

APR 18 2023

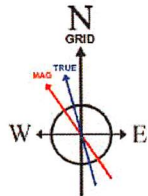
WV Department of
Environmental Protection

Plot reference wellpath is Shannon Fields OHI 210H AWP Proj. 200659 MD	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: 1262.49 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: 210H) -1236.49 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: sourdan on 2022-10-25; Database: WA_MPL_EASTERNUS_Dwh

Location Information					
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Shannon Fields OHI Pad		1736232.340	14559062.680	40°05'17.7900"N	80°39'26.7200"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
210H	42.94	-100.55	1736131.832	14559105.602	40°05'18.2182"N

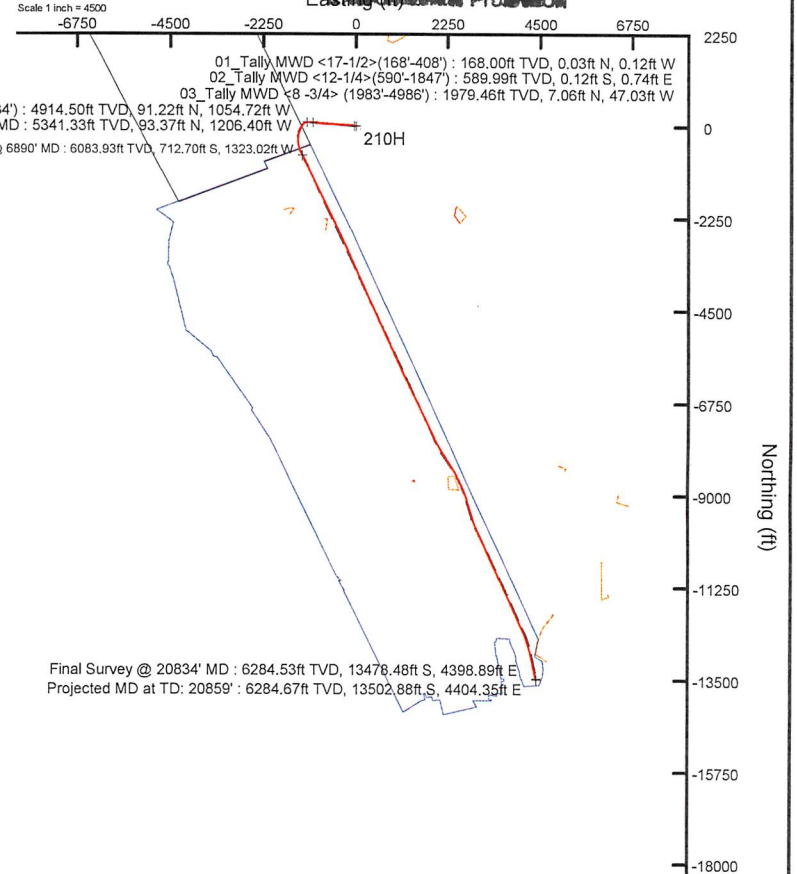
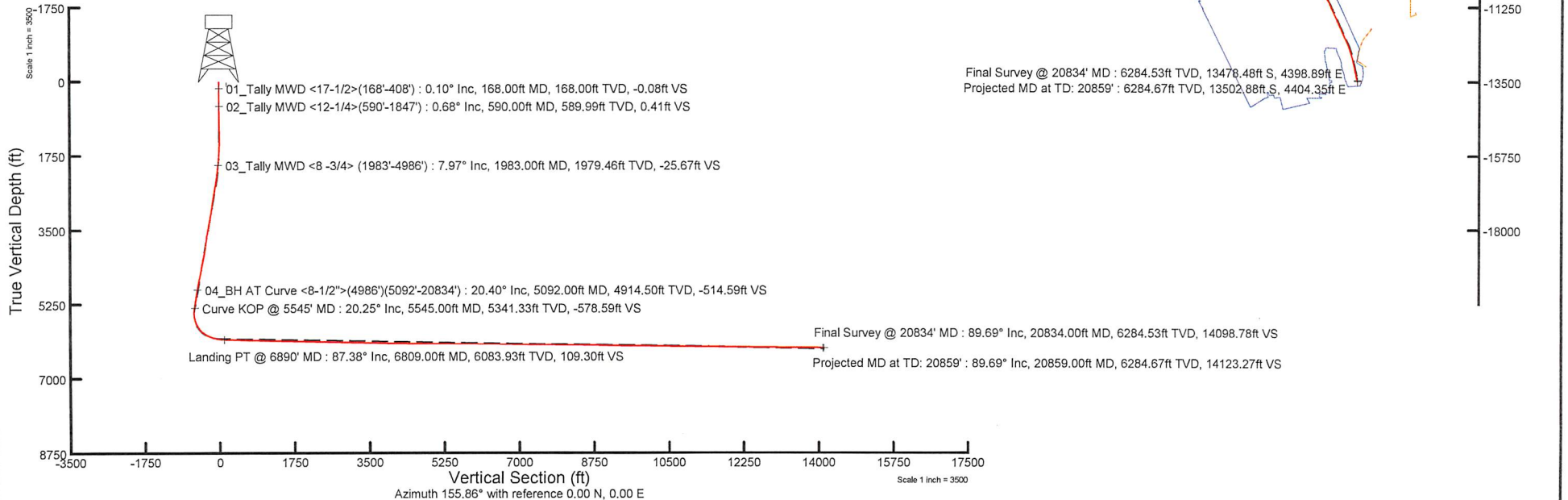
SDC 40 (KB) to Ground level (At Slot: 210H)	26ft
Mean Sea Level to Ground level (At Slot: 210H)	-1236.49ft
SDC 40 (KB) to Mean Sea Level	1262.49ft

Bottom Hole Location							
MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
20859.00	89.690	167.400	6284.67	-13502.88	4404.35	1740534.45	14545608.01



HDGM2022v1.0 (1900.0 to 2023.0) Dip: 67.02° Field: 52112.2 nT
Magnetic North is 8.09 degrees West of True North (at 9/27/2022)
Grid North is 0.22 degrees East of True North
To correct azimuth from True to Grid subtract 0.22 degrees
To correct azimuth from Magnetic to Grid subtract 8.31 degrees

API: 47-069-00334-0000
BH Job #: 111464653
Rig: SDC 40
Duration: 10/15/2022-10/18/2022

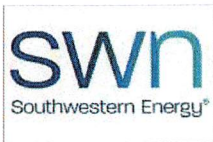




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Well Name: Shannon Fields OHI 210H 47069003340000

LITHOLOGY/FORMATION	TOP DEPTH, MD (FT)	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, MD (FT)	BOTTOM DEPTH, TVD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	0.00	0.00	352.00	352.00	
Top of Salt Water	602.00	602.00	NA	NA	
Pittsburgh Coal	504.00	504.00	509.00	509.00	
Pottsville (ss)	681.00	681.00	739.00	739.00	
Raven Cliff (ss)	953.00	953.00	1163.00	1163.00	
Maxton (ss)	1396.00	1396.00	1536.00	1535.00	
Big Injun (ss)	1536.00	1535.00	1849.00	1846.00	
Berea (siltstone)	2111.00	2105.00	2215.00	2208.00	
Rhinestreet (shale)	5719.00	5503.00	6012.00	5753.00	
Cashaqua (shale)	6012.00	5753.00	6088.00	5809.00	
Middlesex (shale)	6088.00	5809.00	6200.00	5882.00	
Burket (shale)	6200.00	5882.00	6229.00	5899.00	
Tully (ls)	6229.00	5899.00	6325.00	5952.00	
Mahantango (shale)	6325.00	5952.00	6552.00	6041.00	
Marcellus (shale)	6552.00	6041.00	NA	NA	GAS



Actual Wellpath Report

Shannon Fields OHI 210H AWP Proj: 20859' MD
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Shannon Fields OHI 210H
Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Scurdan
Scale	0.999610	Report Generated	10/25/2022 at 1:33:49 PM
Convergence at slot	0.22° 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	42.94	-100.55	1736131.83	14559105.60	40°05'18.2182"N	80°39'28.0115"W
Facility Reference Pt			1736232.34	14559062.68	40°05'17.7900"N	80°39'26.7200"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	1262.49ft
Horizontal Reference Pt	Slot	SDC 40 (KB) to Mean Sea Level	1262.49ft
Vertical Reference Pt	SDC 40 (KB)	SDC 40 (KB) to Ground Level at Slot (210H)	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	155.86°

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Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

WELLPATH DATA (222 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	285.560	0.00	0.00	0.00	0.00	1736131.83	14559105.60	40°05'18.2182"N	80°39'28.0115"W	0.00	0.000	0.00	0.00	0.00
26.00	0.000	285.560	26.00	0.00	0.00	0.00	1736131.83	14559105.60	40°05'18.2182"N	80°39'28.0115"W	0.00	0.000	0.00	0.00	0.00
168.00	0.100	285.560	168.00	-0.08	0.03	-0.12	1736131.71	14559105.64	40°05'18.2185"N	80°39'28.0131"W	0.12	285.560	0.07	0.07	0.00
228.00	0.180	296.840	228.00	-0.19	0.09	-0.25	1736131.58	14559105.69	40°05'18.2191"N	80°39'28.0148"W	0.27	289.485	0.14	0.13	18.80
318.00	0.070	200.100	318.00	-0.26	0.10	-0.40	1736131.43	14559105.70	40°05'18.2192"N	80°39'28.0167"W	0.41	284.347	0.22	-0.12	-107.49
408.00	0.090	159.540	408.00	-0.15	-0.02	-0.39	1736131.44	14559105.59	40°05'18.2180"N	80°39'28.0166"W	0.39	267.696	0.07	0.02	-45.07
590.00	0.680	88.570	589.99	0.41	-0.12	0.74	1736132.57	14559105.48	40°05'18.2169"N	80°39'28.0021"W	0.75	99.466	0.36	0.32	-38.99
680.00	1.090	90.470	679.98	0.98	-0.12	2.13	1736133.96	14559105.49	40°05'18.2169"N	80°39'27.9842"W	2.13	93.136	0.46	0.46	2.11
771.00	1.570	89.120	770.96	1.83	-0.10	4.24	1736136.07	14559105.50	40°05'18.2170"N	80°39'27.9570"W	4.24	91.412	0.53	0.53	-1.48
862.00	1.810	92.200	861.92	2.96	-0.14	6.92	1736138.75	14559105.46	40°05'18.2165"N	80°39'27.9225"W	6.92	91.163	0.28	0.26	3.38
953.00	2.030	95.390	952.87	4.39	-0.35	9.96	1736141.79	14559105.26	40°05'18.2144"N	80°39'27.8834"W	9.97	91.995	0.27	0.24	3.51
1044.00	1.390	104.750	1043.83	5.88	-0.78	12.63	1736144.46	14559104.82	40°05'18.2100"N	80°39'27.8490"W	12.66	93.530	0.77	-0.70	10.29
1135.00	0.540	136.690	1134.81	6.98	-1.37	14.00	1736145.82	14559104.23	40°05'18.2041"N	80°39'27.8316"W	14.06	95.601	1.07	-0.93	35.10
1226.00	0.850	217.620	1225.81	7.70	-2.22	13.88	1736145.70	14559103.38	40°05'18.1957"N	80°39'27.8331"W	14.05	99.086	1.02	0.34	88.93
1317.00	1.670	228.990	1316.79	8.40	-3.62	12.46	1736144.29	14559101.98	40°05'18.1819"N	80°39'27.8514"W	12.98	106.211	0.94	0.90	12.49
1408.00	2.750	244.610	1407.72	8.84	-5.43	9.49	1736141.32	14559100.17	40°05'18.1641"N	80°39'27.8897"W	10.94	119.774	1.35	1.19	17.16
1498.00	4.690	258.510	1497.53	8.08	-7.09	3.93	1736135.77	14559098.52	40°05'18.1480"N	80°39'27.9613"W	8.11	150.966	2.36	2.16	15.44
1589.00	6.140	268.680	1588.12	5.38	-7.94	-4.58	1736127.26	14559097.66	40°05'18.1399"N	80°39'28.0708"W	9.17	209.953	1.90	1.59	11.18
1680.00	6.400	281.070	1678.58	0.56	-7.08	-14.42	1736117.42	14559098.52	40°05'18.1487"N	80°39'28.1974"W	16.06	243.848	1.51	0.29	13.62
1770.00	6.320	292.270	1768.03	-5.92	-4.24	-23.93	1736107.91	14559101.36	40°05'18.1772"N	80°39'28.3196"W	24.30	259.951	1.38	-0.09	12.44
1847.00	6.500	297.090	1844.55	-12.38	-0.65	-31.73	1736100.11	14559104.95	40°05'18.2130"N	80°39'28.4198"W	31.74	268.828	0.74	0.23	6.26
1983.00	7.970	296.450	1979.46	-25.67	7.06	-47.03	1736084.83	14559112.66	40°05'18.2897"N	80°39'28.6162"W	47.55	278.534	1.08	1.08	-0.47
2074.00	9.150	286.250	2069.45	-35.23	11.89	-59.62	1736072.23	14559117.49	40°05'18.3379"N	80°39'28.7781"W	60.80	281.280	2.11	1.30	-11.21
2164.00	11.680	276.760	2157.97	-44.55	14.97	-75.54	1736056.32	14559120.56	40°05'18.3689"N	80°39'28.9827"W	77.01	281.207	3.39	2.81	-10.54
2257.00	15.200	275.850	2248.41	-55.48	17.32	-97.02	1736034.85	14559122.91	40°05'18.3930"N	80°39'29.2590"W	98.56	280.121	3.79	3.78	-0.98
2347.00	16.990	274.210	2334.88	-67.63	19.49	-121.88	1736010.00	14559125.08	40°05'18.4154"N	80°39'29.5787"W	123.43	279.084	2.05	1.99	-1.82
2439.00	18.500	271.230	2422.50	-80.26	20.79	-149.88	1735982.01	14559126.38	40°05'18.4293"N	80°39'29.9389"W	151.31	277.896	1.91	1.64	-3.24
2529.00	18.840	272.510	2507.76	-92.90	21.73	-178.67	1735953.23	14559127.32	40°05'18.4397"N	80°39'30.3093"W	179.99	276.934	0.59	0.38	1.42
2620.00	19.550	275.100	2593.70	-106.93	23.73	-208.52	1735923.40	14559129.32	40°05'18.4606"N	80°39'30.6932"W	209.86	276.492	1.22	0.78	2.85
2710.00	20.400	274.650	2678.29	-121.84	26.34	-239.15	1735892.78	14559131.93	40°05'18.4875"N	80°39'31.0872"W	240.60	276.285	0.96	0.94	-0.50

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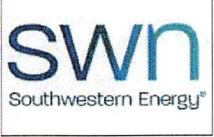


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Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

WELLPATH DATA (222 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]
2803.00	21.090	273.170	2765.26	-137.32	28.58	-272.01	1735859.93	14559134.17	40°05'18.5109"N	80°39'31.5099"W	273.51	275.997	0.93	0.74	-1.59
2894.00	19.970	272.200	2850.48	-151.73	30.08	-303.89	1735828.06	14559135.67	40°05'18.5269"N	80°39'31.9199"W	305.37	275.653	1.29	-1.23	-1.07
2985.00	19.350	269.430	2936.18	-164.65	30.52	-334.49	1735797.47	14559136.11	40°05'18.5325"N	80°39'32.3137"W	335.88	275.214	1.23	-0.68	-3.04
3078.00	19.160	271.310	3023.97	-177.37	30.72	-365.16	1735766.82	14559136.31	40°05'18.5356"N	80°39'32.7082"W	366.45	274.809	0.70	-0.20	2.02
3169.00	19.570	273.260	3109.83	-190.80	31.93	-395.30	1735736.68	14559137.52	40°05'18.5487"N	80°39'33.0960"W	396.59	274.618	0.84	0.45	2.14
3259.00	20.500	275.490	3194.38	-205.53	34.29	-426.04	1735705.96	14559139.88	40°05'18.5732"N	80°39'33.4914"W	427.42	274.602	1.34	1.03	2.48
3351.00	21.210	275.560	3280.35	-221.74	37.45	-458.64	1735673.37	14559143.03	40°05'18.6056"N	80°39'33.9106"W	460.17	274.668	0.77	0.77	0.08
3441.00	20.960	275.840	3364.33	-237.85	40.66	-490.86	1735641.17	14559146.25	40°05'18.6386"N	80°39'34.3250"W	492.54	274.736	0.30	-0.28	0.31
3532.00	20.080	273.950	3449.55	-253.34	43.39	-522.64	1735609.40	14559148.98	40°05'18.6668"N	80°39'34.7337"W	524.43	274.746	1.21	-0.97	-2.08
3623.00	20.140	273.400	3535.01	-267.94	45.40	-553.86	1735578.19	14559150.98	40°05'18.6878"N	80°39'35.1353"W	555.72	274.686	0.22	0.07	-0.60
3713.00	20.240	274.020	3619.48	-282.45	47.41	-584.86	1735547.21	14559152.99	40°05'18.7088"N	80°39'35.5340"W	586.77	274.634	0.26	0.11	0.69
3804.00	18.760	270.080	3705.26	-295.88	48.53	-615.19	1735516.88	14559154.12	40°05'18.7211"N	80°39'35.9243"W	617.10	274.511	2.17	-1.63	-4.33
3895.00	18.040	269.140	3791.60	-307.46	48.34	-643.92	1735488.17	14559153.93	40°05'18.7203"N	80°39'36.2939"W	645.73	274.294	0.86	-0.79	-1.03
3988.00	19.140	269.410	3879.75	-319.24	47.97	-673.56	1735458.54	14559153.55	40°05'18.7177"N	80°39'36.6753"W	675.27	274.074	1.19	1.18	0.29
4079.00	20.400	272.310	3965.39	-332.27	48.46	-704.33	1735427.78	14559154.04	40°05'18.7237"N	80°39'37.0711"W	705.99	273.936	1.75	1.38	3.19
4170.00	20.690	274.050	4050.60	-346.92	50.23	-736.21	1735395.91	14559155.81	40°05'18.7424"N	80°39'37.4813"W	737.92	273.903	0.74	0.32	1.91
4260.00	20.930	275.350	4134.73	-362.35	52.85	-768.08	1735364.06	14559158.43	40°05'18.7695"N	80°39'37.8911"W	769.89	273.936	0.58	0.27	1.44
4351.00	21.500	276.020	4219.56	-378.73	56.12	-800.84	1735331.30	14559161.70	40°05'18.8030"N	80°39'38.3125"W	802.81	274.008	0.68	0.63	0.74
4442.00	20.960	277.680	4304.39	-395.69	60.04	-833.56	1735298.60	14559165.62	40°05'18.8430"N	80°39'38.7333"W	835.72	274.120	0.89	-0.59	1.82
4532.00	19.950	275.520	4388.71	-411.77	63.67	-864.79	1735267.38	14559169.25	40°05'18.8801"N	80°39'39.1350"W	867.13	274.211	1.40	-1.12	-2.40
4623.00	18.850	275.970	4474.54	-426.83	66.69	-894.87	1735237.31	14559172.27	40°05'18.9111"N	80°39'39.5218"W	897.35	274.262	1.22	-1.21	0.49
4713.00	18.820	281.400	4559.73	-442.56	71.07	-923.56	1735208.63	14559176.65	40°05'18.9555"N	80°39'39.8907"W	926.29	274.401	1.95	-0.03	6.03
4805.00	21.180	285.420	4646.18	-461.78	78.43	-954.13	1735178.07	14559184.00	40°05'19.0293"N	80°39'40.2837"W	957.35	274.699	2.97	2.57	4.37
4895.00	20.830	282.430	4730.20	-481.67	86.19	-985.44	1735146.78	14559191.76	40°05'19.1072"N	80°39'40.6861"W	989.20	274.999	1.25	-0.39	-3.32
4986.00	20.830	272.080	4815.28	-498.46	90.27	-1017.42	1735114.81	14559195.83	40°05'19.1487"N	80°39'41.0974"W	1021.41	275.070	4.04	0.00	-11.37
5092.00	20.400	270.850	4914.50	-514.59	91.22	-1054.72	1735077.52	14559196.79	40°05'19.1595"N	80°39'41.5773"W	1058.66	274.943	0.58	-0.41	-1.16
5182.00	19.960	271.070	4998.97	-527.76	91.74	-1085.77	1735046.49	14559197.31	40°05'19.1658"N	80°39'41.9767"W	1089.64	274.830	0.50	-0.49	0.24
5273.00	19.520	270.780	5084.62	-540.79	92.24	-1116.50	1735015.77	14559197.81	40°05'19.1719"N	80°39'42.3721"W	1120.30	274.723	0.50	-0.48	-0.32
5364.00	18.770	271.060	5170.59	-553.43	92.72	-1146.34	1734985.94	14559198.28	40°05'19.1777"N	80°39'42.7560"W	1150.08	274.624	0.83	-0.82	0.31
5454.00	19.250	270.760	5255.68	-565.84	93.18	-1175.65	1734956.64	14559198.75	40°05'19.1834"N	80°39'43.1331"W	1179.34	274.532	0.54	0.53	-0.33

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WELLPATH DATA (222 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]
5545.00	20.250	269.970	5341.33	-578.59	93.37	-1206.40	1734925.91	14559198.94	40°05'19.1865"N	80°39'43.5287"W	1210.01	274.426	1.14	1.10	-0.87
5636.00	20.630	254.150	5426.66	-587.34	88.98	-1237.59	1734894.72	14559194.55	40°05'19.1443"N	80°39'43.9303"W	1240.79	274.113	6.07	0.42	-17.38
5727.00	23.930	237.990	5510.94	-587.12	74.81	-1268.70	1734863.63	14559180.38	40°05'19.0053"N	80°39'44.3312"W	1270.90	273.374	7.61	3.63	-17.76
5812.00	27.520	222.930	5587.58	-577.10	51.26	-1296.73	1734835.61	14559156.84	40°05'18.7736"N	80°39'44.6930"W	1297.75	272.264	8.74	4.22	-17.72
5903.00	33.170	214.470	5666.12	-555.91	15.29	-1325.18	1734807.17	14559120.89	40°05'18.4193"N	80°39'45.0608"W	1325.27	270.661	7.77	6.21	-9.30
5994.00	39.050	206.080	5739.65	-524.56	-31.04	-1351.91	1734780.45	14559074.57	40°05'17.9624"N	80°39'45.4069"W	1352.27	268.685	8.43	6.46	-9.22
6084.00	45.100	203.400	5806.43	-484.86	-85.82	-1377.06	1734755.31	14559019.82	40°05'17.4221"N	80°39'45.7332"W	1379.73	266.434	7.01	6.72	-2.98
6175.00	50.580	197.670	5867.51	-436.84	-148.96	-1400.56	1734731.82	14558956.70	40°05'16.7989"N	80°39'46.0386"W	1408.46	263.929	7.61	6.02	-6.30
6265.00	56.030	190.160	5921.32	-380.01	-218.94	-1417.72	1734714.67	14558886.75	40°05'16.1081"N	80°39'46.2628"W	1434.52	261.221	9.02	6.06	-8.34
6355.00	62.060	182.090	5967.65	-313.38	-295.57	-1425.77	1734706.62	14558810.15	40°05'15.3512"N	80°39'46.3701"W	1456.08	258.288	10.19	6.70	-8.97
6446.00	68.050	177.040	6006.03	-237.86	-378.00	-1425.05	1734707.33	14558727.75	40°05'14.5365"N	80°39'46.3649"W	1474.34	255.144	8.28	6.58	-5.55
6536.00	72.260	169.230	6036.62	-157.09	-461.94	-1414.87	1734717.51	14558643.84	40°05'13.7066"N	80°39'46.2380"W	1488.37	251.919	9.40	4.68	-8.68
6627.00	77.340	162.810	6060.50	-70.72	-547.06	-1393.62	1734738.76	14558558.75	40°05'12.8646"N	80°39'45.9687"W	1497.15	248.568	8.80	5.58	-7.05
6718.00	82.840	155.450	6076.17	18.68	-630.71	-1361.67	1734770.69	14558475.14	40°05'12.0368"N	80°39'45.5618"W	1500.65	245.147	10.00	6.04	-8.09
6809.00	87.380	154.070	6083.93	109.30	-712.70	-1323.02	1734809.33	14558393.18	40°05'11.2251"N	80°39'45.0685"W	1502.77	241.689	5.21	4.99	-1.52
6901.00	87.780	153.930	6087.81	201.17	-795.32	-1282.73	1734849.61	14558310.60	40°05'10.4072"N	80°39'44.5541"W	1509.28	238.200	0.46	0.43	-0.15
6991.00	89.410	154.460	6090.02	291.10	-876.31	-1243.56	1734888.76	14558229.63	40°05'9.6053"N	80°39'44.0542"W	1521.31	234.828	1.90	1.81	0.59
7089.00	87.140	154.300	6092.97	389.02	-964.63	-1201.21	1734931.09	14558141.35	40°05'8.7309"N	80°39'43.5136"W	1540.59	231.234	2.32	-2.32	-0.16
7185.00	88.400	154.170	6096.70	484.91	-1051.02	-1159.51	1734972.77	14558054.99	40°05'7.8757"N	80°39'42.9814"W	1564.96	227.810	1.32	1.31	-0.14
7282.00	88.150	153.480	6099.62	581.80	-1138.03	-1116.74	1735015.53	14557968.01	40°05'7.0142"N	80°39'42.4354"W	1594.44	224.459	0.76	-0.26	-0.71
7378.00	87.660	154.300	6103.13	677.68	-1224.18	-1074.52	1735057.73	14557881.90	40°05'6.1613"N	80°39'41.8964"W	1628.87	221.275	0.99	-0.51	0.85
7474.00	89.140	153.640	6105.81	773.58	-1310.40	-1032.41	1735099.83	14557795.71	40°05'5.3076"N	80°39'41.3588"W	1668.24	218.233	1.69	1.54	-0.69
7570.00	89.380	154.660	6107.05	869.53	-1396.79	-990.56	1735141.66	14557709.36	40°05'4.4524"N	80°39'40.8246"W	1712.37	215.343	1.09	0.25	1.06
7667.00	88.520	153.500	6108.83	966.47	-1484.02	-948.17	1735184.04	14557622.17	40°05'3.5888"N	80°39'40.2835"W	1761.06	212.575	1.49	-0.89	-1.20
7764.00	88.610	153.970	6111.26	1063.37	-1570.97	-905.25	1735226.93	14557535.24	40°05'2.7279"N	80°39'39.7357"W	1813.13	209.952	0.49	0.09	0.48
7860.00	88.460	153.820	6113.71	1159.28	-1657.15	-863.03	1735269.14	14557449.10	40°05'1.8747"N	80°39'39.1966"W	1868.41	207.510	0.22	-0.16	-0.16
7957.00	88.950	154.040	6115.91	1256.20	-1744.26	-820.41	1735311.74	14557362.02	40°05'1.0123"N	80°39'38.6526"W	1927.57	205.190	0.55	0.51	0.23
8053.00	88.830	154.020	6117.77	1352.13	-1830.55	-778.38	1735353.76	14557275.77	40°05'0.1579"N	80°39'38.1161"W	1989.17	203.036	0.13	-0.12	-0.02
8149.00	88.640	153.690	6119.89	1448.05	-1916.71	-736.09	1735396.03	14557189.65	40°04'59.3049"N	80°39'37.5763"W	2053.19	201.009	0.40	-0.20	-0.34
8246.00	88.430	153.310	6122.37	1544.94	-2003.49	-692.82	1735439.28	14557102.90	40°04'58.4457"N	80°39'37.0239"W	2119.90	199.076	0.45	-0.22	-0.39

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Shannon Fields OHI 210H
Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

WELLPATH DATA (222 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]
8343.00	89.170	155.000	6124.40	1641.87	-2090.76	-650.55	1735481.54	14557015.66	40°04'57.5817"N	80°39'36.4843"W	2189.63	197.284	1.90	0.76	1.74
8440.00	88.830	154.750	6126.09	1738.84	-2178.57	-609.37	1735522.70	14556927.88	40°04'56.7124"N	80°39'35.9589"W	2262.19	195.627	0.44	-0.35	-0.26
8536.00	88.710	154.660	6128.15	1834.80	-2265.35	-568.36	1735563.70	14556841.14	40°04'55.8533"N	80°39'35.4355"W	2335.56	194.084	0.16	-0.12	-0.09
8633.00	89.080	153.550	6130.02	1931.73	-2352.59	-526.00	1735606.03	14556753.93	40°04'54.9896"N	80°39'34.8950"W	2410.67	192.603	1.21	0.38	-1.14
8730.00	88.430	155.060	6132.13	2028.67	-2439.97	-483.96	1735648.06	14556666.58	40°04'54.1244"N	80°39'34.3583"W	2487.51	191.219	1.69	-0.67	1.56
8826.00	88.490	154.590	6134.71	2124.62	-2526.82	-443.14	1735688.87	14556579.77	40°04'53.2646"N	80°39'33.8374"W	2565.39	189.947	0.49	0.06	-0.49
8922.00	88.740	154.520	6137.03	2220.57	-2613.49	-401.90	1735730.09	14556493.14	40°04'52.4067"N	80°39'33.3112"W	2644.21	188.742	0.27	0.26	-0.07
9019.00	88.830	154.720	6139.09	2317.52	-2701.10	-360.33	1735771.64	14556405.56	40°04'51.5392"N	80°39'32.7808"W	2725.03	187.599	0.23	0.09	0.21
9115.00	88.800	154.730	6141.07	2413.48	-2787.89	-319.36	1735812.60	14556318.80	40°04'50.6800"N	80°39'32.2579"W	2806.13	186.535	0.03	-0.03	0.01
9212.00	88.980	156.140	6142.95	2510.46	-2876.10	-279.04	1735852.90	14556230.63	40°04'49.8069"N	80°39'31.7436"W	2889.60	185.541	1.47	0.19	1.45
9308.00	88.520	155.330	6145.05	2606.44	-2963.59	-239.60	1735892.33	14556143.17	40°04'48.9407"N	80°39'31.2405"W	2973.26	184.622	0.97	-0.48	-0.84
9405.00	89.080	155.920	6147.08	2703.41	-3051.93	-199.57	1735932.34	14556054.87	40°04'48.0663"N	80°39'30.7300"W	3058.45	183.741	0.84	0.58	0.61
9501.00	88.980	156.000	6148.70	2799.40	-3139.59	-160.47	1735971.42	14555967.24	40°04'47.1985"N	80°39'30.2313"W	3143.69	182.926	0.13	-0.10	0.08
9598.00	88.490	155.710	6150.84	2896.38	-3228.08	-120.80	1736011.08	14555878.79	40°04'46.3225"N	80°39'29.7253"W	3230.34	182.143	0.59	-0.51	-0.30
9694.00	88.800	155.980	6153.11	2992.35	-3315.65	-81.53	1736050.33	14555791.25	40°04'45.4557"N	80°39'29.2244"W	3316.65	181.409	0.43	0.32	0.28
9790.00	88.710	155.400	6155.20	3088.33	-3403.12	-42.02	1736089.83	14555703.82	40°04'44.5898"N	80°39'28.7205"W	3403.38	180.707	0.61	-0.09	-0.60
9887.00	88.920	156.040	6157.21	3185.30	-3491.52	-2.14	1736129.69	14555615.45	40°04'43.7147"N	80°39'28.2118"W	3491.52	180.035	0.69	0.22	0.66
9983.00	88.920	155.500	6159.02	3281.29	-3579.04	37.25	1736169.07	14555527.96	40°04'42.8483"N	80°39'27.7094"W	3579.24	179.404	0.56	0.00	-0.56
10080.00	88.950	155.630	6160.82	3378.27	-3667.34	77.37	1736209.17	14555439.70	40°04'41.9742"N	80°39'27.1977"W	3668.16	178.791	0.14	0.03	0.13
10176.00	88.830	155.700	6162.68	3474.25	-3754.79	116.92	1736248.71	14555352.28	40°04'41.1084"N	80°39'26.6932"W	3756.61	178.216	0.14	-0.12	0.07
10273.00	88.920	155.920	6164.58	3571.23	-3843.26	156.66	1736288.43	14555263.85	40°04'40.2327"N	80°39'26.1864"W	3846.45	177.666	0.25	0.09	0.23
10369.00	88.550	156.020	6166.70	3667.21	-3930.92	195.74	1736327.50	14555176.22	40°04'39.3650"N	80°39'25.6880"W	3935.79	177.149	0.40	-0.39	0.10
10465.00	88.340	155.930	6169.31	3763.17	-4018.57	234.81	1736366.55	14555088.61	40°04'38.4973"N	80°39'25.1897"W	4025.42	176.656	0.24	-0.22	-0.09
10562.00	88.520	155.430	6171.96	3860.13	-4106.93	274.74	1736406.47	14555000.28	40°04'37.6226"N	80°39'24.6804"W	4116.11	176.173	0.55	0.19	-0.52
10658.00	88.920	155.910	6174.11	3956.11	-4194.38	314.29	1736445.99	14554912.86	40°04'36.7569"N	80°39'24.1761"W	4206.14	175.715	0.65	0.42	0.50
10754.00	89.380	155.640	6175.53	4052.10	-4281.92	353.67	1736485.37	14554825.36	40°04'35.8903"N	80°39'23.6738"W	4296.50	175.278	0.56	0.48	-0.28
10851.00	89.600	155.530	6176.40	4149.09	-4370.24	393.76	1736525.44	14554737.07	40°04'35.0160"N	80°39'23.1624"W	4387.94	174.851	0.25	0.23	-0.11
10947.00	89.850	155.800	6176.86	4245.09	-4457.71	433.32	1736564.99	14554649.64	40°04'34.1501"N	80°39'22.6579"W	4478.72	174.448	0.38	0.26	0.28
11044.00	88.920	155.830	6177.90	4342.08	-4546.19	473.06	1736604.71	14554561.19	40°04'33.2742"N	80°39'22.1511"W	4570.73	174.059	0.96	-0.96	0.03
11140.00	89.170	155.410	6179.50	4438.07	-4633.61	512.68	1736644.31	14554473.80	40°04'32.4088"N	80°39'21.6458"W	4661.89	173.686	0.51	0.26	-0.44

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Actual Wellpath Report

Shannon Fields OHI 210H AWP Proj: 20859' MD
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Shannon Fields OHI 210H
Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

WELLPATH DATA (222 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]	
11236.00	89.350	155.780	6180.74	4534.06	-4721.03	552.34	1736683.96	14554386.42	40°04'31.5434"N	80°39'21.1399"W	4753.23	173.327	0.43	0.19	0.39	
11332.00	89.200	155.310	6181.95	4630.05	-4808.41	592.08	1736723.68	14554299.07	40°04'30.6784"N	80°39'20.6331"W	4844.73	172.980	0.51	-0.16	-0.49	
11429.00	89.320	155.300	6183.21	4727.04	-4896.53	632.60	1736764.19	14554210.99	40°04'29.8060"N	80°39'20.1162"W	4937.23	172.638	0.12	0.12	-0.01	
11526.00	89.230	155.420	6184.43	4824.03	-4984.69	673.04	1736804.61	14554122.86	40°04'28.9332"N	80°39'19.6004"W	5029.92	172.310	0.15	-0.09	0.12	
11622.00	89.320	155.550	6185.65	4920.02	-5072.03	712.87	1736844.43	14554035.56	40°04'28.0686"N	80°39'19.0924"W	5121.88	172.000	0.16	0.09	0.14	
11719.00	89.410	155.520	6186.72	5017.01	-5160.32	753.04	1736884.58	14553947.31	40°04'27.1946"N	80°39'18.5801"W	5214.97	171.697	0.10	0.09	-0.03	
11815.00	89.290	155.630	6187.81	5113.00	-5247.72	792.73	1736924.26	14553859.94	40°04'26.3294"N	80°39'18.0739"W	5307.26	171.410	0.17	-0.13	0.11	
11912.00	88.950	154.630	6189.30	5209.98	-5335.71	833.52	1736965.03	14553771.98	40°04'25.4583"N	80°39'17.5536"W	5400.42	171.121	1.09	-0.35	-1.03	
12008.00	90.120	155.970	6190.08	5305.97	-5422.92	873.64	1737005.13	14553684.80	40°04'24.5949"N	80°39'17.0419"W	5492.84	170.848	1.85	1.22	1.40	
12105.00	89.720	156.530	6190.22	5402.97	-5511.71	912.70	1737044.18	14553596.05	40°04'23.7160"N	80°39'16.5438"W	5586.76	170.598	0.71	-0.41	0.58	
12201.00	89.010	154.280	6191.28	5498.95	-5598.99	952.65	1737084.11	14553508.81	40°04'22.8520"N	80°39'16.0343"W	5679.45	170.344	2.46	-0.74	-2.34	
12298.00	89.780	155.270	6192.30	5595.93	-5686.73	993.99	1737125.43	14553421.10	40°04'21.9833"N	80°39'15.5070"W	5772.95	170.085	1.29	0.79	1.02	
12394.00	90.060	155.930	6192.44	5691.93	-5774.15	1033.65	1737165.07	14553333.71	40°04'21.1179"N	80°39'15.0012"W	5865.94	169.851	0.75	0.29	0.69	
12491.00	89.200	155.440	6193.06	5788.92	-5862.55	1073.58	1737205.00	14553245.35	40°04'20.2428"N	80°39'14.4919"W	5960.04	169.623	1.02	-0.89	-0.51	
12587.00	89.510	155.240	6194.15	5884.91	-5949.79	1113.64	1737245.03	14553158.15	40°04'19.3792"N	80°39'13.9811"W	6053.11	169.398	0.38	0.32	-0.21	
12684.00	89.660	154.910	6194.85	5981.90	-6037.75	1154.51	1737285.89	14553070.22	40°04'18.5083"N	80°39'13.4597"W	6147.14	169.175	0.37	0.15	-0.34	
12780.00	88.460	154.280	6196.42	6077.86	-6124.45	1195.69	1737327.06	14552983.55	40°04'17.6499"N	80°39'12.9343"W	6240.08	168.953	1.41	-1.25	-0.66	
12877.00	90.400	153.320	6197.39	6174.79	-6211.48	1238.51	1737369.86	14552896.56	40°04'16.7883"N	80°39'12.3879"W	6333.75	168.724	2.23	2.00	-0.99	
12973.00	89.350	154.330	6197.60	6270.72	-6297.63	1280.86	1737412.19	14552810.44	40°04'15.9353"N	80°39'11.8475"W	6426.56	168.504	1.52	-1.09	1.05	
13069.00	88.920	154.610	6199.05	6366.68	-6384.25	1322.23	1737453.54	14552723.86	40°04'15.0778"N	80°39'11.3197"W	6519.73	168.299	0.53	-0.45	0.29	
13166.00	89.230	154.840	6200.61	6463.65	-6471.95	1363.64	1737494.94	14552636.19	40°04'14.2095"N	80°39'10.7915"W	6614.05	168.102	0.40	0.32	0.24	
13263.00	89.010	154.650	6202.10	6560.62	-6559.67	1405.02	1737536.30	14552548.50	40°04'13.3410"N	80°39'10.2636"W	6708.45	167.910	0.30	-0.23	-0.20	
13359.00	89.140	154.660	6203.65	6656.59	-6646.41	1446.11	1737577.37	14552461.79	40°04'12.4822"N	80°39'9.7394"W	6801.92	167.725	0.14	0.14	0.01	
13456.00	88.680	153.890	6205.50	6753.53	-6733.78	1488.20	1737619.45	14552374.45	40°04'11.6172"N	80°39'9.2024"W	6896.27	167.538	0.92	-0.47	-0.79	
13552.00	88.920	152.670	6207.51	6849.41	-6819.51	1531.36	1737662.59	14552288.76	40°04'10.7683"N	80°39'8.6516"W	6989.33	167.344	1.29	0.25	-1.27	
13649.00	89.910	155.200	6208.50	6946.34	-6906.63	1573.97	1737705.19	14552201.67	40°04'9.9057"N	80°39'8.1078"W	7083.71	167.162	2.80	1.02	2.61	
13746.00	88.580	154.420	6209.78	7043.32	-6994.40	1615.25	1737746.45	14552113.94	40°04'9.0368"N	80°39'7.5813"W	7178.49	166.996	1.59	-1.37	-0.80	
13842.00	88.550	153.920	6212.18	7139.24	-7080.78	1657.07	1737788.25	14552027.59	40°04'8.1816"N	80°39'7.0478"W	7272.09	166.829	0.52	-0.03	-0.52	
13938.00	89.140	153.650	6214.12	7235.16	-7166.89	1699.46	1737830.63	14551941.52	40°04'7.3290"N	80°39'6.5068"W	7365.63	166.660	0.68	0.61	-0.28	
14035.00	89.510	154.080	6215.26	7332.10	-7253.96	1742.19	1737873.34	14551854.48	40°04'6.4669"N	80°39'5.9616"W	7460.24	166.495	0.58	0.38	0.44	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Shannon Fields OHI 210H
Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

WELLPATH DATA (222 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]
14131.00	89.200	154.040	6216.34	7428.04	7340.29	1784.18	1737915.31	14551768.19	40°04'5.6122"N	80°39'5.4259"W	7554.01	166.338	0.33	-0.32	-0.04
14228.00	90.090	154.450	6216.94	7525.00	7427.65	1826.33	1737957.44	14551680.86	40°04'4.7473"N	80°39'4.8882"W	7648.88	166.186	1.01	0.92	0.42
14325.00	89.600	155.120	6217.20	7621.98	7515.40	1867.65	1737998.75	14551593.14	40°04'3.8784"N	80°39'4.3611"W	7743.99	166.044	0.86	-0.51	0.69
14422.00	89.600	154.640	6217.88	7718.97	7603.23	1908.83	1738039.91	14551505.35	40°04'3.0090"N	80°39'3.8359"W	7839.18	165.907	0.49	0.00	-0.49
14518.00	89.320	154.650	6218.78	7814.94	7689.98	1949.93	1738081.00	14551418.64	40°04'2.1501"N	80°39'3.3115"W	7933.35	165.771	0.29	-0.29	0.01
14613.00	89.080	151.800	6220.11	7909.82	7774.77	1992.72	1738123.77	14551333.87	40°04'1.3105"N	80°39'2.7655"W	8026.09	165.624	3.01	-0.25	-3.00
14710.00	90.150	150.120	6220.76	8006.46	7859.57	2039.80	1738170.84	14551249.11	40°04'0.4707"N	80°39'2.1642"W	8119.96	165.451	2.05	1.10	-1.73
14806.00	89.660	147.600	6220.92	8101.74	7941.73	2089.45	1738220.46	14551166.98	40°03'59.6568"N	80°39'1.5298"W	8212.00	165.260	2.67	-0.51	-2.62
14903.00	89.380	146.200	6221.74	8197.55	8022.99	2142.41	1738273.41	14551085.76	40°03'58.8518"N	80°39'0.8527"W	8304.11	165.049	1.47	-0.29	-1.44
14999.00	89.690	146.630	6222.51	8292.24	8102.96	2195.52	1738326.49	14551005.82	40°03'58.0594"N	80°39'0.1737"W	8395.13	164.840	0.55	0.32	0.45
15096.00	89.380	148.150	6223.30	8388.18	8184.66	2247.79	1738378.74	14550924.14	40°03'57.2500"N	80°38'59.5055"W	8487.71	164.643	1.60	-0.32	1.57
15193.00	88.430	145.810	6225.16	8483.99	8265.97	2300.63	1738431.56	14550842.87	40°03'56.4444"N	80°38'58.8299"W	8580.16	164.447	2.60	-0.98	-2.41
15289.00	89.750	145.870	6226.68	8578.51	8345.40	2354.53	1738485.44	14550763.47	40°03'55.6574"N	80°38'58.1408"W	8671.19	164.244	1.38	1.37	0.06
15386.00	89.600	148.800	6227.23	8674.43	8427.05	2406.88	1738537.77	14550681.85	40°03'54.8485"N	80°38'57.4716"W	8764.03	164.060	3.02	-0.15	3.02
15482.00	88.580	150.890	6228.76	8769.88	8510.04	2455.09	1738585.96	14550598.89	40°03'54.0265"N	80°38'56.8557"W	8857.10	163.907	2.42	-1.06	2.18
15578.00	88.520	152.730	6231.18	8865.60	8594.62	2500.43	1738631.28	14550514.35	40°03'53.1889"N	80°38'56.2769"W	8950.96	163.779	1.92	-0.06	1.92
15675.00	88.340	154.940	6233.84	8962.50	8681.64	2543.18	1738674.02	14550427.36	40°03'52.3273"N	80°38'55.7314"W	9046.47	163.673	2.29	-0.19	2.28
15771.00	88.520	153.770	6236.47	9058.43	8768.15	2584.71	1738715.53	14550340.88	40°03'51.4708"N	80°38'55.2017"W	9141.18	163.575	1.23	0.19	-1.22
15868.00	89.540	156.580	6238.12	9155.40	8856.17	2625.43	1738756.23	14550252.90	40°03'50.5994"N	80°38'54.6825"W	9237.13	163.487	3.08	1.05	2.90
15964.00	88.860	158.720	6239.46	9251.34	8944.94	2661.93	1738792.72	14550164.16	40°03'49.7207"N	80°38'54.2175"W	9332.62	163.428	2.34	-0.71	2.23
16060.00	88.280	161.120	6241.85	9347.06	9035.07	2694.87	1738825.65	14550074.07	40°03'48.8287"N	80°38'53.7984"W	9428.41	163.392	2.57	-0.60	2.50
16157.00	89.750	166.100	6243.52	9443.13	9128.08	2722.23	1738853.00	14549981.09	40°03'47.9085"N	80°38'53.4513"W	9525.36	163.394	5.35	1.52	5.13
16253.00	88.800	163.350	6244.74	9537.96	9220.67	2747.52	1738878.27	14549888.54	40°03'46.9925"N	80°38'53.1307"W	9621.31	163.407	3.03	-0.99	-2.86
16350.00	89.910	163.200	6245.83	9634.14	9313.56	2775.43	1738906.17	14549795.68	40°03'46.0735"N	80°38'52.7765"W	9718.31	163.406	1.15	1.14	-0.15
16446.00	89.480	162.980	6246.34	9729.38	9405.41	2803.35	1738934.09	14549703.87	40°03'45.1647"N	80°38'52.4220"W	9814.30	163.403	0.50	-0.45	-0.23
16543.00	89.290	163.510	6247.38	9825.57	9498.29	2831.31	1738962.04	14549611.03	40°03'44.2458"N	80°38'52.0671"W	9911.30	163.401	0.58	-0.20	0.55
16639.00	90.430	163.050	6247.61	9920.76	9590.23	2858.93	1738989.64	14549519.13	40°03'43.3362"N	80°38'51.7166"W	10007.29	163.400	1.28	1.19	-0.48
16736.00	89.410	160.190	6247.75	10017.26	9682.27	2889.51	1739020.21	14549427.13	40°03'42.4254"N	80°38'51.3280"W	10104.24	163.383	3.13	-1.05	-2.95
16832.00	88.800	157.490	6249.25	10113.11	9771.78	2924.16	1739054.85	14549337.65	40°03'41.5396"N	80°38'50.8869"W	10199.92	163.340	2.88	-0.64	-2.81
16927.00	88.890	154.710	6251.16	10208.08	9858.60	2962.64	1739093.31	14549250.86	40°03'40.6800"N	80°38'50.3965"W	10294.14	163.274	2.93	0.09	-2.93

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Shannon Fields OHI 210H
Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

WELLPATH DATA (222 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]
17024.00	90.590	157.750	6251.60	10305.06	-9947.36	3001.73	1739132.38	14549162.14	40°03'39.8014"N	80°38'49.8983"W	10390.40	163.208	3.59	1.75	3.13
17121.00	88.890	156.680	6252.04	10402.03	-10036.79	3039.29	1739169.93	14549072.75	40°03'38.9162"N	80°38'49.4198"W	10486.87	163.153	2.07	-1.75	-1.10
17217.00	88.980	155.530	6253.83	10498.01	-10124.54	3078.17	1739208.79	14548985.03	40°03'38.0475"N	80°38'48.9242"W	10582.13	163.089	1.20	0.09	-1.20
17314.00	89.660	156.660	6254.98	10595.00	-10213.21	3117.47	1739248.08	14548896.39	40°03'37.1697"N	80°38'48.4233"W	10678.40	163.026	1.36	0.70	1.16
17411.00	89.720	156.540	6255.51	10691.99	-10302.23	3155.99	1739286.59	14548807.40	40°03'36.2884"N	80°38'47.9324"W	10774.80	162.968	0.14	0.06	-0.12
17507.00	89.540	156.310	6256.13	10787.98	-10390.22	3194.39	1739324.97	14548719.45	40°03'35.4174"N	80°38'47.4431"W	10870.18	162.910	0.30	-0.19	-0.24
17604.00	89.510	155.050	6256.93	10884.98	-10478.61	3234.33	1739364.90	14548631.10	40°03'34.5424"N	80°38'46.9339"W	10966.41	162.847	1.30	-0.03	-1.30
17700.00	89.230	155.640	6257.99	10980.97	-10565.85	3274.38	1739404.93	14548543.89	40°03'33.6787"N	80°38'46.4233"W	11061.59	162.782	0.68	-0.29	0.61
17797.00	88.860	155.320	6259.60	11077.95	-10654.09	3314.63	1739445.16	14548455.69	40°03'32.8051"N	80°38'45.9102"W	11157.79	162.718	0.50	-0.38	-0.33
17893.00	88.950	155.620	6261.44	11173.93	-10741.41	3354.48	1739485.00	14548368.40	40°03'31.9407"N	80°38'45.4022"W	11253.01	162.657	0.33	0.09	0.31
17989.00	89.450	154.080	6262.78	11269.90	-10828.29	3395.27	1739525.77	14548281.55	40°03'31.0804"N	80°38'44.8820"W	11348.12	162.591	1.69	0.52	-1.60
18086.00	90.150	156.300	6263.12	11366.89	-10916.34	3435.97	1739566.46	14548193.54	40°03'30.2088"N	80°38'44.3631"W	11444.31	162.528	2.40	0.72	2.29
18182.00	89.010	155.430	6263.82	11462.88	-11003.94	3475.22	1739605.69	14548105.97	40°03'29.3415"N	80°38'43.8628"W	11539.66	162.473	1.49	-1.19	-0.91
18278.00	89.570	155.290	6265.01	11558.87	-11091.19	3515.24	1739645.70	14548018.75	40°03'28.4777"N	80°38'43.3526"W	11634.92	162.415	0.60	0.58	-0.15
18375.00	89.410	155.180	6265.87	11655.86	-11179.27	3555.87	1739686.31	14547930.71	40°03'27.6058"N	80°38'42.8346"W	11731.16	162.355	0.20	-0.16	-0.11
18471.00	89.350	155.020	6266.91	11751.85	-11266.34	3596.29	1739726.71	14547843.68	40°03'26.7437"N	80°38'42.3192"W	11826.40	162.297	0.18	-0.06	-0.17
18568.00	89.510	155.280	6267.88	11848.84	-11354.35	3637.05	1739767.46	14547755.70	40°03'25.8723"N	80°38'41.7995"W	11922.64	162.239	0.31	0.16	0.27
18664.00	89.410	155.490	6268.78	11944.83	-11441.62	3677.04	1739807.43	14547668.46	40°03'25.0083"N	80°38'41.2898"W	12017.96	162.184	0.24	-0.10	0.22
18761.00	89.570	155.520	6269.64	12041.82	-11529.89	3717.25	1739847.63	14547580.23	40°03'24.1345"N	80°38'40.7772"W	12114.30	162.131	0.17	0.16	0.03
18857.00	89.690	155.310	6270.26	12137.82	-11617.19	3757.19	1739887.55	14547492.96	40°03'23.2702"N	80°38'40.2680"W	12209.65	162.078	0.25	0.13	-0.22
18954.00	89.600	155.430	6270.86	12234.81	-11705.36	3797.62	1739927.96	14547404.83	40°03'22.3973"N	80°38'39.7527"W	12305.99	162.025	0.15	-0.09	0.12
19051.00	89.630	155.480	6271.52	12331.81	-11793.59	3837.91	1739968.24	14547316.63	40°03'21.5238"N	80°38'39.2390"W	12402.35	161.974	0.06	0.03	0.05
19147.00	89.780	156.260	6272.01	12427.81	-11881.20	3877.15	1740007.47	14547229.05	40°03'20.6565"N	80°38'38.7389"W	12497.81	161.927	0.83	0.16	0.81
19243.00	89.320	155.050	6272.77	12523.80	-11968.66	3916.73	1740047.02	14547141.63	40°03'19.7906"N	80°38'38.2345"W	12593.23	161.879	1.35	-0.48	-1.26
19340.00	89.630	155.550	6273.65	12620.79	-12056.78	3957.26	1740087.54	14547053.54	40°03'18.9182"N	80°38'37.7178"W	12689.60	161.829	0.61	0.32	0.52
19436.00	89.380	155.760	6274.48	12716.79	-12144.24	3996.83	1740127.10	14546966.12	40°03'18.0523"N	80°38'37.2134"W	12785.04	161.783	0.34	-0.26	0.22
19532.00	89.080	155.040	6275.77	12812.78	-12231.52	4036.79	1740167.04	14546878.87	40°03'17.1883"N	80°38'36.7040"W	12880.44	161.735	0.81	-0.31	-0.75
19629.00	90.280	155.790	6276.32	12909.77	-12319.72	4077.14	1740207.38	14546790.70	40°03'16.3150"N	80°38'36.1896"W	12976.85	161.688	1.46	1.24	0.77
19725.00	89.080	158.000	6276.85	13005.74	-12408.01	4114.81	1740245.03	14546702.45	40°03'15.4410"N	80°38'35.7097"W	13072.51	161.653	2.62	-1.25	2.30
19822.00	88.950	159.800	6278.52	13102.59	-12498.49	4149.72	1740279.93	14546612.00	40°03'14.5455"N	80°38'35.2654"W	13169.38	161.633	1.86	-0.13	1.86

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Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

WELLPATH DATA (222 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]
19918.00	90.520	161.660	6278.96	13198.23	-12589.11	4181.40	1740311.60	14546521.42	40°03'13.6488"N	80°38'34.8627"W	13265.36	161.626	2.54	1.64	1.94
20015.00	90.460	164.710	6278.13	13294.43	-12681.94	4209.46	1740339.64	14546428.62	40°03'12.7303"N	80°38'34.5067"W	13362.31	161.638	3.14	-0.06	3.14
20111.00	89.880	163.540	6277.85	13389.43	-12774.28	4235.72	1740365.89	14546336.32	40°03'11.8167"N	80°38'34.1738"W	13458.22	161.655	1.36	-0.60	-1.22
20207.00	89.140	165.750	6278.67	13484.29	-12866.84	4261.14	1740391.30	14546243.80	40°03'10.9010"N	80°38'33.8517"W	13554.08	161.677	2.43	-0.77	2.30
20304.00	89.690	167.380	6279.66	13579.59	-12961.18	4283.67	1740413.83	14546149.50	40°03'9.9679"N	80°38'33.5668"W	13650.72	161.711	1.77	0.57	1.68
20400.00	89.480	167.420	6280.36	13673.65	-13054.87	4304.61	1740434.76	14546055.85	40°03'9.0412"N	80°38'33.3023"W	13746.24	161.751	0.22	-0.22	0.04
20496.00	89.380	167.250	6281.31	13767.73	-13148.53	4325.66	1740455.80	14545962.22	40°03'8.1148"N	80°38'33.0365"W	13841.79	161.790	0.21	-0.10	-0.18
20593.00	89.380	167.680	6282.36	13862.74	-13243.21	4346.71	1740476.84	14545867.58	40°03'7.1783"N	80°38'32.7707"W	13938.31	161.829	0.44	0.00	0.44
20689.00	89.510	167.460	6283.29	13956.74	-13336.95	4367.37	1740497.50	14545773.87	40°03'6.2511"N	80°38'32.5098"W	14033.83	161.868	0.27	0.14	-0.23
20786.00	89.450	167.450	6284.17	14051.75	-13431.63	4388.44	1740518.56	14545679.23	40°03'5.3146"N	80°38'32.2438"W	14130.37	161.907	0.06	-0.06	-0.01
20834.00	89.690	167.400	6284.53	14098.78	-13478.48	4398.89	1740529.00	14545632.40	40°03'4.8512"N	80°38'32.1118"W	14178.14	161.925	0.51	0.50	-0.10
20859.00‡	89.690	167.400	6284.67	14123.27	-13502.88	4404.35	1740534.45	14545608.01	40°03'4.6099"N	80°38'32.0430"W	14203.03	161.935	0.00	0.00	0.00

HOLE & CASING SECTIONS									
- Ref Wellbore: Shannon Fields OHI 210H AWB Ref Wellpath: Shannon Fields OHI 210H AWP Proj: 20859' MD									
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	0.02	-0.06
17.5in Open Hole	126.00	555.00	429.00	126.00	555.00	0.02	-0.06	-0.13	0.36
13.375in Casing Surface	26.00	555.00	529.00	26.00	555.00	0.00	0.00	-0.13	0.36
12.25in Open Hole	555.00	1920.00	1365.00	555.00	1917.02	-0.13	0.36	3.31	-39.54
9.625in Casing Intermediate	26.00	1900.00	1874.00	26.00	1897.18	0.00	0.00	2.19	-37.31
8.75in Open Hole	1920.00	5053.00	3133.00	1917.02	4877.96	3.31	-39.54	90.97	-1041.08
8.5in Open Hole	5053.00	20859.00	15806.00	4877.96	6284.67	90.97	-1041.08	-13502.88	4404.35
5.5in Casing Production	26.00	20859.00	20833.00	26.00	6284.67	0.00	0.00	-13502.88	4404.35

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Actual Wellpath Report
 Shannon Fields OHI 210H AWP Proj: 20859' MD
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Shannon Fields OHI 210H
Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Shannon Fields OHI 210H LP Rev 2	6061.00	-628.14	-1352.48	1734779.88	14558477.71	40°05'12.0619"N	80°39'45.4434"W	point
Shannon Fields OHI 210H WP1	6261.49	-8148.54	2153.76	1738284.75	14550960.25	40°03'57.6106"N	80°39'0.7130"W	point
Shannon Fields OHI 210H WP2	6261.49	-8531.04	2457.73	1738588.60	14550577.90	40°03'53.8189"N	80°38'56.8228"W	point
Shannon Fields OHI 210H WP3	6261.49	-8864.16	2574.28	1738705.10	14550244.91	40°03'50.5224"N	80°38'55.3407"W	point
Shannon Fields OHI 210H WP4	6261.49	-9350.76	2718.98	1738849.75	14549758.50	40°03'45.7081"N	80°38'53.5043"W	point
Shannon Fields OHI 210H WP5	6261.49	-12287.66	4084.02	1740214.25	14546822.75	40°03'16.6316"N	80°38'36.0995"W	point
Shannon Fields OHI 210H PBHL rev 3	6307.19	-13499.13	4414.66	1740544.76	14545611.76	40°03'4.6466"N	80°38'31.9102"W	point

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Shannon Fields OHI 210H AWP Proj: 20859' MD
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**REFERENCE WELLPATH IDENTIFICATION**

Operator	SWN PRODUCTION COMPANY, LLC	Well	Shannon Fields OHI 210H
Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

WELLPATH COMPOSITION - Ref Wellbore: Shannon Fields OHI 210H AWB Ref Wellpath: Shannon Fields OHI 210H AWP Proj: 20859' MD

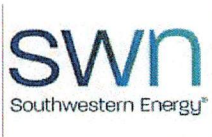
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	408.00	OWSG MWD rev2 + HRGM	01_Tally MWD <17-1/2"> (168' - 408')	Shannon Fields OHI 210H AWB	10/13/2022
408.00	1847.00	OWSG MWD rev2 + HRGM	02_Tally MWD <12-1/4"> (590'-1847')	Shannon Fields OHI 210H AWB	10/25/2022
1847.00	4986.00	OWSG MWD rev2 + HRGM	03_Tally MWD <8-3/4"> (1983'-4986')	Shannon Fields OHI 210H AWB	10/25/2022
4986.00	20859.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04_BHI ATCurve <8-1/2"> (4986')(5092'-20834')	Shannon Fields OHI 210H AWB	10/18/2022

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Shannon Fields OHI 210H
Field	Ohio	API	47-069-00334-0000
Facility	Shannon Fields OHI Pad	Wellbore	Shannon Fields OHI 210H AWB
Slot	210H		

COMMENTS
<p>Wellpath general comments API:47-069-00334-0000 BH Job #: 111464653 Rig: SDC 40 Duration: 10/15/2022-10/18/2022 01_Tally MWD <17-1/2>(168'-408') 02_Tally MWD <12-1/4>(590'-1847') 03_Tally MWD <8 -3/4> (1983'-4986') BH AT Curve <8-1/2>(4986')(5092'-20834') Projection: 20859'</p>

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