176.210	26.00	0.00	0.00	0.00	1768136.90	14424372.83	39°43'4.8094"N	80°32'44.8909"W	0.00	0.000	0.00	0.00	0.00
144.00	0.850	176.210	144.00	-0.63	-0.87	0.06	1768136.96	14424371.96	39°43'4.8008"N	80°32'44.8902"W	0.88	176.210	0.72	0.72	0.00
235.00	0.700	224.500	234.99	-1.09	-1.94	-0.29	1768136.61	14424370.89	39°43'4.7902"N	80°32'44.8947"W	1.96	188.405	0.71	-0.16	53.07
327.00	0.510	244.620	326.98	-0.91	-2.52	-1.05	1768135.85	14424370.31	39°43'4.7846"N	80°32'44.9045"W	2.73	202.641	0.31	-0.21	21.87
420.00	0.750	231.590	419.98	-0.65	-3.08	-1.90	1768135.00	14424369.76	39°43'4.7791"N	80°32'44.9154"W	3.62	211.735	0.30	0.26	-14.01
473.00	0.520	233.610	472.97	-0.55	-3.43	-2.37	1768134.53	14424369.40	39°43'4.7756"N	80°32'44.9214"W	4.17	214.586	0.44	-0.43	3.81
550.00	0.510	215.230	549.97	-0.52	-3.92	-2.85	1768134.05	14424368.91	39°43'4.7708"N	80°32'44.9276"W	4.84	215.978	0.21	-0.01	-23.87
596.00	0.600	195.950	595.97	-0.65	-4.32	-3.03	1768133.87	14424368.51	39°43'4.7669"N	80°32'44.9300"W	5.28	215.053	0.45	0.20	-41.91
688.00	0.790	185.480	687.96	-1.24	-5.41	-3.22	1768133.68	14424367.42	39°43'4.7561"N	80°32'44.9325"W	6.30	210.770	0.25	0.21	-11.38
780.00	1.050	180.560	779.95	-2.18	-6.89	-3.29	1768133.61	14424365.94	39°43'4.7415"N	80°32'44.9335"W	7.63	205.546	0.30	0.28	-5.35
871.00	1.150	94.180	870.94	-3.45	-7.79	-2.39	1768134.51	14424365.04	39°43'4.7326"N	80°32'44.9220"W	8.15	197.057	1.66	0.11	-94.92
962.00	3.350	56.360	961.87	-4.83	-6.38	0.74	1768137.63	14424366.45	39°43'4.7463"N	80°32'44.8819"W	6.42	173.429	2.79	2.42	-41.56
1054.00	5.150	47.890	1053.61	-5.90	-2.12	6.04	1768142.93	14424370.71	39°43'4.7881"N	80°32'44.8138"W	6.40	109.382	2.07	1.96	-9.21
1145.00	4.770	28.790	1144.28	-5.44	3.93	10.89	1768147.79	14424376.76	39°43'4.8477"N	80°32'44.7513"W	11.58	70.149	1.85	-0.42	-20.99
1237.00	3.470	8.680	1236.04	-3.02	10.04	13.15	1768150.05	14424382.86	39°43'4.9080"N	80°32'44.7220"W	16.54	52.652	2.09	-1.41	-21.86
1328.00	3.520	10.230	1326.87	-0.02	15.51	14.06	1768150.96	14424388.33	39°43'4.9620"N	80°32'44.7099"W	20.94	42.203	0.12	0.05	1.70
1420.00	3.950	17.540	1418.68	2.79	21.31	15.52	1768152.41	14424394.13	39°43'5.0192"N	80°32'44.6909"W	26.36	36.067	0.70	0.47	7.95
1512.00	4.150	37.750	1510.45	4.36	26.96	18.51	1768155.41	14424399.78	39°43'5.0750"N	80°32'44.6522"W	32.71	34.474	1.56	0.22	21.97
1603.00	4.300	51.320	1601.21	4.07	31.70	23.19	1768160.08	14424404.52	39°43'5.1215"N	80°32'44.5921"W	39.28	36.191	1.11	0.16	14.91
1695.00	4.270	51.850	1692.95	2.94	35.97	28.58	1768165.47	14424408.79	39°43'5.1635"N	80°32'44.5229"W	45.94	38.467	0.05	-0.03	0.58
1786.00	3.510	43.330	1783.74	2.31	40.09	33.15	1768170.04	14424412.90	39°43'5.2040"N	80°32'44.4640"W	52.02	39.591	1.05	-0.84	-9.36
1880.00	2.950	30.870	1877.59	2.73	44.26	36.37	1768173.26	14424417.07	39°43'5.2450"N	80°32'44.4226"W	57.28	39.412	0.95	-0.60	-13.26
1972.00	3.420	29.910	1969.45	3.77	48.67	38.95	1768175.84	14424421.48	39°43'5.2885"N	80°32'44.3893"W	62.34	38.672	0.51	0.51	-1.04
2063.00	4.050	45.050	2060.26	4.18	53.29	42.58	1768179.46	14424426.10	39°43'5.3340"N	80°32'44.3425"W	68.21	38.625	1.28	0.69	16.64
2155.00	3.700	53.470	2152.05	3.43	57.35	47.27	1768184.15	14424430.16	39°43'5.3739"N	80°32'44.2823"W	74.32	39.492	0.73	-0.38	9.15
2247.00	3.270	39.860	2243.88	2.96	61.14	51.33	1768188.21	14424433.94	39°43'5.4110"N	80°32'44.2300"W	79.83	40.018	1.01	-0.47	-14.79
2339.00	4.570	19.660	2335.67	4.46	66.60	54.25	1768191.13	14424439.41	39°43'5.4649"N	80°32'44.1924"W	85.90	39.163	2.04	1.41	-21.96
2431.00	5.270	17.910	2427.33	7.60	74.07	56.78	1768193.66	14424446.88	39°43'5.5386"N	80°32'44.1595"W	93.33	37.471	0.78	0.76	-1.90
2521.00	4.560	29.830	2517.00	10.06	81.11	59.83	1768196.71	14424453.91	39°43'5.6080"N	80°32'44.1200"W	100.79	36.414	1.38	-0.79	13.24

RECEIVED
 JUN 14 2023
 WV Department of Environmental Protection



Actual Wellpath Report

Vernon Johnson WTZ 201H AWP Proj: 27385'
Page 3 of 14



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson WTZ 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad	Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H		

WELLPATH DATA (300 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)
2615.00	3.810	59.020	2610.76	9.95	85.96	64.37	1768201.24	14424458.76	39°43'5.6557"N	80°32'44.0616"W	107.39	36.826	2.37	-0.80	31.95
2706.00	2.730	63.680	2701.61	8.27	88.48	68.90	1768205.78	14424461.27	39°43'5.6804"N	80°32'44.0034"W	112.14	37.910	1.22	-1.19	51.12
2799.00	2.500	40.960	2794.51	7.50	90.99	72.22	1768209.09	14424463.79	39°43'5.7051"N	80°32'43.9608"W	116.17	38.438	1.13	-0.25	-24.43
2889.00	3.830	27.500	2884.37	8.30	95.14	74.89	1768211.76	14424467.93	39°43'5.7459"N	80°32'43.9263"W	121.08	38.209	1.68	1.48	-14.96
2953.00	4.770	29.770	2948.19	9.41	99.35	77.20	1768214.07	14424472.14	39°43'5.7874"N	80°32'43.8965"W	125.82	37.850	1.49	1.47	3.58
3089.00	5.030	33.850	3083.70	11.48	109.21	83.33	1768220.20	14424481.99	39°43'5.8845"N	80°32'43.8175"W	137.37	37.345	0.32	0.19	3.00
3180.00	4.700	51.020	3174.37	11.48	114.86	88.45	1768225.32	14424487.65	39°43'5.9402"N	80°32'43.7516"W	144.97	37.597	1.63	-0.36	18.87
3272.00	3.080	79.830	3266.17	9.39	117.67	93.81	1768230.68	14424490.46	39°43'5.9677"N	80°32'43.6827"W	150.49	38.563	2.71	-1.76	31.32
3364.00	0.790	78.290	3358.11	7.50	118.24	96.87	1768233.73	14424491.02	39°43'5.9731"N	80°32'43.6436"W	152.85	39.326	2.49	-2.49	-1.67
3455.00	1.120	13.950	3449.10	7.55	119.23	97.70	1768234.56	14424492.01	39°43'5.9828"N	80°32'43.6330"W	154.14	39.331	1.16	0.36	-70.70
3545.00	1.870	40.820	3539.07	8.00	121.19	98.87	1768235.73	14424493.98	39°43'6.0022"N	80°32'43.6178"W	156.41	39.207	1.12	0.83	29.86
3637.00	2.440	58.600	3631.00	7.48	123.35	101.52	1768238.38	14424496.13	39°43'6.0234"N	80°32'43.5837"W	159.75	39.456	0.95	0.62	19.33
3732.00	2.440	16.480	3725.93	7.78	126.34	103.82	1768240.68	14424499.12	39°43'6.0528"N	80°32'43.5541"W	163.53	39.411	1.85	0.00	-44.34
3823.00	2.610	27.480	3816.84	9.15	130.04	105.33	1768242.19	14424502.82	39°43'6.0893"N	80°32'43.5346"W	167.34	39.006	0.56	0.19	12.09
3914.00	2.200	53.820	3907.76	9.32	132.91	107.69	1768244.55	14424505.69	39°43'6.1175"N	80°32'43.5041"W	171.06	39.017	1.28	-0.45	28.95
4004.00	2.080	47.300	3997.70	8.82	135.03	110.29	1768247.14	14424507.81	39°43'6.1384"N	80°32'43.4708"W	174.35	39.240	0.30	-0.13	-7.24
4096.00	2.430	44.290	4089.63	8.60	137.56	112.88	1768249.73	14424510.34	39°43'6.1633"N	80°32'43.4375"W	177.95	39.370	0.40	0.38	-3.27
4186.00	3.420	51.120	4179.51	8.11	140.61	116.30	1768253.15	14424513.39	39°43'6.1932"N	80°32'43.3935"W	182.48	39.593	1.16	1.10	7.59
4277.00	4.870	51.740	4270.27	7.04	144.71	121.44	1768258.30	14424517.48	39°43'6.2335"N	80°32'43.3274"W	188.92	40.004	1.59	1.59	0.68
4367.00	4.340	50.050	4359.98	5.93	149.26	127.05	1768263.91	14424522.03	39°43'6.2782"N	80°32'43.2553"W	196.02	40.405	0.61	-0.59	-1.88
4459.00	3.750	44.810	4451.75	5.32	153.63	131.84	1768268.69	14424526.40	39°43'6.3211"N	80°32'43.1937"W	202.45	40.636	0.76	-0.64	-5.70
4549.00	3.510	41.620	4541.57	5.20	157.78	135.75	1768272.60	14424530.55	39°43'6.3619"N	80°32'43.1435"W	208.14	40.708	0.35	-0.27	-3.54
4640.00	3.170	37.900	4632.41	5.41	161.85	139.14	1768275.99	14424534.62	39°43'6.4019"N	80°32'43.0998"W	213.44	40.686	0.44	-0.37	-4.09
4733.00	2.870	32.790	4725.28	5.98	165.83	141.98	1768278.83	14424538.60	39°43'6.4412"N	80°32'43.0632"W	218.31	40.570	0.43	-0.32	-5.49
4826.00	3.170	48.170	4818.15	6.09	169.51	145.16	1768282.01	14424542.27	39°43'6.4773"N	80°32'43.0223"W	223.17	40.576	0.93	0.32	16.54
4916.00	3.110	47.150	4908.02	5.62	172.83	148.80	1768285.65	14424545.59	39°43'6.5100"N	80°32'42.9754"W	228.06	40.729	0.09	-0.07	-1.13
5007.00	2.870	38.670	4998.90	5.54	176.28	152.04	1768288.88	14424549.05	39°43'6.5440"N	80°32'42.9338"W	232.79	40.777	0.55	-0.26	-9.32
5097.00	2.510	37.380	5088.80	5.84	179.61	154.64	1768291.48	14424552.37	39°43'6.5767"N	80°32'42.9003"W	237.01	40.728	0.41	-0.40	-1.43
5188.00	2.290	35.130	5179.72	6.23	182.68	156.90	1768293.74	14424555.44	39°43'6.6069"N	80°32'42.8712"W	240.81	40.659	0.26	-0.24	-2.47
5279.00	2.710	47.910	5270.63	6.23	185.61	159.54	1768296.38	14424558.37	39°43'6.6357"N	80°32'42.8372"W	244.75	40.681	0.76	0.46	14.04

Office of Oil and Gas

JUN 14 2023

WV Department of Environmental Protection



Actual Wellpath Report

Vernon Johnson WTZ 201H AWP Proj: 27385'
Page 4 of 14



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson WTZ 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad	Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H		

WELLPATH DATA (300 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]
5370.00	3.820	48.910	5361.48	5.66	189.04	163.42	1768300.26	14424561.80	39°43'6.6695"N	80°32'42.7873"W	249.89	40.843	1.22	1.22	1.10
5461.00	3.800	44.250	5452.28	5.19	193.19	167.81	1768304.65	14424565.95	39°43'6.7103"N	80°32'42.7309"W	255.90	40.978	0.34	-0.02	-5.12
5554.00	3.340	42.520	5545.10	5.06	197.40	171.79	1768308.63	14424570.15	39°43'6.7517"N	80°32'42.6797"W	261.68	41.032	0.51	-0.49	-1.86
5645.00	2.930	41.520	5635.96	5.07	201.09	175.13	1768311.96	14424573.85	39°43'6.7880"N	80°32'42.6368"W	266.66	41.052	0.45	-0.45	-1.10
5738.00	3.290	48.050	5728.83	4.82	204.66	178.69	1768315.52	14424577.41	39°43'6.8230"N	80°32'42.5910"W	271.69	41.124	0.54	0.39	7.02
5831.00	3.330	45.840	5821.67	4.37	208.32	182.61	1768319.44	14424581.07	39°43'6.8591"N	80°32'42.5405"W	277.03	41.237	0.14	0.04	-2.38
5922.00	3.040	40.800	5912.53	4.25	211.99	186.08	1768322.91	14424584.74	39°43'6.8951"N	80°32'42.4959"W	282.08	41.276	0.44	-0.32	-5.54
6013.00	3.990	48.040	6003.36	3.98	215.93	190.01	1768326.84	14424588.68	39°43'6.9339"N	80°32'42.4453"W	287.63	41.346	1.15	1.04	7.96
6105.00	4.600	50.020	6095.10	3.15	220.44	195.22	1768332.04	14424593.19	39°43'6.9782"N	80°32'42.3784"W	294.46	41.527	0.68	0.66	2.15
6198.00	4.310	47.470	6187.82	2.31	225.20	200.65	1768337.48	14424597.95	39°43'7.0250"N	80°32'42.3085"W	301.63	41.701	0.38	-0.31	-2.74
6289.00	3.690	46.520	6278.60	1.77	229.53	205.30	1768342.12	14424602.27	39°43'7.0675"N	80°32'42.2488"W	307.95	41.810	0.69	-0.68	-1.04
6380.00	3.560	49.510	6369.42	1.19	233.38	209.57	1768346.39	14424606.12	39°43'7.1053"N	80°32'42.1939"W	313.66	41.923	0.25	-0.14	3.29
6472.00	3.200	50.470	6461.26	0.45	236.87	213.72	1768350.54	14424609.61	39°43'7.1396"N	80°32'42.1405"W	319.04	42.060	0.40	-0.39	1.04
6562.00	3.340	52.930	6551.11	-0.41	240.05	217.75	1768354.57	14424612.79	39°43'7.1708"N	80°32'42.0887"W	324.10	42.212	0.22	0.16	2.73
6616.00	3.360	54.380	6605.02	-1.04	241.92	220.29	1768357.11	14424614.65	39°43'7.1892"N	80°32'42.0561"W	327.19	42.322	0.16	0.04	2.69
6707.00	4.210	34.170	6695.82	-1.14	246.23	224.34	1768361.15	14424618.97	39°43'7.2316"N	80°32'42.0041"W	333.11	42.336	1.72	0.93	-22.21
6752.00	4.160	33.720	6740.70	-0.67	248.96	226.17	1768362.99	14424621.69	39°43'7.2585"N	80°32'41.9804"W	336.35	42.254	0.13	-0.11	-1.00
6843.00	4.390	30.290	6831.45	0.53	254.71	229.76	1768366.57	14424627.44	39°43'7.3151"N	80°32'41.9341"W	343.03	42.052	0.38	0.25	-3.77
6934.00	6.930	19.130	6922.00	3.39	262.91	233.32	1768370.13	14424635.64	39°43'7.3960"N	80°32'41.8881"W	351.51	41.588	3.03	2.79	-12.26
7027.00	13.280	12.780	7013.51	10.83	278.64	237.52	1768374.33	14424651.36	39°43'7.5513"N	80°32'41.8332"W	366.14	40.445	6.92	6.83	-6.83
7118.00	19.300	9.150	7100.82	24.15	303.70	242.23	1768379.04	14424676.42	39°43'7.7987"N	80°32'41.7714"W	388.47	38.575	6.71	6.62	-3.99
7211.00	24.560	11.130	7187.06	42.49	337.87	248.41	1768385.22	14424710.57	39°43'8.1360"N	80°32'41.6901"W	419.36	36.325	5.71	5.66	2.13
7304.00	32.640	9.800	7268.65	65.90	381.62	256.42	1768393.23	14424754.30	39°43'8.5680"N	80°32'41.5847"W	459.77	33.899	8.71	8.69	-1.43
7396.00	37.960	358.380	7343.79	98.81	434.45	259.85	1768396.65	14424807.11	39°43'9.0899"N	80°32'41.5373"W	506.23	30.885	9.19	5.78	-12.41
7488.00	42.690	349.380	7413.97	143.27	493.47	253.30	1768390.10	14424866.11	39°43'9.6735"N	80°32'41.6174"W	554.68	27.171	8.15	5.14	-9.78
7580.00	49.050	343.400	7478.02	197.88	557.51	237.60	1768374.41	14424930.13	39°43'10.3073"N	80°32'41.8142"W	606.03	23.082	8.33	6.91	-6.50
7673.00	54.900	332.330	7535.40	263.79	625.05	209.82	1768346.64	14424997.64	39°43'10.9761"N	80°32'42.1652"W	659.33	18.556	11.28	6.29	-11.90
7765.00	62.030	325.750	7583.52	338.76	692.11	169.39	1768306.23	14425064.67	39°43'11.6408"N	80°32'42.6782"W	712.53	13.753	9.85	7.75	-7.15
7856.00	69.300	323.230	7621.00	419.70	759.52	121.23	1768258.08	14425132.06	39°43'12.3094"N	80°32'43.2903"W	769.13	9.069	8.38	7.95	-2.77
7947.00	75.840	321.340	7648.25	505.12	828.14	68.13	1768205.00	14425200.65	39°43'12.9903"N	80°32'43.9654"W	830.94	4.703	7.45	7.19	-2.08

RECEIVED
 Office of Oil and Gas
 JUN 14 2023
 WV Department of
 Environmental Protection



Actual Wellpath Report
 Vernon Johnson WTZ 201H AWP Proj: 27385'
 Page 5 of 14



REFERENCE WELLPATH IDENTIFICATION				
Operator	SWN PRODUCTION COMPANY, LLC		Well	Vernon Johnson WTZ 201H
Field	Wetzel		API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad		Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H			

WELLPATH DATA (300 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]
8037.00	81.280	316.330	7666.10	592.67	894.48	10.08	1768146.97	14425266.96	39°43'13.6488"N	80°32'44.7039"W	894.53	0.646	8.14	6.04	-5.57
8128.00	85.920	315.910	7676.24	682.86	959.64	-52.59	1768084.33	14425332.10	39°43'14.2959"N	80°32'45.5017"W	961.08	356.863	5.12	5.10	-0.46
8220.00	89.930	315.610	7679.57	774.60	1025.50	-116.72	1768020.23	14425397.93	39°43'14.9499"N	80°32'46.3181"W	1032.12	353.507	4.37	4.36	-0.33
8307.00	89.840	313.690	7679.75	861.51	1086.63	-178.61	1767958.36	14425459.05	39°43'15.5572"N	80°32'47.1062"W	1101.21	350.666	2.21	-0.10	-2.21
8399.00	90.640	314.590	7679.36	953.45	1150.70	-244.63	1767892.36	14425523.09	39°43'16.1937"N	80°32'47.9470"W	1176.42	347.998	1.31	0.87	0.98
8492.00	90.850	312.490	7678.15	1046.41	1214.76	-312.04	1767824.98	14425587.12	39°43'16.8301"N	80°32'48.8055"W	1254.19	345.594	2.27	0.23	-2.26
8583.00	91.130	314.900	7676.58	1137.36	1277.61	-377.82	1767759.23	14425649.95	39°43'17.4545"N	80°32'49.6432"W	1332.30	343.526	2.67	0.31	2.65
8673.00	90.270	313.350	7675.48	1227.29	1340.26	-442.41	1767694.66	14425712.58	39°43'18.0769"N	80°32'50.4659"W	1411.39	341.732	1.97	-0.96	-1.72
8765.00	91.380	313.890	7674.16	1319.25	1403.72	-509.01	1767628.09	14425776.01	39°43'18.7074"N	80°32'51.3140"W	1493.16	340.069	1.34	1.21	0.59
8856.00	90.880	315.030	7672.36	1410.16	1467.44	-573.94	1767563.18	14425839.71	39°43'19.3404"N	80°32'52.1409"W	1575.69	338.639	1.37	-0.55	1.25
8949.00	90.790	315.480	7671.01	1503.01	1533.49	-639.40	1767497.74	14425905.73	39°43'19.9964"N	80°32'52.9744"W	1661.45	337.366	0.49	-0.10	0.48
9040.00	90.760	314.470	7669.78	1593.89	1597.80	-703.77	1767433.40	14425970.02	39°43'20.6351"N	80°32'53.7940"W	1745.93	336.228	1.11	-0.03	-1.11
9131.00	90.670	314.650	7668.64	1684.80	1661.65	-768.61	1767368.59	14426033.84	39°43'21.2693"N	80°32'54.6197"W	1830.80	335.177	0.22	-0.10	0.20
9222.00	90.640	313.940	7667.60	1775.73	1725.19	-833.73	1767303.49	14426097.36	39°43'21.9006"N	80°32'55.4491"W	1916.09	334.207	0.78	-0.03	-0.78
9312.00	90.820	315.140	7666.45	1865.64	1788.31	-897.88	1767239.37	14426160.46	39°43'22.5276"N	80°32'56.2659"W	2001.06	333.340	1.35	0.20	1.33
9403.00	90.610	315.000	7665.32	1956.52	1852.73	-962.14	1767175.13	14426224.85	39°43'23.1674"N	80°32'57.0842"W	2087.66	332.557	0.28	-0.23	-0.15
9496.00	90.360	314.790	7664.53	2049.40	1918.37	-1028.02	1767109.28	14426290.47	39°43'23.8193"N	80°32'57.9231"W	2176.46	331.814	0.35	-0.27	-0.23
9586.00	91.530	312.900	7663.05	2139.35	1980.70	-1092.91	1767044.40	14426352.77	39°43'24.4386"N	80°32'58.7496"W	2262.22	331.111	2.47	1.30	-2.10
9678.00	90.510	312.650	7661.41	2231.33	2043.17	-1160.43	1766976.91	14426415.22	39°43'25.0593"N	80°32'59.6097"W	2349.71	330.405	1.14	-1.11	-0.27
9768.00	91.310	313.260	7659.98	2321.30	2104.49	-1226.29	1766911.08	14426476.52	39°43'25.6685"N	80°33'0.4487"W	2435.71	329.770	1.12	0.89	0.68
9861.00	89.990	313.550	7658.92	2414.27	2168.39	-1293.85	1766843.54	14426540.39	39°43'26.3034"N	80°33'1.3092"W	2525.07	329.176	1.45	-1.42	0.31
9952.00	90.450	311.760	7658.58	2505.26	2230.05	-1360.78	1766776.64	14426602.02	39°43'26.9160"N	80°33'2.1617"W	2612.44	328.608	2.03	0.51	-1.97
10044.00	91.280	312.330	7657.19	2597.25	2291.65	-1429.09	1766708.36	14426663.61	39°43'27.5283"N	80°33'3.0320"W	2700.74	328.052	1.09	0.90	0.62
10136.00	90.330	312.710	7655.89	2689.24	2353.83	-1496.89	1766640.58	14426725.75	39°43'28.1460"N	80°33'3.8958"W	2789.47	327.546	1.11	-1.03	0.41
10226.00	92.050	311.660	7654.02	2779.22	2414.25	-1563.56	1766573.94	14426786.15	39°43'28.7465"N	80°33'4.7452"W	2876.34	327.071	2.24	1.91	-1.17
10318.00	94.210	311.510	7649.00	2871.07	2475.22	-1632.27	1766505.26	14426847.10	39°43'29.3524"N	80°33'5.6206"W	2964.96	326.597	2.35	2.35	-0.16
10409.00	90.970	310.380	7644.89	2961.94	2534.78	-1700.92	1766436.63	14426906.64	39°43'29.9444"N	80°33'6.4954"W	3052.58	326.137	3.77	-3.56	-1.24
10502.00	92.300	312.580	7642.24	3054.89	2596.35	-1770.56	1766367.02	14426968.18	39°43'30.5563"N	80°33'7.3828"W	3142.60	325.708	2.76	1.43	2.37
10592.00	91.310	310.480	7639.40	3144.84	2655.99	-1837.90	1766299.70	14427027.80	39°43'31.1490"N	80°33'8.2408"W	3229.88	325.317	2.58	-1.10	-2.33
10684.00	91.960	311.690	7636.78	3236.78	2716.42	-1907.21	1766230.42	14427088.21	39°43'31.7497"N	80°33'9.1240"W	3319.10	324.927	1.49	0.71	1.32

RECEIVED
 Office of Oil and Gas
 JUN 14 2023
 Environmental Protection



Actual Wellpath Report

Vernon Johnson WTZ 201H AWP Proj: 27385'
Page 6 of 14



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson WTZ 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad	Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H		

WELLPATH DATA (300 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]
10774.00	91.930	311.210	7633.72	3326.72	2775.96	-1974.63	1766163.02	14427147.73	39°43'32.3415"N	80°33'9.9831"W	3406.63	324.575	0.53	-0.03	-0.53
10866.00	92.240	315.070	7630.37	3418.63	2838.82	-2041.71	1766095.98	14427210.56	39°43'32.9659"N	80°33'10.8375"W	3496.78	324.276	4.21	0.34	4.20
10957.00	91.220	310.850	7627.62	3509.56	2900.79	-2108.26	1766029.45	14427272.51	39°43'33.5817"N	80°33'11.6853"W	3585.99	323.991	4.77	-1.12	-4.64
11047.00	91.930	312.580	7625.15	3599.52	2960.65	-2175.41	1765962.32	14427332.35	39°43'34.1766"N	80°33'12.5409"W	3673.94	323.692	2.08	0.79	1.92
11139.00	91.560	311.870	7622.35	3691.47	3022.45	-2243.51	1765894.25	14427394.12	39°43'34.7907"N	80°33'13.4085"W	3764.11	323.414	0.87	-0.40	-0.77
11231.00	91.410	312.020	7619.97	3783.44	3083.92	-2311.91	1765825.87	14427455.57	39°43'35.4016"N	80°33'14.2801"W	3854.29	323.142	0.23	-0.16	0.16
11322.00	91.250	312.150	7617.85	3874.42	3144.90	-2379.43	1765758.38	14427516.52	39°43'36.0075"N	80°33'15.1403"W	3943.61	322.889	0.23	-0.18	0.14
11413.00	91.310	312.860	7615.82	3965.39	3206.37	-2446.50	1765691.34	14427577.97	39°43'36.6182"N	80°33'15.9948"W	4033.13	322.656	0.78	0.07	0.78
11506.00	90.730	312.500	7614.16	4058.37	3269.40	-2514.86	1765623.01	14427640.98	39°43'37.2445"N	80°33'16.8657"W	4124.74	322.432	0.73	-0.62	-0.39
11598.00	90.880	312.460	7612.87	4150.36	3331.53	-2582.70	1765555.19	14427703.08	39°43'37.8618"N	80°33'17.7301"W	4215.38	322.216	0.17	0.16	-0.04
11689.00	90.700	312.720	7611.62	4241.35	3393.10	-2649.69	1765488.23	14427764.63	39°43'38.4737"N	80°33'18.5835"W	4305.11	322.014	0.35	-0.20	0.29
11781.00	90.670	312.290	7610.52	4333.34	3455.26	-2717.51	1765420.43	14427826.77	39°43'39.0913"N	80°33'19.4476"W	4395.87	321.815	0.47	-0.03	-0.47
11871.00	90.360	312.690	7609.71	4423.34	3516.05	-2783.87	1765354.10	14427887.53	39°43'39.6953"N	80°33'20.2931"W	4484.70	321.629	0.56	-0.34	0.44
11962.00	90.210	312.200	7609.26	4514.33	3577.46	-2851.02	1765286.97	14427948.92	39°43'40.3055"N	80°33'21.1486"W	4574.56	321.447	0.56	-0.16	-0.54
12053.00	90.640	311.800	7608.58	4605.33	3638.35	-2918.65	1765219.37	14428009.79	39°43'40.9105"N	80°33'22.0103"W	4664.34	321.264	0.65	0.47	-0.44
12143.00	90.450	312.380	7607.72	4695.32	3698.67	-2985.43	1765152.61	14428070.09	39°43'41.5100"N	80°33'22.8612"W	4753.21	321.091	0.68	-0.21	0.64
12233.00	90.360	313.240	7607.09	4785.32	3759.83	-3051.45	1765086.62	14428131.22	39°43'42.1176"N	80°33'23.7024"W	4842.28	320.937	0.96	-0.10	0.96
12326.00	90.700	313.160	7606.23	4878.30	3823.49	-3119.24	1765018.85	14428194.86	39°43'42.7501"N	80°33'24.5660"W	4934.45	320.792	0.38	0.37	-0.09
12417.00	89.710	314.060	7605.90	4969.26	3886.26	-3185.13	1764952.99	14428257.60	39°43'43.3736"N	80°33'25.4053"W	5024.75	320.662	1.47	-1.09	0.99
12509.00	93.380	313.490	7603.42	5061.18	3949.87	-3251.53	1764886.62	14428321.19	39°43'44.0055"N	80°33'26.2511"W	5116.04	320.539	4.04	3.99	-0.62
12600.00	92.270	312.870	7598.94	5152.05	4012.07	-3317.80	1764820.37	14428383.36	39°43'44.6234"N	80°33'27.0954"W	5206.20	320.411	1.40	-1.22	-0.68
12691.00	91.840	313.090	7595.67	5242.98	4074.07	-3384.33	1764753.86	14428445.33	39°43'45.2393"N	80°33'27.9430"W	5296.39	320.284	0.53	-0.47	0.24
12784.00	91.960	312.620	7592.59	5335.92	4137.28	-3452.47	1764685.75	14428508.53	39°43'45.8674"N	80°33'28.8112"W	5388.57	320.156	0.52	0.13	-0.51
12877.00	92.270	315.290	7589.16	5428.80	4201.78	-3519.37	1764618.88	14428573.00	39°43'46.5081"N	80°33'29.6633"W	5480.96	320.051	2.89	0.33	2.87
12969.00	92.300	313.750	7585.49	5520.65	4266.24	-3584.91	1764553.36	14428637.43	39°43'47.1483"N	80°33'30.4981"W	5572.47	319.960	1.67	0.03	-1.67
13060.00	92.360	314.080	7581.79	5611.53	4329.30	-3650.41	1764487.89	14428700.47	39°43'47.7747"N	80°33'31.3325"W	5662.89	319.863	0.37	0.07	0.36
13152.00	92.140	314.330	7578.18	5703.40	4393.40	-3716.31	1764422.01	14428764.54	39°43'48.4113"N	80°33'32.1719"W	5754.38	319.773	0.36	-0.24	0.27
13244.00	92.050	313.350	7574.82	5795.29	4457.08	-3782.62	1764355.73	14428828.20	39°43'49.0439"N	80°33'33.0167"W	5845.83	319.679	1.07	-0.10	-1.07
13335.00	92.240	312.890	7571.41	5886.22	4519.23	-3849.00	1764289.38	14428890.33	39°43'49.6614"N	80°33'33.8623"W	5936.18	319.579	0.55	0.21	-0.51
13426.00	92.510	314.020	7567.64	5977.11	4581.77	-3915.00	1764223.40	14428952.84	39°43'50.2826"N	80°33'34.7032"W	6026.59	319.487	1.28	0.30	1.24

RECEIVED
 Office of Oil and Gas
 JUN 14 2023
 Environmental Protection



Actual Wellpath Report

Vernon Johnson Wtz 201H AWP Proj: 27385'
Page 7 of 14



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson Wtz 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson Wtz Pad	Wellbore	Vernon Johnson Wtz 201H AWB
Slot	201H		

WELLPATH DATA (300 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]
13517.00	92.730	313.970	7563.48	6067.97	4644.91	-3980.40	1764158.03	14429015.96	39°43'50.9098"N	80°33'35.5362"W	6117.09	319.406	0.25	0.24	-0.05
13607.00	92.580	313.280	7559.31	6157.84	4706.94	-4045.47	1764092.98	14429077.96	39°43'51.5259"N	80°33'36.3653"W	6206.54	319.322	0.78	-0.17	-0.77
13697.00	92.850	314.040	7555.05	6247.71	4769.00	-4110.51	1764027.96	14429140.00	39°43'52.1424"N	80°33'37.1938"W	6296.00	319.241	0.90	0.30	0.84
13788.00	91.990	312.550	7551.20	6338.61	4831.35	-4176.68	1763961.82	14429202.32	39°43'52.7618"N	80°33'38.0369"W	6386.44	319.157	1.89	-0.95	-1.64
13880.00	91.990	309.690	7548.01	6430.53	4891.81	-4245.94	1763892.59	14429262.76	39°43'53.3627"N	80°33'38.9195"W	6477.48	319.043	3.11	0.00	-3.11
13971.00	92.640	311.880	7544.33	6521.42	4951.20	-4314.78	1763823.77	14429322.13	39°43'53.9529"N	80°33'39.7970"W	6567.47	318.929	2.51	0.71	2.41
14062.00	92.940	312.010	7539.90	6612.31	5011.95	-4382.39	1763756.19	14429382.86	39°43'54.5566"N	80°33'40.6585"W	6657.70	318.834	0.36	0.33	0.14
14153.00	92.820	312.890	7535.33	6703.20	5073.29	-4449.45	1763689.16	14429444.18	39°43'55.1661"N	80°33'41.5130"W	6748.03	318.748	0.97	-0.13	0.97
14245.00	93.010	311.890	7530.65	6795.07	5135.24	-4517.31	1763621.33	14429506.10	39°43'55.7815"N	80°33'42.3777"W	6839.35	318.663	1.11	0.21	-1.09
14336.00	92.640	312.310	7526.17	6885.96	5196.17	-4584.74	1763553.91	14429567.01	39°43'56.3870"N	80°33'43.2370"W	6929.65	318.577	0.61	-0.41	0.46
14426.00	92.420	312.800	7522.19	6975.87	5256.98	-4650.98	1763487.71	14429627.79	39°43'56.9911"N	80°33'44.0810"W	7019.07	318.500	0.60	-0.24	0.54
14518.00	91.650	312.390	7518.93	7067.81	5319.20	-4718.66	1763420.05	14429690.00	39°43'57.6093"N	80°33'44.9434"W	7110.53	318.424	0.95	-0.84	-0.45
14608.00	91.900	312.530	7516.14	7157.77	5379.93	-4785.02	1763353.71	14429750.70	39°43'58.2127"N	80°33'45.7891"W	7200.01	318.349	0.32	0.28	0.16
14700.00	89.680	313.360	7514.87	7249.74	5442.60	-4852.36	1763286.40	14429813.34	39°43'58.8353"N	80°33'46.6470"W	7291.59	318.281	2.58	-2.41	0.90
14791.00	90.790	312.930	7514.50	7340.73	5504.83	-4918.75	1763220.03	14429875.55	39°43'59.4534"N	80°33'47.4930"W	7382.23	318.218	1.31	1.22	-0.47
14882.00	90.510	312.110	7513.46	7431.72	5566.33	-4985.82	1763152.99	14429937.02	39°44'0.0644"N	80°33'48.3476"W	7472.78	318.149	0.95	-0.31	-0.90
14973.00	90.940	313.260	7512.31	7522.70	5628.02	-5052.70	1763086.13	14429998.69	39°44'0.6773"N	80°33'49.1999"W	7563.36	318.083	1.35	0.47	1.26
15063.00	90.330	312.310	7511.32	7612.69	5689.14	-5118.75	1763020.11	14430059.79	39°44'1.2846"N	80°33'50.0414"W	7652.97	318.021	1.25	-0.68	-1.06
15154.00	90.270	311.670	7510.84	7703.69	5750.02	-5186.39	1762952.50	14430120.65	39°44'1.8895"N	80°33'50.9034"W	7743.47	317.950	0.71	-0.07	-0.70
15246.00	89.960	312.110	7510.65	7795.69	5811.45	-5254.87	1762884.04	14430182.05	39°44'2.4998"N	80°33'51.7762"W	7834.96	317.879	0.59	-0.34	0.48
15336.00	89.840	311.920	7510.81	7885.69	5871.69	-5321.74	1762817.20	14430242.27	39°44'3.0984"N	80°33'52.6283"W	7924.50	317.813	0.25	-0.13	-0.21
15428.00	89.870	311.940	7511.04	7977.69	5933.16	-5390.18	1762748.78	14430303.72	39°44'3.7092"N	80°33'53.5006"W	8016.02	317.745	0.04	0.03	0.02
15520.00	89.930	312.140	7511.21	8069.69	5994.77	-5458.51	1762680.48	14430365.30	39°44'4.3213"N	80°33'54.3714"W	8107.57	317.681	0.23	0.07	0.22
15611.00	89.840	311.990	7511.39	8160.69	6055.74	-5526.07	1762612.95	14430426.25	39°44'4.9271"N	80°33'55.2323"W	8198.13	317.618	0.19	-0.10	-0.16
15702.00	90.110	312.500	7511.43	8251.69	6116.92	-5593.43	1762545.61	14430487.40	39°44'5.5349"N	80°33'56.0908"W	8288.74	317.560	0.63	0.30	0.56
15793.00	89.930	312.420	7511.40	8342.68	6178.35	-5660.57	1762478.50	14430548.81	39°44'6.1453"N	80°33'56.9463"W	8379.38	317.504	0.22	-0.20	-0.09
15884.00	89.400	312.300	7511.93	8433.68	6239.66	-5727.81	1762411.29	14430610.10	39°44'6.7544"N	80°33'57.8032"W	8470.02	317.449	0.60	-0.58	-0.13
15976.00	89.560	312.220	7512.76	8525.68	6301.53	-5795.90	1762343.23	14430671.95	39°44'7.3691"N	80°33'58.6709"W	8561.64	317.393	0.19	0.17	-0.09
16068.00	89.560	311.740	7513.47	8617.67	6363.07	-5864.28	1762274.86	14430733.46	39°44'7.9805"N	80°33'59.5425"W	8653.23	317.336	0.52	0.00	-0.52
16158.00	89.560	312.480	7514.16	8707.67	6423.41	-5931.05	1762208.13	14430793.78	39°44'8.5801"N	80°34'0.3934"W	8742.86	317.282	0.82	0.00	0.82

RECEIVED
Office of Oil and Gas

JUN 14 2023

WV Department of
Environmental Protection



Actual Wellpath Report
 Vernon Johnson WZ 201H AWP Proj: 27385'
 Page 8 of 14



REFERENCE WELLPATH IDENTIFICATION				
Operator	SWN PRODUCTION COMPANY, LLC		Well	Vernon Johnson WZ 201H
Field	Wetzel		API	47-103-03519-0000
Facility	Vernon Johnson WZ Pad		Wellbore	Vernon Johnson WZ 201H AWB
Slot	201H			

WELLPATH DATA (300 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)
16249.00	89.740	313.430	7514.72	8798.66	6485.42	-5997.65	1762141.55	14430855.76	39°44'9.1961"N	80°34'1.2420"W	8833.60	317.238	1.06	0.20	1.04
16339.00	89.650	313.300	7515.20	8888.64	6547.22	-6063.08	1762076.15	14430917.54	39°44'9.8099"N	80°34'2.0757"W	8923.39	317.199	0.18	-0.10	-0.14
16430.00	89.710	312.960	7515.70	8979.62	6609.43	-6129.49	1762009.76	14430979.73	39°44'10.4279"N	80°34'2.9219"W	9014.17	317.158	0.38	0.07	-0.37
16521.00	89.530	312.850	7516.31	9070.61	6671.38	-6196.14	1761943.13	14431041.65	39°44'11.0433"N	80°34'3.7713"W	9104.92	317.115	0.23	-0.20	-0.12
16616.00	89.440	312.680	7517.16	9165.60	6735.87	-6265.89	1761873.41	14431106.12	39°44'11.6839"N	80°34'4.6602"W	9199.64	317.070	0.22	-0.09	-0.20
16711.00	89.620	312.860	7517.94	9260.59	6800.37	-6335.64	1761803.69	14431170.59	39°44'12.3247"N	80°34'5.5490"W	9294.37	317.026	0.28	0.19	0.21
16807.00	89.400	313.190	7518.76	9356.58	6865.87	-6405.82	1761733.54	14431236.06	39°44'12.9753"N	80°34'6.4433"W	9390.14	316.985	0.41	-0.23	0.34
16902.00	89.530	313.460	7519.65	9451.55	6931.05	-6474.93	1761664.45	14431301.22	39°44'13.6228"N	80°34'7.3239"W	9484.94	316.949	0.32	0.14	0.28
16997.00	89.590	312.900	7520.38	9546.54	6996.05	-6544.20	1761595.21	14431366.20	39°44'14.2685"N	80°34'8.2066"W	9579.73	316.911	0.59	0.06	-0.59
17092.00	89.470	312.990	7521.16	9641.52	7060.77	-6613.74	1761525.70	14431430.89	39°44'14.9114"N	80°34'9.0928"W	9674.50	316.872	0.16	-0.13	0.09
17184.00	89.560	313.030	7521.94	9733.51	7123.52	-6681.01	1761458.45	14431493.62	39°44'15.5348"N	80°34'9.9500"W	9766.29	316.836	0.11	0.10	0.04
17279.00	89.470	312.880	7522.74	9828.50	7188.26	-6750.54	1761388.95	14431558.33	39°44'16.1778"N	80°34'10.8360"W	9861.07	316.799	0.18	-0.09	-0.16
17373.00	89.650	313.480	7523.46	9922.48	7252.58	-6819.08	1761320.43	14431622.63	39°44'16.8167"N	80°34'11.7095"W	9954.89	316.765	0.67	0.19	0.64
17468.00	89.310	313.110	7524.32	10017.45	7317.72	-6888.22	1761251.32	14431687.75	39°44'17.4638"N	80°34'12.5905"W	10049.71	316.732	0.53	-0.36	-0.39
17563.00	90.140	312.530	7524.78	10112.44	7382.29	-6957.90	1761181.67	14431752.29	39°44'18.1052"N	80°34'13.4785"W	10144.49	316.695	1.07	0.87	-0.61
17658.00	90.110	313.420	7524.57	10207.43	7447.05	-7027.41	1761112.19	14431817.03	39°44'18.7485"N	80°34'14.3643"W	10239.29	316.661	0.94	-0.03	0.94
17752.00	90.300	314.050	7524.24	10301.40	7512.04	-7095.32	1761044.30	14431881.99	39°44'19.3939"N	80°34'15.2297"W	10333.17	316.634	0.70	0.20	0.67
17847.00	90.240	312.960	7523.79	10396.37	7577.43	-7164.23	1760975.42	14431947.36	39°44'20.0435"N	80°34'16.1077"W	10428.02	316.606	1.15	-0.06	-1.15
17942.00	90.730	312.800	7522.98	10491.35	7642.07	-7233.84	1760905.83	14432011.98	39°44'20.6856"N	80°34'16.9949"W	10522.82	316.572	0.54	0.52	-0.17
18037.00	90.140	313.680	7522.26	10586.33	7707.15	-7303.04	1760836.66	14432077.03	39°44'21.3320"N	80°34'17.8768"W	10617.66	316.542	1.12	-0.62	0.93
18132.00	90.170	313.050	7522.01	10681.31	7772.38	-7372.11	1760767.62	14432142.23	39°44'21.9799"N	80°34'18.7569"W	10712.51	316.514	0.66	0.03	-0.66
18227.00	90.360	313.870	7521.57	10776.28	7837.73	-7441.06	1760698.69	14432207.55	39°44'22.6290"N	80°34'19.6356"W	10807.38	316.487	0.89	0.20	0.86
18322.00	90.240	313.340	7521.07	10871.25	7903.25	-7509.85	1760629.93	14432273.05	39°44'23.2797"N	80°34'20.5121"W	10902.25	316.462	0.57	-0.13	-0.56
18416.00	91.190	312.900	7519.90	10965.23	7967.49	-7578.46	1760561.35	14432337.27	39°44'23.9179"N	80°34'21.3864"W	10996.09	316.434	1.11	1.01	-0.47
18511.00	91.040	313.010	7518.05	11060.20	8032.21	-7647.97	1760491.86	14432401.97	39°44'24.5608"N	80°34'22.2724"W	11090.90	316.404	0.20	-0.16	0.12
18607.00	91.130	313.040	7516.23	11156.17	8097.71	-7718.14	1760421.72	14432467.43	39°44'25.2113"N	80°34'23.1666"W	11186.71	316.375	0.10	0.09	0.03
18701.00	91.040	313.320	7514.45	11250.14	8162.02	-7786.68	1760353.21	14432531.72	39°44'25.8501"N	80°34'24.0400"W	11280.55	316.348	0.31	-0.10	0.30
18797.00	91.070	313.260	7512.68	11346.10	8227.83	-7856.54	1760283.37	14432597.51	39°44'26.5038"N	80°34'24.9304"W	11376.40	316.322	0.07	0.03	-0.06
18888.00	91.130	312.760	7510.94	11437.08	8289.89	-7923.07	1760216.87	14432659.55	39°44'27.1203"N	80°34'25.7782"W	11467.23	316.296	0.55	0.07	-0.55
18983.00	90.970	313.270	7509.19	11532.05	8354.69	-7992.52	1760147.44	14432724.32	39°44'27.7639"N	80°34'26.6634"W	11562.06	316.269	0.56	-0.17	0.54

RECEIVED
Office of Oil and Gas

JUN 14 2023

WV Department of
Environmental Protection



Actual Wellpath Report
 Vernon Johnson WTZ 201H AWP Proj: 27385'
 Page 9 of 14



REFERENCE WELLPATH IDENTIFICATION				
Operator	SWN PRODUCTION COMPANY, LLC		Well	Vernon Johnson WTZ 201H
Field	Wetzel		API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad		Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H			

WELLPATH DATA (300 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)	
19078.00	90.940	313.310	7507.61	11627.02	8419.82	-8061.66	1760078.33	14432789.43	39°44'28.4108"N	80°34'27.5445"W	11656.92	316.245	0.05	-0.03	0.04	
19174.00	91.190	313.190	7505.83	11722.98	8485.59	-8131.57	1760008.44	14432855.17	39°44'29.0641"N	80°34'28.4354"W	11752.77	316.220	0.29	0.26	-0.12	
19269.00	91.500	313.210	7503.60	11817.94	8550.60	-8200.81	1759939.24	14432920.16	39°44'29.7098"N	80°34'29.3178"W	11847.62	316.196	0.33	0.33	0.02	
19364.00	91.310	312.930	7501.27	11912.90	8615.46	-8270.18	1759869.89	14432984.99	39°44'30.3540"N	80°34'30.2020"W	11942.45	316.171	0.36	-0.20	-0.29	
19458.00	91.440	313.080	7499.01	12006.86	8679.55	-8338.91	1759801.19	14433049.06	39°44'30.9907"N	80°34'31.0778"W	12036.28	316.147	0.21	0.14	0.16	
19553.00	91.160	313.010	7496.86	12101.82	8744.38	-8408.32	1759731.81	14433113.86	39°44'31.6346"N	80°34'31.9624"W	12131.12	316.122	0.30	-0.29	-0.07	
19647.00	91.560	313.050	7494.63	12195.79	8808.51	-8477.01	1759663.14	14433177.96	39°44'32.2715"N	80°34'32.8379"W	12224.95	316.099	0.43	0.43	0.04	
19742.00	91.650	312.630	7491.97	12290.74	8873.08	-8546.64	1759593.53	14433242.51	39°44'32.9129"N	80°34'33.7254"W	12319.76	316.074	0.45	0.09	-0.44	
19836.00	91.680	313.750	7489.23	12384.68	8937.38	-8615.15	1759525.06	14433306.79	39°44'33.5516"N	80°34'34.5985"W	12413.60	316.052	1.19	0.03	1.19	
19930.00	91.530	313.200	7486.60	12478.62	9002.03	-8683.33	1759456.90	14433371.41	39°44'34.1937"N	80°34'35.4675"W	12507.47	316.032	0.61	-0.16	-0.59	
20025.00	91.740	313.280	7483.89	12573.57	9067.09	-8752.51	1759387.74	14433436.44	39°44'34.8399"N	80°34'36.3491"W	12602.32	316.011	0.24	0.22	0.08	
20120.00	91.740	312.990	7481.01	12668.51	9132.01	-8821.80	1759318.48	14433501.34	39°44'35.4847"N	80°34'37.2323"W	12697.16	315.990	0.31	0.00	-0.31	
20214.00	91.770	313.410	7478.13	12762.45	9196.33	-8890.30	1759250.01	14433565.63	39°44'36.1235"N	80°34'38.1052"W	12791.00	315.969	0.45	0.03	0.45	
20309.00	91.620	313.160	7475.32	12857.39	9261.43	-8959.42	1759180.91	14433630.71	39°44'36.7702"N	80°34'38.9862"W	12885.86	315.950	0.31	-0.16	-0.26	
20403.00	91.590	313.400	7472.68	12951.33	9325.85	-9027.83	1759112.53	14433695.11	39°44'37.4100"N	80°34'39.8580"W	12979.72	315.930	0.26	-0.03	0.26	
20498.00	91.870	313.500	7469.82	13046.26	9391.16	-9096.76	1759043.62	14433760.39	39°44'38.0586"N	80°34'40.7366"W	13074.59	315.912	0.31	0.29	0.11	
20591.00	91.740	313.370	7466.89	13139.19	9455.06	-9164.26	1758976.15	14433824.27	39°44'38.6933"N	80°34'41.5969"W	13167.46	315.895	0.20	-0.14	-0.14	
20686.00	91.810	312.820	7463.94	13234.13	9519.94	-9233.60	1758906.84	14433889.12	39°44'39.3377"N	80°34'42.4806"W	13262.30	315.875	0.58	0.07	-0.58	
20781.00	91.440	312.810	7461.25	13329.09	9584.48	-9303.26	1758837.21	14433953.63	39°44'39.9787"N	80°34'43.3685"W	13357.13	315.853	0.39	-0.39	-0.01	
20876.00	91.370	312.510	7458.92	13424.06	9648.83	-9373.10	1758767.39	14434017.97	39°44'40.6180"N	80°34'44.2587"W	13451.95	315.830	0.32	-0.07	-0.32	
20970.00	91.900	313.190	7456.24	13518.01	9712.73	-9441.99	1758698.53	14434081.84	39°44'41.2527"N	80°34'45.1367"W	13545.79	315.810	0.92	0.56	0.72	
21065.00	91.590	312.790	7453.35	13612.95	9777.48	-9511.44	1758629.10	14434146.56	39°44'41.8958"N	80°34'46.0220"W	13640.63	315.790	0.53	-0.33	-0.42	
21159.00	91.770	313.570	7450.59	13706.90	9841.78	-9579.96	1758560.61	14434210.83	39°44'42.5344"N	80°34'46.8953"W	13734.49	315.772	0.85	0.19	0.83	
21253.00	91.560	312.860	7447.86	13800.84	9906.12	-9648.43	1758492.16	14434275.15	39°44'43.1734"N	80°34'47.7681"W	13828.36	315.755	0.79	-0.22	-0.76	
21347.00	91.770	313.170	7445.13	13894.79	9970.21	-9717.14	1758423.49	14434339.22	39°44'43.8100"N	80°34'48.6438"W	13922.21	315.736	0.40	0.22	0.33	
21440.00	91.440	312.610	7442.52	13987.75	10033.48	-9785.25	1758355.40	14434402.47	39°44'44.4385"N	80°34'49.5120"W	14015.06	315.718	0.70	-0.35	-0.60	
21534.00	91.410	313.020	7440.19	14081.71	10097.35	-9854.18	1758286.50	14434466.31	39°44'45.0728"N	80°34'50.3906"W	14108.91	315.698	0.44	-0.03	0.44	
21627.00	91.620	312.890	7437.73	14174.67	10160.70	-9922.22	1758218.48	14434529.63	39°44'45.7020"N	80°34'51.2579"W	14201.77	315.680	0.27	0.23	-0.14	
21721.00	91.680	312.590	7435.02	14268.62	10224.47	-9991.23	1758149.50	14434593.38	39°44'46.3354"N	80°34'52.1376"W	14295.61	315.661	0.33	0.06	-0.32	
21815.00	91.650	312.950	7432.29	14362.58	10288.27	-10060.20	1758080.55	14434657.16	39°44'46.9692"N	80°34'53.0168"W	14389.45	315.642	0.38	-0.03	0.38	

RECEIVED
Office of Oil and Gas

JUN 14 2023

WV Department of
Environmental Protection



Actual Wellpath Report

Vernon Johnson WTZ 201H AWP Proj: 27385'
Page 10 of 14



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson WTZ 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad	Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H		

WELLPATH DATA (300 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]
21910.00	91.530	313.260	7429.65	14457.53	10353.16	-10129.54	1758011.25	14434722.03	39°44'47.6137"N	80°34'53.9005"W	14484.32	315.626	0.35	-0.13	0.33
22004.00	91.310	312.150	7427.32	14551.49	10416.90	-10198.59	1757942.22	14434785.73	39°44'48.2467"N	80°34'54.7808"W	14578.17	315.607	1.20	-0.23	-1.18
22099.00	91.500	312.870	7424.99	14646.46	10481.07	-10268.60	1757872.24	14434849.88	39°44'48.8841"N	80°34'55.6732"W	14673.00	315.587	0.78	0.20	0.76
22193.00	91.710	312.690	7422.36	14740.42	10544.89	-10337.57	1757803.30	14434913.68	39°44'49.5180"N	80°34'56.5523"W	14766.85	315.569	0.29	0.22	-0.19
22287.00	91.710	312.950	7419.56	14834.37	10608.75	-10406.48	1757734.41	14434977.52	39°44'50.1523"N	80°34'57.4308"W	14860.70	315.551	0.28	0.00	0.28
22382.00	92.240	312.900	7416.28	14929.30	10673.41	-10476.01	1757664.91	14435042.15	39°44'50.7945"N	80°34'58.3170"W	14955.55	315.535	0.56	0.56	-0.05
22476.00	91.960	312.010	7412.84	15023.24	10736.82	-10545.31	1757595.63	14435105.53	39°44'51.4244"N	80°34'59.2005"W	15049.35	315.516	0.99	-0.30	-0.95
22571.00	91.710	312.540	7409.80	15118.19	10800.69	-10615.57	1757525.40	14435169.38	39°44'52.0588"N	80°35'0.0962"W	15144.15	315.495	0.62	-0.26	0.56
22665.00	91.990	312.360	7406.76	15212.14	10864.10	-10684.89	1757456.10	14435232.77	39°44'52.6887"N	80°35'0.9799"W	15237.97	315.476	0.35	0.30	-0.19
22759.00	91.960	312.780	7403.52	15306.08	10927.66	-10754.08	1757386.95	14435296.30	39°44'53.3199"N	80°35'1.8619"W	15331.79	315.459	0.45	-0.03	0.45
22854.00	91.710	312.800	7400.48	15401.03	10992.16	-10823.76	1757317.29	14435360.77	39°44'53.9606"N	80°35'2.7502"W	15426.64	315.442	0.26	-0.26	0.02
22948.00	91.530	312.590	7397.82	15494.98	11055.87	-10892.82	1757248.26	14435424.47	39°44'54.5934"N	80°35'3.6305"W	15520.50	315.426	0.29	-0.19	-0.22
23043.00	91.530	312.870	7395.28	15589.94	11120.31	-10962.57	1757178.53	14435488.88	39°44'55.2334"N	80°35'4.5198"W	15615.36	315.409	0.29	0.00	0.29
23138.00	91.410	312.810	7392.85	15684.91	11184.89	-11032.21	1757108.92	14435553.43	39°44'55.8748"N	80°35'5.4075"W	15710.23	315.394	0.14	-0.13	-0.06
23233.00	91.650	313.180	7390.31	15779.86	11249.65	-11101.67	1757039.49	14435618.16	39°44'56.5180"N	80°35'6.2929"W	15805.11	315.379	0.46	0.25	0.39
23328.00	91.710	312.120	7387.53	15874.82	11313.98	-11171.51	1756969.67	14435682.48	39°44'57.1570"N	80°35'7.1833"W	15899.96	315.363	1.12	0.06	-1.12
23422.00	91.560	312.940	7384.84	15968.77	11377.50	-11240.75	1756900.45	14435745.97	39°44'57.7878"N	80°35'8.0660"W	15993.81	315.346	0.89	-0.16	0.87
23516.00	91.650	312.950	7382.21	16062.73	11441.51	-11309.54	1756831.70	14435809.96	39°44'58.4236"N	80°35'8.9428"W	16087.69	315.332	0.10	0.10	0.01
23611.00	91.680	312.510	7379.45	16157.68	11505.95	-11379.29	1756761.97	14435874.37	39°44'59.0636"N	80°35'9.8321"W	16182.55	315.317	0.46	0.03	-0.46
23705.00	91.620	312.920	7376.74	16251.64	11569.69	-11448.33	1756692.96	14435938.08	39°44'59.6967"N	80°35'10.7122"W	16276.42	315.302	0.44	-0.06	0.44
23799.00	91.680	313.090	7374.04	16345.59	11633.77	-11517.04	1756624.28	14436002.14	39°45'0.3332"N	80°35'11.5881"W	16370.31	315.289	0.19	0.06	0.18
23892.00	91.710	312.730	7371.29	16438.54	11697.07	-11585.12	1756556.22	14436065.41	39°45'0.9618"N	80°35'12.4561"W	16463.18	315.275	0.39	0.03	-0.39
23987.00	92.080	313.980	7368.15	16533.46	11762.25	-11654.16	1756487.21	14436130.57	39°45'1.6091"N	80°35'13.3361"W	16558.08	315.264	1.37	0.39	1.32
24081.00	92.050	312.790	7364.76	16627.38	11826.77	-11722.43	1756418.96	14436195.07	39°45'2.2499"N	80°35'14.2064"W	16651.96	315.254	1.27	-0.03	-1.27
24175.00	92.020	313.120	7361.42	16721.31	11890.79	-11791.18	1756350.24	14436259.06	39°45'2.8856"N	80°35'15.0829"W	16745.83	315.241	0.35	-0.03	0.35
24269.00	91.990	312.360	7358.13	16815.25	11954.54	-11860.18	1756281.27	14436322.79	39°45'3.5188"N	80°35'15.9625"W	16839.68	315.227	0.81	-0.03	-0.81
24364.00	91.900	312.810	7354.91	16910.19	12018.79	-11930.08	1756211.39	14436387.01	39°45'4.1569"N	80°35'16.8537"W	16934.53	315.212	0.48	-0.09	0.47
24458.00	91.840	313.290	7351.84	17004.13	12082.92	-11998.74	1756142.76	14436451.12	39°45'4.7939"N	80°35'17.7289"W	17028.41	315.200	0.51	-0.06	0.51
24552.00	92.080	314.340	7348.62	17098.03	12147.96	-12066.53	1756075.00	14436516.14	39°45'5.4397"N	80°35'18.5930"W	17122.33	315.193	1.15	0.26	1.12
24646.00	92.910	314.230	7344.53	17191.87	12213.53	-12193.76	1756007.80	14436581.68	39°45'6.0908"N	80°35'19.4499"W	17216.23	315.188	0.89	0.88	-0.12



Actual Wellpath Report
 Vernon Johnson WTZ 201H AWP Proj: 27385'
 Page 12 of 14



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson WTZ 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad	Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Vernon Johnson WTZ 201H 50' Boundary	7225.00	0.00	0.00	1768136.90	14424372.83	39°43'4.8094"N	80°32'44.8909"W	polygon
	2D Polygon: dimensions not calculated							
Vernon Johnson WTZ 201H BHL rev 4	7225.00	13835.68	-14311.23	1753831.16	14438203.21	39°45'22.2198"N	80°35'47.2352"W	point
Vernon Johnson WTZ 201H BHL rev 3	7231.10	13835.68	-14311.23	1753831.16	14438203.21	39°45'22.2198"N	80°35'47.2352"W	point
Vernon Johnson WTZ 201H wp2	7231.10	13753.45	-14153.04	1753989.29	14438121.01	39°45'21.4001"N	80°35'45.2144"W	point
Vernon Johnson WTZ 201H wp1	7239.10	13204.56	-13164.09	1754977.86	14437572.33	39°45'15.9313"N	80°35'32.5838"W	point
first perf on the Vernon Johnson WTZ 10H ST1	7499.10	895.65	464.27	1768600.99	14425268.14	39°43'13.6376"N	80°32'38.8914"W	ellipse
	2D Ellipse radii 500 x 500.							
Vernon Johnson WTZ 201H LP rev 1	7679.10	913.61	39.21	1768176.09	14425286.09	39°43'13.8364"N	80°32'44.3300"W	point

RECEIVED
Office of Oil and Gas

JUN 14 2013

Environmental Protection



Actual Wellpath Report
 Vernon Johnson WTZ 201H AWP Proj: 27385'
 Page 13 of 14



REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson WTZ 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad	Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H		

WELLPATH COMPOSITION - Ref Wellbore: Vernon Johnson WTZ 201H AWB Ref Wellpath: Vernon Johnson WTZ 201H AWP Proj: 27385'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	473.00	OWSG MWD rev2 + HRGM	01_Tally MWD <17-1/2"> (144'-473')	Vernon Johnson WTZ 201H AWB	11/14/2022
473.00	2953.00	OWSG MWD rev2 +HRGM + Multi-Station Correction	02_Tally MWD+Superior QC HRGM+FDIR <12-1/4"> (550'-2953')	Vernon Johnson WTZ 201H AWB	11/22/2022
2953.00	6562.00	OWSG MWD rev2 +HRGM + Multi-Station Correction	03_Tally MWD + Superior QC HRGM+FDIR <8-3/4"> (3089'-6562')	Vernon Johnson WTZ 201H AWB	11/22/2022
6562.00	27385.00	OWSG MWD rev2 +HRGM + Multi-Station Correction	04_BH AT Curve + Superior QC HRGM+FDIR <8-1/2"> (6616'-27360')	Vernon Johnson WTZ 201H AWB	11/18/2022

JUN 14 2023

WV Department of
 Environmental Protection



Actual Wellpath Report
 Vernon Johnson WTZ 201H AWP Proj: 27385'
 Page 14 of 14



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Vernon Johnson WTZ 201H
Field	Wetzel	API	47-103-03519-0000
Facility	Vernon Johnson WTZ Pad	Wellbore	Vernon Johnson WTZ 201H AWB
Slot	201H		

COMMENTS
<p>Wellpath general comments API: 47-103-03519-0000 BH Job #: 111554939 Rig: SDC 41 Duration: 11/15/2022-11/22/2022 01_Tally MWD <17-1/2">(144'-473') 02_Tally MWD+Superior QC FDIR <12-1/4">(500'-2953') 03_Tally MWD+Superior QC FDIR <8-3/4">(3089'-6562') 04_BH AT Curve+Superior QC FDIR <8-1/2">(6616'-27360')</p>

RECEIVED
 Office of Oil and Gas

JUN 14 2023

WV Department of
 Environmental Protection