



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'

Page 1 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Delaset
Scale	0.999601	Report Generated	8/9/2019 at 3:13:10 PM
Convergence at slot	0.08° East	Database/Source file	WA_MPL_EasternUS_Defn/Rodzina_Unit_3H_AWP_Proj_20716_.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-217.21	229.59	1676279.23	14300375.39	39°22'48.560"N	80°52'23.110"W
Facility Reference Pt			1676049.73	14300592.52	39°22'50.710"N	80°52'26.030"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

## WELLPATH DATUM

Calculation method	Minimum curvature	H&P 519 (RKB) to Facility Vertical Datum	1039.00ft
Horizontal Reference Pt	Slot	H&P 519 (RKB) to Mean Sea Level	1039.00ft
Vertical Reference Pt	H&P 519 (RKB)	H&P 519 (RKB) to Ground Level at Slot (Slot #11)	30.00ft
MD Reference Pt	H&P 519 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	161.66°



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'  
Page 2 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH DATA (241 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]	Comments
0.00†	0.000	161.260	0.00	0.00	0.00	0.00	1676279.23	14300375.39	39°22'48.560"N	80°52'23.110"W	0.00	0.000	0.00	0.00	0.00	
30.00	0.000	161.260	30.00	0.00	0.00	0.00	1676279.23	14300375.39	39°22'48.560"N	80°52'23.110"W	0.00	0.000	0.00	0.00	0.00	
115.00	0.440	161.260	115.00	0.33	-0.31	0.10	1676279.33	14300375.08	39°22'48.557"N	80°52'23.109"W	0.33	161.260	0.52	0.52	189.72	Gyrodata MS Gyro <17-1/2">(100'-544')
140.00	0.280	179.110	140.00	0.48	-0.46	0.14	1676279.37	14300374.93	39°22'48.555"N	80°52'23.108"W	0.48	163.492	0.77	-0.64	71.40	
165.00	0.210	190.340	165.00	0.58	-0.57	0.13	1676279.36	14300374.82	39°22'48.554"N	80°52'23.108"W	0.58	167.152	0.34	-0.28	44.92	
190.00	0.170	173.320	190.00	0.66	-0.65	0.13	1676279.36	14300374.74	39°22'48.554"N	80°52'23.108"W	0.66	169.061	0.28	-0.16	-68.08	
215.00	0.190	202.650	215.00	0.72	-0.72	0.11	1676279.34	14300374.67	39°22'48.553"N	80°52'23.109"W	0.73	171.069	0.37	0.08	117.32	
240.00	0.070	196.200	240.00	0.77	-0.78	0.09	1676279.32	14300374.61	39°22'48.552"N	80°52'23.109"W	0.78	173.133	0.48	-0.48	-25.80	
265.00	0.070	238.050	265.00	0.78	-0.80	0.08	1676279.31	14300374.59	39°22'48.552"N	80°52'23.109"W	0.80	174.546	0.20	0.00	167.40	
290.00	0.180	200.430	290.00	0.82	-0.84	0.05	1676279.28	14300374.55	39°22'48.552"N	80°52'23.109"W	0.85	176.633	0.53	0.44	-150.48	
315.00	0.060	250.880	315.00	0.85	-0.89	0.02	1676279.25	14300374.50	39°22'48.551"N	80°52'23.110"W	0.89	178.472	0.60	-0.48	201.80	
340.00	0.090	185.630	340.00	0.87	-0.91	0.01	1676279.24	14300374.48	39°22'48.551"N	80°52'23.110"W	0.91	179.412	0.34	0.12	-261.00	
365.00	0.060	216.010	365.00	0.89	-0.94	0.00	1676279.23	14300374.45	39°22'48.551"N	80°52'23.110"W	0.94	180.018	0.20	-0.12	121.52	
390.00	0.120	40.410	390.00	0.89	-0.93	0.01	1676279.24	14300374.46	39°22'48.551"N	80°52'23.110"W	0.93	179.447	0.72	0.24	-702.40	
415.00	0.210	68.090	415.00	0.87	-0.89	0.07	1676279.30	14300374.50	39°22'48.551"N	80°52'23.109"W	0.90	175.618	0.47	0.36	110.72	
440.00	0.280	64.170	440.00	0.86	-0.85	0.17	1676279.40	14300374.54	39°22'48.552"N	80°52'23.108"W	0.87	168.949	0.29	0.28	-15.68	
465.00	0.260	57.930	465.00	0.84	-0.79	0.27	1676279.50	14300374.60	39°22'48.552"N	80°52'23.107"W	0.84	161.261	0.14	-0.08	-24.96	
490.00	0.400	57.030	490.00	0.80	-0.72	0.39	1676279.62	14300374.67	39°22'48.553"N	80°52'23.105"W	0.81	151.384	0.56	0.56	-3.60	
515.00	0.500	51.430	515.00	0.74	-0.60	0.55	1676279.78	14300374.79	39°22'48.554"N	80°52'23.103"W	0.81	137.547	0.44	0.40	-22.40	
540.00	0.430	83.850	540.00	0.72	-0.52	0.73	1676279.96	14300374.87	39°22'48.555"N	80°52'23.101"W	0.90	125.657	1.07	-0.28	129.68	
559.00	0.400	66.530	558.99	0.73	-0.49	0.86	1676280.09	14300374.90	39°22'48.555"N	80°52'23.099"W	0.99	119.587	0.68	-0.16	-91.16	
669.00	0.790	129.250	668.99	1.34	-0.81	1.80	1676281.03	14300374.58	39°22'48.552"N	80°52'23.087"W	1.97	114.368	0.64	0.35	57.02	Gyrodata MS Gyro <12-1/4">(544')(654')
789.00	1.000	141.670	788.98	3.02	-2.16	3.09	1676282.32	14300373.23	39°22'48.539"N	80°52'23.071"W	3.77	124.961	0.24	0.18	10.35	WFT EM <12-1/4">(654')(774'-2510')
916.00	1.930	230.040	915.94	4.85	-4.40	2.14	1676281.37	14300370.99	39°22'48.516"N	80°52'23.083"W	4.89	154.113	1.69	0.73	69.58	
1011.00	4.270	239.730	1010.80	6.17	-7.21	-2.14	1676277.09	14300368.18	39°22'48.489"N	80°52'23.137"W	7.53	196.559	2.52	2.46	10.20	
1074.00	5.940	243.300	1073.55	7.13	-9.86	-7.08	1676272.15	14300365.53	39°22'48.463"N	80°52'23.200"W	12.14	215.691	2.70	2.65	5.67	
1169.00	7.640	242.510	1167.88	8.85	-14.98	-17.08	1676262.16	14300360.41	39°22'48.412"N	80°52'23.328"W	22.72	228.735	1.79	1.79	-0.83	
1263.00	9.930	242.870	1260.77	11.08	-21.57	-29.84	1676249.41	14300353.83	39°22'48.347"N	80°52'23.490"W	36.81	234.140	2.44	2.44	0.38	
1358.00	11.470	238.820	1354.12	14.43	-30.19	-45.21	1676234.04	14300345.21	39°22'48.262"N	80°52'23.686"W	54.36	236.263	1.80	1.62	-4.26	
1452.00	12.920	231.960	1446.00	20.05	-41.51	-61.48	1676217.77	14300333.90	39°22'48.151"N	80°52'23.894"W	74.18	235.976	2.18	1.54	-7.30	



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'  
Page 3 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH DATA (241 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 (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
1547.00	13.000	231.270	1538.58	27.36	-54.74	-78.18	1676201.08	14300320.67	39°22'48.020"N	80°52'24.107"W	95.44	235.003	0.18	0.08	-0.73	
1642.00	11.090	228.760	1631.48	34.64	-67.45	-93.39	1676185.88	14300307.97	39°22'47.895"N	80°52'24.301"W	115.20	234.163	2.08	-2.01	-2.64	
1736.00	9.710	228.870	1723.93	41.22	-78.62	-106.16	1676173.11	14300296.80	39°22'47.784"N	80°52'24.463"W	132.10	233.476	1.47	-1.47	0.12	
1831.00	8.620	233.990	1817.72	46.49	-88.08	-117.95	1676161.32	14300287.35	39°22'47.691"N	80°52'24.614"W	147.21	233.251	1.43	-1.15	5.39	
1925.00	8.880	246.000	1910.64	49.34	-95.17	-130.28	1676149.00	14300280.26	39°22'47.621"N	80°52'24.771"W	161.34	233.852	1.96	0.28	12.78	
2020.00	9.580	253.080	2004.41	49.87	-100.45	-144.54	1676134.75	14300274.98	39°22'47.569"N	80°52'24.953"W	176.02	235.202	1.40	0.74	7.45	
2115.00	10.150	257.720	2098.00	48.79	-104.53	-160.28	1676119.01	14300270.90	39°22'47.529"N	80°52'25.153"W	191.36	236.888	1.03	0.60	4.88	
2209.00	9.470	252.020	2190.63	47.87	-108.68	-175.73	1676103.57	14300266.75	39°22'47.488"N	80°52'25.350"W	206.63	238.265	1.26	-0.72	-6.06	
2304.00	9.220	245.430	2284.37	48.64	-114.26	-190.09	1676089.22	14300261.18	39°22'47.433"N	80°52'25.533"W	221.79	238.990	1.16	-0.26	-6.94	
2399.00	9.630	244.160	2378.09	50.51	-120.89	-204.16	1676075.15	14300254.55	39°22'47.368"N	80°52'25.712"W	237.27	239.369	0.48	0.43	-1.34	
2525.00	9.220	241.150	2502.39	53.72	-130.35	-222.49	1676056.83	14300245.09	39°22'47.275"N	80°52'25.946"W	257.86	239.635	0.51	-0.33	-2.39	
2657.00	8.190	235.800	2632.87	58.22	-140.74	-239.53	1676039.80	14300234.71	39°22'47.172"N	80°52'26.163"W	277.82	239.563	0.99	-0.78	-4.05	WFT EM <8-3/4">(2510')(2642'-6180')
2752.00	8.940	243.040	2726.81	61.18	-147.89	-251.70	1676027.63	14300227.56	39°22'47.102"N	80°52'26.318"W	291.94	239.563	1.38	0.79	7.62	
2846.00	10.460	243.570	2819.47	63.47	-155.00	-265.86	1676013.48	14300220.45	39°22'47.032"N	80°52'26.498"W	307.74	239.757	1.62	1.62	0.56	
2941.00	12.060	240.030	2912.64	66.69	-163.80	-282.18	1675997.17	14300211.66	39°22'46.945"N	80°52'26.706"W	326.27	239.866	1.83	1.68	-3.73	
3036.00	13.820	239.570	3005.22	71.07	-174.50	-300.56	1675978.79	14300200.96	39°22'46.839"N	80°52'26.941"W	347.54	239.861	1.86	1.85	-0.48	
3131.00	15.540	240.160	3097.12	75.98	-186.58	-321.38	1675957.98	14300188.88	39°22'46.720"N	80°52'27.206"W	371.62	239.862	1.82	1.81	0.62	
3228.00	16.470	240.280	3190.35	81.28	-199.86	-344.60	1675934.77	14300175.61	39°22'46.589"N	80°52'27.502"W	398.36	239.886	0.96	0.96	0.12	
3323.00	16.030	237.890	3281.56	87.06	-213.51	-367.40	1675911.97	14300161.96	39°22'46.455"N	80°52'27.793"W	424.94	239.837	0.84	-0.46	-2.52	
3417.00	16.620	238.130	3371.77	93.30	-227.51	-389.81	1675889.57	14300147.97	39°22'46.317"N	80°52'28.078"W	451.35	239.730	0.63	0.63	0.26	
3512.00	16.580	237.080	3462.81	99.89	-242.05	-412.73	1675866.67	14300133.44	39°22'46.173"N	80°52'28.370"W	478.47	239.610	0.32	-0.04	-1.11	
3607.00	16.030	234.370	3553.99	107.20	-257.06	-434.77	1675844.64	14300118.44	39°22'46.025"N	80°52'28.651"W	505.08	239.406	0.99	-0.58	-2.85	
3701.00	16.320	234.720	3644.27	114.90	-272.25	-456.10	1675823.31	14300103.25	39°22'45.876"N	80°52'28.923"W	531.17	239.167	0.33	0.31	0.37	
3796.00	16.680	235.700	3735.36	122.54	-287.64	-478.26	1675801.16	14300087.87	39°22'45.724"N	80°52'29.206"W	558.09	238.976	0.48	0.38	1.03	
3891.00	16.640	238.250	3826.37	129.45	-302.48	-501.09	1675778.34	14300073.03	39°22'45.577"N	80°52'29.497"W	585.31	238.883	0.77	-0.04	2.68	
3986.00	15.890	235.660	3917.57	136.18	-316.97	-523.39	1675756.05	14300058.54	39°22'45.434"N	80°52'29.781"W	611.89	238.800	1.10	-0.79	-2.73	
4080.00	15.810	237.040	4008.00	142.96	-331.20	-544.76	1675734.69	14300044.32	39°22'45.294"N	80°52'30.053"W	637.54	238.702	0.41	-0.09	1.47	
4175.00	15.160	234.650	4099.55	149.86	-345.43	-565.75	1675713.70	14300030.10	39°22'45.154"N	80°52'30.321"W	662.87	238.593	0.96	-0.68	-2.52	
4269.00	15.110	236.140	4190.29	156.74	-359.36	-585.95	1675693.51	14300016.17	39°22'45.016"N	80°52'30.578"W	687.37	238.479	0.42	-0.05	1.59	
4364.00	16.000	236.320	4281.81	163.52	-373.52	-607.13	1675672.34	14300002.02	39°22'44.877"N	80°52'30.848"W	712.83	238.399	0.94	0.94	0.19	



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'  
Page 4 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH DATA (241 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]	Comments
4459.00	16.240	237.060	4373.07	170.33	-388.01	-629.17	1675650.31	14299987.54	39°22'44.734"N	80°52'31.129"W	739.19	238.338	0.33	0.25	0.78	
4553.00	16.520	239.720	4463.26	176.41	-401.89	-651.75	1675627.75	14299973.66	39°22'44.597"N	80°52'31.417"W	765.70	238.340	0.85	0.30	2.83	
4648.00	16.610	242.370	4554.32	181.39	-415.00	-675.44	1675604.06	14299960.55	39°22'44.468"N	80°52'31.719"W	792.75	238.433	0.80	0.09	2.79	
4745.00	16.310	240.550	4647.34	186.25	-428.13	-699.58	1675579.93	14299947.43	39°22'44.338"N	80°52'32.027"W	820.19	238.534	0.62	-0.31	-1.88	
4840.00	16.180	240.870	4738.55	191.30	-441.13	-722.76	1675556.76	14299934.44	39°22'44.210"N	80°52'32.322"W	846.75	238.603	0.17	-0.14	0.34	
4934.00	16.650	242.190	4828.72	195.97	-453.79	-746.11	1675533.42	14299921.78	39°22'44.085"N	80°52'32.620"W	873.27	238.692	0.64	0.50	1.40	
5029.00	16.640	239.760	4919.74	201.01	-466.99	-769.90	1675509.64	14299908.59	39°22'43.955"N	80°52'32.923"W	900.46	238.761	0.73	-0.01	-2.56	
5124.00	16.390	236.500	5010.82	207.32	-481.24	-792.83	1675486.72	14299894.35	39°22'43.815"N	80°52'33.215"W	927.45	238.743	1.01	-0.26	-3.43	
5218.00	14.830	234.610	5101.35	214.32	-495.52	-813.70	1675465.86	14299880.06	39°22'43.674"N	80°52'33.481"W	952.71	238.659	1.75	-1.66	-2.01	
5312.00	15.560	236.800	5192.07	221.08	-509.40	-834.06	1675445.51	14299866.20	39°22'43.537"N	80°52'33.741"W	977.31	238.586	0.99	0.78	2.33	
5407.00	16.330	238.260	5283.41	227.44	-523.40	-856.08	1675423.50	14299852.20	39°22'43.399"N	80°52'34.021"W	1003.40	238.559	0.91	0.81	1.54	
5502.00	16.400	235.550	5374.56	234.26	-538.01	-878.49	1675401.09	14299837.59	39°22'43.255"N	80°52'34.307"W	1030.15	238.516	0.81	0.07	-2.85	
5596.00	15.390	233.690	5464.97	241.79	-552.90	-899.49	1675380.10	14299822.71	39°22'43.108"N	80°52'34.575"W	1055.83	238.421	1.20	-1.07	-1.98	
5691.00	14.640	234.200	5556.72	249.28	-567.39	-919.38	1675360.21	14299808.23	39°22'42.965"N	80°52'34.828"W	1080.37	238.319	0.80	-0.79	0.54	
5785.00	15.640	233.990	5647.46	256.69	-581.79	-939.27	1675340.34	14299793.83	39°22'42.823"N	80°52'35.082"W	1104.86	238.226	1.07	1.06	-0.22	
5880.00	15.510	233.330	5738.97	264.58	-596.91	-959.81	1675319.80	14299778.72	39°22'42.674"N	80°52'35.344"W	1130.28	238.123	0.23	-0.14	-0.69	
5974.00	16.530	223.560	5829.34	274.83	-614.10	-979.11	1675300.51	14299761.53	39°22'42.504"N	80°52'35.590"W	1155.76	237.904	3.06	1.09	-10.39	
6038.00	18.810	216.010	5890.32	285.13	-629.05	-991.46	1675288.17	14299746.59	39°22'42.356"N	80°52'35.747"W	1174.18	237.606	5.04	3.56	-11.80	
6101.00	21.220	207.240	5949.53	299.04	-647.41	-1002.65	1675276.98	14299728.24	39°22'42.175"N	80°52'35.890"W	1193.50	237.150	6.10	3.83	-13.92	
6164.00	23.230	197.280	6007.86	317.13	-669.42	-1011.57	1675268.07	14299706.24	39°22'41.958"N	80°52'36.004"W	1213.01	236.505	6.77	3.19	-15.81	
6195.00	25.440	191.490	6036.11	327.87	-681.79	-1014.71	1675264.93	14299693.87	39°22'41.835"N	80°52'36.044"W	1222.48	236.103	10.48	7.13	-18.68	
6233.00	26.760	188.400	6070.24	342.60	-698.25	-1017.58	1675262.05	14299677.42	39°22'41.673"N	80°52'36.081"W	1234.11	235.543	4.99	3.47	-8.13	BH AT Curve <8-1/2">(6195')(6233'-20688')
6330.00	32.760	177.200	6154.47	387.46	-746.15	-1019.50	1675260.14	14299629.54	39°22'41.199"N	80°52'36.106"W	1263.37	233.800	8.41	6.19	-11.55	
6426.00	40.370	174.110	6231.53	442.93	-803.11	-1015.03	1675264.61	14299572.61	39°22'40.636"N	80°52'36.050"W	1294.32	231.648	8.15	7.93	-3.22	
6496.00†	45.862	171.135	6282.61	489.88	-850.52	-1008.83	1675270.81	14299525.21	39°22'40.168"N	80°52'35.972"W	1319.51	229.867	8.36	7.85	-4.25	Middlesex: 6496' MD
6522.00	47.920	170.170	6300.38	508.63	-869.24	-1005.74	1675273.89	14299506.49	39°22'39.983"N	80°52'35.933"W	1329.32	229.164	8.36	7.91	-3.71	
6617.00	55.310	167.680	6359.33	582.45	-942.25	-991.37	1675288.26	14299433.52	39°22'39.261"N	80°52'35.751"W	1367.71	226.455	8.04	7.78	-2.62	
6711.00†	62.622	164.680	6407.77	662.68	-1020.37	-972.07	1675307.55	14299355.42	39°22'38.488"N	80°52'35.507"W	1409.28	223.611	8.24	7.78	-3.19	Burkett: 6711' MD
6712.00	62.700	164.650	6408.23	663.57	-1021.23	-971.83	1675307.79	14299354.57	39°22'38.480"N	80°52'35.504"W	1409.74	223.580	8.24	7.81	-2.96	
6794.00†	68.632	163.746	6442.00	738.17	-1093.09	-951.48	1675328.13	14299282.74	39°22'37.769"N	80°52'35.246"W	1449.19	221.038	7.30	7.23	-1.10	Tully: 6794' MD



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'  
Page 5 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH DATA (241 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)	Comments
6806.00	69.500	163.620	6446.29	749.38	-1103.84	-948.33	1675331.28	14299271.99	39°22'37.663"N	80°52'35.206"W	1455.27	220.667	7.30	7.24	-1.05	
6894.00†	75.613	162.339	6472.66	833.26	-1184.07	-923.75	1675355.85	14299191.79	39°22'36.870"N	80°52'34.895"W	1501.78	217.960	7.08	6.95	-1.46	Marcellus POE: 6894' MD
6901.00	76.100	162.240	6474.37	840.05	-1190.54	-921.69	1675357.91	14299185.33	39°22'36.806"N	80°52'34.868"W	1505.62	217.746	7.08	6.95	-1.41	
6947.00	79.670	161.660	6484.02	885.02	-1233.29	-907.75	1675371.84	14299142.59	39°22'36.383"N	80°52'34.692"W	1531.35	216.355	7.86	7.76	-1.26	
6995.00	84.270	161.660	6490.72	932.54	-1278.40	-892.80	1675386.78	14299097.51	39°22'35.937"N	80°52'34.502"W	1559.29	214.930	9.58	9.58	0.00	
7039.00	87.910	162.110	6493.72	976.43	-1320.11	-879.16	1675400.43	14299055.81	39°22'35.525"N	80°52'34.329"W	1586.07	213.663	8.34	8.27	1.02	
7091.00	90.180	162.020	6494.59	1028.41	-1369.57	-863.15	1675416.43	14299006.36	39°22'35.036"N	80°52'34.126"W	1618.88	212.220	4.37	4.37	-0.17	
7188.00	90.620	159.930	6493.91	1125.40	-1461.27	-831.53	1675448.03	14298914.71	39°22'34.129"N	80°52'33.725"W	1681.29	209.642	2.20	0.45	-2.15	
7284.00	90.770	161.080	6492.75	1221.37	-1551.76	-799.50	1675480.05	14298824.26	39°22'33.234"N	80°52'33.319"W	1745.61	207.258	1.21	0.16	1.20	
7378.00	90.620	160.420	6491.61	1315.35	-1640.49	-768.51	1675511.03	14298735.55	39°22'32.357"N	80°52'32.926"W	1811.58	205.101	0.72	-0.16	-0.70	
7472.00	90.550	160.780	6490.65	1409.33	-1729.15	-737.29	1675542.24	14298646.93	39°22'31.480"N	80°52'32.530"W	1879.78	203.093	0.39	-0.07	0.38	
7567.00	90.800	162.430	6489.53	1504.32	-1819.29	-707.31	1675572.20	14298556.83	39°22'30.589"N	80°52'32.149"W	1951.95	201.245	1.76	0.26	1.74	
7661.00	90.370	159.720	6488.57	1598.30	-1908.19	-676.83	1675602.67	14298467.96	39°22'29.710"N	80°52'31.763"W	2024.67	199.529	2.92	-0.46	-2.88	
7757.00	89.940	160.280	6488.31	1694.26	-1998.40	-643.99	1675635.49	14298377.79	39°22'28.817"N	80°52'31.346"W	2099.61	197.862	0.74	-0.45	0.58	
7852.00	90.090	161.550	6488.28	1789.25	-2088.18	-612.93	1675666.54	14298288.05	39°22'27.930"N	80°52'30.952"W	2176.28	196.358	1.35	0.16	1.34	
7947.00	90.090	161.590	6488.13	1884.25	-2178.31	-582.90	1675696.57	14298197.96	39°22'27.039"N	80°52'30.571"W	2254.95	194.981	0.04	0.00	0.04	
8041.00	90.060	162.170	6488.01	1978.25	-2267.64	-553.66	1675725.79	14298108.65	39°22'26.155"N	80°52'30.201"W	2334.26	193.721	0.62	-0.03	0.62	
8136.00	90.060	162.960	6487.91	2073.24	-2358.28	-525.20	1675754.24	14298018.05	39°22'25.259"N	80°52'29.840"W	2416.05	192.555	0.83	0.00	0.83	
8231.00	90.060	161.960	6487.81	2168.23	-2448.86	-496.57	1675782.86	14297927.51	39°22'24.363"N	80°52'29.477"W	2498.70	191.463	1.05	0.00	-1.05	
8325.00	89.910	161.770	6487.84	2262.23	-2538.19	-467.31	1675812.11	14297838.21	39°22'23.480"N	80°52'29.106"W	2580.85	190.432	0.26	-0.16	-0.20	
8420.00	89.750	160.730	6488.12	2357.22	-2628.15	-436.78	1675842.63	14297748.29	39°22'22.591"N	80°52'28.719"W	2664.20	189.436	1.11	-0.17	-1.09	
8515.00	90.180	162.030	6488.18	2452.22	-2718.17	-406.44	1675872.95	14297658.30	39°22'21.700"N	80°52'28.334"W	2748.39	188.504	1.44	0.45	1.37	
8611.00	90.460	161.340	6487.64	2548.22	-2809.31	-376.28	1675903.10	14297567.21	39°22'20.799"N	80°52'27.952"W	2834.40	187.629	0.78	0.29	-0.72	
8706.00	90.370	161.400	6486.95	2643.21	-2899.33	-345.93	1675933.44	14297477.22	39°22'19.909"N	80°52'27.567"W	2919.89	186.804	0.11	-0.09	0.06	
8801.00	90.280	160.340	6486.41	2738.20	-2989.08	-314.80	1675964.56	14297387.51	39°22'19.022"N	80°52'27.172"W	3005.61	186.012	1.12	-0.09	-1.12	
8897.00	90.220	161.440	6486.00	2834.19	-3079.79	-283.37	1675995.97	14297296.84	39°22'18.125"N	80°52'26.773"W	3092.80	185.257	1.15	-0.06	1.15	
8992.00	90.310	160.160	6485.56	2929.18	-3169.50	-252.13	1676027.20	14297207.16	39°22'17.237"N	80°52'26.377"W	3179.51	184.548	1.35	0.09	-1.35	
9088.00	90.280	159.650	6485.06	3025.13	-3259.65	-219.15	1676060.17	14297117.04	39°22'16.346"N	80°52'25.959"W	3267.01	183.846	0.53	-0.03	-0.53	
9184.00	90.030	161.770	6484.80	3121.11	-3350.26	-187.43	1676091.87	14297026.47	39°22'15.450"N	80°52'25.557"W	3355.50	183.202	2.22	-0.26	2.21	
9278.00	90.370	162.780	6484.47	3215.10	-3439.80	-158.82	1676120.48	14296936.97	39°22'14.565"N	80°52'25.194"W	3443.46	182.643	1.13	0.36	1.07	



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'  
Page 6 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH DATA (241 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]	Comments
9373.00	90.340	163.190	6483.89	3310.07	-3530.64	-131.02	1676148.26	14296846.17	39°22'13.667"N	80°52'24.841"W	3533.07	182.125	0.43	-0.03	0.43	
9468.00	90.220	162.380	6483.42	3405.05	-3621.38	-102.90	1676176.37	14296755.46	39°22'12.769"N	80°52'24.485"W	3622.84	181.628	0.86	-0.13	-0.85	
9563.00	90.280	163.200	6483.01	3500.03	-3712.12	-74.79	1676204.47	14296664.75	39°22'11.872"N	80°52'24.129"W	3712.88	181.154	0.87	0.06	0.86	
9659.00	90.400	161.620	6482.44	3596.02	-3803.63	-45.78	1676233.46	14296573.28	39°22'10.967"N	80°52'23.761"W	3803.90	180.690	1.65	0.12	-1.65	
9753.00	89.850	162.780	6482.23	3690.01	-3893.13	-17.05	1676262.19	14296483.82	39°22'10.082"N	80°52'23.397"W	3893.16	180.251	1.37	-0.59	1.23	
9849.00	90.280	162.690	6482.12	3786.00	-3984.80	11.44	1676290.67	14296392.18	39°22'09.176"N	80°52'23.036"W	3984.82	179.835	0.46	0.45	-0.09	
9944.00	90.370	162.650	6481.58	3880.98	-4075.49	39.74	1676318.95	14296301.54	39°22'08.279"N	80°52'22.677"W	4075.68	179.441	0.10	0.09	-0.04	
10040.00	90.340	163.230	6480.99	3976.96	-4167.26	67.90	1676347.11	14296209.80	39°22'07.372"N	80°52'22.320"W	4167.81	179.066	0.60	-0.03	0.60	
10136.00	90.250	161.500	6480.49	4072.94	-4258.74	96.98	1676376.18	14296118.35	39°22'06.467"N	80°52'21.951"W	4259.85	178.695	1.80	-0.09	-1.80	
10231.00	90.400	162.390	6479.96	4167.94	-4349.06	126.43	1676405.61	14296028.07	39°22'05.574"N	80°52'21.578"W	4350.90	178.335	0.95	0.16	0.94	
10325.00	90.150	161.470	6479.50	4261.94	-4438.43	155.58	1676434.75	14295938.74	39°22'04.690"N	80°52'21.208"W	4441.15	177.992	1.01	-0.27	-0.98	
10420.00	90.310	161.400	6479.12	4356.93	-4528.48	185.83	1676464.98	14295848.72	39°22'03.800"N	80°52'20.825"W	4532.29	177.650	0.18	0.17	-0.07	
10516.00	90.400	161.820	6478.53	4452.93	-4619.58	216.11	1676495.26	14295757.66	39°22'02.899"N	80°52'20.441"W	4624.63	177.322	0.45	0.09	0.44	
10611.00	90.400	162.730	6477.87	4547.92	-4710.06	245.04	1676524.17	14295667.21	39°22'02.004"N	80°52'20.074"W	4716.43	177.022	0.96	0.00	0.96	
10706.00	90.340	162.660	6477.25	4642.91	-4800.76	273.29	1676552.42	14295576.55	39°22'01.107"N	80°52'19.716"W	4808.54	176.742	0.10	-0.06	-0.07	
10802.00	90.770	163.130	6476.32	4738.88	-4892.51	301.53	1676580.64	14295484.84	39°22'00.200"N	80°52'19.358"W	4901.79	176.473	0.66	0.45	0.49	
10898.00	91.880	162.160	6474.10	4834.84	-4984.11	330.16	1676609.25	14295393.27	39°21'59.295"N	80°52'18.995"W	4995.04	176.210	1.54	1.16	-1.01	
10993.00	90.460	162.250	6472.16	4929.81	-5074.55	359.18	1676638.27	14295302.87	39°21'58.400"N	80°52'18.628"W	5087.24	175.951	1.50	-1.49	0.09	
11089.00	91.350	164.370	6470.65	5025.75	-5166.49	386.75	1676665.82	14295210.97	39°21'57.491"N	80°52'18.278"W	5180.94	175.719	2.39	0.93	2.21	
11184.00	91.540	162.100	6468.25	5120.68	-5257.41	414.14	1676693.20	14295120.08	39°21'56.592"N	80°52'17.931"W	5273.70	175.496	2.40	0.20	-2.39	
11279.00	90.340	162.180	6466.69	5215.66	-5347.82	443.27	1676722.32	14295029.71	39°21'55.698"N	80°52'17.562"W	5366.16	175.262	1.27	-1.26	0.08	
11375.00	89.820	162.020	6466.56	5311.66	-5439.17	472.78	1676751.82	14294938.40	39°21'54.795"N	80°52'17.188"W	5459.68	175.032	0.57	-0.54	-0.17	
11469.00	90.890	162.090	6465.97	5405.65	-5528.60	501.74	1676780.77	14294849.01	39°21'53.911"N	80°52'16.821"W	5551.32	174.814	1.14	1.14	0.07	
11565.00	90.740	161.130	6464.61	5501.64	-5619.68	532.02	1676811.04	14294757.96	39°21'53.010"N	80°52'16.437"W	5644.81	174.592	1.01	-0.16	-1.00	
11659.00	91.510	162.090	6462.76	5595.62	-5708.87	561.67	1676840.68	14294668.81	39°21'52.128"N	80°52'16.061"W	5736.43	174.381	1.31	0.82	1.02	
11754.00	91.380	161.960	6460.37	5690.59	-5799.20	590.98	1676869.97	14294578.51	39°21'51.235"N	80°52'15.689"W	5829.23	174.181	0.19	-0.14	-0.14	
11848.00	91.050	160.170	6458.37	5784.56	-5888.09	621.47	1676900.45	14294489.66	39°21'50.356"N	80°52'15.303"W	5920.80	173.975	1.94	-0.35	-1.90	
11943.00	90.890	156.780	6456.77	5879.39	-5976.44	656.32	1676935.29	14294401.35	39°21'49.482"N	80°52'14.861"W	6012.37	173.733	3.57	-0.17	-3.57	
12038.00	90.860	156.560	6455.32	5974.01	-6063.66	693.94	1676972.89	14294314.16	39°21'48.620"N	80°52'14.383"W	6103.24	173.471	0.23	-0.03	-0.23	
12134.00	91.020	157.790	6453.74	6069.71	-6152.13	731.17	1677010.11	14294225.72	39°21'47.745"N	80°52'13.911"W	6195.43	173.222	1.29	0.17	1.28	



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'  
Page 7 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH DATA (241 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]	Comments
12228.00	90.740	160.550	6452.30	6163.60	-6239.97	764.59	1677043.51	14294137.92	39°21'46.876"N	80°52'13.487"W	6286.64	173.014	2.95	-0.30	2.94	
12322.00	90.370	164.060	6451.39	6257.57	-6329.50	793.16	1677072.07	14294048.42	39°21'45.991"N	80°52'13.125"W	6379.00	172.857	3.75	-0.39	3.73	
12417.00	92.060	163.760	6449.37	6352.47	-6420.76	819.48	1677098.38	14293957.21	39°21'45.088"N	80°52'12.792"W	6472.84	172.727	1.81	1.78	-0.32	
12511.00	91.570	162.480	6446.39	6446.39	-6510.66	846.76	1677125.65	14293867.34	39°21'44.200"N	80°52'12.446"W	6565.49	172.590	1.46	-0.52	-1.36	
12605.00	90.310	160.390	6444.85	6540.37	-6599.75	876.68	1677155.56	14293778.29	39°21'43.319"N	80°52'12.067"W	6657.72	172.433	2.60	-1.34	-2.22	
12700.00	88.370	159.520	6445.95	6635.32	-6688.98	909.24	1677188.10	14293689.09	39°21'42.436"N	80°52'11.654"W	6750.50	172.259	2.24	-2.04	-0.92	
12797.00	90.030	163.980	6447.30	6732.28	-6781.07	939.60	1677218.46	14293597.04	39°21'41.526"N	80°52'11.269"W	6845.86	172.111	4.91	1.71	4.60	
12892.00	89.880	162.730	6447.38	6827.24	-6872.09	966.81	1677245.66	14293506.06	39°21'40.626"N	80°52'10.924"W	6939.76	171.992	1.33	-0.16	-1.32	
12987.00	89.600	162.210	6447.81	6922.23	-6962.67	995.43	1677274.26	14293415.51	39°21'39.730"N	80°52'10.561"W	7033.47	171.864	0.62	-0.29	-0.55	
13082.00	89.510	161.620	6448.54	7017.22	-7052.98	1024.92	1677303.74	14293325.24	39°21'38.837"N	80°52'10.188"W	7127.06	171.732	0.63	-0.09	-0.62	
13177.00	89.630	164.490	6449.26	7112.18	-7143.84	1052.60	1677331.41	14293234.41	39°21'37.938"N	80°52'09.837"W	7220.97	171.618	3.02	0.13	3.02	
13273.00	90.000	162.680	6449.57	7208.12	-7235.92	1079.73	1677358.53	14293142.37	39°21'37.028"N	80°52'09.493"W	7316.04	171.513	1.92	0.39	-1.89	
13367.00	90.150	162.780	6449.44	7302.11	-7325.68	1107.64	1677386.42	14293052.64	39°21'36.140"N	80°52'09.139"W	7408.95	171.402	0.19	0.16	0.11	
13461.00	90.060	162.630	6449.27	7396.09	-7415.43	1135.58	1677414.36	14292962.93	39°21'35.253"N	80°52'08.785"W	7501.88	171.294	0.19	-0.10	-0.16	
13557.00	90.280	163.150	6448.99	7492.07	-7507.18	1163.82	1677442.59	14292871.21	39°21'34.346"N	80°52'08.427"W	7596.86	171.188	0.59	0.23	0.54	
13652.00	89.380	161.280	6449.27	7587.06	-7597.64	1192.84	1677471.59	14292780.79	39°21'33.451"N	80°52'08.060"W	7690.71	171.077	2.18	-0.95	-1.97	
13747.00	89.480	163.790	6450.21	7682.03	-7688.25	1221.35	1677500.09	14292690.22	39°21'32.555"N	80°52'07.698"W	7784.65	170.973	2.64	0.11	2.64	
13842.00	88.950	162.210	6451.52	7777.00	-7779.08	1249.12	1677527.85	14292599.42	39°21'31.657"N	80°52'07.347"W	7878.73	170.878	1.75	-0.56	-1.66	
13938.00	88.860	162.010	6453.35	7872.98	-7870.43	1278.60	1677557.32	14292508.12	39°21'30.754"N	80°52'06.973"W	7973.61	170.773	0.23	-0.09	-0.21	
14034.00	89.570	161.080	6454.67	7968.96	-7961.48	1308.99	1677587.70	14292417.10	39°21'29.854"N	80°52'06.588"W	8068.37	170.663	1.22	0.74	-0.97	
14129.00	89.450	161.960	6455.48	8063.96	-8051.58	1339.10	1677617.80	14292327.04	39°21'28.963"N	80°52'06.206"W	8162.17	170.557	0.93	-0.13	0.93	
14224.00	89.170	163.050	6456.62	8158.94	-8142.17	1367.66	1677646.34	14292236.48	39°21'28.067"N	80°52'05.844"W	8256.24	170.465	1.18	-0.29	1.15	
14319.00	89.140	162.910	6458.02	8253.91	-8233.00	1395.46	1677674.13	14292145.68	39°21'27.169"N	80°52'05.492"W	8350.43	170.380	0.15	-0.03	-0.15	
14414.00	89.050	162.200	6459.52	8348.88	-8323.62	1423.94	1677702.60	14292055.10	39°21'26.273"N	80°52'05.131"W	8444.54	170.292	0.75	-0.09	-0.75	
14508.00	89.140	162.600	6461.01	8442.86	-8413.21	1452.36	1677731.01	14291965.55	39°21'25.387"N	80°52'04.771"W	8537.65	170.206	0.44	0.10	0.43	
14602.00	90.090	163.710	6461.64	8536.83	-8503.17	1479.60	1677758.23	14291875.62	39°21'24.497"N	80°52'04.426"W	8630.94	170.129	1.55	1.01	1.18	
14697.00	90.490	163.710	6461.16	8631.76	-8594.36	1506.24	1677784.87	14291784.48	39°21'23.596"N	80°52'04.088"W	8725.35	170.059	0.42	0.42	0.00	
14792.00	90.340	162.470	6460.47	8726.73	-8685.25	1533.87	1677812.49	14291693.62	39°21'22.697"N	80°52'03.738"W	8819.65	169.984	1.31	-0.16	-1.31	
14886.00	90.280	163.350	6459.96	8820.70	-8775.09	1561.50	1677840.10	14291603.81	39°21'21.809"N	80°52'03.388"W	8912.94	169.910	0.94	-0.06	0.94	
14981.00	90.620	162.390	6459.22	8915.68	-8865.87	1589.48	1677868.07	14291513.07	39°21'20.911"N	80°52'03.034"W	9007.23	169.836	1.07	0.36	-1.01	



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'  
Page 8 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH DATA (241 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]	Comments
15075.00	90.180	160.710	6458.56	9009.67	-8955.04	1619.23	1677897.81	14291423.94	39°21'20.029"N	80°52'02.657"W	9100.25	169.751	1.85	-0.47	-1.79	
15170.00	90.220	160.620	6458.23	9104.66	-9044.68	1650.68	1677929.25	14291334.33	39°21'19.143"N	80°52'02.258"W	9194.07	169.657	0.10	0.04	-0.09	
15266.00	90.220	160.550	6457.86	9200.64	-9135.22	1682.59	1677961.15	14291243.83	39°21'18.247"N	80°52'01.853"W	9288.88	169.564	0.07	0.00	-0.07	
15361.00	90.060	160.000	6457.63	9295.61	-9224.64	1714.65	1677993.20	14291154.44	39°21'17.363"N	80°52'01.447"W	9382.65	169.470	0.60	-0.17	-0.58	
15455.00	90.370	160.780	6457.28	9389.59	-9313.19	1746.20	1678024.73	14291065.93	39°21'16.487"N	80°52'01.047"W	9475.48	169.380	0.89	0.33	0.83	
15551.00	90.250	160.610	6456.76	9485.57	-9403.79	1777.94	1678056.45	14290975.37	39°21'15.592"N	80°52'00.645"W	9570.39	169.294	0.22	-0.13	-0.18	
15646.00	90.000	160.640	6456.55	9580.56	-9493.41	1809.45	1678087.96	14290885.78	39°21'14.705"N	80°52'00.245"W	9664.31	169.209	0.27	-0.26	0.03	
15742.00	90.090	160.420	6456.47	9676.54	-9583.92	1841.45	1678119.94	14290795.31	39°21'13.810"N	80°51'59.840"W	9759.23	169.124	0.25	0.09	-0.23	
15837.00	89.600	160.130	6456.73	9771.51	-9673.35	1873.51	1678151.99	14290705.92	39°21'12.926"N	80°51'59.433"W	9853.10	169.039	0.60	-0.52	-0.31	
15932.00	88.990	159.970	6457.90	9866.46	-9762.64	1905.92	1678184.39	14290616.66	39°21'12.043"N	80°51'59.022"W	9946.94	168.953	0.66	-0.64	-0.17	
16027.00	89.050	161.070	6459.52	9961.43	-9852.19	1937.60	1678216.05	14290527.15	39°21'11.157"N	80°51'58.621"W	10040.91	168.874	1.16	0.06	1.16	
16123.00	89.570	160.570	6460.68	10057.41	-9942.85	1969.14	1678247.58	14290436.52	39°21'10.261"N	80°51'58.221"W	10135.96	168.798	0.75	0.54	-0.52	
16218.00	89.450	160.600	6461.49	10152.39	-10032.44	2000.71	1678279.14	14290346.96	39°21'09.375"N	80°51'57.821"W	10229.99	168.722	0.13	-0.13	0.03	
16314.00	89.510	160.680	6462.36	10248.37	-10123.01	2032.54	1678310.95	14290256.43	39°21'08.479"N	80°51'57.417"W	10325.05	168.647	0.10	0.06	0.08	
16409.00	90.000	160.670	6462.77	10343.36	-10212.66	2063.98	1678342.38	14290166.82	39°21'07.593"N	80°51'57.019"W	10419.14	168.574	0.52	0.52	-0.01	
16505.00	89.880	160.530	6462.87	10439.34	-10303.21	2095.86	1678374.25	14290076.31	39°21'06.697"N	80°51'56.614"W	10514.22	168.502	0.19	-0.13	-0.15	
16600.00	89.880	160.770	6463.07	10534.33	-10392.84	2127.34	1678405.72	14289986.71	39°21'05.811"N	80°51'56.215"W	10608.33	168.432	0.25	0.00	0.25	
16695.00	89.940	160.360	6463.22	10629.31	-10482.43	2158.95	1678437.31	14289897.16	39°21'04.925"N	80°51'55.815"W	10702.45	168.362	0.44	0.06	-0.43	
16789.00	89.940	160.650	6463.32	10723.29	-10571.04	2190.32	1678468.67	14289808.59	39°21'04.049"N	80°51'55.417"W	10795.57	168.294	0.31	0.00	0.31	
16884.00	89.780	160.580	6463.55	10818.27	-10660.65	2221.85	1678500.19	14289719.01	39°21'03.163"N	80°51'55.017"W	10889.73	168.227	0.18	-0.17	-0.07	
16980.00	89.970	161.080	6463.76	10914.26	-10751.33	2253.37	1678531.70	14289628.37	39°21'02.266"N	80°51'54.618"W	10984.93	168.163	0.56	0.20	0.52	
17074.00	89.940	160.540	6463.83	11008.25	-10840.11	2284.27	1678562.59	14289539.63	39°21'01.388"N	80°51'54.226"W	11078.17	168.100	0.58	-0.03	-0.57	
17170.00	89.850	160.850	6464.01	11104.24	-10930.71	2316.01	1678594.31	14289449.06	39°21'00.492"N	80°51'53.824"W	11173.37	168.037	0.34	-0.09	0.32	
17265.00	90.340	163.860	6463.85	11199.22	-11021.23	2344.80	1678623.09	14289358.58	39°20'59.597"N	80°51'53.459"W	11267.90	167.989	3.21	0.52	3.17	
17362.00	90.120	162.550	6463.46	11296.18	-11114.09	2372.83	1678651.11	14289265.76	39°20'58.679"N	80°51'53.104"W	11364.56	167.948	1.37	-0.23	-1.35	
17455.00	90.400	162.530	6463.04	11389.17	-11202.80	2400.73	1678679.00	14289177.08	39°20'57.802"N	80°51'52.751"W	11457.15	167.905	0.30	0.30	-0.02	
17552.00	90.220	162.920	6462.51	11486.15	-11295.42	2429.54	1678707.79	14289084.49	39°20'56.886"N	80°51'52.386"W	11553.75	167.861	0.44	-0.19	0.40	
17647.00	90.400	163.220	6462.00	11581.12	-11386.30	2457.20	1678735.45	14288993.65	39°20'55.987"N	80°51'52.035"W	11648.42	167.822	0.37	0.19	0.32	
17742.00	90.220	163.240	6461.49	11676.08	-11477.26	2484.61	1678762.85	14288902.72	39°20'55.088"N	80°51'51.688"W	11743.12	167.785	0.19	-0.19	0.02	
17838.00	90.000	163.160	6461.30	11772.05	-11569.17	2512.36	1678790.58	14288810.86	39°20'54.179"N	80°51'51.337"W	11838.81	167.748	0.24	-0.23	-0.08	





# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'  
Page 9 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH DATA (241 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]	Comments
17933.00	89.940	161.910	6461.35	11867.04	-11659.78	2540.87	1678819.08	14288720.28	39°20'53.283"N	80°51'50.976"W	11933.42	167.706	1.32	-0.06	-1.32	
18028.00	90.030	161.930	6461.38	11962.03	-11750.09	2570.35	1678848.55	14288630.00	39°20'52.390"N	80°51'50.602"W	12027.94	167.661	0.10	0.09	0.02	
18124.00	90.030	162.240	6461.33	12058.03	-11841.44	2599.88	1678878.07	14288538.69	39°20'51.487"N	80°51'50.228"W	12123.49	167.617	0.32	0.00	0.32	
18219.00	89.850	161.370	6461.43	12153.03	-11931.69	2629.55	1678907.72	14288448.48	39°20'50.594"N	80°51'49.852"W	12218.01	167.572	0.94	-0.19	-0.92	
18314.00	89.940	162.000	6461.60	12248.03	-12021.87	2659.40	1678937.56	14288358.33	39°20'49.702"N	80°51'49.474"W	12312.51	167.526	0.67	0.09	0.66	
18409.00	89.970	162.220	6461.68	12343.03	-12112.28	2688.58	1678966.74	14288267.96	39°20'48.808"N	80°51'49.104"W	12407.09	167.485	0.23	0.03	0.23	
18503.00	89.940	161.720	6461.75	12437.02	-12201.66	2717.68	1678995.82	14288178.61	39°20'47.925"N	80°51'48.735"W	12500.66	167.443	0.53	-0.03	-0.53	
18599.00	89.910	161.720	6461.87	12533.02	-12292.82	2747.79	1679025.92	14288087.49	39°20'47.023"N	80°51'48.354"W	12596.18	167.400	0.03	-0.03	0.00	
18693.00	89.780	161.030	6462.13	12627.02	-12381.90	2777.81	1679055.93	14287998.45	39°20'46.142"N	80°51'47.973"W	12689.66	167.355	0.75	-0.14	-0.73	
18787.00	89.880	161.650	6462.41	12721.02	-12470.95	2807.88	1679085.99	14287909.43	39°20'45.262"N	80°51'47.592"W	12783.15	167.311	0.67	0.11	0.66	
18883.00	90.060	161.640	6462.46	12817.02	-12562.07	2838.11	1679116.21	14287818.35	39°20'44.361"N	80°51'47.209"W	12878.68	167.269	0.19	0.19	-0.01	
18978.00	89.850	161.770	6462.53	12912.02	-12652.27	2867.94	1679146.02	14287728.19	39°20'43.469"N	80°51'46.831"W	12973.24	167.228	0.26	-0.22	0.14	
19073.00	89.910	162.000	6462.73	13007.02	-12742.56	2897.47	1679175.54	14287637.93	39°20'42.576"N	80°51'46.457"W	13067.83	167.190	0.25	0.06	0.24	
19168.00	89.910	162.000	6462.88	13102.02	-12832.91	2926.83	1679204.89	14287547.62	39°20'41.683"N	80°51'46.085"W	13162.44	167.152	0.00	0.00	0.00	
19264.00	90.030	162.070	6462.93	13198.02	-12924.23	2956.44	1679234.49	14287456.34	39°20'40.780"N	80°51'45.710"W	13258.06	167.115	0.14	0.12	0.07	
19359.00	90.180	162.400	6462.76	13293.01	-13014.70	2985.43	1679263.46	14287365.90	39°20'39.885"N	80°51'45.343"W	13352.72	167.081	0.38	0.16	0.35	
19454.00	90.280	162.430	6462.38	13388.00	-13105.26	3014.13	1679292.15	14287275.38	39°20'38.989"N	80°51'44.979"W	13447.41	167.048	0.11	0.11	0.03	
19549.00	90.120	162.450	6462.04	13482.99	-13195.83	3042.79	1679320.80	14287184.84	39°20'38.094"N	80°51'44.616"W	13542.10	167.015	0.17	-0.17	0.02	
19644.00	90.150	162.010	6461.82	13577.99	-13286.30	3071.78	1679349.78	14287094.41	39°20'37.199"N	80°51'44.249"W	13636.77	166.982	0.46	0.03	-0.46	
19740.00	90.220	160.600	6461.51	13673.98	-13377.23	3102.55	1679380.54	14287003.52	39°20'36.300"N	80°51'43.859"W	13732.30	166.942	1.47	0.07	-1.47	
19836.00	90.090	160.940	6461.25	13769.97	-13467.87	3134.17	1679412.15	14286912.91	39°20'35.404"N	80°51'43.459"W	13827.75	166.900	0.38	-0.14	0.35	
19931.00	90.090	160.820	6461.10	13864.96	-13557.63	3165.29	1679443.25	14286823.19	39°20'34.516"N	80°51'43.064"W	13922.23	166.859	0.13	0.00	-0.13	
20026.00	89.880	160.800	6461.13	13959.95	-13647.35	3196.51	1679474.46	14286733.50	39°20'33.629"N	80°51'42.669"W	14016.70	166.818	0.22	-0.22	-0.02	
20120.00	90.030	161.060	6461.20	14053.94	-13736.19	3227.23	1679505.16	14286644.70	39°20'32.750"N	80°51'42.279"W	14110.21	166.779	0.32	0.16	0.28	
20215.00	90.090	160.530	6461.10	14148.93	-13825.91	3258.48	1679536.40	14286555.02	39°20'31.863"N	80°51'41.883"W	14204.70	166.739	0.56	0.06	-0.56	
20309.00	89.940	160.020	6461.08	14242.90	-13914.39	3290.20	1679568.11	14286466.57	39°20'30.988"N	80°51'41.481"W	14298.10	166.696	0.57	-0.16	-0.54	
20403.00	90.030	160.160	6461.10	14336.87	-14002.77	3322.21	1679600.11	14286378.23	39°20'30.114"N	80°51'41.076"W	14391.48	166.653	0.18	0.10	0.15	
20499.00	90.180	160.210	6460.92	14432.84	-14093.09	3354.76	1679632.64	14286287.95	39°20'29.221"N	80°51'40.663"W	14486.87	166.610	0.16	0.16	0.05	
20594.00	89.750	159.820	6460.98	14527.80	-14182.37	3387.22	1679665.10	14286198.70	39°20'28.338"N	80°51'40.252"W	14581.25	166.567	0.61	-0.45	-0.41	
20688.00	89.570	159.040	6461.54	14621.72	-14270.37	3420.25	1679698.11	14286110.73	39°20'27.468"N	80°51'39.833"W	14674.52	166.522	0.85	-0.19	-0.83	



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'

Page 10 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH DATA (241 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]	Comments
20716.00	89.570	159.040	6461.75	14649.69	-14296.52	3430.27	1679708.12	14286084.60	39°20'27.209"N	80°51'39.706"W	14702.28	166.508	0.00	0.00	0.00	Projected MD at TD: 20716'

## HOLE & CASING SECTIONS - Ref Wellbore: Rodzina Unit 3H AWB Ref Wellpath: Rodzina Unit 3H AWP Proj: 20716'

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
20in Conductor	30.00	110.00	80.00	30.00	110.00	0.00	0.00	-0.27	0.09
17.5in Open Hole	110.00	593.40	483.40	110.00	593.39	-0.27	0.09	-0.45	1.10
13.375in Casing Surface	30.00	593.40	563.40	30.00	593.39	0.00	0.00	-0.45	1.10
12.25in Open Hole	593.40	2573.10	1979.70	593.39	2549.90	-0.45	1.10	-134.10	-229.04
9.625in Casing Intermediate	30.00	2573.10	2543.10	30.00	2549.90	0.00	0.00	-134.10	-229.04
8.75in Open Hole	2573.10	6270.00	3696.90	2549.90	6102.95	-134.10	-229.04	-715.43	-1019.37
8.5in Open Hole	6270.00	20716.00	14446.00	6102.95	6461.75	-715.43	-1019.37	-14296.52	3430.27
5.5in Casing Production	30.00	20716.00	20686.00	30.00	6461.75	0.00	0.00	-14296.52	3430.27

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Rodzina Unit 3H POE Rev-1	6470.00	-1165.03	-935.70	1675343.90	14299210.83	39°22'37.058"N	80°52'35.046"W	point
Rodzina Unit 3H BHL Rev-1	6495.00	-14299.00	3417.36	1679695.22	14286082.12	39°20'27.185"N	80°51'39.870"W	point
Rodzina Unit 3H LP Rev-1	6495.00	-1341.41	-877.24	1675402.34	14299034.52	39°22'35.314"N	80°52'34.305"W	point



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'

Page 11 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## WELLPATH COMPOSITION - Ref Wellbore: Rodzina Unit 3H AWB Ref Wellpath: Rodzina Unit 3H AWP Proj: 20716'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	559.00	Gyrodata standard - Drop gyro or Multi-shot	01_Gyrodata MS Gyro <17-1/2">(100'-544')	Rodzina Unit 3H AWB
559.00	669.00	Gyrodata standard - Drop gyro or Multi-shot	02_Gyrodata MS Gyro <12-1/4">(544')(654')	Rodzina Unit 3H AWB
669.00	2525.00	OWSG MWD rev2 + HRGM	03_WFT EM <12-1/4">(654')(774'-2510')	Rodzina Unit 3H AWB
2525.00	6195.00	OWSG MWD rev2 + HRGM	04_WFT EM <8-3/4">(2510')(2642'-6180')	Rodzina Unit 3H AWB
6195.00	20688.00	BHI AutoTrak Curve (Short)	05_BH AT Curve <8-1/2">(6195')(6233'-20688')	Rodzina Unit 3H AWB
20688.00	20716.00	Blind Drilling (std)	Projection to bit	Rodzina Unit 3H AWB



# Actual Wellpath Report

Rodzina Unit 3H AWP Proj: 20716'

Page 12 of 12



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #11
Area	Tyler County, WV	Well	Rodzina Unit 3H
Field	Tyler	Wellbore	Rodzina Unit 3H AWB
Facility	Dawson Pad		

## COMMENTS

### Wellpath general comments

API: 47-095-02587-0000

BHI Job #: 109933271

Rig: H&P 519

Duration: 07/28/2019-07/31/2019

Gyrodata MS Gyro <17-1/2">(100'-544')

Gyrodata MS Gyro <12-1/4">(544')(654')

WFT EM <12-1/4">(654')(774'-2510')

WFT EM <8-3/4">(2510')(2642'-6180')

BH AT Curve <8-1/2">(6195')(6233'-20688')

Middlesex: 6496' MD

Burkett: 6711' MD

Tully: 6794' MD

Marcellus POE: 6894' MD

Projected MD at TD: 20716'