

Location: Ohio County, WV  
Field: Ohio VW  
Facility: Carl Rotter OHI Pad

Slot: Slot 206H  
Well: Carl Rotter OHI 206H  
Wellbore: Carl Rotter OHI 206H PWB

Plot reference wellpath is Carl Rotter OHI 206H AWB_awp 146' - 25598' Proj: 25623'	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: 1362.7 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot 206H): -1336.7 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: tranlam on 2022-03-17; Database: WA_MPL_EASTERNUS_Defn

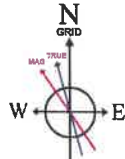
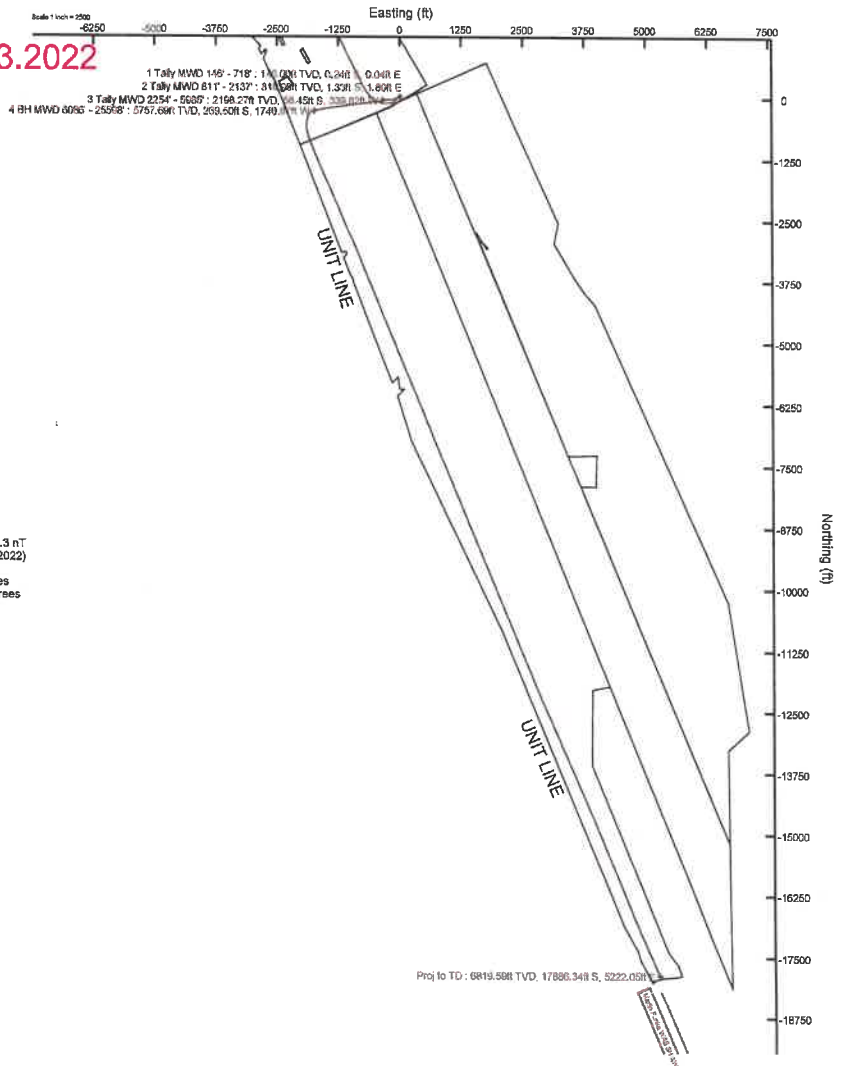
### Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
Carl Rotter OHI Pad	1768372.772	14564065.056	40°06'5.8140"N	80°32'32.7080"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot 206H	-52.54	-27.32	1768345.460	14564012.540	40°06'5.2962"N	80°32'33.0631"W
SDC 40 (KB) to Ground level (At Slot: Slot 206H)				26ft		
Mean Sea Level to Ground level (At Slot: Slot 206H)				-1336.7ft		
SDC 40 (KB) to Mean Sea Level				1362.7ft		

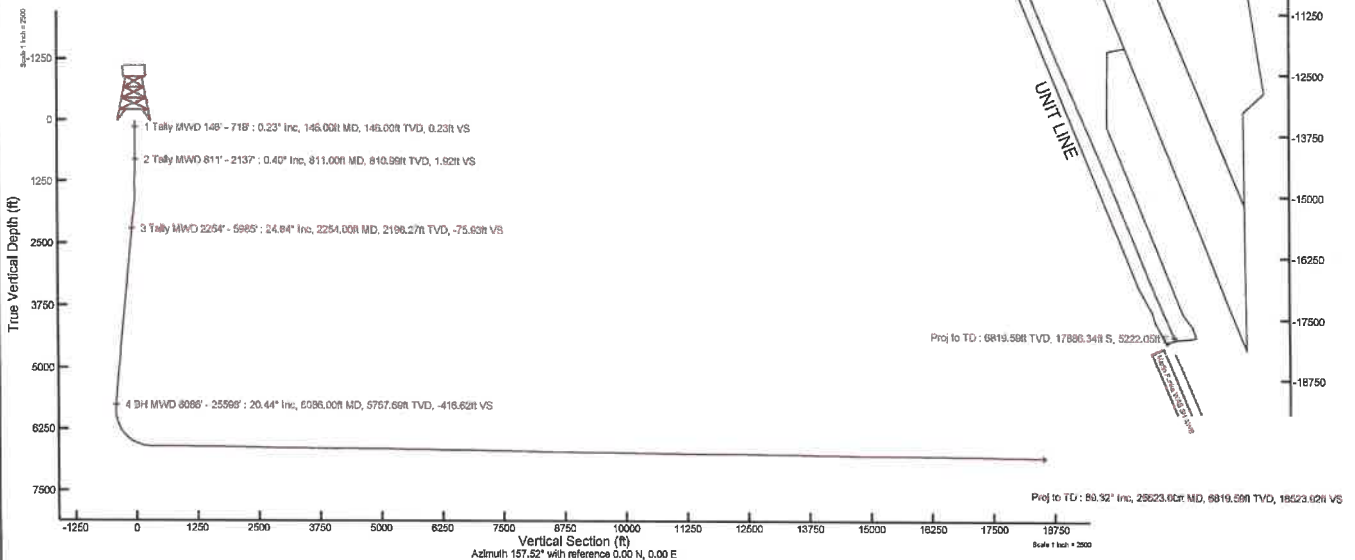
### Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
25623.00	89.320	156.680	6819.59	-17886.34	5222.05	1773565.51	14546133.06	40°03'8.2720"N	80°31'27.0937"W

**API: 470690003290000**  
**BH JOB: 111260073**  
**Duration: 03.08.2022 to 03.13.2022**  
**Rig: SDC 40**



HDGM2022v1.0 (1900.0 to 2023.0) Dip: 67.08° Field: 52269.3 N  
Magnetic North is 8.46 degrees West of True North (at 2/14/2022)  
Grid North is 0.23 degrees East of True North  
To correct azimuth from True to Grid subtract 0.29 degrees  
To correct azimuth from Magnetic to Grid subtract 8.75 degrees





# Actual Wellpath Report

Carl Rotter OHI 206H AWB\_awp 146' - 25598' Proj: 25623'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Carl Rotter OHI 206H
Field	Ohio VW	API	470690003290000
Facility	Carl Rotter OHI Pad	Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Tranlam
Scale	0.999619	Report Generated	3/17/2022 at 10:13:19 PM
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	-52.54	-27.32	1768345.46	14564012.54	40°06'5.2962"N	80°32'33.0631"W
Facility Reference Pt			1768372.77	14564065.06	40°06'5.8140"N	80°32'32.7080"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	1362.70ft
Horizontal Reference Pt	Slot	SDC 40 (KB) to Mean Sea Level	1362.70ft
Vertical Reference Pt	SDC 40 (KB)	SDC 40 (KB) to Ground Level at Slot (Slot 206H)	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	157.52°

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Field	Ohio VW		API	470690003290000
Facility	Carl Rotter OHI Pad		Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H			

**WELLPATH DATA (285 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	DLS ["/100ft]	Comments
0.00†	0.000	170.480	0.00	0.00	0.00	0.00	1768345.46	14564012.54	40°06'5.2962"N	80°32'33.0631"W	0.00	
26.00	0.000	170.480	26.00	0.00	0.00	0.00	1768345.46	14564012.54	40°06'5.2962"N	80°32'33.0631"W	0.00	
146.00	0.230	170.480	146.00	0.23	-0.24	0.04	1768345.50	14564012.30	40°06'5.2939"N	80°32'33.0626"W	0.19	1 Tally MWD 146' - 718'
238.00	0.100	149.390	238.00	0.49	-0.49	0.11	1768345.57	14564012.05	40°06'5.2914"N	80°32'33.0617"W	0.15	
329.00	0.390	123.060	329.00	0.83	-0.73	0.41	1768345.87	14564011.81	40°06'5.2890"N	80°32'33.0578"W	0.33	
420.00	0.460	95.680	420.00	1.26	-0.93	1.03	1768346.49	14564011.61	40°06'5.2870"N	80°32'33.0498"W	0.23	
510.00	0.340	90.630	509.99	1.53	-0.97	1.66	1768347.12	14564011.57	40°06'5.2866"N	80°32'33.0418"W	0.14	
601.00	0.090	170.810	600.99	1.71	-1.04	1.94	1768347.40	14564011.50	40°06'5.2858"N	80°32'33.0382"W	0.37	
691.00	0.200	121.070	690.99	1.90	-1.19	2.09	1768347.55	14564011.35	40°06'5.2843"N	80°32'33.0363"W	0.18	
718.00	0.190	184.940	717.99	1.98	-1.26	2.12	1768347.58	14564011.28	40°06'5.2836"N	80°32'33.0358"W	0.76	
811.00	0.400	284.650	810.99	1.92	-1.33	1.80	1768347.26	14564011.21	40°06'5.2829"N	80°32'33.0400"W	0.51	2 Tally MWD 811' - 2137'
902.00	2.690	266.130	901.95	1.05	-1.40	-0.64	1768344.82	14564011.14	40°06'5.2824"N	80°32'33.0714"W	2.54	
994.00	5.810	267.460	993.69	-1.23	-1.75	-7.45	1768338.01	14564010.79	40°06'5.2793"N	80°32'33.1591"W	3.39	
1085.00	8.800	264.430	1083.94	-4.83	-2.63	-18.98	1768326.49	14564009.91	40°06'5.2712"N	80°32'33.3075"W	3.31	
1176.00	9.840	261.170	1173.74	-8.69	-4.50	-33.59	1768311.88	14564008.04	40°06'5.2535"N	80°32'33.4957"W	1.28	
1267.00	9.150	251.240	1263.50	-10.99	-8.02	-48.13	1768297.35	14564004.52	40°06'5.2194"N	80°32'33.6830"W	1.95	
1357.00	8.920	236.860	1352.39	-10.16	-14.14	-60.75	1768284.73	14563998.41	40°06'5.1596"N	80°32'33.8458"W	2.52	
1448.00	10.310	238.090	1442.11	-7.53	-22.30	-73.57	1768271.92	14563990.25	40°06'5.0796"N	80°32'34.0113"W	1.54	
1539.00	12.360	249.410	1531.34	-6.51	-30.03	-89.60	1768255.89	14563982.52	40°06'5.0040"N	80°32'34.2181"W	3.31	
1630.00	14.380	263.490	1619.90	-9.94	-34.74	-109.95	1768235.55	14563977.81	40°06'4.9585"N	80°32'34.4803"W	4.19	
1721.00	17.420	268.060	1707.41	-17.83	-36.48	-134.80	1768210.71	14563976.07	40°06'4.9426"N	80°32'34.8002"W	3.61	
1812.00	20.950	269.530	1793.34	-28.71	-37.08	-164.69	1768180.83	14563975.48	40°06'4.9382"N	80°32'35.1849"W	3.91	
1903.00	23.270	268.540	1877.64	-41.26	-37.67	-198.94	1768146.60	14563974.89	40°06'4.9341"N	80°32'35.6256"W	2.58	
1996.00	24.580	265.530	1962.65	-53.83	-39.64	-236.59	1768108.96	14563972.91	40°06'4.9165"N	80°32'36.1102"W	1.92	
2087.00	24.190	261.100	2045.54	-64.06	-44.00	-273.88	1768071.69	14563968.55	40°06'4.8753"N	80°32'36.5904"W	2.05	
2137.00	23.080	258.650	2091.35	-68.36	-47.52	-293.61	1768051.96	14563965.04	40°06'4.8416"N	80°32'36.8446"W	2.96	
2254.00	24.840	254.870	2198.27	-75.93	-58.45	-339.82	1768005.77	14563954.12	40°06'4.7359"N	80°32'37.4400"W	2.00	3 Tally MWD 2254' - 5985'
2347.00	22.980	256.460	2283.28	-81.25	-67.80	-376.33	1767969.27	14563944.77	40°06'4.6454"N	80°32'37.9104"W	2.12	
2438.00	20.960	258.730	2367.67	-87.18	-75.14	-409.57	1767936.05	14563937.43	40°06'4.5745"N	80°32'38.3386"W	2.41	
2529.00	21.200	264.490	2452.59	-95.14	-79.90	-441.91	1767903.72	14563932.67	40°06'4.5291"N	80°32'38.7551"W	2.29	



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Facility	Carl Rotter OHI Pad		Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H			

**WELLPATH DATA (285 stations)**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2620.00	21.730	263.370	2537.28	-104.55	-83.42	-475.03	1767870.62	14563929.15	40°06'4.4959"N	80°32'39.1815"W	0.74	
2711.00	22.090	261.520	2621.71	-113.29	-87.89	-508.68	1767836.97	14563924.68	40°06'4.4535"N	80°32'39.6149"W	0.86	
2801.00	20.640	264.260	2705.52	-121.95	-91.97	-541.21	1767804.46	14563920.60	40°06'4.4148"N	80°32'40.0337"W	1.96	
2892.00	20.650	261.560	2790.68	-130.46	-95.93	-573.04	1767772.64	14563916.64	40°06'4.3773"N	80°32'40.4435"W	1.05	
2983.00	20.530	263.260	2875.87	-138.69	-100.16	-604.76	1767740.94	14563912.42	40°06'4.3371"N	80°32'40.8520"W	0.67	
3074.00	20.400	261.020	2961.13	-146.72	-104.51	-636.27	1767709.44	14563908.07	40°06'4.2957"N	80°32'41.2578"W	0.87	
3165.00	19.760	262.980	3046.60	-154.52	-108.86	-667.20	1767678.51	14563903.72	40°06'4.2542"N	80°32'41.6562"W	1.02	
3255.00	20.610	264.000	3131.07	-163.07	-112.38	-698.06	1767647.67	14563900.20	40°06'4.2211"N	80°32'42.0534"W	1.02	
3347.00	20.160	262.320	3217.31	-171.71	-116.19	-729.87	1767615.87	14563896.39	40°06'4.1850"N	80°32'42.4631"W	0.80	
3439.00	20.570	261.900	3303.56	-179.78	-120.59	-761.58	1767584.17	14563892.00	40°06'4.1432"N	80°32'42.8715"W	0.47	
3533.00	21.450	263.450	3391.31	-188.59	-124.87	-795.01	1767550.76	14563887.71	40°06'4.1025"N	80°32'43.3019"W	1.11	
3624.00	22.110	262.670	3475.81	-197.64	-128.96	-828.52	1767517.25	14563883.63	40°06'4.0638"N	80°32'43.7335"W	0.79	
3715.00	21.750	262.860	3560.23	-206.57	-133.24	-862.24	1767483.55	14563879.35	40°06'4.0232"N	80°32'44.1676"W	0.40	
3807.00	21.870	263.080	3645.64	-215.68	-137.42	-896.16	1767449.64	14563875.17	40°06'3.9836"N	80°32'44.6044"W	0.16	
3898.00	21.750	262.790	3730.13	-224.67	-141.58	-929.72	1767416.10	14563871.01	40°06'3.9442"N	80°32'45.0365"W	0.18	
3989.00	21.490	261.230	3814.73	-233.06	-146.24	-962.92	1767382.91	14563866.36	40°06'3.8999"N	80°32'45.4640"W	0.69	
4080.00	21.320	262.140	3899.45	-241.18	-151.04	-995.78	1767350.06	14563861.56	40°06'3.8541"N	80°32'45.8872"W	0.41	
4171.00	21.710	262.200	3984.11	-249.62	-155.59	-1028.84	1767317.01	14563857.01	40°06'3.8108"N	80°32'46.3130"W	0.43	
4262.00	21.910	261.480	4068.60	-257.99	-160.39	-1062.31	1767283.56	14563852.21	40°06'3.7650"N	80°32'46.7439"W	0.37	
4355.00	23.010	260.120	4154.54	-266.14	-166.08	-1097.37	1767248.51	14563846.53	40°06'3.7106"N	80°32'47.1956"W	1.31	
4446.00	23.190	261.400	4238.24	-274.31	-171.81	-1132.61	1767213.28	14563840.80	40°06'3.6557"N	80°32'47.6494"W	0.59	
4536.00	22.330	262.800	4321.24	-283.07	-176.60	-1167.10	1767178.81	14563836.01	40°06'3.6101"N	80°32'48.0935"W	1.13	
4628.00	22.460	261.520	4406.30	-291.93	-181.38	-1201.82	1767144.10	14563831.23	40°06'3.5646"N	80°32'48.5406"W	0.55	
4718.00	23.780	261.430	4489.07	-300.45	-186.62	-1236.77	1767109.17	14563825.99	40°06'3.5146"N	80°32'48.9907"W	1.47	
4809.00	24.380	260.500	4572.15	-309.08	-192.46	-1273.43	1767072.52	14563820.16	40°06'3.4588"N	80°32'49.4629"W	0.78	
4900.00	23.510	260.700	4655.32	-317.44	-198.49	-1309.87	1767036.09	14563814.13	40°06'3.4010"N	80°32'49.9322"W	0.96	
4991.00	21.530	261.670	4739.37	-325.66	-203.84	-1344.31	1767001.67	14563808.78	40°06'3.3498"N	80°32'50.3757"W	2.21	
5081.00	21.310	262.180	4823.16	-333.83	-208.46	-1376.85	1766969.14	14563804.16	40°06'3.3058"N	80°32'50.7948"W	0.32	
5172.00	21.440	264.420	4907.90	-342.85	-212.33	-1409.78	1766936.22	14563800.30	40°06'3.2693"N	80°32'51.2188"W	0.91	
5264.00	21.340	263.560	4993.56	-352.37	-215.84	-1443.15	1766902.86	14563796.78	40°06'3.2362"N	80°32'51.6485"W	0.36	

**REFERENCE WELLPATH IDENTIFICATION**

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Field	Ohio VW	API	470690003290000
Facility	Carl Rotter OHI Pad	Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H		

**WELLPATH DATA (285 stations)**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5354.00	22.170	261.240	5077.15	-360.92	-220.26	-1476.21	1766869.82	14563792.36	40°06'3.1942"N	80°32'52.0741"W	1.33	
5448.00	22.880	259.540	5163.98	-368.93	-226.28	-1511.71	1766834.33	14563786.35	40°06'3.1365"N	80°32'52.5314"W	1.02	
5539.00	22.910	258.990	5247.81	-376.14	-232.88	-1546.49	1766799.56	14563779.75	40°06'3.0731"N	80°32'52.9794"W	0.24	
5630.00	22.500	260.040	5331.76	-383.43	-239.27	-1581.03	1766765.04	14563773.36	40°06'3.0116"N	80°32'53.4242"W	0.63	
5721.00	22.040	260.880	5415.97	-391.15	-244.99	-1615.04	1766731.04	14563767.65	40°06'2.9568"N	80°32'53.8622"W	0.61	
5812.00	21.040	259.570	5500.62	-398.51	-250.65	-1647.96	1766698.13	14563761.98	40°06'2.9025"N	80°32'54.2863"W	1.22	
5903.00	20.350	259.030	5585.75	-405.08	-256.62	-1679.56	1766666.54	14563756.02	40°06'2.8451"N	80°32'54.6933"W	0.79	
5985.00	19.640	257.870	5662.80	-410.40	-262.23	-1707.03	1766639.08	14563750.41	40°06'2.7911"N	80°32'55.0472"W	0.99	
6086.00	20.440	257.870	5757.69	-416.62	-269.50	-1740.87	1766605.26	14563743.14	40°06'2.7209"N	80°32'55.4831"W	0.79	4 BH MWD 6086' - 25598'
6176.00	21.020	255.640	5841.86	-421.72	-276.81	-1771.87	1766574.27	14563735.84	40°06'2.6502"N	80°32'55.8825"W	1.09	
6267.00	21.510	237.150	5926.76	-421.02	-289.92	-1801.73	1766544.42	14563722.73	40°06'2.5222"N	80°32'56.2676"W	7.36	
6358.00	24.380	223.560	6010.61	-410.38	-312.60	-1828.71	1766517.45	14563700.06	40°06'2.2994"N	80°32'56.6163"W	6.60	
6448.00	27.130	210.040	6091.73	-390.33	-343.86	-1851.81	1766494.36	14563668.81	40°06'1.9917"N	80°32'56.9156"W	7.19	
6539.00	29.770	201.010	6171.77	-361.30	-382.93	-1870.31	1766475.87	14563629.75	40°06'1.6064"N	80°32'57.1562"W	5.54	
6631.00	35.030	194.500	6249.45	-323.60	-429.87	-1885.12	1766461.06	14563582.84	40°06'1.1434"N	80°32'57.3499"W	6.85	
6722.00	41.750	187.720	6320.77	-276.47	-485.26	-1895.75	1766450.44	14563527.46	40°06'0.5965"N	80°32'57.4903"W	8.71	
6813.00	48.500	182.560	6384.96	-219.33	-549.43	-1901.35	1766444.84	14563463.33	40°05'59.9627"N	80°32'57.5665"W	8.43	
6904.00	52.820	174.210	6442.69	-153.63	-619.64	-1899.21	1766446.98	14563393.13	40°05'59.2687"N	80°32'57.5436"W	8.53	
6995.00	58.420	167.700	6494.09	-80.64	-693.69	-1887.28	1766458.90	14563319.11	40°05'58.5363"N	80°32'57.3948"W	8.52	
7087.00	66.580	163.810	6536.55	0.05	-772.68	-1867.12	1766479.05	14563240.16	40°05'57.7548"N	80°32'57.1406"W	9.63	
7179.00	73.620	159.520	6567.86	86.26	-854.69	-1839.87	1766506.30	14563158.17	40°05'56.9430"N	80°32'56.7952"W	8.82	
7269.00	80.170	158.800	6588.26	173.83	-936.57	-1808.69	1766537.46	14563076.33	40°05'56.1323"N	80°32'56.3994"W	7.32	
7358.00	86.860	159.110	6598.30	262.18	-1019.05	-1776.96	1766569.19	14562993.88	40°05'55.3156"N	80°32'55.9964"W	7.52	
7449.00	89.170	158.630	6601.45	353.09	-1103.88	-1744.17	1766601.96	14562909.09	40°05'54.4757"N	80°32'55.5801"W	2.59	
7539.00	89.690	157.220	6602.35	443.08	-1187.27	-1710.35	1766635.76	14562825.72	40°05'53.6499"N	80°32'55.1503"W	1.67	
7629.00	90.090	157.650	6602.52	533.08	-1270.38	-1675.82	1766670.29	14562742.64	40°05'52.8269"N	80°32'54.7114"W	0.65	
7720.00	89.660	158.010	6602.72	624.08	-1354.65	-1641.48	1766704.61	14562658.40	40°05'51.9924"N	80°32'54.2750"W	0.62	
7811.00	88.710	155.570	6604.01	715.06	-1438.27	-1605.62	1766740.45	14562574.82	40°05'51.1643"N	80°32'53.8191"W	2.88	
7902.00	90.860	157.000	6604.36	806.03	-1521.58	-1569.02	1766777.04	14562491.54	40°05'50.3392"N	80°32'53.3536"W	2.84	
7992.00	89.820	156.710	6603.82	896.02	-1604.34	-1533.65	1766812.40	14562408.82	40°05'49.5196"N	80°32'52.9038"W	1.20	





# Actual Wellpath Report

Carl Rotter OHI 206H AWB\_awp 146' - 25598' Proj: 25623'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Carl Rotter OHI 206H
Field	Ohio VW	API	470690003290000
Facility	Carl Rotter OHI Pad	Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H		

WELLPATH DATA (285 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8084.00	89.630	157.030	6604.26	988.01	-1688.94	-1497.51	1766848.52	14562324.25	40°05'48.6817"N	80°32'52.4443"W	0.40	
8175.00	88.920	156.880	6605.42	1079.00	-1772.67	-1461.89	1766884.13	14562240.55	40°05'47.8525"N	80°32'51.9915"W	0.80	
8266.00	89.290	155.880	6606.84	1169.97	-1856.03	-1425.44	1766920.57	14562157.22	40°05'47.0269"N	80°32'51.5278"W	1.17	
8359.00	89.600	158.070	6607.74	1262.95	-1941.62	-1389.07	1766956.93	14562071.67	40°05'46.1793"N	80°32'51.0654"W	2.38	
8451.00	89.380	157.510	6608.56	1354.95	-2026.79	-1354.29	1766991.69	14561986.53	40°05'45.3359"N	80°32'50.6235"W	0.65	
8541.00	88.680	156.460	6610.08	1444.93	-2109.61	-1319.11	1767026.86	14561903.74	40°05'44.5157"N	80°32'50.1763"W	1.40	
8632.00	89.540	155.530	6611.49	1535.89	-2192.73	-1282.09	1767063.86	14561820.65	40°05'43.6925"N	80°32'49.7054"W	1.39	
8723.00	89.420	158.310	6612.32	1626.87	-2276.43	-1246.43	1767099.51	14561736.98	40°05'42.8635"N	80°32'49.2519"W	3.06	
8814.00	89.420	158.040	6613.24	1717.86	-2360.90	-1212.60	1767133.33	14561652.54	40°05'42.0270"N	80°32'48.8222"W	0.30	
8905.00	89.480	160.330	6614.11	1808.81	-2445.96	-1180.26	1767165.65	14561567.52	40°05'41.1849"N	80°32'48.4117"W	2.52	
8995.00	88.220	153.910	6615.92	1898.74	-2528.81	-1145.30	1767200.60	14561484.70	40°05'40.3644"N	80°32'47.9672"W	7.27	
9086.00	89.380	159.420	6617.83	1989.67	-2612.32	-1109.27	1767236.61	14561401.22	40°05'39.5373"N	80°32'47.5092"W	6.19	
9177.00	89.780	155.490	6618.50	2080.65	-2696.35	-1074.39	1767271.48	14561317.23	40°05'38.7052"N	80°32'47.0659"W	4.34	
9268.00	90.220	158.540	6618.50	2171.64	-2780.11	-1038.86	1767307.00	14561233.50	40°05'37.8757"N	80°32'46.6142"W	3.39	
9358.00	88.400	152.830	6619.58	2261.54	-2862.08	-1001.82	1767344.02	14561151.55	40°05'37.0637"N	80°32'46.1430"W	6.66	
9449.00	87.140	157.200	6623.12	2352.36	-2944.48	-963.43	1767382.40	14561069.19	40°05'36.2475"N	80°32'45.6543"W	4.99	
9540.00	89.320	157.170	6625.93	2443.31	-3028.32	-928.16	1767417.66	14560985.38	40°05'35.4173"N	80°32'45.2061"W	2.40	
9630.00	89.290	157.850	6627.03	2533.31	-3111.47	-893.73	1767452.07	14560902.27	40°05'34.5939"N	80°32'44.7686"W	0.76	
9721.00	89.170	158.060	6628.25	2624.30	-3195.81	-859.58	1767486.21	14560817.96	40°05'33.7587"N	80°32'44.3347"W	0.27	
9814.00	88.830	157.900	6629.87	2717.28	-3282.01	-824.72	1767521.06	14560731.79	40°05'32.9051"N	80°32'43.8918"W	0.40	
9904.00	89.230	158.350	6631.40	2807.26	-3365.52	-791.19	1767554.57	14560648.31	40°05'32.0782"N	80°32'43.4659"W	0.67	
9995.00	88.770	158.090	6632.98	2898.24	-3450.01	-757.43	1767588.32	14560563.85	40°05'31.2415"N	80°32'43.0371"W	0.58	
10086.00	89.480	158.210	6634.37	2989.22	-3534.46	-723.57	1767622.17	14560479.43	40°05'30.4053"N	80°32'42.6069"W	0.79	
10176.00	88.370	158.430	6636.06	3079.20	-3618.08	-690.33	1767655.40	14560395.85	40°05'29.5773"N	80°32'42.1847"W	1.26	
10267.00	88.800	157.920	6638.31	3170.16	-3702.53	-656.51	1767689.21	14560311.43	40°05'28.7410"N	80°32'41.7551"W	0.73	
10358.00	90.650	156.180	6638.75	3261.15	-3786.32	-621.03	1767724.67	14560227.67	40°05'27.9112"N	80°32'41.3041"W	2.79	
10450.00	89.850	159.820	6638.34	3353.13	-3871.60	-586.57	1767759.12	14560142.42	40°05'27.0667"N	80°32'40.8664"W	4.05	
10543.00	89.480	156.150	6638.89	3446.11	-3957.81	-551.71	1767793.96	14560056.25	40°05'26.2131"N	80°32'40.4236"W	3.97	
10634.00	89.350	157.650	6639.82	3537.10	-4041.50	-516.01	1767829.64	14559972.59	40°05'25.3842"N	80°32'39.9698"W	1.65	
10726.00	89.420	157.640	6640.81	3629.09	-4126.58	-481.02	1767864.62	14559887.54	40°05'24.5416"N	80°32'39.5252"W	0.08	

**REFERENCE WELLPATH IDENTIFICATION**

Operator	<b>SWN PRODUCTION COMPANY, LLC</b>	Well	<b>Carl Rotter OHI 206H</b>
Field	<b>Ohio VW</b>	API	<b>470690003290000</b>
Facility	<b>Carl Rotter OHI Pad</b>	Wellbore	<b>Carl Rotter OHI 206H AWB</b>
Slot	<b>Slot 206H</b>		

**WELLPATH DATA (285 stations)**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10817.00	89.140	159.120	6641.95	3720.07	-4211.17	-447.50	1767898.13	14559802.98	40°05'23.7040"N	80°32'39.0994"W	1.66	
10909.00	88.950	158.040	6643.48	3812.04	-4296.80	-413.91	1767931.71	14559717.38	40°05'22.8561"N	80°32'38.6728"W	1.19	
11000.00	90.710	159.320	6643.75	3903.02	-4381.57	-380.82	1767964.78	14559632.65	40°05'22.0167"N	80°32'38.2528"W	2.39	
11091.00	89.170	156.950	6643.85	3994.00	-4466.02	-346.94	1767998.66	14559548.24	40°05'21.1805"N	80°32'37.8223"W	3.11	
11181.00	90.370	156.990	6644.21	4084.00	-4548.84	-311.73	1768033.85	14559465.44	40°05'20.3603"N	80°32'37.3748"W	1.33	
11273.00	90.400	158.450	6643.59	4175.99	-4633.97	-276.85	1768068.72	14559380.35	40°05'19.5173"N	80°32'36.9317"W	1.59	
11365.00	90.340	157.970	6643.00	4267.98	-4719.39	-242.70	1768102.85	14559294.96	40°05'18.6714"N	80°32'36.4979"W	0.53	
11456.00	89.820	157.750	6642.87	4358.98	-4803.68	-208.40	1768137.14	14559210.70	40°05'17.8367"N	80°32'36.0622"W	0.62	
11547.00	89.780	157.850	6643.19	4449.98	-4887.94	-174.02	1768171.51	14559126.48	40°05'17.0023"N	80°32'35.6254"W	0.12	
11639.00	89.570	157.110	6643.71	4541.98	-4972.92	-138.78	1768206.73	14559041.53	40°05'16.1607"N	80°32'35.1777"W	0.84	
11730.00	89.570	158.050	6644.39	4632.97	-5057.04	-104.08	1768241.42	14558957.44	40°05'15.3277"N	80°32'34.7368"W	1.03	
11821.00	90.030	157.950	6644.71	4723.97	-5141.41	-69.99	1768275.50	14558873.10	40°05'14.4922"N	80°32'34.3037"W	0.52	
11912.00	89.690	158.180	6644.93	4814.96	-5225.82	-36.00	1768309.48	14558788.72	40°05'13.6563"N	80°32'33.8720"W	0.45	
12001.00	89.570	158.140	6645.51	4903.96	-5308.43	-2.89	1768342.57	14558706.14	40°05'12.8383"N	80°32'33.4515"W	0.14	
12090.00	89.110	156.140	6646.53	4992.94	-5390.43	31.68	1768377.13	14558624.17	40°05'12.0262"N	80°32'33.0121"W	2.31	
12178.00	88.580	158.670	6648.31	5080.92	-5471.65	65.48	1768410.92	14558542.98	40°05'11.2218"N	80°32'32.5826"W	2.94	
12268.00	89.260	157.410	6650.00	5170.90	-5555.11	99.13	1768444.56	14558459.56	40°05'10.3954"N	80°32'32.1552"W	1.59	
12356.00	87.880	156.800	6652.20	5258.86	-5636.15	133.36	1768478.77	14558378.55	40°05'9.5929"N	80°32'31.7203"W	1.71	
12445.00	88.400	156.940	6655.09	5347.81	-5717.95	168.30	1768513.70	14558296.78	40°05'8.7827"N	80°32'31.2761"W	0.61	
12535.00	89.630	159.190	6656.63	5437.79	-5801.42	201.91	1768547.29	14558213.35	40°05'7.9562"N	80°32'30.8492"W	2.85	
12628.00	88.340	156.360	6658.28	5530.76	-5887.48	237.08	1768582.45	14558127.31	40°05'7.1039"N	80°32'30.4025"W	3.34	
12718.00	88.920	157.510	6660.43	5620.73	-5970.26	272.33	1768617.68	14558044.57	40°05'6.2841"N	80°32'29.9545"W	1.43	
12809.00	89.230	157.730	6661.90	5711.71	-6054.40	306.97	1768652.31	14557960.46	40°05'5.4509"N	80°32'29.5143"W	0.42	
12899.00	90.180	158.420	6662.37	5801.71	-6137.88	340.57	1768685.90	14557877.01	40°05'4.6241"N	80°32'29.0875"W	1.30	
12990.00	89.690	157.960	6662.47	5892.70	-6222.37	374.38	1768719.70	14557792.55	40°05'3.7875"N	80°32'28.6582"W	0.74	
13081.00	88.860	157.730	6663.62	5983.69	-6306.64	408.70	1768754.00	14557708.31	40°05'2.9530"N	80°32'28.2223"W	0.95	
13172.00	88.860	157.860	6665.43	6074.67	-6390.88	443.08	1768788.37	14557624.11	40°05'2.1188"N	80°32'27.7855"W	0.14	
13262.00	88.680	157.590	6667.36	6164.65	-6474.14	477.19	1768822.47	14557540.88	40°05'1.2942"N	80°32'27.3523"W	0.36	
13355.00	88.890	158.550	6669.34	6257.62	-6560.39	511.91	1768857.18	14557454.66	40°05'0.4401"N	80°32'26.9113"W	1.06	
13445.00	89.080	158.350	6670.93	6347.60	-6644.09	544.97	1768890.22	14557371.00	40°04'59.6114"N	80°32'26.4916"W	0.31	





# Actual Wellpath Report

Carl Rotter OHI 206H AWB\_ awp 146' - 25598' Proj: 25623'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Carl Rotter OHI 206H
Field	Ohio VW	API	470690003290000
Facility	Carl Rotter OHI Pad	Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H		

WELLPATH DATA (285 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13534.00	89.230	157.830	6672.24	6436.58	-6726.65	578.17	1768923.41	14557288.47	40°04'58.7938"N	80°32'26.0699"W	0.61	
13625.00	90.650	158.270	6672.34	6527.58	-6811.05	612.19	1768957.41	14557204.10	40°04'57.9580"N	80°32'25.6379"W	1.63	
13717.00	88.770	158.140	6672.80	6619.57	-6896.47	646.34	1768991.56	14557118.71	40°04'57.1121"N	80°32'25.2041"W	2.05	
13808.00	89.880	156.710	6673.88	6710.56	-6980.49	681.27	1769026.47	14557034.73	40°04'56.2801"N	80°32'24.7603"W	1.99	
13894.00	89.230	157.910	6674.54	6796.55	-7059.83	714.45	1769059.63	14556955.42	40°04'55.4944"N	80°32'24.3389"W	1.59	
13985.00	89.380	157.660	6675.65	6887.54	-7144.07	748.85	1769094.02	14556871.21	40°04'54.6602"N	80°32'23.9019"W	0.32	
14075.00	88.310	157.810	6677.46	6977.52	-7227.34	782.94	1769128.10	14556787.97	40°04'53.8355"N	80°32'23.4688"W	1.20	
14166.00	88.430	156.990	6680.05	7068.48	-7311.32	817.90	1769163.05	14556704.03	40°04'53.0039"N	80°32'23.0247"W	0.91	
14257.00	88.400	157.350	6682.57	7159.45	-7395.16	853.19	1769198.33	14556620.22	40°04'52.1736"N	80°32'22.5762"W	0.40	
14347.00	89.720	157.310	6684.04	7249.43	-7478.19	887.88	1769233.00	14556537.22	40°04'51.3512"N	80°32'22.1356"W	1.47	
14438.00	89.200	157.930	6684.90	7340.43	-7562.33	922.52	1769267.63	14556453.11	40°04'50.5180"N	80°32'21.6955"W	0.89	
14529.00	89.020	157.990	6686.31	7431.41	-7646.67	956.67	1769301.76	14556368.80	40°04'49.6828"N	80°32'21.2618"W	0.21	
14622.00	88.980	157.670	6687.94	7524.40	-7732.78	991.75	1769336.83	14556282.72	40°04'48.8300"N	80°32'20.8162"W	0.35	
14713.00	89.290	157.430	6689.31	7615.39	-7816.87	1026.50	1769371.57	14556198.66	40°04'47.9972"N	80°32'20.3748"W	0.43	
14805.00	89.450	157.720	6690.32	7707.38	-7901.91	1061.59	1769406.65	14556113.66	40°04'47.1551"N	80°32'19.9290"W	0.36	
14896.00	88.150	157.730	6692.23	7798.36	-7986.10	1096.08	1769441.12	14556029.50	40°04'46.3214"N	80°32'19.4910"W	1.43	
14985.00	88.310	156.110	6694.98	7887.31	-8067.94	1130.95	1769475.98	14555947.70	40°04'45.5109"N	80°32'19.0478"W	1.83	
15076.00	89.050	157.560	6697.07	7978.28	-8151.57	1166.74	1769511.75	14555864.09	40°04'44.6825"N	80°32'18.5930"W	1.79	
15166.00	88.520	157.980	6698.98	8068.25	-8234.87	1200.78	1769545.78	14555780.83	40°04'43.8577"N	80°32'18.1607"W	0.75	
15257.00	88.980	157.800	6700.97	8159.23	-8319.15	1235.02	1769580.01	14555696.58	40°04'43.0230"N	80°32'17.7258"W	0.54	
15347.00	88.980	157.860	6702.57	8249.22	-8402.49	1268.98	1769613.95	14555613.27	40°04'42.1978"N	80°32'17.2945"W	0.07	
15438.00	89.200	158.010	6704.02	8340.20	-8486.81	1303.16	1769648.12	14555528.98	40°04'41.3627"N	80°32'16.8604"W	0.29	
15529.00	89.290	157.640	6705.21	8431.19	-8571.07	1337.50	1769682.45	14555444.75	40°04'40.5283"N	80°32'16.4243"W	0.42	
15619.00	89.200	157.760	6706.40	8521.18	-8654.33	1371.65	1769716.59	14555361.52	40°04'39.7037"N	80°32'15.9905"W	0.17	
15710.00	89.320	158.190	6707.58	8612.17	-8738.69	1405.78	1769750.70	14555277.20	40°04'38.8684"N	80°32'15.5572"W	0.49	
15802.00	89.080	158.440	6708.86	8704.15	-8824.17	1439.77	1769784.67	14555191.76	40°04'38.0219"N	80°32'15.1257"W	0.38	
15893.00	88.800	157.160	6710.54	8795.14	-8908.40	1474.14	1769819.04	14555107.55	40°04'37.1877"N	80°32'14.6891"W	1.44	
15984.00	89.140	157.350	6712.18	8886.12	-8992.31	1509.32	1769854.20	14555023.67	40°04'36.3567"N	80°32'14.2422"W	0.43	
16076.00	89.290	157.840	6713.44	8978.11	-9077.36	1544.38	1769889.25	14554938.66	40°04'35.5145"N	80°32'13.7968"W	0.56	
16166.00	89.230	157.240	6714.60	9068.10	-9160.53	1578.76	1769923.62	14554855.52	40°04'34.6909"N	80°32'13.3601"W	0.67	



REFERENCE WELLPATH IDENTIFICATION				
Operator	SWN PRODUCTION COMPANY, LLC		Well	Carl Rotter OHI 206H
Field	Ohio VW		API	470690003290000
Facility	Carl Rotter OHI Pad		Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H			

WELLPATH DATA (285 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16257.00	89.080	157.630	6715.94	9159.09	-9244.55	1613.68	1769958.52	14554771.53	40°04'33.8587"N	80°32'12.9166"W	0.46	
16347.00	89.350	157.870	6717.18	9249.08	-9327.84	1647.75	1769992.58	14554688.27	40°04'33.0339"N	80°32'12.4838"W	0.40	
16437.00	89.350	157.660	6718.20	9339.08	-9411.14	1681.81	1770026.62	14554605.00	40°04'32.2090"N	80°32'12.0514"W	0.23	
16529.00	89.290	157.540	6719.29	9431.07	-9496.20	1716.86	1770061.67	14554519.98	40°04'31.3667"N	80°32'11.6061"W	0.15	
16620.00	89.410	157.570	6720.32	9522.06	-9580.30	1751.61	1770096.39	14554435.92	40°04'30.5338"N	80°32'11.1648"W	0.14	
16710.00	89.450	157.480	6721.22	9612.06	-9663.46	1786.01	1770130.78	14554352.79	40°04'29.7102"N	80°32'10.7279"W	0.11	
16801.00	89.480	158.150	6722.07	9703.05	-9747.72	1820.37	1770165.13	14554268.56	40°04'28.8758"N	80°32'10.2915"W	0.74	
16891.00	89.660	157.870	6722.74	9793.05	-9831.17	1854.07	1770198.82	14554185.14	40°04'28.0494"N	80°32'9.8636"W	0.37	
16981.00	89.510	157.770	6723.39	9883.05	-9914.50	1888.04	1770232.78	14554101.84	40°04'27.2241"N	80°32'9.4322"W	0.20	
17073.00	89.630	157.840	6724.09	9975.04	-9999.68	1922.80	1770267.52	14554016.69	40°04'26.3806"N	80°32'8.9909"W	0.15	
17163.00	89.170	157.180	6725.03	10065.04	-10082.83	1957.22	1770301.93	14553933.57	40°04'25.5571"N	80°32'8.5536"W	0.89	
17253.00	89.170	157.790	6726.33	10155.03	-10165.97	1991.68	1770336.38	14553850.47	40°04'24.7338"N	80°32'8.1159"W	0.68	
17344.00	88.980	157.630	6727.80	10246.01	-10250.15	2026.19	1770370.88	14553766.31	40°04'23.9001"N	80°32'7.6777"W	0.27	
17434.00	89.230	157.310	6729.21	10336.00	-10333.28	2060.67	1770405.34	14553683.23	40°04'23.0769"N	80°32'7.2397"W	0.45	
17527.00	89.020	157.620	6730.63	10428.99	-10419.16	2096.31	1770440.97	14553597.37	40°04'22.2263"N	80°32'6.7871"W	0.40	
17617.00	88.920	157.290	6732.24	10518.98	-10502.27	2130.81	1770475.46	14553514.29	40°04'21.4032"N	80°32'6.3489"W	0.38	
17709.00	88.800	157.700	6734.07	10610.96	-10587.25	2166.02	1770510.65	14553429.35	40°04'20.5617"N	80°32'5.9017"W	0.46	
17802.00	89.420	157.740	6735.52	10703.95	-10673.30	2201.27	1770545.89	14553343.34	40°04'19.7095"N	80°32'5.4540"W	0.67	
17892.00	89.140	157.230	6736.65	10793.94	-10756.43	2235.73	1770580.34	14553260.23	40°04'18.8862"N	80°32'5.0163"W	0.65	
17983.00	89.320	157.600	6737.87	10884.93	-10840.44	2270.68	1770615.27	14553176.25	40°04'18.0542"N	80°32'4.5725"W	0.45	
18074.00	89.750	158.000	6738.61	10975.93	-10924.69	2305.06	1770649.64	14553092.03	40°04'17.2198"N	80°32'4.1359"W	0.65	
18165.00	89.820	157.570	6738.95	11066.92	-11008.94	2339.47	1770684.03	14553007.82	40°04'16.3856"N	80°32'3.6990"W	0.48	
18255.00	89.230	158.110	6739.70	11156.92	-11092.29	2373.41	1770717.96	14552924.51	40°04'15.5601"N	80°32'3.2680"W	0.89	
18347.00	89.350	157.630	6740.84	11248.91	-11177.50	2408.07	1770752.61	14552839.32	40°04'14.7162"N	80°32'2.8279"W	0.54	
18437.00	89.170	157.940	6742.00	11338.90	-11260.81	2442.09	1770786.62	14552756.04	40°04'13.8912"N	80°32'2.3959"W	0.40	
18528.00	89.480	157.840	6743.07	11429.89	-11345.12	2476.34	1770820.85	14552671.77	40°04'13.0563"N	80°32'1.9611"W	0.36	
18618.00	89.750	158.170	6743.68	11519.89	-11428.56	2510.05	1770854.55	14552588.36	40°04'12.2300"N	80°32'1.5331"W	0.47	
18709.00	89.540	157.710	6744.24	11610.88	-11512.90	2544.22	1770888.71	14552504.05	40°04'11.3948"N	80°32'1.0992"W	0.56	
18800.00	89.510	157.970	6745.00	11701.88	-11597.18	2578.55	1770923.02	14552419.81	40°04'10.5602"N	80°32'0.6634"W	0.29	
18890.00	88.980	158.100	6746.18	11791.87	-11680.63	2612.21	1770956.67	14552336.38	40°04'9.7337"N	80°32'0.2361"W	0.61	



# Actual Wellpath Report

Carl Rotter OHI 206H AWB\_ awp 146' - 25598' Proj: 25623'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Carl Rotter OHI 206H
Field	Ohio VW	API	470690003290000
Facility	Carl Rotter OHI Pad	Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H		

WELLPATH DATA (285 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
18981.00	89.050	157.180	6747.75	11882.85	-11764.78	2646.82	1770991.27	14552252.27	40°04'8.9004"N	80°31'59.7965"W	1.01	
19071.00	89.910	158.500	6748.56	11972.84	-11848.13	2680.77	1771025.20	14552168.96	40°04'8.0750"N	80°31'59.3655"W	1.75	
19162.00	89.970	158.490	6748.66	12063.83	-11932.79	2714.13	1771058.55	14552084.32	40°04'7.2366"N	80°31'58.9422"W	0.07	
19253.00	89.510	157.830	6749.07	12154.82	-12017.26	2747.98	1771092.39	14551999.89	40°04'6.4001"N	80°31'58.5124"W	0.88	
19344.00	89.170	156.850	6750.12	12245.81	-12101.23	2783.03	1771127.43	14551915.95	40°04'5.5685"N	80°31'58.0672"W	1.14	
19435.00	89.540	156.700	6751.14	12336.80	-12184.85	2818.92	1771163.30	14551832.36	40°04'4.7403"N	80°31'57.6113"W	0.44	
19526.00	89.690	156.560	6751.76	12427.79	-12268.38	2855.01	1771199.38	14551748.86	40°04'3.9130"N	80°31'57.1527"W	0.23	
19617.00	89.570	156.810	6752.34	12518.78	-12351.95	2891.03	1771235.38	14551665.33	40°04'3.0853"N	80°31'56.6951"W	0.30	
19708.00	89.080	156.760	6753.42	12609.76	-12435.57	2926.90	1771271.24	14551581.73	40°04'2.2570"N	80°31'56.2394"W	0.54	
19799.00	89.260	156.640	6754.73	12700.74	-12519.14	2962.89	1771307.21	14551498.20	40°04'1.4293"N	80°31'55.7822"W	0.24	
19890.00	89.510	156.570	6755.71	12791.73	-12602.66	2999.02	1771343.33	14551414.71	40°04'0.6021"N	80°31'55.3231"W	0.29	
19982.00	89.320	156.530	6756.65	12883.71	-12687.05	3035.63	1771379.93	14551330.35	40°03'59.7662"N	80°31'54.8579"W	0.21	
20073.00	89.290	156.780	6757.75	12974.69	-12770.60	3071.69	1771415.97	14551246.84	40°03'58.9388"N	80°31'54.3998"W	0.28	
20160.00	89.420	156.360	6758.73	13061.67	-12850.42	3106.28	1771450.55	14551167.05	40°03'58.1482"N	80°31'53.9603"W	0.51	
20250.00	89.450	156.460	6759.62	13151.65	-12932.89	3142.29	1771486.55	14551084.60	40°03'57.3313"N	80°31'53.5026"W	0.12	
20339.00	89.230	156.390	6760.65	13240.63	-13014.46	3177.89	1771522.13	14551003.07	40°03'56.5234"N	80°31'53.0504"W	0.26	
20430.00	89.450	156.790	6761.69	13331.61	-13097.96	3214.04	1771558.27	14550919.60	40°03'55.6963"N	80°31'52.5910"W	0.50	
20520.00	89.380	157.110	6762.61	13421.60	-13180.77	3249.27	1771593.49	14550836.82	40°03'54.8761"N	80°31'52.1435"W	0.36	
20611.00	89.450	156.960	6763.54	13512.59	-13264.56	3284.78	1771628.98	14550753.07	40°03'54.0463"N	80°31'51.6925"W	0.18	
20702.00	88.860	155.870	6764.88	13603.57	-13347.94	3321.18	1771665.37	14550669.71	40°03'53.2204"N	80°31'51.2299"W	1.36	
20793.00	89.080	156.970	6766.52	13694.53	-13431.33	3357.58	1771701.75	14550586.36	40°03'52.3945"N	80°31'50.7675"W	1.23	
20884.00	88.980	156.640	6768.06	13785.51	-13514.96	3393.42	1771737.58	14550502.76	40°03'51.5661"N	80°31'50.3122"W	0.38	
20976.00	89.020	156.740	6769.67	13877.49	-13599.44	3429.82	1771773.96	14550418.31	40°03'50.7294"N	80°31'49.8498"W	0.12	
21066.00	89.260	156.820	6771.02	13967.47	-13682.14	3465.29	1771809.43	14550335.64	40°03'49.9103"N	80°31'49.3991"W	0.28	
21158.00	89.140	156.720	6772.30	14059.45	-13766.68	3501.58	1771845.70	14550251.14	40°03'49.0731"N	80°31'48.9382"W	0.17	
21250.00	89.170	156.810	6773.66	14151.44	-13851.20	3537.87	1771881.97	14550166.64	40°03'48.2359"N	80°31'48.4772"W	0.10	
21341.00	89.230	156.910	6774.93	14242.42	-13934.88	3573.63	1771917.72	14550083.01	40°03'47.4072"N	80°31'48.0230"W	0.13	
21432.00	89.170	157.280	6776.20	14333.41	-14018.69	3609.04	1771953.12	14549999.22	40°03'46.5770"N	80°31'47.5732"W	0.41	
21523.00	89.230	156.600	6777.47	14424.40	-14102.41	3644.68	1771988.74	14549915.53	40°03'45.7478"N	80°31'47.1205"W	0.75	
21615.00	88.950	156.550	6778.93	14516.37	-14186.82	3681.25	1772025.30	14549831.16	40°03'44.9118"N	80°31'46.6559"W	0.31	



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Carl Rotter OHI 206H
Field	Ohio VW	API	470690003290000
Facility	Carl Rotter OHI Pad	Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H		

WELLPATH DATA (285 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
21706.00	89.110	156.830	6780.47	14607.35	-14270.38	3717.25	1772061.29	14549747.63	40°03'44.0842"N	80°31'46.1985"W	0.35	
21796.00	89.020	156.620	6781.94	14697.33	-14353.04	3752.81	1772096.83	14549665.00	40°03'43.2654"N	80°31'45.7468"W	0.25	
21887.00	89.750	156.680	6782.92	14788.31	-14436.59	3788.88	1772132.89	14549581.49	40°03'42.4380"N	80°31'45.2887"W	0.80	
21977.00	89.970	156.900	6783.14	14878.30	-14519.30	3824.35	1772168.34	14549498.80	40°03'41.6187"N	80°31'44.8381"W	0.35	
22068.00	89.660	156.900	6783.43	14969.30	-14603.00	3860.05	1772204.03	14549415.13	40°03'40.7897"N	80°31'44.3846"W	0.34	
22160.00	89.720	156.740	6783.93	15061.29	-14687.58	3896.26	1772240.23	14549330.59	40°03'39.9521"N	80°31'43.9247"W	0.19	
22251.00	89.940	158.340	6784.20	15152.29	-14771.67	3931.03	1772274.98	14549246.53	40°03'39.1192"N	80°31'43.4833"W	1.77	
22342.00	89.750	157.800	6784.44	15243.28	-14856.08	3965.01	1772308.95	14549162.15	40°03'38.2833"N	80°31'43.0520"W	0.63	
22432.00	90.280	157.910	6784.42	15333.28	-14939.45	3998.94	1772342.87	14549078.82	40°03'37.4577"N	80°31'42.6213"W	0.60	
22525.00	90.520	157.910	6783.77	15426.28	-15025.62	4033.91	1772377.82	14548992.68	40°03'36.6043"N	80°31'42.1774"W	0.26	
22617.00	89.200	157.360	6784.00	15518.27	-15110.69	4068.92	1772412.82	14548907.64	40°03'35.7618"N	80°31'41.7330"W	1.55	
22708.00	89.510	158.130	6785.02	15609.27	-15194.91	4103.38	1772447.27	14548823.46	40°03'34.9277"N	80°31'41.2956"W	0.91	
22800.00	89.230	157.360	6786.03	15701.26	-15280.05	4138.22	1772482.09	14548738.35	40°03'34.0845"N	80°31'40.8533"W	0.89	
22891.00	89.600	158.080	6786.96	15792.25	-15364.25	4172.72	1772516.58	14548654.18	40°03'33.2506"N	80°31'40.4154"W	0.89	
22982.00	89.350	157.870	6787.80	15883.25	-15448.55	4206.99	1772550.84	14548569.92	40°03'32.4158"N	80°31'39.9804"W	0.53	
23073.00	89.450	157.370	6788.75	15974.24	-15532.63	4241.78	1772585.62	14548485.87	40°03'31.5831"N	80°31'39.5386"W	0.35	
23164.00	89.660	158.070	6789.46	16065.24	-15616.83	4276.28	1772620.10	14548401.70	40°03'30.7492"N	80°31'39.1007"W	0.80	
23255.00	89.750	158.340	6789.92	16156.23	-15701.32	4310.07	1772653.88	14548317.23	40°03'29.9125"N	80°31'38.6720"W	0.31	
23345.00	89.320	157.860	6790.65	16246.22	-15784.83	4343.64	1772687.43	14548233.76	40°03'29.0855"N	80°31'38.2460"W	0.72	
23436.00	89.660	157.580	6791.46	16337.22	-15869.03	4378.14	1772721.92	14548149.59	40°03'28.2516"N	80°31'37.8080"W	0.48	
23527.00	89.600	157.870	6792.05	16428.21	-15953.24	4412.63	1772756.40	14548065.42	40°03'27.4177"N	80°31'37.3702"W	0.33	
23618.00	89.380	158.020	6792.86	16519.21	-16037.57	4446.80	1772790.55	14547981.11	40°03'26.5825"N	80°31'36.9366"W	0.29	
23708.00	89.260	157.810	6793.93	16609.20	-16120.96	4480.63	1772824.38	14547897.76	40°03'25.7566"N	80°31'36.5071"W	0.27	
23799.00	89.290	157.740	6795.08	16700.19	-16205.20	4515.05	1772858.78	14547813.56	40°03'24.9224"N	80°31'36.0703"W	0.08	
23889.00	89.750	158.240	6795.84	16790.18	-16288.63	4548.78	1772892.50	14547730.15	40°03'24.0961"N	80°31'35.6422"W	0.75	
23980.00	89.230	157.670	6796.65	16881.18	-16372.98	4582.93	1772926.64	14547645.84	40°03'23.2608"N	80°31'35.2088"W	0.85	
24071.00	89.540	157.980	6797.62	16972.17	-16457.24	4617.28	1772960.97	14547561.61	40°03'22.4263"N	80°31'34.7729"W	0.48	
24161.00	89.380	157.970	6798.47	17062.16	-16540.67	4651.03	1772994.70	14547478.21	40°03'21.6001"N	80°31'34.3446"W	0.18	
24252.00	89.140	157.760	6799.65	17153.16	-16624.95	4685.31	1773028.98	14547393.96	40°03'20.7654"N	80°31'33.9094"W	0.35	
24343.00	89.140	157.950	6801.01	17244.14	-16709.23	4719.61	1773063.26	14547309.71	40°03'19.9307"N	80°31'33.4741"W	0.21	

**REFERENCE WELLPATH IDENTIFICATION**

Operator	SWN PRODUCTION COMPANY, LLC	Well	Carl Rotter OHI 206H
Field	Ohio VW	API	470690003290000
Facility	Carl Rotter OHI Pad	Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H		

**WELLPATH DATA (285 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	DLS [°/100ft]	Comments
24433.00	89.200	156.560	6802.32	17334.13	-16792.22	4754.40	1773098.04	14547226.75	40°03'19.1088"N	80°31'33.0324"W	1.55	
24524.00	89.170	156.780	6803.61	17425.11	-16875.77	4790.44	1773134.06	14547143.23	40°03'18.2812"N	80°31'32.5747"W	0.24	
24615.00	89.260	157.010	6804.86	17516.10	-16959.47	4826.14	1773169.75	14547059.57	40°03'17.4523"N	80°31'32.1213"W	0.27	
24707.00	89.080	156.920	6806.19	17608.08	-17044.12	4862.14	1773205.74	14546974.95	40°03'16.6138"N	80°31'31.6642"W	0.22	
24798.00	89.290	157.170	6807.48	17699.07	-17127.91	4897.63	1773241.21	14546891.20	40°03'15.7840"N	80°31'31.2136"W	0.36	
24889.00	89.140	156.760	6808.73	17790.06	-17211.64	4933.23	1773276.80	14546807.49	40°03'14.9546"N	80°31'30.7614"W	0.48	
24980.00	89.230	156.840	6810.02	17881.04	-17295.28	4969.08	1773312.63	14546723.89	40°03'14.1263"N	80°31'30.3062"W	0.13	
25072.00	89.050	156.650	6811.41	17973.02	-17379.79	5005.40	1773348.94	14546639.41	40°03'13.2891"N	80°31'29.8450"W	0.28	
25162.00	89.230	156.750	6812.76	18063.00	-17462.44	5040.99	1773384.52	14546556.79	40°03'12.4705"N	80°31'29.3929"W	0.23	
25253.00	89.200	157.270	6814.00	18153.99	-17546.21	5076.53	1773420.04	14546473.06	40°03'11.6409"N	80°31'28.9416"W	0.57	
25346.00	89.170	156.790	6815.33	18246.98	-17631.82	5112.82	1773456.32	14546387.47	40°03'10.7929"N	80°31'28.4809"W	0.52	
25436.00	89.110	156.930	6816.68	18336.96	-17714.57	5148.18	1773491.67	14546304.76	40°03'9.9733"N	80°31'28.0318"W	0.17	
25529.00	88.950	156.650	6818.25	18429.94	-17800.03	5184.83	1773528.30	14546219.33	40°03'9.1268"N	80°31'27.5664"W	0.35	
25598.00	89.320	156.680	6819.29	18498.92	-17863.38	5212.16	1773555.62	14546156.00	40°03'8.4994"N	80°31'27.2193"W	0.54	
25623.00‡	89.320	156.680	6819.59	18523.92	-17886.34	5222.05	1773565.51	14546133.06	40°03'8.2720"N	80°31'27.0937"W	0.00	Proj to TD

**TARGETS**

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Carl Rotter OHI 206H LP Rev 6	6595.00	-1019.00	-1783.14	1766563.00	14562993.93	40°05'55.3164"N	80°32'56.0760"W	point
Carl Rotter OHI 206H BHL Rev 6	6803.00	-17896.06	5200.92	1773544.39	14546123.34	40°03'8.1770"N	80°31'27.3660"W	point



REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Carl Rotter OHI 206H
Field	Ohio VW	API	470690003290000
Facility	Carl Rotter OHI Pad	Wellbore	Carl Rotter OHI 206H AWB
Slot	Slot 206H		

WELLPATH COMPOSITION - Ref Wellbore: Carl Rotter OHI 206H AWB Ref Wellpath: Carl Rotter OHI 206H AWB_awp 146' - 25598' Proj: 25623'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	718.00	OWSG MWD rev2 + HRGM	1 Tally MWD 146' - 718'	Carl Rotter OHI 206H AWB	3/7/2022
718.00	2137.00	OWSG MWD rev2 + HRGM	2 Tally MWD 811' - 2137'	Carl Rotter OHI 206H AWB	3/7/2022
2137.00	5985.00	OWSG MWD rev2 + HRGM	3 Tally MWD 2254' - 5985'	Carl Rotter OHI 206H AWB	3/7/2022
5985.00	25623.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	4 BH MWD 6086' - 25598'	Carl Rotter OHI 206H AWB	3/7/2022