

# Actual Wellpath Report

Edward Dremak OHI 10H AWP Proj: 21035

## REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Well	Edward Dremak OHI 10H
Field	Ohio	API/Legal	
Facility	Edward Dremak OHI Pad	Wellbore	Edward Dremak OHI 10H AWB
Slot	Slot #10H		

## REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Atenjen
Scale	0.999611	Report Generated	1/6/2020 at 9:02:54 AM
Convergence at slot	0.22° East	Database	WA_MPL_EASTERNS_Defn

## WELLPATH LOCATION

Local coordinates		Grid coordinates		Geographic coordinates	
North [ft]	East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
-4.27	17.03	1737757.85	14584700.06	40°09'31.1801"N	80°39'5.7919"W
		1737740.83	14584704.33	40°09'31.2230"N	80°39'6.0110"W
Facility Reference Pt					
Field Reference Pt					
Field Reference Pt					

## WELLPATH DATUM

Calculation method	Minimum curvature	SDC 42 (KB) to Facility Vertical Datum	1114.10ft
Horizontal Reference Pt	Slot	SDC 42 (KB) to Mean Sea Level	1114.10ft
Vertical Reference Pt	SDC 42 (KB)	SDC 42 (KB) to Ground Level at Slot (Slot #10H)	26.00ft
MD Reference Pt	SDC 42 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	158.71°

RECEIVED  
Office of Oil and Gas  
AUG 04 2020  
WV Department of  
Environmental Protection



SOUTHWESTERN ENERGY

# Actual Wellpath Report

Edward Dremak OHI 10H AWP Proj: 21035

Page 2 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Well	Edward Dremak OHI 10H
Field	Ohio	AP/Legal	
Facility	Edward Dremak OHI Pad	Wellbore	Edward Dremak OHI 10H AWB
Slot	Slot #10H		

WELLPATH DATA (240 stations) † = interpolated, ‡ = extrapolated station														
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Turn Rate
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]	[N]	[W]	[ft]	[°]	[ft/100ft]	[°/100ft]
0.00	0.00	176.140	0.00	0.00	0.00	0.00	173757.85	14584700.06	40°09'31.1801"N	80°39'5.7919"W	0.00	0.00	0.00	0.00
26.00	0.00	176.140	26.00	0.00	0.00	0.00	173757.85	14584700.06	40°09'31.1801"N	80°39'5.7919"W	0.00	0.00	0.00	0.00
180.00	0.820	176.140	179.99	1.05	-1.10	0.07	173757.92	14584698.96	40°09'31.1692"N	80°39'5.7919"W	1.10	176.140	0.53	0.53
210.00	0.660	175.770	209.99	1.42	-1.49	0.10	173757.95	14584698.57	40°09'31.1654"N	80°39'5.7906"W	1.49	176.097	0.53	-0.53
302.00	0.460	166.670	301.99	2.29	-2.37	0.23	173758.08	14584697.69	40°09'31.1566"N	80°39'5.7891"W	2.38	174.571	0.24	-0.22
397.00	0.330	209.740	396.99	2.84	-2.98	0.18	173758.03	14584697.08	40°09'31.1506"N	80°39'5.7897"W	2.99	176.588	0.33	-0.14
428.00	0.380	223.990	427.99	2.94	-3.13	0.06	173757.91	14584696.93	40°09'31.1491"N	80°39'5.7912"W	3.13	178.864	0.33	0.16
518.00	0.740	226.250	517.98	3.29	-3.75	-0.56	173757.29	14584696.31	40°09'31.1431"N	80°39'5.7993"W	3.79	188.567	0.40	0.40
610.00	0.940	100.960	609.98	3.92	-4.30	-0.25	173757.60	14584695.76	40°09'31.1376"N	80°39'5.7953"W	4.31	183.366	1.62	0.22
702.00	3.190	90.580	701.91	5.28	-4.47	3.05	1737760.90	14584695.59	40°09'31.1358"W	80°39'5.7528"W	5.41	145.738	2.47	-11.28
793.00	3.810	91.110	792.74	7.37	-4.56	8.60	1737766.45	14584695.50	40°09'31.1347"N	80°39'5.6813"W	9.74	117.919	0.68	0.68
883.00	3.490	92.710	882.56	9.62	-4.75	14.33	1737772.17	14584695.32	40°09'31.1327"N	80°39'5.6076"W	15.09	108.326	0.37	-0.36
975.00	3.910	94.900	974.37	12.15	-5.15	20.25	1737778.09	14584694.92	40°09'31.1285"N	80°39'5.5313"W	20.89	104.258	0.48	0.46
1066.00	5.650	83.420	1065.05	14.65	-4.90	27.79	1737785.63	14584695.16	40°09'31.1306"N	80°39'5.4342"W	28.22	99.995	2.17	-12.62
1157.00	8.410	80.300	1155.36	17.13	-3.26	38.80	1737796.64	14584696.80	40°09'31.1464"N	80°39'5.2923"W	38.94	94.807	3.06	-3.43
1247.00	10.400	86.430	1244.14	20.92	-1.65	53.40	1737811.23	14584698.41	40°09'31.1616"N	80°39'5.1042"W	53.43	91.768	2.47	2.21
1337.00	12.150	93.830	1332.41	27.42	-1.77	70.96	1737828.78	14584698.29	40°09'31.1598"N	80°39'4.8780"W	70.98	91.433	2.52	1.94
1426.00	13.480	98.290	1419.19	36.52	-3.90	90.57	1737848.39	14584696.17	40°09'31.1381"N	80°39'4.6255"W	90.66	92.463	1.86	1.49
1514.00	13.800	95.920	1504.71	46.38	-6.46	111.16	1737868.97	14584693.60	40°09'31.1120"N	80°39'4.3605"W	111.35	93.325	0.73	0.36
1601.00	14.050	93.600	1589.15	55.57	-8.19	132.02	1737889.82	14584691.87	40°09'31.0941"N	80°39'4.0919"W	132.28	93.550	0.70	0.29
1695.00	15.110	89.210	1680.13	64.66	-8.74	155.66	1737913.45	14584689.32	40°09'31.0877"N	80°39'3.7875"W	155.91	93.213	1.63	1.13
1784.00	15.090	99.230	1766.07	74.61	-10.44	178.70	1737936.48	14584688.63	40°09'31.0700"N	80°39'3.4909"W	179.00	93.343	2.93	-0.02
1872.00	15.640	98.710	1850.92	86.36	-14.07	201.73	1737959.50	14584685.99	40°09'31.0332"N	80°39'3.1944"W	202.22	93.990	0.64	0.62
1962.00	16.340	97.540	1937.44	98.53	-17.57	226.27	1737984.04	14584682.50	40°09'30.9977"N	80°39'2.8785"W	226.96	94.440	0.86	0.78
2053.00	14.720	95.190	2025.12	109.86	-20.29	250.48	1738008.23	14584679.77	40°09'30.9698"N	80°39'2.5669"W	251.30	94.632	1.91	-1.78
2143.00	14.900	91.780	2112.13	119.49	-21.69	273.43	1738031.18	14584678.38	40°09'30.9552"N	80°39'2.2713"W	274.29	94.535	0.99	0.20
2231.00	14.130	90.750	2197.32	127.95	-22.18	295.48	1738053.22	14584677.89	40°09'30.9456"N	80°39'1.9874"W	296.31	94.293	0.92	-0.87
2321.00	12.050	85.290	2284.98	134.76	-21.55	315.83	1738073.56	14584678.52	40°09'30.9549"N	80°39'1.7252"W	316.57	93.904	2.69	-2.31
2411.00	12.880	92.450	2372.86	141.48	-21.21	335.22	1738092.94	14584678.86	40°09'30.9575"N	80°39'1.4755"W	335.89	93.620	1.95	0.92
2501.00	13.310	91.170	2460.52	149.47	-21.85	355.60	1738113.31	14584678.22	40°09'30.9504"N	80°39'1.2131"W	356.27	93.516	0.58	-1.42

RECEIVED  
Office of Oil and  
AUG 04 2020  
WV Department of  
Environmental Protection



Southwestern Energy

REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Field	Ohio
Facility	Edward Dremak OHI Pad
Slot	Slot #10H
	Wellbore
	API/Legal
	Edward Dremak OHI 10H

Actual Wellpath Report  
Edward Dremak OHI 10H AWP Proj: 21035'

Page 3 of 12



MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)	(ft)	(ft)	(ft)	(°)	(ft/100ft)	(°/100ft)	(°/100ft)
2590.00	12.600	93.800	2547.26	157.50	-22.70	375.53	1738133.23	14584677.37	40°09'30.9412"N	80°39'0.9564"W	376.21	93.460	1.04	-0.80	2.96
2680.00	12.680	91.000	2635.08	165.41	-23.53	395.20	1738152.89	14584676.54	40°09'30.9323"N	80°39'0.7031"W	395.90	93.407	0.69	0.09	-3.11
2770.00	12.970	87.660	2722.83	172.44	-23.29	415.17	1738172.85	14584676.78	40°09'30.9339"N	80°39'0.4459"W	415.82	93.210	0.88	0.32	-3.71
2859.00	12.190	91.930	2809.70	179.39	-23.19	434.54	1738192.22	14584676.87	40°09'30.9340"N	80°39'0.1965"W	435.16	93.055	1.36	-0.88	4.80
2949.00	12.620	96.710	2897.60	187.75	-24.66	453.80	1738211.47	14584675.41	40°09'30.9188"N	80°38'59.9485"W	454.47	93.111	1.24	0.48	5.31
3039.00	12.840	91.330	2985.39	196.21	-26.04	473.56	1738231.23	14584674.03	40°09'30.9043"N	80°38'59.6940"W	474.28	93.148	1.34	0.24	-5.98
3129.00	12.720	92.060	3073.16	203.99	-26.63	493.46	1738251.12	14584673.44	40°09'30.8978"N	80°38'59.4377"W	494.18	93.089	0.22	-0.13	0.81
3218.00	12.230	97.400	3160.06	212.40	-28.20	512.60	1738270.25	14584671.87	40°09'30.8815"N	80°38'59.1913"W	513.38	93.149	1.41	-0.55	6.00
3308.00	12.290	92.070	3248.01	220.77	-29.77	531.63	1738289.27	14584670.30	40°09'30.8652"N	80°38'58.9463"W	532.46	93.205	1.26	0.07	-5.92
3398.00	12.690	93.760	3335.88	228.75	-30.77	551.07	1738308.70	14584669.30	40°09'30.8547"N	80°38'58.6960"W	551.92	93.196	0.60	0.44	1.88
3488.00	13.290	97.780	3423.58	237.97	-32.82	571.18	1738328.81	14584667.26	40°09'30.8336"N	80°38'58.4371"W	572.12	93.288	1.20	0.67	4.47
3578.00	13.420	92.480	3511.15	247.20	-34.67	591.86	1738349.48	14584665.41	40°09'30.8145"N	80°38'58.1708"W	592.88	93.352	1.37	0.14	-5.89
3667.00	12.990	95.220	3597.80	255.83	-36.03	612.14	1738369.75	14584664.05	40°09'30.8003"N	80°38'57.9097"W	613.20	93.368	0.85	-0.48	3.08
3757.00	12.880	90.420	3685.52	264.06	-37.02	632.25	1738389.85	14584663.06	40°09'30.7897"N	80°38'57.6508"W	633.33	93.351	1.20	-0.12	-5.33
3847.00	13.280	94.430	3773.18	272.25	-37.89	652.59	1738410.18	14584662.18	40°09'30.7803"N	80°38'57.3889"W	653.69	93.323	1.10	0.44	4.46
3936.00	13.340	98.630	3859.79	281.81	-40.22	672.93	1738430.52	14584659.85	40°09'30.7565"N	80°38'57.1270"W	674.13	93.421	1.09	0.07	4.72
4026.00	13.220	92.280	3947.39	291.10	-42.19	693.48	1738451.06	14584657.89	40°09'30.7362"N	80°38'56.8624"W	694.76	93.481	1.63	-0.13	-7.06
4115.00	14.570	95.320	4033.79	300.19	-43.63	714.79	1738472.37	14584656.45	40°09'30.7211"N	80°38'56.5880"W	716.13	93.493	1.72	1.52	3.42
4205.00	13.890	98.210	4121.03	310.58	-46.22	736.76	1738494.32	14584653.85	40°09'30.6947"N	80°38'56.3052"W	738.21	93.590	1.09	-0.76	3.21
4296.00	13.360	92.150	4209.47	320.14	-48.18	758.08	1738515.63	14584651.90	40°09'30.6745"N	80°38'56.0307"W	759.61	93.636	1.67	-0.58	-6.66
4385.00	13.170	97.420	4296.10	329.10	-49.87	778.41	1738535.95	14584648.37	40°09'30.6570"N	80°38'55.7690"W	780.00	93.666	1.37	-0.21	5.92
4474.00	12.680	93.110	4382.84	338.01	-51.71	798.22	1738555.75	14584646.76	40°09'30.6380"N	80°38'55.5140"W	799.89	93.707	1.21	-0.55	-4.84
4564.00	13.330	95.930	4470.54	346.83	-53.32	818.40	1738575.93	14584645.30	40°09'30.6214"N	80°38'55.2541"W	820.13	93.728	1.01	0.72	3.13
4654.00	13.310	92.130	4558.12	355.70	-54.78	839.07	1738596.59	14584645.30	40°09'30.6061"N	80°38'54.9879"W	840.86	93.735	0.97	-0.02	-4.22
4743.00	13.520	95.850	4644.69	364.53	-56.24	859.66	1738617.17	14584643.84	40°09'30.5909"N	80°38'54.7229"W	861.49	93.743	1.02	0.24	4.29
4833.00	13.770	92.060	4732.15	373.59	-57.71	880.83	1738638.33	14584642.37	40°09'30.5755"N	80°38'54.4503"W	882.71	93.749	1.06	0.28	-4.32
4923.00	13.120	95.480	4819.69	382.44	-59.07	901.70	1738659.20	14584641.01	40°09'30.5613"N	80°38'54.1816"W	903.63	93.748	1.14	-0.72	3.80
5012.00	12.560	90.820	4906.46	390.63	-60.18	921.43	1738678.92	14584639.91	40°09'30.5496"N	80°38'53.9275"W	923.39	93.737	1.32	-0.63	-5.24
5102.00	12.890	100.280	4994.26	399.57	-62.11	941.09	1738698.58	14584637.98	40°09'30.5297"N	80°38'53.6743"W	943.14	93.776	2.34	0.37	10.51
5191.00	12.410	101.860	5081.10	410.00	-65.85	960.22	1738717.70	14584634.24	40°09'30.4870"N	80°38'53.4282"W	962.48	93.923	0.66	-0.54	1.78

RECEIVED  
Office of Oil and  
AUG 04 2020  
WV Department of  
Environmental Protection



Southwestern Energy

REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Field	Ohio
Facility	Edward Dremak OHI Pad
Slot	Slot #10H
Well	Edward Dremak OHI 10H
API/Legal	Wellbore
Edward Dremak OHI 10H AWP	

Actual Wellpath Report  
Edward Dremak OHI 10H AWP Proj: 21035'



MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)			(ft)	(°)	(%/100ft)	(%/100ft)	(%/100ft)
5281.00	17.540	126.800	5168.10	426.83	-5.97	980.58	1738738.05	14584624.12	40°09'30.39"12"N	80°38'53.1665"W	983.52	94.430	9.03	5.70	27.71
5370.00	25.610	142.520	5250.87	456.76	-99.33	1003.08	1738760.53	14584600.77	40°09'30.1595"N	80°38'52.8779"W	1007.98	95.655	11.08	9.07	17.66
5417.00	29.260	145.950	5292.58	477.72	-116.91	1015.69	1738773.15	14584583.19	40°09'29.9852"N	80°38'52.7163"W	1022.40	96.566	8.46	7.77	7.30
5460.00	31.070	148.630	5329.75	498.90	-135.10	1027.36	1738784.80	14584565.02	40°09'29.8051"N	80°38'52.5670"W	1036.20	97.491	5.25	4.21	6.23
5551.00	33.850	152.010	5406.54	547.20	-177.54	1051.48	1738808.92	14584522.59	40°09'29.3847"N	80°38'52.2585"W	1066.36	99.584	3.65	3.05	3.71
5640.00	33.890	148.850	5480.44	596.27	-220.66	1075.95	1738833.38	14584479.48	40°09'28.9576"N	80°38'51.9455"W	1098.35	101.590	1.98	0.04	-3.55
5730.00	39.040	151.740	5552.80	649.17	-267.14	1102.37	1738859.79	14584433.03	40°09'28.4973"N	80°38'51.6076"W	1134.28	103.622	6.03	5.72	3.21
5819.00	43.140	155.100	5619.87	707.39	-319.46	1128.47	1738885.88	14584380.73	40°09'27.9793"N	80°38'51.2742"W	1172.81	105.806	5.23	4.61	3.78
5907.00	51.280	160.620	5679.62	771.86	-379.26	1152.58	1738909.98	14584320.95	40°09'27.3874"N	80°38'50.9668"W	1213.37	108.214	10.33	9.25	6.27
6000.00	60.540	159.330	5731.70	848.78	-451.52	1178.97	1738936.35	14584248.72	40°09'26.6722"N	80°38'50.6306"W	1262.47	110.956	10.02	9.96	-1.39
6043.00	64.650	159.240	5751.48	886.94	-487.22	1192.47	1738949.85	14584213.03	40°09'26.3189"N	80°38'50.4585"W	1288.16	112.224	9.56	9.56	-0.21
6090.00	66.950	161.430	5770.75	929.79	-527.58	1206.88	1738964.26	14584172.68	40°09'25.9195"N	80°38'50.2749"W	1317.16	113.612	6.48	4.89	4.66
6133.00	71.990	163.140	5785.83	969.96	-565.93	1219.12	1738976.50	14584134.35	40°09'25.5400"N	80°38'50.1192"W	1344.08	114.901	12.30	11.72	3.98
6179.00	76.110	164.580	5798.46	1014.00	-608.41	1231.41	1738988.78	14584091.89	40°09'25.1198"N	80°38'49.9632"W	1373.51	116.293	9.45	8.96	3.13
6226.00	78.330	165.310	5808.86	1058.56	-652.67	1243.31	1739000.88	14584047.65	40°09'24.6820"N	80°38'49.8121"W	1404.21	117.697	4.96	4.72	1.55
6269.00	83.200	166.200	5815.76	1101.67	-693.79	1253.75	1739011.11	14584006.54	40°09'24.2752"N	80°38'49.6798"W	1432.91	118.959	11.51	11.33	2.07
6315.00	85.790	166.550	5820.17	1147.04	-738.29	1264.54	1739021.89	14583962.06	40°09'23.8350"N	80°38'49.5432"W	1464.28	120.278	5.68	5.63	0.76
6362.00	86.260	165.980	5823.43	1193.52	-783.84	1275.67	1739033.02	14583916.53	40°09'23.3845"N	80°38'49.4021"W	1497.24	121.569	1.57	1.00	-1.21
6430.00	87.720	166.230	5827.00	1260.86	-849.75	1291.98	1739049.32	14583850.64	40°09'22.7325"N	80°38'49.1955"W	1546.38	123.334	2.18	2.15	0.37
6519.00	88.950	164.810	5829.59	1349.19	-935.89	1314.22	1739071.56	14583764.54	40°09'21.8804"N	80°38'48.9134"W	1613.40	125.456	2.11	1.38	-1.60
6609.00	90.030	164.480	5830.39	1438.71	-1022.67	1338.05	1739095.38	14583677.79	40°09'21.0219"N	80°38'48.6110"W	1684.11	127.391	1.25	1.20	-0.37
6701.00	89.940	164.810	5830.41	1530.21	-1111.38	1362.41	1739119.73	14583589.11	40°09'20.1443"N	80°38'48.3018"W	1758.22	129.206	0.37	-0.10	0.36
6794.00	90.220	162.260	5830.28	1622.88	-1200.56	1388.77	1739146.07	14583499.97	40°09'19.2620"N	80°38'47.9669"W	1835.76	130.843	2.76	0.30	-2.74
6882.00	89.200	162.600	5830.73	1710.69	-1284.46	1415.33	1739172.63	14583416.11	40°09'18.4319"N	80°38'47.6291"W	1911.28	132.225	1.22	-1.16	0.39
6975.00	89.200	161.050	5832.03	1803.54	-1372.80	1444.34	1739201.62	14583327.79	40°09'17.5577"N	80°38'47.2600"W	1992.66	133.545	1.67	0.00	-1.67
7067.00	89.290	160.990	5833.24	1895.46	-1459.79	1474.26	1739231.53	14583240.84	40°09'16.6969"N	80°38'46.8792"W	2074.71	134.718	0.12	0.10	-0.07
7160.00	89.020	161.090	5834.61	1988.37	-1547.74	1504.47	1739261.73	14583152.93	40°09'15.8266"N	80°38'46.4946"W	2158.45	135.812	0.31	-0.29	0.11
7253.00	88.830	160.680	5836.36	2081.29	-1635.60	1534.92	1739292.17	14583065.10	40°09'14.9572"N	80°38'46.1070"W	2243.02	136.819	0.49	-0.20	-0.44
7346.00	88.980	161.240	5838.13	2174.20	-1723.49	1565.25	1739322.49	14582977.24	40°09'14.0875"N	80°38'45.7208"W	2328.18	137.755	0.62	0.16	0.60
7438.00	89.230	159.380	5839.57	2266.15	-1810.10	1596.24	1739353.57	14582890.67	40°09'13.2304"N	80°38'45.3261"W	2413.39	138.692	2.04	0.27	-2.02

WELLPATH DATA (240 stations)

RECEIVED  
Office of Oil and Gas  
AUG 04 2010  
Department of Environmental Protection





Southwestern Energy

REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Well	Edward Dremak OHI 10H
Field	Ohio	API/Legal	Edward Dremak OHI 10H AWB
Facility	Edward Dremak OHI Pad	Wellbore	Edward Dremak OHI 10H AWB
Slot	Slot #10H		

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)			(ft)	(°)	(ft/100ft)	(ft/100ft)	(/100ft)
7531.00	88.740	161.450	5841.22	2359.08	-1897.70	1627.41	1739384.62	14582803.10	40°09'12.3635"N	80°38'44.9292"W	2499.95	139.385	2.29	-0.53	2.23
7624.00	90.710	161.190	5841.66	2451.98	-1985.79	1657.20	1739414.40	14582715.04	40°09'11.4918"N	80°38'44.5502"W	2586.44	140.154	2.14	2.12	-0.28
7716.00	89.940	157.740	5841.14	2543.96	-2071.93	1689.46	1739446.65	14582628.94	40°09'10.6393"N	80°38'44.1391"W	2673.42	140.806	3.84	-0.84	-3.75
7809.00	88.860	157.350	5842.12	2636.93	-2157.88	1724.98	1739482.16	14582543.03	40°09'9.7886"N	80°38'43.6861"W	2762.61	141.362	1.23	-1.16	-0.42
7902.00	88.610	160.600	5844.17	2729.90	-2244.65	1758.34	1739515.50	14582456.29	40°09'8.9298"N	80°38'43.2610"W	2851.35	141.927	3.50	-0.27	3.49
7995.00	90.550	162.370	5844.85	2822.78	-2332.83	1787.86	1739545.01	14582368.14	40°09'8.0573"N	80°38'42.8852"W	2939.14	142.534	2.82	2.09	1.90
8087.00	90.150	159.670	5844.29	2914.69	-2419.82	1817.78	1739574.92	14582281.19	40°09'7.1965"N	80°38'42.5044"W	3026.52	143.086	2.97	-0.43	-2.93
8181.00	90.120	160.100	5844.07	3008.67	-2508.08	1850.11	1739607.24	14582192.96	40°09'6.3229"N	80°38'42.0926"W	3116.63	143.585	0.46	-0.03	0.46
8273.00	88.650	160.870	5845.05	3100.62	-2594.79	1880.84	1739637.95	14582106.29	40°09'5.4649"N	80°38'41.7014"W	3204.76	144.063	1.80	-1.60	0.84
8366.00	89.600	164.680	5846.48	3193.36	-2683.59	1908.37	1739665.47	14582017.52	40°09'4.5883"N	80°38'41.3514"W	3292.95	144.582	4.22	1.02	4.10
8459.00	89.600	163.830	5847.12	3285.92	-2773.10	1933.61	1739690.70	14581928.05	40°09'3.7008"N	80°38'41.0310"W	3380.67	145.113	0.91	0.00	-0.91
8551.00	89.110	163.790	5848.16	3377.55	-2861.44	1959.26	1739716.34	14581839.74	40°09'2.8267"N	80°38'40.7053"W	3467.93	145.600	0.53	-0.53	-0.04
8644.00	88.550	163.360	5850.06	3470.19	-2950.63	1985.55	1739742.62	14581750.59	40°09'1.9443"N	80°38'40.3713"W	3556.49	146.062	0.76	-0.60	-0.46
8737.00	89.970	163.380	5851.26	3562.87	-3039.73	2012.16	1739769.22	14581661.52	40°09'1.0628"N	80°38'40.0331"W	3645.37	146.497	1.53	0.02	0.02
8830.00	89.570	164.660	5851.63	3655.47	-3129.13	2037.76	1739794.81	14581572.15	40°09'0.1783"N	80°38'39.7081"W	3734.16	146.927	1.44	-0.43	1.38
8922.00	88.890	162.650	5852.87	3747.12	-3217.40	2063.65	1739820.69	14581483.92	40°08'59.3050"N	80°38'39.3792"W	3822.34	147.324	2.31	-0.74	-2.18
9015.00	89.480	163.860	5854.19	3839.81	-3306.45	2090.44	1739847.47	14581394.91	40°08'58.4240"N	80°38'39.0388"W	3911.84	147.698	1.45	0.63	1.30
9108.00	88.830	163.860	5855.56	3932.43	-3395.77	2116.29	1739873.31	14581305.62	40°08'57.5403"N	80°38'38.7106"W	4001.24	148.068	0.70	-0.70	0.00
9197.00	89.080	163.050	5857.19	4021.11	-3481.07	2141.63	1739898.64	14581220.35	40°08'56.6964"N	80°38'38.3886"W	4087.11	148.399	0.95	0.28	-0.91
9287.00	88.860	165.460	5858.81	4110.66	-3567.67	2166.05	1739923.05	14581133.78	40°08'55.8396"N	80°38'38.0787"W	4173.73	148.737	2.69	-0.24	2.68
9377.00	91.320	164.290	5858.66	4200.13	-3654.55	2189.53	1739946.52	14581046.94	40°08'54.9802"N	80°38'37.7808"W	4260.25	149.073	3.03	2.73	-1.30
9466.00	91.290	161.430	5856.64	4288.87	-3739.56	2215.75	1739972.73	14580961.96	40°08'54.1390"N	80°38'37.4475"W	4346.71	149.353	3.21	-0.03	-3.21
9556.00	88.740	161.460	5856.61	4378.76	-3824.88	2244.38	1740001.36	14580876.68	40°08'53.2948"N	80°38'37.0832"W	4434.74	149.596	2.83	-2.83	0.03
9646.00	88.030	164.410	5859.15	4468.47	-3910.87	2270.78	1740027.74	14580790.72	40°08'52.4439"N	80°38'36.7477"W	4522.32	149.859	3.37	-0.79	3.28
9735.00	89.690	163.980	5860.92	4557.04	-3996.49	2295.02	1740051.97	14580705.14	40°08'51.5969"N	80°38'36.4400"W	4608.58	150.133	1.93	1.87	-0.48
9822.00	88.520	163.360	5862.28	4643.70	-4079.97	2319.47	1740076.42	14580621.69	40°08'50.7710"N	80°38'36.1294"W	4693.19	150.382	1.52	-1.34	-0.71
9911.00	90.280	165.340	5863.21	4732.26	-4165.65	2343.48	1740100.41	14580536.04	40°08'49.9233"N	80°38'35.8247"W	4779.60	150.639	2.98	1.98	2.22
10001.00	89.820	162.960	5863.13	4821.85	-4252.23	2368.05	1740124.98	14580449.50	40°08'49.0688"N	80°38'35.5127"W	4867.15	150.887	2.69	-0.51	-2.64
10091.00	90.920	163.320	5862.55	4911.57	-4338.35	2394.6	1740151.07	14580363.40	40°08'48.2147"N	80°38'35.1810"W	4955.13	151.107	1.29	1.22	0.40
10181.00	89.940	161.090	5861.88	5001.40	-4424.04	2421.35	1740178.57	14580277.75	40°08'47.3669"N	80°38'34.8313"W	5043.47	151.304	2.71	-1.09	-2.48

RECEIVED  
Office of Oil and Gas  
AUG 04 2020  
Department of  
Environmental Protection

Actual Wellpath Report  
Edward Dremak OHI 10H AWP Proj: 21035



REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Field	Ohio
Facility	Edward Dremak OHI Pad
Slot	Slot #10H
Well	Edward Dremak OHI 10H
API/Legal	
Wellbore	Edward Dremak OHI 10H AWB

**Actual Wellpath Report**  
 Edward Dremak OHI 10H AWP Proj: 21035



MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(us ft)	(us ft)			(ft)	(°)	(ft/100ft)	(ft/100ft)	(/100ft)
10273.00	88.800	162.510	5862.89	5093.25	-4511.43	2450.39	1740207.29	14580190.40	40°08'46.5021"N	80°38'34.4658"W	5133.95	151.491	1.98	-1.24	1.54
10363.00	90.340	164.870	5863.56	5182.90	-4597.79	2475.67	1740232.55	14580104.06	40°08'45.6477"N	80°38'33.1449"W	5221.94	151.700	3.13	1.71	2.62
10453.00	90.950	162.070	5862.55	5272.58	-4684.06	2501.27	1740258.14	14580017.83	40°08'44.7942"N	80°38'33.8196"W	5310.06	151.898	3.18	0.68	-3.11
10542.00	89.690	159.580	5862.05	5361.51	-4768.11	2530.50	1740287.36	14579933.81	40°08'43.9624"N	80°38'33.4476"W	5397.99	152.045	3.14	-1.42	-2.80
10632.00	88.460	161.770	5863.51	5451.43	-4853.02	2560.27	1740317.12	14579848.93	40°08'43.1221"N	80°38'33.0686"W	5486.97	152.186	2.79	-1.37	2.43
10723.00	91.450	162.850	5863.58	5542.24	-4939.71	2587.92	1740344.76	14579762.28	40°08'42.2644"N	80°38'32.7170"W	5576.57	152.350	3.49	3.29	1.19
10812.00	89.690	160.270	5862.69	5631.12	-5024.13	2616.07	1740372.90	14579677.90	40°08'41.4291"N	80°38'32.3590"W	5664.42	152.494	3.51	-1.98	-2.90
10903.00	88.740	161.530	5863.94	5722.04	-5110.11	2645.84	1740402.66	14579591.95	40°08'40.5783"N	80°38'31.9800"W	5754.45	152.626	1.73	-1.04	1.38
10993.00	90.520	162.110	5864.52	5811.90	-5195.61	2673.92	1740430.73	14579506.49	40°08'39.7322"N	80°38'31.6229"W	5843.30	152.767	2.08	1.98	0.64
11082.00	89.350	159.630	5864.62	5900.83	-5279.68	2703.09	1740459.88	14579422.44	40°08'38.9002"N	80°38'31.2517"W	5931.42	152.889	3.08	-1.31	-2.79
11172.00	88.000	161.380	5866.70	5990.76	-5364.50	2733.11	1740489.89	14579337.66	40°08'38.0609"N	80°38'30.8695"W	6020.61	153.002	2.46	-1.50	1.94
11262.00	90.220	163.920	5868.10	6080.52	-5450.38	2759.94	1740516.71	14579251.81	40°08'37.2111"N	80°38'30.5285"W	6109.33	153.143	3.75	2.47	2.82
11352.00	90.030	161.690	5867.90	6170.28	-5536.35	2786.55	1740543.31	14579165.88	40°08'36.3605"N	80°38'30.1904"W	6198.07	153.283	2.49	-0.21	-2.48
11442.00	89.050	162.850	5868.63	6260.10	-5622.07	2813.95	1740570.70	14579080.19	40°08'35.5123"N	80°38'29.8419"W	6286.97	153.411	1.69	-1.09	1.29
11532.00	91.540	162.950	5868.16	6349.86	-5708.08	2840.41	1740597.15	14578994.21	40°08'34.6613"N	80°38'29.5057"W	6375.75	153.544	2.77	2.77	0.11
11622.00	89.170	160.310	5867.61	6439.72	-5793.48	2868.77	1740625.50	14578908.84	40°08'33.8162"N	80°38'29.1449"W	6464.85	153.657	3.94	-2.63	-2.93
11712.00	88.430	163.350	5869.49	6529.56	-5878.96	2896.83	1740653.55	14578823.39	40°08'32.9704"N	80°38'28.7881"W	6553.92	153.768	3.48	-0.82	3.38
11802.00	90.860	164.110	5870.05	6619.20	-5965.35	2922.04	1740678.75	14578737.04	40°08'32.1157"N	80°38'28.4680"W	6642.57	153.903	2.83	2.70	0.84
11892.00	90.310	161.470	5869.13	6708.96	-6051.31	2948.67	1740705.96	14578651.12	40°08'31.2652"N	80°38'28.1788"W	6731.49	154.021	3.00	-0.61	-2.93
11982.00	89.380	162.790	5869.37	6798.80	-6136.96	2976.28	1740732.97	14578565.50	40°08'30.4177"N	80°38'27.7785"W	6820.60	154.128	1.79	-1.03	1.47
12071.00	89.320	160.530	5870.38	6887.67	-6221.43	3004.28	1740760.96	14578481.06	40°08'29.5818"N	80°38'27.4223"W	6908.83	154.224	2.54	-0.07	-2.54
12161.00	88.250	162.770	5872.29	6977.52	-6306.83	3032.61	1740789.27	14578395.70	40°08'28.7368"N	80°38'27.0620"W	6998.06	154.320	2.76	-1.19	2.49
12250.00	90.520	164.170	5873.25	7066.20	-6392.14	3057.93	1740814.58	14578310.42	40°08'27.8928"N	80°38'26.7405"W	7085.93	154.434	3.00	2.55	1.57
12340.00	90.680	161.620	5872.30	7155.95	-6478.15	3084.39	1740841.04	14578224.45	40°08'27.0418"N	80°38'26.4042"W	7174.95	154.540	2.84	0.18	-2.83
12430.00	88.860	162.300	5872.67	7245.80	-6563.72	3112.26	1740868.90	14578138.91	40°08'26.1951"N	80°38'26.0498"W	7264.20	154.631	2.16	-2.02	0.76
12519.00	90.030	161.550	5873.53	7334.66	-6648.32	3139.88	1740896.50	14578054.34	40°08'25.3579"N	80°38'25.6987"W	7352.48	154.720	1.56	1.31	-0.84
12609.00	89.970	162.620	5873.53	7424.50	-6733.95	3167.56	1740924.17	14577968.74	40°08'24.5106"N	80°38'25.3467"W	7441.75	154.808	1.19	-0.07	1.19
12701.00	89.820	162.580	5873.70	7516.29	-6821.74	3195.07	1740951.67	14577880.98	40°08'23.6419"N	80°38'24.9970"W	7532.91	154.903	0.17	-0.16	-0.04
12794.00	89.880	163.260	5873.94	7609.03	-6910.64	3222.39	1740978.98	14577792.12	40°08'22.7624"N	80°38'24.6499"W	7625.01	155.001	0.73	0.06	0.73
12887.00	89.480	161.230	5874.46	7701.85	-6998.75	3250.74	1741007.32	14577703.59	40°08'21.8860"N	80°38'24.2894"W	7717.27	155.088	2.22	-0.43	-2.18

RECEIVED  
 Office of Oil and Gas  
 AUG 04 2020  
 Department of  
 Environmental Protection



Southern Energy

REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Field	Ohio
Facility	Edward Dremak OHI Pad
Slot	Slot #10H
	Wellbore
	AP/Legal
	Edward Dremak OHI 10H

Actual Wellpath Report

Edward Dremak OHI 10H AWP Proj: 21035'



MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)			(ft)	(ft)	(ft)	(ft/100ft)	(ft/100ft)
12980.00	89.290	162.220	5876.46	7794.72	-7087.51	3279.90	1741036.47	14577615.32	40°08'21.0123"N	80°38'23.9186"W	7809.65	155.167	1.08	-0.20	1.06
13072.00	89.480	162.470	5876.44	7886.52	-7175.17	3307.80	1741064.36	14577527.70	40°08'20.1449"N	80°38'23.5639"W	7900.93	155.250	0.34	0.21	0.27
13165.00	89.850	163.090	5876.99	7979.29	-7264.00	3335.34	1741091.88	14577438.90	40°08'19.2660"N	80°38'23.2140"W	7993.13	155.337	0.78	0.40	0.67
13258.00	89.110	161.260	5877.83	8072.11	-7352.53	3363.80	1741120.34	14577350.41	40°08'18.3900"N	80°38'22.8522"W	8085.47	155.416	2.12	-0.80	-1.97
13350.00	90.120	163.160	5878.45	8163.93	-7440.12	3391.91	1741148.43	14577262.85	40°08'17.5233"N	80°38'22.4948"W	8176.82	155.492	2.34	1.10	2.07
13443.00	89.850	160.140	5878.48	8258.80	-7528.38	3421.18	1741177.69	14577174.62	40°08'16.6499"N	80°38'22.1225"W	8269.28	155.561	3.26	-0.29	-3.25
13536.00	88.860	161.310	5879.52	8349.73	-7616.16	3451.88	1741208.38	14577086.88	40°08'15.7812"N	80°38'21.7319"W	8361.90	155.618	1.65	-1.06	1.26
13629.00	89.260	161.600	5881.05	8442.61	-7704.32	3481.45	1741237.94	14576998.75	40°08'14.9089"N	80°38'21.3557"W	8454.41	155.683	0.53	0.43	0.31
13721.00	89.020	161.410	5882.43	8534.49	-7791.56	3510.64	1741267.11	14576911.55	40°08'14.0456"N	80°38'20.9845"W	8545.93	155.745	0.33	-0.26	-0.21
13813.00	89.780	161.910	5883.39	8626.36	-7878.88	3539.88	1741296.05	14576824.26	40°08'13.1815"N	80°38'20.6164"W	8637.44	155.808	0.99	0.83	0.54
13906.00	89.510	162.120	5883.97	8719.21	-7967.33	3568.30	1741324.75	14576735.84	40°08'12.3063"N	80°38'20.2513"W	8729.90	155.874	0.37	-0.29	0.23
13999.00	89.020	161.870	5885.16	8812.05	-8055.77	3597.04	1741353.48	14576647.44	40°08'11.4312"N	80°38'19.8859"W	8822.37	155.938	0.59	-0.53	-0.27
14091.00	89.750	161.410	5886.15	8903.92	-8143.08	3626.02	1741382.45	14576560.16	40°08'10.5672"N	80°38'19.5174"W	8913.91	155.997	0.94	0.79	-0.50
14180.00	89.570	162.140	5886.68	8992.79	-8227.62	3653.85	1741410.27	14576475.66	40°08'9.7307"N	80°38'19.1634"W	9002.46	156.054	0.84	-0.20	0.82
14270.00	89.200	161.230	5887.64	9082.66	-8313.05	3682.13	1741438.54	14576390.26	40°08'8.8853"N	80°38'18.8038"W	9092.02	156.110	1.09	-0.41	-1.01
14360.00	89.230	161.750	5888.88	9172.55	-8398.39	3710.70	1741467.10	14576304.96	40°08'8.0409"N	80°38'18.4404"W	9181.62	156.162	0.58	0.03	0.58
14452.00	89.820	161.750	5889.64	9264.42	-8485.76	3739.51	1741495.90	14576217.62	40°08'7.1764"N	80°38'18.0741"W	9273.19	156.218	0.64	0.64	0.00
14541.00	89.970	161.880	5889.80	9353.28	-8570.31	3767.29	1741523.66	14576133.10	40°08'6.3397"N	80°38'17.7209"W	9361.77	156.271	0.22	0.17	0.15
14633.00	90.430	161.870	5889.48	9445.14	-8657.74	3795.91	1741552.27	14576046.70	40°08'5.4745"N	80°38'17.3570"W	9453.33	156.325	0.50	-0.01	-0.01
14725.00	89.140	161.300	5889.83	9537.02	-8745.03	3824.97	1741581.32	14575958.45	40°08'4.6108"N	80°38'16.9874"W	9544.94	156.376	1.53	-1.40	-0.62
14813.00	90.580	162.140	5890.04	9624.90	-8828.59	3852.57	1741608.91	14575874.93	40°08'3.7839"N	80°38'16.6364"W	9632.56	156.425	1.89	1.64	0.95
14903.00	88.710	160.840	5890.60	9714.79	-8913.92	3881.14	1741637.47	14575789.62	40°08'2.9395"N	80°38'16.2731"W	9722.20	156.472	2.53	-2.08	-1.44
14996.00	89.480	161.260	5892.07	9807.70	-9001.87	3911.34	1741667.66	14575701.71	40°08'2.0692"N	80°38'15.8889"W	9814.90	156.515	0.94	0.83	0.45
15087.00	89.200	162.260	5893.12	9898.56	-9088.29	3939.82	1741696.12	14575615.32	40°08'1.2140"N	80°38'15.5268"W	9905.51	156.563	1.14	-0.31	1.10
15177.00	88.770	161.410	5894.71	9988.41	-9173.79	3967.87	1741724.17	14575529.86	40°08'0.3680"N	80°38'15.1701"W	9995.12	156.610	1.06	-0.48	-0.94
15267.00	89.420	160.450	5896.13	10078.33	-9258.84	3997.27	1741753.56	14575444.84	40°07'59.5263"N	80°38'14.7960"W	10084.85	156.649	1.29	0.72	-1.07
15356.00	89.020	162.390	5897.33	10166.22	-9342.24	4025.31	1741781.58	14575361.47	40°07'58.7010"N	80°38'14.4394"W	10172.54	156.690	2.25	-0.45	2.20
15445.00	88.860	161.360	5898.99	10256.07	-9427.76	4053.30	1741809.56	14575275.99	40°07'57.8548"N	80°38'14.0835"W	10262.16	156.736	1.16	-0.18	-1.14
15534.00	88.680	162.820	5900.91	10344.89	-9512.43	4080.66	1741836.91	14575191.36	40°07'57.0171"N	80°38'13.7357"W	10350.75	156.782	1.65	-0.20	1.64
15624.00	89.750	161.770	5902.14	10434.70	-9598.15	4108.03	1741864.27	14575105.66	40°07'56.1688"N	80°38'13.3879"W	10440.33	156.829	1.67	1.19	-1.17

WELLPATH DATA (240 stations)

RECEIVED  
Office of Oil and Gas  
AUG 04 2020  
Department of  
Environmental Protection



# Actual Wellpath Report

Edward Dremak OHI 10H AWP Proj: 21035

Page 9 of 12

## REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Field	Ohio
Facility	Edward Dremak OHI Pad
Slot	Slot #10H

Well	Edward Dremak OHI 10H
AP/Legal	
Wellbore	Edward Dremak OHI 10H AWB

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]	[ft]	[ft]	[ft]	[°]	[ft]	[%/100ft]	[%/100ft]
18419.00	89.570	162.790	5924.37	13222.92	-12265.49	4942.30	1742698.22	14572439.37	40°07'29.7764"N	80°38'2.7885"W	13223.79	158.053	0.37	-0.23	0.00
18512.00	89.940	162.940	5924.76	13315.67	-12354.36	4969.70	1742725.61	14572350.53	40°07'28.8970"N	80°38'2.4405"W	13316.46	158.087	0.43	0.40	0.16
18605.00	89.820	163.070	5924.96	13408.41	-12443.30	4996.88	1742752.78	14572261.63	40°07'28.0170"N	80°38'2.0953"W	13409.12	158.121	0.19	-0.13	0.14
18697.00	89.880	163.380	5925.20	13500.13	-12531.38	5023.44	1742779.32	14572173.58	40°07'27.1455"N	80°38'1.7581"W	13500.76	158.156	0.34	0.07	0.34
18789.00	89.380	161.130	5925.79	13591.94	-12619.00	5051.47	1742807.35	14572086.00	40°07'26.2785"N	80°38'1.4019"W	13592.52	158.183	2.51	-0.54	-2.45
18880.00	89.690	162.010	5926.53	13682.82	-12705.33	5080.24	1742836.10	14571999.70	40°07'25.4243"N	80°38'1.0361"W	13683.35	158.206	1.03	0.34	0.97
18972.00	89.660	161.910	5927.06	13774.68	-12792.80	5108.73	1742864.58	14571912.26	40°07'24.5587"N	80°38'0.6740"W	13775.16	158.231	0.11	-0.03	-0.11
19063.00	89.510	162.260	5927.71	13865.52	-12879.39	5136.72	1742892.56	14571825.71	40°07'23.7019"N	80°38'0.3183"W	13865.95	158.256	0.42	-0.16	0.38
19155.00	89.910	161.930	5928.18	13957.35	-12966.93	5165.01	1742920.84	14571738.20	40°07'22.8356"N	80°37'59.9588"W	13957.74	158.282	0.56	0.43	-0.36
19247.00	89.260	161.710	5928.85	14049.21	-13054.34	5193.71	1742949.53	14571650.83	40°07'21.9707"N	80°37'59.5940"W	14049.57	158.305	0.75	-0.71	-0.24
19340.00	90.030	161.780	5929.42	14142.08	-13142.65	5222.84	1742978.65	14571562.55	40°07'21.0968"N	80°37'59.2237"W	14142.40	158.327	0.83	0.83	0.08
19433.00	89.320	161.090	5929.95	14234.97	-13230.81	5252.45	1743008.24	14571474.42	40°07'20.2244"N	80°37'58.8472"W	14235.26	158.348	1.06	-0.76	-0.74
19526.00	89.660	161.760	5930.78	14327.87	-13318.96	5282.07	1743037.86	14571386.31	40°07'19.3521"N	80°37'58.4706"W	14328.12	158.368	0.81	0.37	0.72
19619.00	89.660	161.530	5931.33	14420.74	-13407.23	5311.36	1743067.13	14571298.07	40°07'18.4786"N	80°37'58.0983"W	14420.97	158.389	0.25	0.00	-0.25
19712.00	89.780	161.720	5931.78	14513.62	-13495.49	5340.67	1743096.44	14571209.85	40°07'17.6053"N	80°37'57.7256"W	14513.82	158.409	0.24	0.13	0.20
19804.00	89.780	161.550	5932.14	14605.50	-13582.80	5369.66	1743125.41	14571122.57	40°07'16.7413"N	80°37'57.3571"W	14605.67	158.430	0.18	0.00	-0.18
19897.00	89.750	161.610	5932.52	14698.38	-13671.03	5399.05	1743154.78	14571034.37	40°07'15.8681"N	80°37'56.9836"W	14698.53	158.450	0.07	-0.03	0.06
19989.00	89.750	161.840	5932.92	14790.25	-13758.39	5427.90	1743183.62	14570947.05	40°07'15.0037"N	80°37'56.6169"W	14790.38	158.470	0.25	0.00	0.25
20082.00	89.750	162.040	5933.33	14883.10	-13846.81	5456.73	1743212.44	14570858.67	40°07'14.1287"N	80°37'56.2505"W	14883.21	158.492	0.22	0.00	0.22
20175.00	89.600	160.570	5933.85	14976.01	-13934.90	5486.53	1743242.24	14570770.61	40°07'13.2570"N	80°37'55.8715"W	14976.10	158.509	1.59	-0.16	-1.58
20267.00	89.750	161.950	5934.38	15067.91	-14022.02	5516.09	1743271.78	14570683.53	40°07'12.3949"N	80°37'55.4957"W	15067.99	158.526	1.51	0.16	1.50
20360.00	89.600	161.960	5934.90	15160.76	-14110.44	5544.90	1743300.58	14570595.14	40°07'11.5199"N	80°37'55.1296"W	15160.82	158.547	0.16	-0.16	0.01
20451.00	89.820	161.680	5935.36	15251.62	-14196.90	5573.29	1743328.96	14570508.71	40°07'10.6644"N	80°37'54.7687"W	15251.67	158.566	0.39	-0.31	-0.31
20544.00	90.090	161.110	5935.44	15344.52	-14285.04	5602.96	1743358.62	14570420.61	40°07'9.7922"N	80°37'54.3915"W	15344.56	158.584	0.68	0.29	-0.61
20637.00	89.910	162.000	5935.44	15437.41	-14373.26	5632.38	1743388.03	14570332.42	40°07'8.9192"N	80°37'54.0174"W	15437.43	158.602	0.98	-0.19	0.96
20730.00	89.480	162.040	5935.93	15530.25	-14461.72	5661.09	1743416.73	14570244.00	40°07'8.0439"N	80°37'53.6526"W	15530.27	158.622	0.46	-0.46	0.04
20822.00	89.380	161.280	5936.85	15622.12	-14549.04	5690.04	1743445.66	14570156.71	40°07'7.1798"N	80°37'53.2847"W	15622.13	158.640	0.83	-0.11	-0.83
20915.00	89.880	161.750	5937.45	15715.01	-14637.24	5719.52	1743475.14	14570068.55	40°07'6.3070"N	80°37'52.9099"W	15715.02	158.657	0.74	0.54	0.51
21008.00	89.510	161.880	5937.94	15807.87	-14725.59	5748.55	1743504.15	14569980.23	40°07'5.4327"N	80°37'52.5410"W	15807.87	158.675	0.42	-0.40	0.14
21035.00	89.510	161.880	5938.17	15834.83	-14751.25	5756.94	1743512.54	14569954.58	40°07'5.1787"N	80°37'52.4343"W	15834.83	158.681	0.00	0.00	0.00

## HOLE & CASING SECTIONS - Ref Wellbore: Edward Dremak OHI 10H AWB

### Ref Wellpath: Edward Dremak OHI 10H AWP Proj: 21035

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start EW [ft]	End N/S [ft]	End EW [ft]
-----------------	---------------	-------------	---------------	----------------	--------------	----------------	---------------	--------------	-------------



**HOLE & CASING SECTIONS - Ref Wellbore: Edward Dremak OHI 10H AWB      Ref Wellpath: Edward Dremak OHI 10H AWP Proj: 21035**

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start EW [ft]	End N/S [ft]	End EW [ft]
20in Conductor	26.00	126.00	100.00	26.00	126.00	0.00	0.00	-0.46	0.03
17.5in Open Hole	126.00	385.00	259.00	126.00	384.99	-0.46	0.03	-2.92	0.21
13.375in Casing Surface	26.00	360.00	334.00	26.00	359.99	0.00	0.00	-2.78	0.25
12.25in Open Hole	385.00	1673.00	1288.00	384.99	1658.88	-2.92	0.21	-8.77	149.97
9.625in Casing Intermediate	26.00	1650.00	1624.00	26.00	1636.63	0.00	0.00	-8.70	144.13
8.75in Open Hole	1650.00	6422.00	4772.00	1636.63	5826.67	-8.70	144.13	-841.99	1290.07
8.5in Open Hole	6422.00	21035.00	14613.00	5826.67	5938.17	-841.99	1290.07	-14751.25	5756.94
5.5in Casing Production	26.00	21035.00	21009.00	26.00	5938.17	0.00	0.00	-14751.25	5756.94

RECEIVED  
Office of Oil and Gas  
AUG 04 2020  
WV Department of  
Environmental Protection

**REFERENCE WELLPATH IDENTIFICATION**

Operator	SOUTHWESTERN ENERGY	Well	Edward Dremak OHI 10H
Field	Ohio	API/Legal	
Facility	Edward Dremak OHI Pad	Wellbore	Edward Dremak OHI 10H AWB
Slot	Slot #10H		

TARGETS							
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude
Edward Dremak North Hardlines 1	5802.60	-138.90	803.37	1738560.91	14584561.21	40°09'29.7762"N	80°38'55.4520"W
2D Polygon: dimensions not calculated							
Edward Dremak North Hardlines 2	5802.60	-2332.10	632.05	1738389.65	14582368.87	40°09'8.1098"N	80°38'57.7700"W
2D Polygon: dimensions not calculated							
Edward Dremak South Hardlines 1	5802.60	-11192.82	4780.23	1742536.21	14573511.62	40°07'40.3831"N	80°38'4.8181"W
2D Polygon: dimensions not calculated							
Edward Dremak South Hardlines 2	5802.60	-12935.38	4916.57	1742672.50	14571769.74	40°07'23.1575"N	80°38'3.1551"W
2D Polygon: dimensions not calculated							
Edward Dremak South Unit 1	5802.60	-10755.83	6253.08	1744008.49	14573948.44	40°07'44.6412"N	80°37'45.8337"W
2D Polygon: dimensions not calculated							
Edward Dremak South Unit 2	5802.60	-13653.98	4919.28	1742675.20	14571051.42	40°07'16.0562"N	80°38'3.1584"W
2D Polygon: dimensions not calculated							
Edward Dremak OHI 10H LP Rev-3	5820.00	-714.62	1246.64	1739004.01	14583985.72	40°09'24.0696"N	80°38'49.7724"W
point							
Edward Dremak OHI 10H BHL Rev-3	5948.00	-14768.03	5753.53	1743509.13	14569937.81	40°07'5.0131"N	80°37'52.4791"W
point							

RECEIVED  
 Office of Oil and Gas  
 AUG 04 2020  
 WV Department of  
 Environmental Protection

REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Well	Edward Dremak OHI 10H
Field	Oho	API/Legal	
Facility	Edward Dremak OHI Pad	Wellbore	Edward Dremak OHI 10H AWB
Slot	Slot #10H		

WELLPATH COMPOSITION - Ref Wellbore: Edward Dremak OHI 10H AWB    Ref Wellpath: Edward Dremak OHI 10H AWP Proj: 21035'					
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	302.00	OWSG MWD rev2 + HRGM	01 Premier MWD <17-1/2" > (180-302)	Edward Dremak OHI 10H AWB	12/28/2019
302.00	1601.00	OWSG MWD rev2 + HRGM	02 Premier MWD <12-1/4" > (302),(397'-1601')	Edward Dremak OHI 10H AWB	12/28/2019
1601.00	6362.00	OWSG MWD rev2 + HRGM	03 Premier MWD <8-3/4" > (1601),(1695'-6362')	Edward Dremak OHI 10H AWB	12/28/2019
6362.00	21035.00	BH AutoTrak Curve (2019) (Short spacing)	04 BH AT Curve <8-1/2" > (6362),(6430'-21008')	Edward Dremak OHI 10H AWB	12/28/2019

RECEIVED  
Office of Oil and Gas

AUG 04 2020

WV Department of  
Environmental Protection

# Actual Wellpath Report

Edward Dremak OHI 10H AWP Proj: 21035'

Page 12 of 12

REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Well	Edward Dremak OHI 10H
Field	Ohio	API/Legal	
Facility	Edward Dremak OHI Pad	Wellbore	Edward Dremak OHI 10H AWB
Slot	Slot #10H		

COMMENTS
Wellpath general comments API: 47-069-00318-0000 BH Job #: 110192757A Rig: SDC 42 Duration: 12/28/2019 - 12/30/2019

RECEIVED  
Office of Oil and Gas

AUG 04 2020

WV Department of  
Environmental Protection