



Actual Wellpath Report

Edward Dremak OHI 205H AWP Proj: 22313'
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REFERENCE WELLPATH IDENTIFICATION	
Operator	SOUTHWESTERN ENERGY
Area	Ohio County, WV
Field	Ohio
Facility	Edward Dremak OHI Pad
Slot	Slot #205H
Well	Edward Dremak OHI 205H
Wellbore	Edward Dremak OHI 205H AWB

REPORT SETUP INFORMATION	
Projection System	NAD83 / UTM Zone 17 North, US feet
Software System	WellArchitect® 5.1
North Reference	Grid
Scale	0.999611
User	Atenjen
Report Generated	2/1/2019 at 2:03:17 PM
Database/Source file	WA_MPL_EASTERNUS_Defn/Edward_Dremak_OHI_205H_AWP_Proj_22313_.xml
Convergence at slot	0.22° East

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	4.19	50.49	1737791.30	14584708.52	40°09'31.262"N	80°39'05.360"W
Facility Reference Pt			1737740.83	14584704.33	40°09'31.223"N	80°39'06.011"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.478"W

WELLPATH DATUM	
Calculation method	Minimum curvature
Horizontal Reference Pt	Slot
Vertical Reference Pt	SDC 40 (RKB)
MD Reference Pt	SDC 40 (RKB)
Field Vertical Reference	Mean Sea Level
	SDC 40 (RKB) to Facility Vertical Datum
	SDC 40 (RKB) to Mean Sea Level
	SDC 40 (RKB) to Ground Level at Slot (Slot #205H)
	Section Origin
	Section Azimuth
	1114.00ft
	1114.00ft
	26.00ft
	N 0.00, E 0.00 ft
	349.18°

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REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #205H
SOUTHWESTERN ENERGY	Well	Edward Dremak OHI 205H
Area	Wellbore	Edward Dremak OHI 205H AWB
Field		
Facility		

WELLPATH DATA (256 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]
0.00H	0.000	75.390	0.00	0.00	0.00	0.00	1737791.30	14584708.52	40°09'31.262"N	80°39'05.360"W	0.00	0.000	0.00	0.00	0.00
26.00	0.000	75.390	26.00	0.00	0.00	0.00	1737791.30	14584708.52	40°09'31.262"N	80°39'05.360"W	0.00	0.000	0.00	0.00	0.00
50.00	0.300	75.390	50.00	0.00	0.02	0.06	1737791.36	14584708.54	40°09'31.263"N	80°39'05.360"W	0.06	75.390	1.25	1.25	314.13
100.00	0.280	79.400	100.00	0.01	0.07	0.31	1737791.61	14584708.59	40°09'31.263"N	80°39'05.356"W	0.32	76.941	0.06	-0.04	8.02
150.00	0.360	73.290	150.00	0.03	0.14	0.58	1737791.88	14584708.66	40°09'31.264"N	80°39'05.353"W	0.59	76.482	0.17	0.16	-12.22
200.00	0.220	57.980	200.00	0.08	0.24	0.81	1737792.11	14584708.75	40°09'31.265"N	80°39'05.350"W	0.84	73.817	0.32	-0.28	-30.62
250.00	0.260	78.430	250.00	0.12	0.31	1.00	1737792.30	14584708.83	40°09'31.266"N	80°39'05.348"W	1.05	72.885	0.19	0.08	40.90
275.00	0.210	88.410	275.00	0.11	0.32	1.10	1737792.40	14584708.84	40°09'31.266"N	80°39'05.346"W	1.15	73.769	0.26	-0.20	39.92
420.00	0.240	163.630	420.00	-0.24	0.04	1.46	1737793.10	14584708.01	40°09'31.257"N	80°39'05.337"W	1.87	105.913	0.43	0.40	-24.38
510.00	0.600	141.690	509.99	-0.84	-0.51	1.80	1737793.53	14584707.18	40°09'31.249"N	80°39'05.332"W	2.60	120.964	0.24	-0.03	23.65
603.00	0.570	163.680	602.99	-1.73	-1.34	2.23	1737794.14	14584706.09	40°09'31.238"N	80°39'05.324"W	3.74	130.556	0.53	0.45	-21.62
696.00	0.990	143.570	695.98	-2.92	-2.43	2.84	1737794.56	14584704.94	40°09'31.227"N	80°39'05.319"W	4.85	137.687	0.73	-0.39	45.58
789.00	0.630	185.960	788.97	-4.13	-3.58	3.26	1737794.66	14584704.36	40°09'31.221"N	80°39'05.320"W	5.23	142.838	0.58	-0.56	32.86
882.00	0.110	216.520	881.97	-4.68	-4.16	3.16	1737793.95	14584704.32	40°09'31.221"N	80°39'05.326"W	4.97	147.720	0.55	0.49	62.47
974.00	0.560	273.990	973.97	-4.63	-4.20	2.66	1737794.60	14584704.64	40°09'31.224"N	80°39'05.318"W	5.10	139.642	2.08	0.90	173.48
1067.00	1.400	75.330	1066.96	-4.44	-3.89	3.30	1737794.89	14584706.22	40°09'31.239"N	80°39'05.290"W	8.90	105.001	4.45	4.45	-2.67
1159.00	5.490	72.870	1158.77	-3.88	-2.30	8.60	1737799.89	14584710.39	40°09'31.280"N	80°39'05.105"W	19.95	84.632	4.23	4.17	-5.43
1252.00	9.370	67.820	1250.98	-1.90	1.87	19.86	1737811.16	14584717.92	40°09'31.354"N	80°39'04.895"W	37.34	75.408	3.90	3.78	-4.99
1345.00	12.890	63.180	1342.22	2.46	9.41	36.14	1737827.42	14584727.50	40°09'31.448"N	80°39'04.657"W	57.78	70.815	0.31	0.04	-1.38
1438.00	12.930	61.900	1432.87	8.41	18.99	54.57	1737845.85	14584736.16	40°09'31.533"N	80°39'04.439"W	76.62	68.843	2.52	2.48	2.22
1531.00	10.620	63.960	1523.90	13.75	27.65	71.45	1737862.72	14584742.52	40°09'31.595"N	80°39'04.270"W	91.11	68.081	0.06	-0.04	0.25
1610.00	10.590	64.160	1601.55	17.54	34.01	84.53	1737875.79	14584748.99	40°09'31.659"N	80°39'04.109"W	105.09	67.344	1.59	1.37	-4.21
1683.00	11.590	61.090	1673.19	21.56	40.48	96.98	1737888.25	14584753.27	40°09'31.701"N	80°39'04.011"W	113.76	66.824	0.73	0.51	-2.53
1726.00	11.810	60.000	1715.30	24.34	44.77	104.58	1737893.46	14584761.73	40°09'31.784"N	80°39'03.784"W	133.30	66.463	1.96	0.49	9.11
1820.00	12.270	68.560	1807.24	29.34	53.23	122.21	1737913.69	14584769.20	40°09'31.857"N	80°39'03.548"W	153.01	66.624	0.67	0.54	-1.82
1911.00	12.760	66.900	1896.07	33.26	60.71	140.45	1737931.69	14584775.71	40°09'31.920"N	80°39'03.299"W	173.34	67.184	2.16	0.18	9.71
2003.00	12.930	75.830	1985.78	36.03	67.21	159.78	1737951.01	14584781.28	40°09'31.975"N	80°39'03.036"W	194.33	68.002	0.72	0.47	2.37
2096.00	13.370	73.630	2076.34	37.67	72.79	180.18	1737971.41	14584787.11	40°09'32.032"N	80°39'02.755"W	216.74	68.732	1.61	1.45	2.89
2189.00	14.720	76.320	2166.56	39.30	78.62	201.98	1737993.20	14584792.77	40°09'32.087"N	80°39'02.437"W	241.83	69.603	2.37	2.33	1.52
2282.00	16.890	77.730	2256.04	40.24	84.28	226.66	1738017.88	14584799.61	40°09'32.153"N	80°39'02.095"W	269.08	70.206	1.68	0.67	4.84
2374.00	17.770	73.460	2343.87	41.97	91.12	253.18	1738044.38	14584806.77	40°09'32.223"N	80°39'01.729"W	298.20	70.755	1.98	1.98	0.90
2467.00	18.920	78.020	2432.14	43.69	98.29	281.54	1738072.73								

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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]
2557.00	19.620	75.140	2517.10	45.05	105.20	310.42	1738101.60	14584813.67	40°09'32.290"N	80°39'01.357"W	327.76	71.279	1.31	0.78	-3.20
2649.00	20.380	70.370	2603.56	48.59	114.54	340.44	1738131.61	14584823.01	40°09'32.381"N	80°39'00.970"W	359.19	71.405	1.96	0.83	-5.18
2742.00	19.500	76.280	2690.99	51.87	123.67	376.77	1738161.63	14584832.14	40°09'32.470"N	80°39'00.578"W	390.88	71.534	2.38	0.95	-6.33
2835.00	19.610	74.320	2778.63	53.98	131.57	400.88	1738192.02	14584840.04	40°09'32.547"N	80°39'00.191"W	421.92	71.830	0.71	0.12	-2.09
2928.00	20.170	69.010	2866.09	58.13	141.53	430.87	1738222.01	14584850.00	40°09'32.644"N	80°38'59.804"W	453.52	71.816	2.03	0.60	-5.71
3020.00	20.550	74.000	2952.35	62.39	151.67	461.21	1738252.33	14584860.13	40°09'32.743"N	80°38'59.413"W	485.50	71.797	1.93	0.41	5.42
3113.00	20.440	71.640	3039.46	66.00	161.28	492.31	1738283.42	14584869.74	40°09'32.837"N	80°38'59.012"W	518.05	71.861	0.90	-0.12	-2.54
3206.00	19.380	74.940	3126.90	69.27	170.41	522.62	1738313.72	14584878.86	40°09'32.926"N	80°38'58.621"W	549.70	71.941	1.66	-1.14	3.55
3298.00	18.600	71.780	3213.90	72.29	178.96	551.30	1738342.39	14584887.41	40°09'33.009"N	80°38'58.251"W	579.62	72.016	1.40	-0.85	-3.43
3391.00	20.030	72.980	3301.66	75.92	188.26	580.62	1738371.69	14584896.71	40°09'33.100"N	80°38'57.873"W	610.38	72.035	1.60	1.54	1.29
3484.00	20.760	70.910	3388.83	80.01	198.31	611.43	1738402.49	14584906.75	40°09'33.198"N	80°38'57.476"W	642.78	72.030	1.10	0.78	-2.23
3577.00	21.390	74.010	3475.61	83.91	208.38	643.31	1738434.36	14584916.81	40°09'33.297"N	80°38'57.064"W	676.21	72.052	1.38	0.68	3.33
3670.00	21.340	71.660	3562.22	87.65	218.37	675.67	1738466.71	14584926.81	40°09'33.394"N	80°38'56.647"W	710.08	72.090	0.92	-0.05	-2.53

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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Slot	Slot #205H
Area	Ohio County, WV	Well	Edward Dremak OHI 205H
Field	Ohio	Wellbore	Edward Dremak OHI 205H AWB
Facility	Edward Dremak OHI Pad		

WELLPATH DATA (256 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]
3762.00	21.040	67.440	3648.01	93.20	229.98	706.81	1738497.84	14584938.41	40°09'33.508"N	80°38'56.245"W	743.29	71.977	1.69	-0.33	-4.59
3852.00	20.130	70.930	3732.26	98.71	241.23	736.37	1738527.38	14584949.66	40°09'33.618"N	80°38'55.864"W	774.88	71.861	1.70	-1.01	3.88
3945.00	19.160	70.150	3819.85	103.40	251.65	765.85	1738556.85	14584960.07	40°09'33.719"N	80°38'55.484"W	806.14	71.810	1.08	-1.04	-0.84
4038.00	19.360	72.870	3907.65	107.49	261.37	794.94	1738585.93	14584969.79	40°09'33.814"N	80°38'55.109"W	836.80	71.800	0.99	0.22	2.92
4130.00	19.510	71.290	3994.41	111.28	270.79	824.06	1738615.04	14584979.20	40°09'33.906"N	80°38'54.733"W	867.41	71.809	0.59	0.16	-1.72
4223.00	21.050	72.900	4081.64	115.24	280.68	854.74	1738645.70	14584989.09	40°09'34.003"N	80°38'54.338"W	899.64	71.821	1.76	1.66	1.73
4316.00	21.240	70.380	4168.38	119.64	291.25	886.57	1738677.52	14584999.65	40°09'34.106"N	80°38'53.927"W	933.18	71.814	1.00	0.20	-2.71
4409.00	20.180	74.690	4255.37	123.47	301.14	917.91	1738708.85	14585009.54	40°09'34.203"N	80°38'53.523"W	966.05	71.837	2.00	-1.14	4.63
4501.00	19.750	73.430	4341.84	126.27	309.76	948.12	1738739.05	14585018.16	40°09'34.287"N	80°38'53.133"W	997.44	71.907	0.66	-0.47	-1.37
4594.00	20.690	75.240	4429.11	128.98	318.43	979.07	1738769.98	14585026.83	40°09'34.371"N	80°38'52.734"W	1029.55	71.983	1.21	1.01	1.95
4687.00	21.360	73.450	4515.92	131.80	327.44	1011.19	1738802.09	14585035.83	40°09'34.459"N	80°38'52.320"W	1062.88	72.057	1.00	0.72	-1.92
4780.00	21.060	70.050	4602.63	136.14	337.97	1043.13	1738834.02	14585046.36	40°09'34.562"N	80°38'51.908"W	1096.51	72.048	1.36	-0.32	-3.66
4872.00	20.140	74.360	4688.75	140.09	347.88	1073.92	1738864.80	14585056.26	40°09'34.658"N	80°38'51.511"W	1128.86	72.051	1.93	-1.00	4.68
4965.00	19.810	72.460	4776.15	143.28	356.94	1104.37	1738895.24	14585065.32	40°09'34.747"N	80°38'51.119"W	1160.62	72.089	0.78	-0.35	-2.04
5058.00	19.180	67.700	4863.83	148.17	367.49	1133.53	1738924.39	14585075.87	40°09'34.850"N	80°38'50.742"W	1191.61	72.037	1.84	-0.68	-5.12
5151.00	19.810	69.640	4951.50	153.82	378.77	1162.44	1738953.29	14585087.14	40°09'34.960"N	80°38'50.370"W	1222.59	71.952	0.97	0.68	2.09
5243.00	19.360	68.220	5038.17	159.30	389.85	1191.22	1738982.05	14585098.22	40°09'35.069"N	80°38'49.998"W	1253.39	71.878	0.71	-0.49	-1.54
5336.00	20.360	65.410	5125.64	166.09	402.31	1220.24	1739011.07	14585110.67	40°09'35.190"N	80°38'49.624"W	1284.85	71.753	1.49	1.08	-3.02
5429.00	20.940	62.730	5212.67	174.64	416.65	1249.73	1739040.54	14585125.01	40°09'35.331"N	80°38'49.243"W	1317.35	71.562	1.19	0.62	-2.88
5517.00	19.430	58.130	5295.27	184.35	431.59	1276.14	1739066.94	14585139.94	40°09'35.478"N	80°38'48.902"W	1347.14	71.315	2.49	-1.72	-5.23
5609.00	24.060	40.740	5380.79	201.54	453.91	1301.41	1739092.20	14585162.25	40°09'35.697"N	80°38'48.576"W	1378.30	70.772	8.57	5.03	-18.90
5702.00	30.260	29.630	5463.54	231.20	488.70	1325.41	1739116.19	14585197.03	40°09'36.040"N	80°38'48.265"W	1412.63	69.760	8.59	6.67	-11.95
5795.00	34.860	14.010	5542.05	273.25	534.96	1343.47	1739134.24	14585243.27	40°09'36.497"N	80°38'48.030"W	1446.06	68.288	10.27	4.95	-16.80
5841.00	38.800	8.220	5578.87	298.82	562.00	1348.72	1739139.49	14585270.30	40°09'36.763"N	80°38'47.961"W	1461.12	67.379	11.41	8.57	-12.59
5888.00	43.450	4.920	5614.27	328.32	592.70	1352.21	1739142.98	14585300.99	40°09'37.067"N	80°38'47.914"W	1476.40	66.331	10.92	9.89	-7.02
5934.00	47.340	5.230	5646.56	359.81	625.31	1355.11	1739145.88	14585333.59	40°09'37.389"N	80°38'47.875"W	1492.43	65.229	8.47	8.46	0.67
5980.00	51.530	3.410	5676.47	393.54	660.15	1357.72	1739148.49	14585368.41	40°09'37.733"N	80°38'47.840"W	1509.71	64.070	9.59	9.11	-3.96
6027.00	56.280	0.240	5704.16	430.58	698.09	1358.90	1739149.67	14585406.34	40°09'38.108"N	80°38'47.823"W	1527.72	62.810	11.48	10.11	-6.74
6073.00	61.660	356.660	5727.87	469.47	737.47	1357.80	1739148.57	14585445.75	40°09'38.497"N	80°38'47.835"W	1545.15	61.492	13.46	11.70	-7.78
6120.00	67.150	355.650	5748.16	511.52	779.74	1354.95	1739145.72	14585487.96	40°09'38.915"N	80°38'47.870"W	1563.29	60.081	11.84	11.68	-2.15
6166.00	72.630	355.730	5763.97	554.42	822.80	1351.71	1739142.48	14585531.00	40°09'39.341"N	80°38'47.909"W	1582.44	58.671	11.91	11.91	0.17
6212.00	76.710	355.710	5776.13	598.49	867.03	1348.40	1739139.17	14585575.21	40°09'39.778"N	80°38'47.950"W	1603.09	57.259	8.87	8.87	-6.04

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6259.00	81.130	354.400	5785.16	644.36	912.97	1344.42	1739135.19	14585621.13	40°09'40.232"N	80°38'47.998"W	1625.11	55.820	9.79	9.40	-2.79
6305.00	82.530	352.200	5791.70	689.77	958.19	1339.10	1739129.88	14585666.33	40°09'40.679"N	80°38'48.065"W	1646.61	54.415	5.63	3.04	-4.78
6381.00	82.640	349.080	5797.56	735.38	1003.20	1331.66	1739122.46	14585711.33	40°09'41.124"N	80°38'48.168"W	1667.27	53.008	8.76	0.67	-3.79
6398.00	86.490	343.950	5801.93	782.10	1048.68	1320.77	1739111.55	14585756.79	40°09'41.574"N	80°38'48.296"W	1686.47	51.551	13.36	7.77	-10.91
6441.00	90.250	342.040	5803.16	824.82	1089.78	1308.20	1739098.99	14585797.87	40°09'41.981"N	80°38'48.456"W	1702.65	50.205	9.81	8.74	-4.44
6534.00	90.370	341.520	5802.65	917.04	1178.11	1279.13	1739069.92	14585886.17	40°09'42.855"N	80°38'48.826"W	1739.00	47.354	0.57	0.13	-0.56
6626.00	90.150	339.770	5802.23	1008.02	1264.91	1248.64	1739039.45	14585972.93	40°09'43.714"N	80°38'49.214"W	1777.38	44.629	1.92	-0.24	-1.90
6719.00	90.310	338.110	5801.88	1089.68	1351.98	1215.98	1739006.80	14586059.97	40°09'44.575"N	80°38'49.630"W	1818.37	41.988	0.73	0.17	-0.71
6812.00	90.250	339.260	5801.41	1191.27	1438.91	1182.93	1738973.77	14586146.87	40°09'45.436"N	80°38'50.051"W	1862.74	39.424	0.17	-0.06	0.16
6905.00	90.280	340.670	5800.98	1283.06	1526.28	1151.07	1738941.92	14586234.20	40°09'46.300"N	80°38'50.457"W	1911.67	37.022	1.52	0.03	1.52
6997.00	90.550	343.610	5800.31	1374.36	1613.83	1122.86	1738913.72	14586321.72	40°09'47.167"N	80°38'50.816"W	1966.03	34.829	3.21	0.29	3.20
7090.00	90.710	344.460	5799.29	1466.98	1703.24	1097.28	1738888.15	14586411.09	40°09'48.051"N	80°38'51.141"W	2026.09	32.791	0.93	0.17	0.91
7183.00	90.650	343.680	5798.16	1559.61	1792.71	1071.91	1738862.79	14586500.53	40°09'48.938"N	80°38'51.463"W	2088.73	30.876	0.63	-0.06	-0.62

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Actual Wellpath Report

Edward Dremak OHI 205H AWP Proj: 22313'

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REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #205H
SOUTHWESTERN ENERGY	Well	Edward Dremak OHI 205H
Area	Wellbore	Edward Dremak OHI 205H AWB
Field		
Facility		

WELLPATH DATA (256 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]
7276.00	90.310	344.180	5797.40	1652.23	1882.11	1046.33	1738837.22	14586589.90	40°09'49.821"N	80°38'51.788"W	2153.40	29.071	0.49	-0.37	0.32
7368.00	90.280	345.090	5796.93	1743.94	1970.82	1021.95	1738812.85	14586678.57	40°09'50.698"N	80°38'52.098"W	2220.03	27.408	0.99	-0.03	0.99
7461.00	90.220	345.050	5796.53	1836.70	2060.68	997.99	1738788.90	14586768.40	40°09'51.587"N	80°38'52.402"W	2289.63	25.841	0.08	-0.06	-0.04
7554.00	90.280	343.730	5796.12	1929.38	2150.25	972.96	1738763.88	14586857.93	40°09'52.473"N	80°38'52.720"W	2360.14	24.346	1.42	0.06	-1.42
7644.00	90.370	341.680	5795.61	2018.79	2236.18	946.21	1738737.14	14586943.82	40°09'53.323"N	80°38'53.060"W	2428.13	22.935	2.28	0.10	-2.28
7736.00	90.310	341.550	5795.06	2109.99	2323.48	917.19	1738708.13	14587031.09	40°09'54.187"N	80°38'53.429"W	2497.96	21.542	0.16	-0.07	-0.14
7829.00	90.370	341.050	5794.51	2202.11	2411.57	887.38	1738678.33	14587119.14	40°09'55.059"N	80°38'53.809"W	2569.65	20.202	0.54	0.06	-0.54
7922.00	90.370	340.450	5793.91	2294.11	2499.37	856.72	1738647.68	14587206.91	40°09'55.928"N	80°38'54.199"W	2642.12	18.920	0.65	0.00	-0.65
8015.00	90.550	343.260	5793.16	2386.33	2587.73	827.76	1738618.73	14587295.24	40°09'56.802"N	80°38'54.568"W	2716.90	17.738	3.03	0.19	3.02
8108.00	90.460	344.570	5792.34	2478.94	2677.08	801.99	1738592.98	14587384.56	40°09'57.686"N	80°38'54.895"W	2794.63	16.677	1.41	-0.10	1.41
8200.00	90.370	346.340	5791.68	2570.74	2766.13	778.89	1738569.89	14587473.57	40°09'58.567"N	80°38'55.188"W	2873.70	15.726	1.93	-0.10	1.92
8293.00	90.490	346.680	5790.98	2663.63	2856.56	757.20	1738548.20	14587563.96	40°09'59.461"N	80°38'55.463"W	2955.21	14.846	0.39	0.13	0.37
8386.00	90.550	346.560	5790.14	2756.54	2947.03	735.68	1738526.69	14587654.40	40°10'00.356"N	80°38'55.735"W	3037.47	14.016	0.14	0.06	-0.13
8475.00	90.580	346.650	5789.26	2845.44	3033.61	715.06	1738506.08	14587740.94	40°10'01.213"N	80°38'55.997"W	3116.74	13.263	0.11	0.03	0.10
8568.00	90.310	347.170	5788.54	2938.36	3124.19	694.00	1738485.03	14587831.48	40°10'02.109"N	80°38'56.263"W	3200.34	12.524	0.63	-0.29	0.56
8661.00	90.400	347.350	5787.96	3031.31	3214.89	673.49	1738464.52	14587922.16	40°10'03.006"N	80°38'56.523"W	3284.68	11.832	0.22	0.10	0.19
8750.00	90.340	346.660	5787.38	3120.24	3301.61	653.48	1738444.52	14588008.84	40°10'03.863"N	80°38'56.776"W	3365.66	11.196	0.78	-0.07	-0.78
8843.00	90.370	346.320	5786.81	3213.14	3392.04	631.75	1738422.80	14588099.23	40°10'04.758"N	80°38'57.051"W	3450.37	10.550	0.37	0.03	-0.37
8936.00	90.340	345.870	5786.23	3306.00	3482.31	609.40	1738400.46	14588189.47	40°10'05.651"N	80°38'57.335"W	3535.23	9.926	0.48	-0.03	-0.48
9028.00	90.220	345.330	5785.78	3397.82	3571.42	586.52	1738377.59	14588278.54	40°10'06.532"N	80°38'57.625"W	3619.26	9.326	0.60	-0.13	-0.59
9121.00	90.180	343.870	5785.46	3490.52	3661.08	561.83	1738352.91	14588368.16	40°10'07.419"N	80°38'57.938"W	3703.93	8.725	1.57	-0.04	-1.57
9214.00	90.090	343.200	5785.24	3583.07	3750.26	535.47	1738326.56	14588457.32	40°10'08.302"N	80°38'58.273"W	3788.30	8.126	0.73	-0.10	-0.72
9306.00	90.120	341.420	5785.07	3674.41	3837.91	507.51	1738298.61	14588544.93	40°10'09.169"N	80°38'58.629"W	3871.32	7.533	1.94	0.03	-1.93
9399.00	90.150	340.510	5784.85	3766.45	3925.82	477.18	1738268.29	14588632.81	40°10'10.039"N	80°38'59.015"W	3954.72	6.930	0.98	0.03	-0.98
9492.00	90.650	342.340	5784.20	3858.59	4013.97	447.56	1738238.68	14588720.92	40°10'10.911"N	80°38'59.392"W	4038.85	6.362	2.04	0.54	1.97
9584.00	91.110	345.040	5782.79	3950.15	4102.25	421.73	1738212.86	14588809.17	40°10'11.784"N	80°38'59.721"W	4123.87	5.870	2.98	0.50	2.93
9677.00	90.830	344.700	5781.21	4042.88	4192.01	397.46	1738188.60	14588898.89	40°10'12.672"N	80°39'00.029"W	4210.81	5.416	0.47	-0.30	-0.37
9770.00	90.490	341.500	5780.14	4135.33	4280.98	370.43	1738168.58	14588987.82	40°10'13.553"N	80°39'00.372"W	4296.98	4.945	3.46	-0.37	-3.44
9862.00	90.370	338.490	5779.45	4226.14	4367.42	338.96	1738130.13	14589074.23	40°10'14.408"N	80°39'00.773"W	4380.55	4.438	3.27	-0.13	-3.27
9955.00	90.550	338.240	5778.71	4317.49	4453.86	304.67	1738095.85	14589160.64	40°10'15.264"N	80°39'01.211"W	4464.27	3.913	0.33	0.19	-0.27
10048.00	90.280	338.400	5778.03	4408.82	4540.28	270.32	1738061.51	14589247.02	40°10'16.119"N	80°39'01.649"W	4548.32	3.407	0.34	-0.29	0.17
10141.00	90.180	339.740	5777.66	4500.37	4627.14	237.09	1738028.30	14589333.85	40°10'16.978"N	80°39'02.072"W	4633.21	2.933	1.44	-0.11	1.44

WELLPATH DATA (256 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]
10234.00	90.220	342.350	5777.33	4592.43	4715.09	206.89	1737998.11	14589421.77	40°10'17.849"N	80°39'02.457"W	4719.63	2.512	2.81	0.04	2.81
10326.00	90.310	346.200	5776.91	4684.07	4803.63	181.96	1737973.19	14589510.27	40°10'18.725"N	80°39'02.774"W	4807.07	2.169	4.19	0.10	4.18
10419.00	90.650	349.790	5776.13	4777.03	4894.58	162.62	1737953.86	14589601.18	40°10'19.624"N	80°39'03.018"W	4897.28	1.903	3.88	0.37	3.86
10512.00	90.580	349.290	5775.13	4870.03	4986.03	145.74	1737936.98	14589692.60	40°10'20.529"N	80°39'03.231"W	4988.16	1.674	0.54	-0.08	-0.54
10601.00	90.580	347.000	5774.23	4959.00	5073.12	127.46	1737918.71	14589779.65	40°10'21.390"N	80°39'03.462"W	5074.72	1.439	2.57	0.00	-2.57
10694.00	90.580	346.090	5773.29	5051.90	5163.56	105.82	1737897.08	14589870.06	40°10'22.284"N	80°39'03.736"W	5164.64	1.174	0.98	0.00	-0.98
10787.00	90.620	343.310	5772.31	5144.60	5253.25	81.28	1737872.55	14589959.71	40°10'23.172"N	80°39'04.048"W	5253.88	0.886	2.99	0.04	-2.99
10877.00	90.520	342.350	5771.42	5234.04	5339.23	54.71	1737845.99	14590045.66	40°10'24.022"N	80°39'04.386"W	5339.51	0.587	1.07	-0.11	-1.07
10966.00	90.550	342.460	5770.59	5322.42	5424.07	27.81	1737819.10	14590130.46	40°10'24.862"N	80°39'04.728"W	5424.14	0.294	0.13	0.03	0.12
11056.00	90.580	342.150	5769.70	5411.76	5509.80	0.46	1737791.76	14590216.17	40°10'25.710"N	80°39'05.076"W	5509.80	0.005	0.35	0.03	-0.34
11148.00	90.580	342.440	5768.77	5503.10	5597.44	-27.52	1737763.79	14590303.77	40°10'26.577"N	80°39'05.432"W	5597.51	359.718	0.32	0.00	0.32
11237.00	90.490	343.580	5767.94	5591.57	5682.55	-53.52	1737737.80	14590388.85	40°10'27.419"N	80°39'05.763"W	5682.80	359.460	1.28	-0.10	1.28
11330.00	90.520	345.250	5767.12	5684.25	5772.13	-78.51	1737712.82	14590478.39	40°10'28.305"N	80°39'06.080"W	5772.66	359.221	1.80	0.03	1.80

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Actual Wellpath Report

Edward Dremak OHI 205H AWP Proj: 22313'

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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Slot	Slot #205H
Area	Ohio County, WV	Well	Edward Dremak OHI 205H
Field	Ohio	Wellbore	Edward Dremak OHI 205H AWB
Facility	Edward Dremak OHI Pad		

WELLPATH DATA (256 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]
11423.00	90.370	345.520	5766.40	5777.04	5862.11	-101.97	1737689.37	14590568.34	40°10'29.196"N	80°39'06.378"W	5863.00	359.003	0.33	-0.16	0.29
11515.00	90.150	343.950	5765.98	5868.76	5950.86	-126.20	1737665.15	14590657.06	40°10'30.074"N	80°39'06.685"W	5952.20	358.785	1.72	-0.24	-1.71
11608.00	90.250	343.120	5765.65	5961.31	6040.05	-152.55	1737638.81	14590746.21	40°10'30.956"N	80°39'07.020"W	6041.98	358.553	0.90	0.11	-0.89
11698.00	90.250	342.900	5765.26	6050.78	6126.12	-178.85	1737612.52	14590832.24	40°10'31.807"N	80°39'07.355"W	6128.73	358.328	0.24	0.00	-0.24
11791.00	90.370	342.780	5764.76	6143.21	6214.98	-206.29	1737585.09	14590921.07	40°10'32.687"N	80°39'07.704"W	6218.40	358.099	0.18	0.13	-0.13
11883.00	90.310	343.990	5764.21	6234.74	6303.13	-232.60	1737558.79	14591009.19	40°10'33.559"N	80°39'08.038"W	6307.42	357.887	1.32	-0.07	1.32
11976.00	90.340	344.280	5763.68	6327.38	6392.59	-258.02	1737533.38	14591098.61	40°10'34.444"N	80°39'08.361"W	6397.80	357.689	0.31	0.03	0.31
12069.00	90.290	345.460	5763.18	6420.11	6482.36	-282.29	1737509.12	14591188.35	40°10'35.332"N	80°39'08.670"W	6488.51	357.506	1.27	-0.06	1.27
12162.00	90.400	344.620	5762.63	6512.87	6572.21	-306.30	1737485.12	14591278.16	40°10'36.221"N	80°39'08.974"W	6579.34	357.332	0.91	0.13	-0.90
12255.00	90.340	344.330	5762.03	6605.55	6661.81	-331.19	1737460.24	14591367.73	40°10'37.107"N	80°39'09.290"W	6670.04	357.154	0.32	-0.06	-0.31
12347.00	90.370	344.600	5761.46	6697.24	6750.45	-355.83	1737435.61	14591456.33	40°10'37.984"N	80°39'09.603"W	6759.82	356.983	0.30	0.03	0.29
12440.00	90.460	344.560	5760.79	6789.94	6840.10	-380.56	1737410.89	14591545.95	40°10'38.871"N	80°39'09.917"W	6850.68	356.816	0.11	0.10	-0.04
12533.00	90.490	343.610	5760.01	6882.57	6929.53	-406.06	1737385.40	14591635.34	40°10'39.756"N	80°39'10.241"W	6941.42	356.646	1.02	0.03	-1.02
12626.00	90.770	347.370	5758.99	6975.35	7019.54	-429.35	1737362.11	14591725.32	40°10'40.646"N	80°39'10.537"W	7032.66	356.500	4.05	0.30	4.04
12718.00	90.650	347.180	5757.85	7067.29	7109.28	-449.62	1737341.86	14591815.02	40°10'41.533"N	80°39'10.794"W	7123.48	356.381	0.24	-0.13	-0.21
12811.00	90.620	345.610	5756.82	7160.17	7199.66	-471.49	1737319.99	14591905.36	40°10'42.427"N	80°39'11.071"W	7215.08	356.253	1.69	-0.03	-1.69
12904.00	90.680	345.670	5755.77	7252.99	7289.75	-494.56	1737296.94	14591995.42	40°10'43.319"N	80°39'11.363"W	7306.50	356.119	0.09	0.06	0.06
12997.00	90.680	344.920	5754.66	7345.77	7379.70	-518.16	1737273.34	14592085.33	40°10'44.208"N	80°39'11.663"W	7397.86	355.984	0.81	0.00	-0.81
13089.00	90.650	344.490	5753.59	7437.48	7468.43	-542.43	1737249.08	14592174.03	40°10'45.086"N	80°39'11.971"W	7488.10	355.846	0.47	-0.03	-0.47
13182.00	90.740	343.270	5752.47	7530.08	7557.77	-568.25	1737223.28	14592263.33	40°10'45.970"N	80°39'12.299"W	7579.10	355.700	1.32	0.10	-1.31
13275.00	90.680	342.060	5751.31	7622.47	7646.53	-595.95	1737195.58	14592352.06	40°10'46.848"N	80°39'12.652"W	7669.72	355.544	1.30	-0.06	-1.30
13367.00	90.740	341.860	5750.17	7713.73	7734.00	-624.44	1737167.10	14592439.50	40°10'47.714"N	80°39'13.014"W	7759.17	355.384	0.23	0.07	-0.22
13460.00	91.080	344.560	5748.70	7806.21	7823.02	-651.30	1737140.25	14592528.48	40°10'48.594"N	80°39'13.356"W	7850.08	355.241	2.93	0.37	2.90
13553.00	90.980	347.130	5747.02	7899.03	7913.17	-674.04	1737117.53	14592618.60	40°10'49.486"N	80°39'13.644"W	7941.83	355.131	2.77	-0.11	2.76
13645.00	90.860	347.610	5745.55	7990.97	8002.94	-694.15	1737097.42	14592708.32	40°10'50.374"N	80°39'13.899"W	8032.98	355.043	0.54	-0.13	0.52
13738.00	90.890	346.720	5744.13	8083.90	8093.60	-714.81	1737076.77	14592798.95	40°10'51.271"N	80°39'14.161"W	8125.10	354.953	0.96	0.03	-0.96
13831.00	90.920	343.240	5742.66	8176.62	8183.40	-738.90	1737052.69	14592888.72	40°10'52.159"N	80°39'14.463"W	8216.69	354.841	3.74	0.03	-3.74
13924.00	90.800	340.900	5741.26	8268.89	8271.86	-767.53	1737024.07	14592977.15	40°10'53.034"N	80°39'14.831"W	8307.40	354.699	2.52	-0.13	-2.52
14016.00	90.830	339.100	5739.95	8359.70	8358.30	-798.99	1736992.62	14593063.55	40°10'53.890"N	80°39'15.232"W	8396.41	354.540	1.96	0.03	-1.96
14109.00	90.800	338.380	5738.63	8451.15	8444.97	-832.71	1736958.92	14593150.18	40°10'54.747"N	80°39'15.662"W	8485.92	354.369	0.77	-0.03	-0.77
14202.00	90.650	338.850	5737.45	8542.57	8531.56	-866.62	1736925.02	14593236.74	40°10'55.604"N	80°39'16.094"W	8575.46	354.200	0.53	-0.16	0.51
14295.00	90.550	340.750	5736.48	8634.31	8618.83	-898.73	1736892.93	14593323.98	40°10'56.468"N	80°39'16.504"W	8665.56	354.047	2.05	-0.11	2.04

WELLPATH DATA (256 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]
14387.00	90.830	343.890	5735.37	8725.64	8706.46	-926.66	1736865.00	14593411.58	40°10'57.335"N	80°39'16.859"W	8755.64	353.925	3.43	0.30	3.41
14480.00	90.950	346.170	5733.93	8818.37	8796.29	-950.68	1736840.99	14593501.37	40°10'58.224"N	80°39'17.164"W	8847.52	353.832	2.45	0.13	2.45
14573.00	91.390	347.770	5732.03	8911.28	8886.87	-971.64	1736820.04	14593591.92	40°10'59.120"N	80°39'17.430"W	8939.83	353.760	1.78	0.47	1.72
14665.00	90.950	349.250	5730.15	9003.25	8977.01	-989.96	1736801.72	14593682.02	40°11'00.011"N	80°39'17.661"W	9031.43	353.707	1.68	-0.48	1.61
14758.00	90.980	349.480	5728.58	9096.24	9068.40	-1007.12	1736784.57	14593773.37	40°11'00.915"N	80°39'17.878"W	9124.15	353.663	0.25	0.03	0.25
14851.00	90.950	346.890	5727.02	9189.21	9159.41	-1026.16	1736765.54	14593864.34	40°11'01.815"N	80°39'18.119"W	9216.71	353.608	2.78	-0.03	-2.78
14944.00	90.980	343.790	5725.45	9281.97	9249.36	-1049.69	1736742.02	14593954.26	40°11'02.705"N	80°39'18.417"W	9308.73	353.525	3.33	0.03	-3.33
15037.00	91.020	340.800	5723.83	9374.28	9337.93	-1077.97	1736713.75	14594042.80	40°11'03.581"N	80°39'18.777"W	9399.94	353.415	3.21	0.04	-3.22
15129.00	90.990	339.790	5722.21	9465.16	9424.53	-1108.98	1736682.75	14594129.36	40°11'04.438"N	80°39'19.172"W	9489.55	353.289	1.10	-0.03	-1.10
15222.00	90.860	338.940	5720.71	9556.78	9511.55	-1141.75	1736649.99	14594216.35	40°11'05.299"N	80°39'19.590"W	9579.83	353.155	0.92	-0.14	-0.91
15315.00	90.800	339.240	5719.36	9648.34	9598.41	-1174.94	1736616.82	14594303.18	40°11'06.159"N	80°39'20.014"W	9670.06	353.021	0.33	-0.06	0.32
15408.00	90.830	340.200	5718.04	9740.06	9685.64	-1207.17	1736584.60	14594390.37	40°11'07.022"N	80°39'20.425"W	9760.58	352.896	1.03	0.03	1.03
15501.00	90.520	340.820	5716.94	9831.99	9773.30	-1238.20	1736553.59	14594478.00	40°11'07.889"N	80°39'20.820"W	9851.43	352.780	0.75	-0.33	0.67

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Actual Wellpath Report

Edward Dremak OHI 205H AWP Proj: 22313'

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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Slot	Slot #205H
Area	Ohio County, WV	Well	Edward Dremak OHI 205H
Field	Ohio	Wellbore	Edward Dremak OHI 205H AWB
Facility	Edward Dremak OHI Pad		

WELLPATH DATA (256 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]
15593.00	90.580	340.530	5716.06	9922.98	9860.11	-1268.64	1736523.15	14594564.78	40°11'08.749"N	80°39'21.208"W	9941.39	352.668	0.32	0.07	-0.32
15686.00	90.550	340.510	5715.14	10014.91	9947.79	-1299.65	1736492.15	14594652.42	40°11'09.616"N	80°39'21.603"W	10032.33	352.557	0.04	-0.03	-0.02
15779.00	90.400	341.270	5714.37	10106.93	10035.66	-1330.10	1736461.72	14594740.25	40°11'10.486"N	80°39'21.991"W	10123.42	352.450	0.83	-0.16	0.82
15872.00	90.520	343.640	5713.63	10199.29	10124.32	-1358.13	1736433.70	14594828.88	40°11'11.363"N	80°39'22.348"W	10215.01	352.360	2.55	0.13	2.55
15964.00	90.580	346.030	5712.74	10291.01	10213.11	-1382.20	1736409.64	14594917.63	40°11'12.241"N	80°39'22.653"W	10306.21	352.293	2.60	0.07	2.60
16057.00	90.580	345.850	5711.80	10383.86	10303.32	-1404.79	1736387.06	14595007.81	40°11'13.133"N	80°39'22.940"W	10398.64	352.236	0.19	0.00	-0.19
16150.00	90.580	344.860	5710.86	10476.64	10393.29	-1428.30	1736363.56	14595097.75	40°11'14.023"N	80°39'23.238"W	10490.97	352.175	1.06	0.00	-1.06
16242.00	90.620	344.500	5709.90	10568.35	10482.02	-1452.61	1736339.26	14595186.44	40°11'14.901"N	80°39'23.547"W	10582.19	352.110	0.39	0.04	-0.39
16335.00	90.520	345.590	5708.97	10661.11	10571.86	-1476.60	1736315.27	14595276.25	40°11'15.790"N	80°39'23.852"W	10674.48	352.049	1.18	-0.11	1.17
16428.00	90.550	346.340	5708.10	10753.96	10662.08	-1499.16	1736292.73	14595366.43	40°11'16.682"N	80°39'24.138"W	10766.96	351.996	0.81	0.03	0.81
16520.00	90.650	348.250	5707.14	10845.90	10751.82	-1519.39	1736272.51	14595456.13	40°11'17.570"N	80°39'24.394"W	10858.64	351.957	2.08	0.11	2.08
16613.00	90.550	350.820	5706.17	10938.88	10843.26	-1536.28	1736255.62	14595547.54	40°11'18.474"N	80°39'24.607"W	10951.55	351.936	2.77	-0.11	2.76
16706.00	90.920	351.000	5704.97	11031.83	10935.08	-1550.97	1736240.94	14595639.33	40°11'19.382"N	80°39'24.792"W	11044.53	351.927	4.44	0.40	0.19
16799.00	90.980	347.200	5703.43	11124.80	11026.38	-1568.55	1736223.36	14595730.58	40°11'20.285"N	80°39'25.014"W	11137.38	351.904	4.09	0.06	-4.09
16891.00	90.800	343.710	5702.00	11216.58	11115.40	-1591.65	1736200.27	14595819.57	40°11'21.166"N	80°39'25.307"W	11228.78	351.851	3.80	-0.20	-3.79
16984.00	90.920	342.600	5700.65	11306.07	11201.53	-1617.73	1736174.21	14595905.67	40°11'22.018"N	80°39'25.639"W	11317.74	351.782	1.24	0.13	-1.23
17074.00	90.830	341.420	5699.23	11398.33	11289.97	-1646.44	1736145.50	14595994.08	40°11'22.893"N	80°39'26.004"W	11409.39	351.703	1.27	-0.10	-1.27
17163.00	90.800	340.650	5697.96	11486.43	11374.13	-1675.37	1736116.59	14596078.20	40°11'23.725"N	80°39'26.373"W	11496.86	351.621	0.87	-0.03	-0.87
17256.00	90.800	339.430	5696.67	11578.23	11461.53	-1707.11	1736084.86	14596165.57	40°11'24.590"N	80°39'26.778"W	11587.97	351.529	1.31	0.00	-1.31
17349.00	90.830	339.540	5695.34	11669.90	11548.63	-1739.70	1736052.28	14596252.63	40°11'25.452"N	80°39'27.193"W	11678.93	351.433	0.12	0.03	0.12
17442.00	90.920	340.710	5693.92	11761.73	11636.08	-1771.31	1736020.68	14596340.04	40°11'26.318"N	80°39'27.596"W	11770.12	351.345	1.26	0.10	1.26
17534.00	90.920	341.950	5692.45	11852.85	11723.22	-1800.76	1735991.25	14596427.16	40°11'27.180"N	80°39'27.971"W	11860.72	351.267	1.35	0.00	1.35
17627.00	90.830	341.910	5691.02	11945.10	11811.62	-1829.60	1735962.42	14596515.52	40°11'28.055"N	80°39'28.339"W	11952.49	351.195	0.11	-0.10	-0.04
17720.00	90.550	343.050	5689.90	12037.45	11900.30	-1857.59	1735934.43	14596604.17	40°11'28.932"N	80°39'28.695"W	12044.41	351.128	1.26	-0.30	1.23
17813.00	90.860	345.090	5688.76	12130.07	11989.72	-1883.12	1735908.92	14596693.55	40°11'29.817"N	80°39'29.019"W	12136.70	351.074	2.22	0.33	2.19
17905.00	91.140	345.650	5687.15	12221.85	12078.72	-1906.35	1735885.70	14596782.52	40°11'30.697"N	80°39'29.314"W	12228.23	351.031	0.68	0.30	0.61
17998.00	91.080	343.620	5685.35	12314.54	12168.38	-1930.99	1735861.07	14596872.14	40°11'31.584"N	80°39'29.627"W	12320.64	350.983	2.18	-0.06	-2.18
18091.00	90.830	341.920	5683.80	12406.94	12257.91	-1958.53	1735833.54	14596960.91	40°11'32.463"N	80°39'29.978"W	12412.67	350.922	1.85	-0.27	-1.83
18183.00	90.980	341.990	5682.35	12498.20	12344.65	-1987.02	1735805.05	14597048.34	40°11'33.328"N	80°39'30.341"W	12503.55	350.856	0.18	0.16	0.08
18276.00	90.920	342.540	5680.81	12590.51	12433.22	-2015.35	1735776.74	14597136.88	40°11'34.204"N	80°39'30.701"W	12595.50	350.793	0.59	-0.06	0.59
18362.00	91.020	344.460	5679.35	12676.07	12515.66	-2039.77	1735752.33	14597219.29	40°11'35.020"N	80°39'31.012"W	12680.79	350.743	2.24	0.12	2.23
18447.00	90.950	346.940	5677.89	12760.89	12598.01	-2060.76	1735731.35	14597301.60	40°11'35.834"N	80°39'31.278"W	12765.45	350.710	2.92	-0.08	2.92

WELLPATH DATA (256 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]
18533.00	91.200	349.370	5676.28	12846.86	12682.16	-2078.41	1735713.71	14597385.72	40°11'36.667"N	80°39'31.501"W	12851.34	350.693	2.84	0.29	2.83
18619.00	91.050	349.740	5674.59	12932.84	12766.72	-2094.00	1735698.12	14597470.24	40°11'37.503"N	80°39'31.698"W	12937.30	350.685	0.46	-0.17	0.43
18703.00	91.020	349.600	5673.07	13016.83	12849.19	-2109.85	1735692.26	14597552.89	40°11'36.316"N	80°39'31.896"W	13021.26	350.675	1.48	-0.04	-1.48
18787.00	91.020	345.520	5671.58	13100.74	12931.02	-2128.72	1735663.41	14597634.48	40°11'39.128"N	80°39'32.138"W	13105.07	350.652	3.55	0.00	-3.55
18873.00	90.950	342.450	5670.10	13186.37	13013.66	-2152.44	1735639.70	14597717.09	40°11'39.945"N	80°39'32.439"W	13190.46	350.608	3.57	-0.08	-3.57
18959.00	90.950	340.150	5668.67	13271.54	13095.10	-2180.01	1735612.14	14597798.50	40°11'40.751"N	80°39'32.790"W	13275.32	350.548	2.67	0.00	-2.67
19044.00	90.950	340.250	5667.26	13355.48	13175.07	-2208.80	1735583.36	14597878.43	40°11'41.542"N	80°39'33.157"W	13358.94	350.483	0.12	0.00	0.12
19128.00	90.710	341.950	5666.04	13436.84	13264.83	-2236.01	1735556.17	14597967.86	40°11'42.329"N	80°39'33.504"W	13441.81	350.425	2.04	-0.29	2.02
19220.00	90.710	343.220	5664.90	13530.02	13342.30	-2263.54	1735528.65	14598045.60	40°11'43.197"N	80°39'33.854"W	13532.94	350.371	1.38	0.00	1.38
19313.00	90.680	344.650	5663.78	13622.62	13431.66	-2289.27	1735502.92	14598134.93	40°11'44.091"N	80°39'34.182"W	13625.35	350.328	1.54	-0.03	1.54
19406.00	90.740	345.790	5662.62	13715.39	13521.57	-2312.99	1735479.21	14598224.81	40°11'44.971"N	80°39'34.483"W	13717.98	350.293	1.23	0.06	1.23
19498.00	90.800	347.810	5661.39	13807.30	13611.13	-2334.00	1735458.21	14598314.33	40°11'45.856"N	80°39'34.749"W	13809.80	350.270	2.20	0.07	2.20
19591.00	90.710	349.550	5660.16	13900.28	13702.31	-2352.25	1735439.97	14598405.47	40°11'46.758"N	80°39'34.980"W	13902.75	350.259	1.87	-0.10	1.87

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Actual Wellpath Report

Edward Dremak OHI 205H AWP Proj: 22313'

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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Slot	Slot #205H
Area	Ohio County, WV	Well	Edward Dremak OHI 205H
Field	Ohio	Wellbore	Edward Dremak OHI 205H AWB
Facility	Edward Dremak OHI Pad		

WELLPATH DATA (256 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]
19684.00	90.430	350.000	5659.24	13993.27	13793.83	-2368.76	1735423.47	14598496.95	40°11'47.663"N	80°39'35.188"W	13995.74	350.256	0.57	-0.30	0.48
19777.00	90.460	349.050	5658.51	14086.27	13885.28	-2385.67	1735406.57	14598588.36	40°11'48.567"N	80°39'35.401"W	14088.73	350.251	1.02	0.03	-1.02
19869.00	90.400	346.220	5657.82	14178.22	13975.13	-2405.36	1735386.88	14598678.18	40°11'49.456"N	80°39'35.651"W	14180.62	350.234	3.08	-0.07	-3.08
19962.00	90.430	345.070	5657.15	14271.04	14065.22	-2428.42	1735363.83	14598768.24	40°11'50.347"N	80°39'35.944"W	14273.32	350.204	1.24	0.03	-1.24
20055.00	90.400	344.050	5656.48	14363.74	14154.86	-2453.18	1735339.08	14598857.85	40°11'51.234"N	80°39'36.258"W	14365.87	350.168	1.10	-0.03	-1.10
20148.00	90.430	342.040	5655.80	14456.20	14243.81	-2480.30	1735311.97	14598946.76	40°11'52.114"N	80°39'36.603"W	14458.15	350.122	2.16	0.03	-2.16
20240.00	90.400	341.110	5655.14	14547.38	14331.09	-2509.37	1735282.91	14599034.01	40°11'52.978"N	80°39'36.974"W	14549.13	350.068	1.01	-0.03	-1.01
20333.00	90.430	340.730	5654.46	14639.42	14418.98	-2539.77	1735252.52	14599121.86	40°11'53.847"N	80°39'37.361"W	14640.95	350.010	0.41	0.03	-0.41
20426.00	90.400	339.520	5653.79	14731.25	14506.44	-2571.39	1735220.92	14599209.28	40°11'54.713"N	80°39'37.764"W	14732.58	349.948	1.30	-0.03	-1.30
20519.00	90.340	338.470	5653.19	14822.78	14593.26	-2604.72	1735187.59	14599296.07	40°11'55.572"N	80°39'38.189"W	14823.89	349.880	1.13	-0.06	-1.13
20611.00	90.520	340.180	5652.50	14913.42	14679.32	-2637.20	1735155.13	14599382.10	40°11'56.424"N	80°39'38.604"W	14914.34	349.815	1.87	0.20	1.86
20701.00	90.680	341.840	5651.56	15002.50	14764.42	-2666.49	1735125.85	14599467.16	40°11'57.266"N	80°39'38.977"W	15003.27	349.763	1.85	0.18	1.84
20786.00	90.520	342.890	5650.67	15086.89	14845.42	-2692.24	1735100.12	14599548.13	40°11'58.067"N	80°39'39.305"W	15087.56	349.721	1.25	-0.19	1.24
20873.00	90.650	343.630	5649.78	15173.42	14928.73	-2717.29	1735075.07	14599631.41	40°11'58.891"N	80°39'39.624"W	15174.01	349.684	0.86	0.15	0.85
20958.00	90.650	341.420	5648.81	15257.84	15009.79	-2742.82	1735049.56	14599712.44	40°11'59.693"N	80°39'39.949"W	15258.34	349.644	2.60	0.00	-2.60
21044.00	90.520	340.410	5647.93	15342.94	15091.06	-2770.93	1735021.45	14599793.68	40°12'00.497"N	80°39'40.307"W	15343.34	349.596	1.18	-0.15	-1.17
21130.00	90.520	341.840	5647.15	15428.09	15172.43	-2798.75	1734993.64	14599875.02	40°12'01.303"N	80°39'40.661"W	15428.41	349.549	1.66	0.00	1.66
21216.00	90.550	343.710	5646.35	15513.54	15254.57	-2824.22	1734968.19	14599957.12	40°12'02.115"N	80°39'40.986"W	15513.80	349.511	2.17	0.03	2.17
21310.00	90.620	345.810	5645.39	15607.25	15345.25	-2848.92	1734943.49	14600047.77	40°12'03.012"N	80°39'41.300"W	15607.47	349.482	2.24	0.07	2.23
21405.00	90.370	345.090	5644.57	15702.05	15437.20	-2872.79	1734919.63	14600139.68	40°12'03.922"N	80°39'41.603"W	15702.23	349.458	0.80	-0.26	-0.76
21499.00	90.370	344.050	5643.96	15795.74	15527.81	-2897.80	1734894.64	14600230.26	40°12'04.818"N	80°39'41.920"W	15795.89	349.429	1.11	0.00	-1.11
21593.00	90.150	343.910	5643.54	15889.35	15618.16	-2923.74	1734868.70	14600320.57	40°12'05.712"N	80°39'42.250"W	15889.47	349.397	0.28	-0.23	-0.15
21687.00	89.940	343.750	5643.46	15982.94	15708.44	-2949.92	1734842.54	14600410.81	40°12'06.605"N	80°39'42.583"W	15983.02	349.364	0.28	-0.22	-0.17
21781.00	90.030	345.540	5643.49	16076.64	15799.08	-2974.81	1734817.66	14600501.42	40°12'07.502"N	80°39'42.900"W	16076.70	349.337	1.91	0.10	1.90
21876.00	90.180	344.220	5643.31	16171.37	15890.79	-2999.59	1734792.89	14600593.09	40°12'08.409"N	80°39'43.214"W	16171.42	349.310	1.40	0.16	-1.39
21970.00	90.460	343.370	5642.79	16264.96	15981.05	-3025.82	1734766.66	14600683.32	40°12'09.302"N	80°39'43.548"W	16264.98	349.279	0.95	0.30	-0.90
22065.00	90.650	344.620	5641.87	16359.56	16072.36	-3052.01	1734740.48	14600774.60	40°12'10.205"N	80°39'43.881"W	16359.57	349.248	1.33	0.20	1.32
22160.00	90.400	343.760	5641.00	16454.20	16163.77	-3077.89	1734714.61	14600865.96	40°12'11.109"N	80°39'44.210"W	16454.20	349.219	0.94	-0.26	-0.91
22254.00	90.400	341.820	5640.34	16547.61	16253.55	-3105.70	1734686.81	14600955.71	40°12'11.998"N	80°39'44.564"W	16547.61	349.182	2.06	0.00	-2.06
22288.00	90.550	341.840	5640.06	16581.33	16285.85	-3116.30	1734676.21	14600988.00	40°12'12.317"N	80°39'44.699"W	16581.33	349.167	0.45	0.44	0.06
22313.00	90.550	341.840	5639.82	16606.12	16309.61	-3124.10	1734668.43	14601011.75	40°12'12.552"N	80°39'44.798"W	16606.12	349.156	0.00	0.00	0.00

HOLE & CASING SECTIONS - Ref Wellbore: Edward Dremak OHI 205H AWB Ref Wellpath: Edward Dremak OHI 205H AWP Proj: 22313'													
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]	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	0.10	0.44	0.00	0.00	0.10	0.44
17.5in Open Hole	126.00	356.00	230.00	126.00	356.00	0.10	0.44	0.24	1.34	0.10	0.44	0.24	1.34
13.375in Casing Surface	26.00	356.00	330.00	26.00	356.00	0.00	0.00	0.24	1.34	0.00	0.00	0.24	1.34
12.25in Open Hole	356.00	1677.00	1321.00	356.00	1667.31	0.24	1.34	39.90	95.93	0.24	1.34	39.90	95.93
9.625in Casing Intermediate	26.00	1677.00	1651.00	26.00	1667.31	0.00	0.00	39.90	95.93	0.00	0.00	39.90	95.93
8.75in Open Hole	1677.00	5496.00	3819.00	1667.31	5275.48	39.90	95.93	427.93	1270.12	39.90	95.93	427.93	1270.12
8.5in Open Hole	5496.00	22313.00	16817.00	5275.48	5639.82	427.93	1270.12	16309.61	-3124.10	427.93	1270.12	16309.61	-3124.10
5.5in Casing Production	26.00	22313.00	22287.00	26.00	5639.82	0.00	0.00	16309.61	-3124.10	0.00	0.00	16309.61	-3124.10

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Actual Wellpath Report

Edward Dremak OHI 205H AWP Proj: 22313'
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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Slot	Slot #205H
Area	Ohio County, WV	Well	Edward Dremak OHI 205H
Field	Ohio	Wellbore	Edward Dremak OHI 205H AWB
Facility	Edward Dremak OHI Pad		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Edward Dremak OHI 205H BHL Rev-4	5653.00	16311.93	-3117.61	1734674.91	14601014.07	40°12'12.575"N	80°39'44.715"W	point
Edward Dremak OHI 205H LP Rev-4	5803.00	1034.68	1303.95	1739094.74	14585742.80	40°09'41.436"N	80°38'48.513"W	point

WELLPATH COMPOSITION - Ref Wellbore: Edward Dremak OHI 205H AWB Ref Wellpath: Edward Dremak OHI 205H AWP Proj: 22313'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment
26.00	275.00	OWSG MWD rev2 + HRGM	01_Premier MWD <17 1/2"> (50'-275')
275.00	1610.00	OWSG MWD rev2 + HRGM	02_Premier MWD <12 1/4"> (420'-1610')
1610.00	5429.00	OWSG MWD rev2 + HRGM	03_Premier MWD <8 3/4"> (1683'-5429')
5429.00	22288.00	BHI AutoTrak Curve (Short)	04_BH AT Curve <8 1/2"> (5517'-22288')
22288.00	22313.00	Blind Drilling (std)	Projection to bit

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #205H
Area	Ohio County, WV	Well	Edward Dremak OHI 205H
Field	Ohio	Wellbore	Edward Dremak OHI 205H AWB
Facility	Edward Dremak OHI Pad		

COMMENTS
Wellpath general comments API: 47-069-00227-0000 BH Job #: 109567843 Rig: SDC 40 Duration: 01/24/2019 - 01/29/2019

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