





# Actual Wellpath Report

Sterling Unit 2H AWP Proj: 17147  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot #02	
Area	Tyler County, WV	Well	Sterling Unit 2H
Field	Tyler	Wellbore	Sterling Unit 2H AWB
Facility	Meredith Pad		

## REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Delaset
Scale	0.999602	Report Generated	3/13/2019 at 7:43:50 AM
Convergence at slot	0.08° East	Database/Source file	WA_MPL_EasternUS_Defn/Sterling_Unit_2H_AWP_Proj_17147_.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Northing[US ft]	Latitude	Longitude	
Slot Location	-38.62	-119.36	14288835.70	39°20'54.450"N	80°52'13.590"W	
Facility Reference Pt			1677162.34	39°20'54.830"N	80°52'12.070"W	
Field Reference Pt			0.00	0°00'00.000"	85°29'19.301"W	

## WELLPATH DATUM

Calculation method	Minimum curvature	H&P 317 (RKB) to Facility Vertical Datum	25.50ft
Horizontal Reference Pt	Slot	H&P 317 (RKB) to Mean Sea Level	1136.50ft
Vertical Reference Pt	H&P 317 (RKB)	H&P 317 (RKB) to Ground Level at Slot (Slot #02)	25.50ft
MD Reference Pt	H&P 317 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	341.74°



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Operator	ANTERO RESOURCES CORPORATION	Well	Sterling Unit 2H
Area	Tyler County, WV	Wellbore	Sterling Unit 2H AWB
Field	Tyler		
Facility	Meredith Pad		

WELLPATH DATA (227 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	0.00	139.140	0.00	0.00	0.00	0.00	1677043.03	14288835.69	39°20'54.450"N	80°52'13.590"W	0.00	0.000	0.00	0.00	0.00	
25.50	0.00	139.140	25.50	0.00	0.00	0.00	1677043.03	14288835.69	39°20'54.450"N	80°52'13.590"W	0.00	0.000	0.00	0.00	0.00	
35.50	0.310	139.140	35.50	-0.02	-0.02	0.02	1677043.05	14288835.67	39°20'54.450"N	80°52'13.590"W	0.03	139.140	3.10	3.10	1391.40	Gyrodota MS Gyro <17-1/2">[25'-8.08']
60.50	0.450	134.890	60.50	-0.18	-0.14	0.13	1677043.16	14288835.55	39°20'54.449"N	80°52'13.588"W	0.19	136.977	0.57	0.56	-17.00	
85.50	0.440	136.200	85.50	-0.35	-0.28	0.27	1677043.30	14288835.42	39°20'54.447"N	80°52'13.587"W	0.39	136.254	0.06	-0.04	5.24	
110.50	0.490	128.620	110.50	-0.53	-0.42	0.42	1677043.45	14288835.28	39°20'54.446"N	80°52'13.585"W	0.59	134.864	0.32	0.20	-30.34	
135.50	0.400	132.180	135.50	-0.69	-0.54	0.57	1677043.60	14288835.15	39°20'54.445"N	80°52'13.583"W	0.78	133.713	0.38	-0.36	14.24	
160.50	0.380	131.080	160.50	-0.85	-0.67	0.67	1677043.70	14288835.02	39°20'54.443"N	80°52'13.581"W	0.95	135.066	0.52	-0.08	75.60	
185.50	0.410	143.770	185.50	-1.01	-0.82	0.76	1677043.80	14288834.88	39°20'54.442"N	80°52'13.580"W	1.12	136.932	0.23	0.12	-29.24	
210.50	0.560	161.550	210.50	-1.22	-1.00	0.85	1677043.89	14288834.69	39°20'54.440"N	80°52'13.579"W	1.32	139.806	0.84	0.60	71.12	
235.50	0.460	153.520	235.49	-1.44	-1.21	0.94	1677043.97	14288834.48	39°20'54.438"N	80°52'13.578"W	1.53	142.218	0.49	-0.40	-32.12	
260.50	0.470	159.360	260.49	-1.65	-1.40	1.02	1677044.05	14288834.30	39°20'54.436"N	80°52'13.577"W	1.73	143.872	0.19	0.04	23.36	
285.50	0.520	164.720	285.49	-1.86	-1.60	1.09	1677044.12	14288834.09	39°20'54.434"N	80°52'13.576"W	1.93	145.879	0.27	0.20	21.44	
310.50	0.560	153.270	310.49	-2.10	-1.82	1.17	1677044.20	14288833.88	39°20'54.432"N	80°52'13.575"W	2.16	147.265	0.46	0.16	-48.80	
335.50	0.660	163.860	335.49	-2.36	-2.07	1.27	1677044.30	14288833.63	39°20'54.430"N	80°52'13.574"W	2.42	148.540	0.60	0.40	42.38	
360.50	0.700	164.020	360.49	-2.66	-2.35	1.35	1677044.38	14288833.34	39°20'54.427"N	80°52'13.573"W	2.71	150.205	0.16	0.16	0.64	
385.50	0.810	161.630	385.49	-2.99	-2.67	1.44	1677044.48	14288833.03	39°20'54.424"N	80°52'13.572"W	3.03	151.555	0.46	0.44	-9.56	
410.50	0.540	167.100	410.48	-3.28	-2.95	1.53	1677044.56	14288832.75	39°20'54.421"N	80°52'13.571"W	3.32	152.633	1.11	-1.08	21.88	
435.50	0.380	208.470	435.48	-3.45	-3.14	1.51	1677044.55	14288832.56	39°20'54.419"N	80°52'13.571"W	3.48	154.246	1.43	-0.64	165.48	
460.50	0.400	208.980	460.48	-3.57	-3.29	1.43	1677044.46	14288832.41	39°20'54.417"N	80°52'13.572"W	3.59	156.460	0.08	0.08	2.04	
485.50	0.430	216.470	485.48	-3.68	-3.44	1.33	1677044.37	14288832.26	39°20'54.416"N	80°52'13.573"W	3.69	158.799	0.25	0.12	29.96	
510.50	0.360	215.200	510.48	-3.78	-3.58	1.23	1677044.27	14288832.12	39°20'54.415"N	80°52'13.574"W	3.78	160.990	0.28	-0.28	-5.04	
535.50	0.370	217.600	535.48	-3.88	-3.71	1.14	1677044.17	14288831.99	39°20'54.413"N	80°52'13.576"W	3.88	162.928	0.07	0.04	9.60	
560.50	0.080	138.050	560.48	-3.94	-3.78	1.10	1677044.13	14288831.91	39°20'54.413"N	80°52'13.576"W	3.94	163.779	1.46	-1.16	-318.20	
585.50	0.130	46.690	585.48	-3.94	-3.78	1.13	1677044.17	14288831.92	39°20'54.413"N	80°52'13.576"W	3.94	163.302	0.82	0.20	-365.44	
610.50	0.120	89.290	610.48	-3.94	-3.76	1.18	1677044.21	14288831.94	39°20'54.413"N	80°52'13.575"W	3.94	162.566	0.37	-0.04	170.40	
635.50	0.110	54.590	635.48	-3.94	-3.74	1.23	1677044.26	14288831.95	39°20'54.413"N	80°52'13.574"W	3.94	161.869	0.28	-0.04	-136.80	
660.50	0.120	50.400	660.48	-3.92	-3.71	1.27	1677044.30	14288831.98	39°20'54.413"N	80°52'13.574"W	3.92	161.179	0.05	0.04	-16.76	
685.50	0.170	48.590	685.48	-3.90	-3.67	1.31	1677044.35	14288832.03	39°20'54.414"N	80°52'13.573"W	3.90	160.316	0.20	0.20	-7.24	
710.50	0.210	53.770	710.48	-3.87	-3.62	1.38	1677044.41	14288832.08	39°20'54.414"N	80°52'13.573"W	3.87	159.156	0.17	0.16	20.74	





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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #02
Operator	ANTERO RESOURCES CORPORATION		
Area	Tyler County, WV		
Field	Tyler		
Well	Sterling Unit 2H		
Wellbore	Sterling Unit 2H AWB		
Facility	Meredith Pad		

WELLPATH DATA (227 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (IUS ft)	Grid North (IUS ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (°/100ft)	Comments
735.50	0.210	58.48	735.48	-3.84	-3.57	1.45	1677044.49	14288832.13	39°20'54.415"N	80°52'13.572"W	3.85	157.830	0.07	0.00	18.84	
760.50	0.220	47.110	760.48	-3.81	-3.51	1.53	1677044.56	14288832.18	39°20'54.415"N	80°52'13.571"W	3.83	156.482	0.17	0.04	-45.48	
785.50	0.290	45.750	785.48	-3.77	-3.43	1.61	1677044.64	14288832.26	39°20'54.416"N	80°52'13.570"W	3.79	154.904	0.28	0.28	-5.44	
810.50	0.310	42.650	810.48	-3.71	-3.34	1.70	1677044.73	14288832.36	39°20'54.417"N	80°52'13.568"W	3.75	153.033	0.10	0.08	-12.40	
818.50	0.280	41.130	818.48	-3.68	-3.31	1.73	1677044.76	14288832.39	39°20'54.417"N	80°52'13.568"W	3.73	152.443	0.39	-0.38	-19.00	
932.50	0.510	33.320	932.48	-3.23	-2.68	2.19	1677045.22	14288833.02	39°20'54.424"N	80°52'13.562"W	3.46	140.718	0.21	0.20	-6.85	Panther EM <12-1/4">(808)(922'-2557')
1028.50	0.130	259.600	1028.48	-2.95	-2.34	2.32	1677045.35	14288833.36	39°20'54.427"N	80°52'13.561"W	3.29	135.274	0.63	-0.40	-139.29	
1122.50	1.500	237.840	1122.46	-3.23	-3.01	1.17	1677044.20	14288832.68	39°20'54.420"N	80°52'13.575"W	3.23	158.773	1.47	1.46	-23.15	
1216.50	2.970	238.030	1216.39	-4.10	-4.96	-1.94	1677041.10	14288830.74	39°20'54.401"N	80°52'13.615"W	5.32	201.343	1.56	1.56	0.20	
1310.50	4.640	234.250	1310.18	-5.82	-8.47	-7.09	1677035.95	14288827.23	39°20'54.366"N	80°52'13.680"W	11.04	219.933	1.80	1.78	-4.02	
1404.50	6.380	237.880	1403.74	-8.21	-13.47	-14.60	1677028.44	14288822.23	39°20'54.317"N	80°52'13.776"W	19.86	227.308	1.89	1.85	3.86	
1498.50	8.300	241.830	1496.97	-10.63	-19.45	-25.00	1677018.04	14288816.25	39°20'54.258"N	80°52'13.909"W	31.68	232.125	2.11	2.04	4.20	
1593.50	10.810	245.210	1590.64	-12.83	-26.42	-39.14	1677003.91	14288809.28	39°20'54.189"N	80°52'14.089"W	47.22	235.978	2.71	2.64	3.56	
1687.50	12.820	247.990	1682.65	-14.51	-34.03	-56.81	1676986.24	14288801.68	39°20'54.114"N	80°52'14.314"W	66.22	239.081	2.22	2.14	2.96	
1781.50	14.430	243.560	1774.00	-16.86	-43.15	-76.97	1676956.09	14288792.56	39°20'54.025"N	80°52'14.571"W	88.24	240.724	2.04	1.71	-4.71	
1875.50	15.480	234.170	1864.83	-22.32	-55.71	-97.63	1676945.44	14288780.01	39°20'53.901"N	80°52'14.834"W	112.41	240.290	2.81	1.12	-9.99	
1969.50	16.570	232.790	1955.18	-30.46	-71.16	-118.48	1676924.60	14288764.56	39°20'53.748"N	80°52'15.099"W	138.21	239.010	1.23	1.16	-1.47	
2063.50	19.870	233.900	2044.45	-39.70	-88.68	-142.07	1676901.02	14288747.05	39°20'53.575"N	80°52'15.400"W	167.47	238.026	3.53	3.51	1.18	
2157.50	19.470	233.750	2132.97	-49.44	-107.36	-167.61	1676875.49	14288728.38	39°20'53.391"N	80°52'15.725"W	199.04	237.359	0.43	-0.43	-0.16	
2251.50	17.370	231.260	2222.15	-59.19	-125.41	-191.19	1676851.92	14288710.34	39°20'53.213"N	80°52'16.026"W	228.65	236.738	2.39	-2.23	-2.65	
2345.50	15.610	231.120	2312.28	-68.55	-142.13	-211.98	1676831.14	14288693.63	39°20'53.048"N	80°52'16.291"W	255.22	236.159	1.87	-1.87	-0.15	
2440.50	16.890	236.980	2403.49	-76.10	-157.26	-233.76	1676809.37	14288678.49	39°20'52.899"N	80°52'16.568"W	281.74	236.069	2.68	1.35	8.27	
2534.50	18.320	238.960	2493.09	-82.13	-171.70	-258.25	1676784.88	14288664.07	39°20'52.757"N	80°52'16.880"W	310.12	236.382	1.55	1.52	1.04	
2667.50	17.520	238.810	2524.48	-84.30	-176.87	-266.99	1676776.15	14288658.90	39°20'52.706"N	80°52'16.992"W	320.28	236.478	2.65	-2.42	-3.48	
2666.50	15.390	234.670	2619.43	-91.49	-192.18	-290.46	1676752.69	14288643.59	39°20'52.555"N	80°52'17.291"W	348.28	236.510	2.45	-2.15	-4.18	Panther EM <8-3/4">(2557)(2656'-5562')
2761.50	17.210	237.680	2710.61	-98.61	-206.99	-312.62	1676730.53	14288628.79	39°20'52.409"N	80°52'17.573"W	374.94	236.492	2.11	1.92	3.17	
2856.50	18.360	236.990	2801.07	-105.33	-222.21	-337.32	1676705.84	14288613.57	39°20'52.259"N	80°52'17.888"W	403.94	236.625	1.28	1.21	1.38	
2950.50	16.070	234.820	2890.85	-112.38	-237.34	-360.65	1676682.53	14288598.45	39°20'52.109"N	80°52'18.185"W	431.74	236.652	2.77	-2.44	-4.44	
3044.50	17.130	235.940	2980.93	-119.94	-252.58	-382.75	1676660.43	14288583.21	39°20'51.959"N	80°52'18.467"W	458.58	236.579	1.18	1.13	1.19	
3139.50	15.690	232.280	3072.06	-128.03	-268.28	-404.51	1676638.69	14288567.74	39°20'51.804"N	80°52'18.744"W	485.39	236.447	1.87	-1.52	-3.85	



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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Meredith Pad
Slot	Slot #02
Well	Sterling Unit 2H
Wellbore	Sterling Unit 2H AWB

WELLPATH DATA (227 stations)															
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Comments
3233.50	16.580	233.650	3162.36	-136.43	-284.01	1676671.84	14288551.80	39°20'51.649"N	80°52'19.010"W	511.46	236.270	1.03	0.95	1.48	
3333.50	15.710	231.370	3258.42	-145.57	-300.92	1676595.78	14288534.90	39°20'51.482"N	80°52'19.291"W	539.21	236.078	1.08	-0.87	-2.28	
3427.50	16.290	234.610	3348.78	-153.88	-316.50	1676575.10	14288519.33	39°20'51.328"N	80°52'19.554"W	565.07	235.937	1.13	0.62	3.43	
3522.50	16.800	239.740	3439.85	-160.66	-331.13	1676552.39	14288504.70	39°20'51.184"N	80°52'19.844"W	592.09	235.996	1.63	0.54	5.47	
3616.50	15.350	235.240	3530.17	-167.02	-345.07	1676530.44	14288490.76	39°20'51.047"N	80°52'20.124"W	618.09	236.083	2.03	-1.54	-4.79	
3711.50	15.340	236.710	3621.79	-173.85	-359.14	1676509.61	14288476.70	39°20'50.908"N	80°52'20.389"W	643.23	236.059	0.41	-0.01	1.55	
3806.50	15.970	240.510	3713.27	-179.65	-372.47	1676487.74	14288463.38	39°20'50.776"N	80°52'20.668"W	668.83	236.158	1.27	0.66	4.01	
3901.50	14.710	236.220	3804.88	-185.43	-385.61	1676466.35	14288450.24	39°20'50.647"N	80°52'20.941"W	693.92	236.241	1.78	-1.33	-4.52	
3995.50	15.580	235.360	3895.62	-192.18	-399.42	1676446.05	14288436.43	39°20'50.511"N	80°52'21.199"W	718.48	236.226	0.96	0.93	-0.91	
4090.50	15.780	237.190	3987.08	-199.02	-413.67	1676424.70	14288422.19	39°20'50.370"N	80°52'21.471"W	744.15	236.227	0.56	0.21	1.93	
4185.50	17.260	237.750	4078.16	-205.68	-428.19	1676401.94	14288407.67	39°20'50.227"N	80°52'21.752"W	771.16	236.271	1.57	1.56	0.59	
4280.50	16.170	232.340	4169.15	-213.48	-443.80	1676379.55	14288392.08	39°20'50.073"N	80°52'22.047"W	798.45	236.232	2.00	-1.15	-5.68	
4374.50	15.910	232.060	4259.49	-222.16	-459.72	1676359.04	14288376.16	39°20'49.916"N	80°52'22.308"W	824.36	236.105	0.29	-0.28	-0.30	
4469.50	17.050	235.680	4350.59	-230.40	-475.57	1676337.27	14288360.31	39°20'49.760"N	80°52'22.586"W	851.27	236.037	1.61	1.20	3.81	
4565.50	17.060	235.650	4442.36	-238.20	-491.46	1676314.03	14288344.44	39°20'49.603"N	80°52'22.862"W	879.43	236.025	0.01	0.01	-0.03	
4660.50	15.830	233.370	4533.48	-246.14	-507.05	1676292.14	14288328.85	39°20'49.449"N	80°52'23.161"W	906.31	235.981	1.46	-1.29	-2.40	
4756.50	15.720	238.380	4625.87	-253.28	-521.68	1676270.56	14288314.22	39°20'49.305"N	80°52'23.436"W	932.38	235.978	1.42	-0.11	5.22	
4850.50	15.720	239.590	4716.35	-258.90	-534.80	1676248.75	14288301.11	39°20'49.175"N	80°52'23.714"W	957.82	236.058	0.35	0.00	1.29	
4946.50	14.030	233.520	4809.14	-265.28	-548.31	1676228.18	14288287.61	39°20'49.042"N	80°52'23.976"W	982.43	236.074	2.39	-1.76	-6.32	
5040.50	13.420	232.140	4900.45	-272.50	-561.78	1676210.41	14288274.14	39°20'48.909"N	80°52'24.203"W	1004.69	236.003	0.74	-0.65	-1.47	
5135.50	15.890	240.410	4992.36	-278.75	-574.97	1676190.40	14288260.96	39°20'48.779"N	80°52'24.458"W	1028.66	236.017	3.40	2.60	8.71	
5231.50	18.630	246.600	5084.04	-282.71	-587.55	1676164.90	14288248.38	39°20'48.655"N	80°52'24.733"W	1056.86	236.224	3.43	2.85	6.45	
5326.50	15.770	240.130	5174.79	-286.67	-600.01	1676139.79	14288235.93	39°20'48.532"N	80°52'25.103"W	1084.67	236.415	3.62	-3.01	-6.81	
5420.50	14.720	231.020	5265.49	-293.46	-613.89	1676119.43	14288222.06	39°20'48.396"N	80°52'25.362"W	1109.32	236.400	2.78	-1.12	-9.69	
5516.50	14.290	233.390	5358.43	-301.51	-628.62	1676100.45	14288207.32	39°20'48.250"N	80°52'25.604"W	1133.29	236.311	0.76	-0.45	2.47	
5572.50	13.980	238.620	5412.74	-305.22	-636.27	1676089.13	14288199.68	39°20'48.175"N	80°52'25.749"W	1146.95	236.307	2.35	-0.59	9.34	
5643.00	13.500	234.810	5481.23	-309.55	-645.44	1676075.14	14288190.51	39°20'48.084"N	80°52'25.927"W	1163.69	236.313	1.45	-0.68	-5.40	BH AT Curve <8-1/2' >(6572.5)(5643-17123)
5724.00	13.590	235.010	5559.97	-315.04	-656.35	1676059.62	14288179.61	39°20'47.977"N	80°52'26.125"W	1182.65	236.291	0.13	0.11	0.25	
5818.00	13.770	241.450	5651.31	-320.22	-668.03	1676040.75	14288167.93	39°20'47.861"N	80°52'26.365"W	1204.84	236.327	1.63	0.19	6.85	
5913.00	13.840	241.830	5743.57	-324.20	-678.80	1676020.81	14288157.17	39°20'47.755"N	80°52'26.619"W	1227.41	236.425	0.12	0.07	0.40	





# Actual Wellpath Report

Sterling Unit 2H AWP Proj: 17147'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Sterling Unit 2H
Field	Tyler	Wellbore	Sterling Unit 2H AWB
Facility	Meredith Pad		

## WELLPATH DATA (227 stations) $\dagger$ = interpolated/extrapolated station

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (°/100ft)	Comments
5960.00	14.220	262.060	5789.19	-324.13	-682.25	-1033.31	1676010.14	14288153.72	39°20'47.721"N	80°52'26.755"W	1238.22	236.565	10.41	0.81	43.04	
6008.00	15.250	282.940	5835.65	-319.80	-681.65	-1045.31	1675998.14	14288154.32	39°20'47.727"N	80°52'26.908"W	1247.93	236.891	11.21	2.15	43.50	
6055.00	15.670	283.310	5880.95	-313.27	-678.81	-1057.51	1675985.95	14288157.16	39°20'47.756"N	80°52'27.063"W	1256.63	237.304	0.92	0.89	0.79	
6103.00	16.230	279.880	5927.10	-306.72	-676.16	-1070.43	1675973.03	14288159.80	39°20'47.782"N	80°52'27.228"W	1266.10	237.720	2.28	1.17	-7.15	
6150.00	17.680	295.090	5972.08	-298.72	-672.01	-1083.37	1675960.10	14288163.96	39°20'47.823"N	80°52'27.392"W	1274.87	238.189	9.90	3.09	32.36	
6198.00	18.790	303.550	6017.67	-287.63	-664.64	-1096.42	1675947.06	14288171.32	39°20'47.896"N	80°52'27.558"W	1282.14	238.776	5.97	2.31	17.63	
6245.00	21.080	306.290	6061.85	-274.80	-655.45	-1109.54	1675933.94	14288180.50	39°20'47.967"N	80°52'27.725"W	1288.68	239.428	5.26	4.87	5.83	
6292.00	24.100	309.280	6105.25	-259.81	-644.37	-1123.78	1675919.70	14288191.58	39°20'48.097"N	80°52'27.906"W	1295.42	240.170	6.87	6.43	6.36	
6339.00	27.870	313.480	6147.49	-242.03	-630.73	-1139.19	1675904.30	14288205.21	39°20'48.232"N	80°52'28.102"W	1302.14	241.028	8.92	8.02	8.94	
6387.00	31.160	317.330	6189.26	-220.83	-613.88	-1155.75	1675887.74	14288222.06	39°20'48.399"N	80°52'28.313"W	1308.67	242.025	7.91	6.85	8.02	
6434.00	34.830	320.330	6228.67	-197.26	-594.60	-1172.57	1675870.93	14288241.34	39°20'48.590"N	80°52'28.526"W	1314.71	243.111	8.55	7.81	6.38	
6482.00	38.460	323.790	6267.19	-170.28	-571.99	-1190.15	1675853.36	14288263.93	39°20'48.813"N	80°52'28.750"W	1320.46	244.331	8.70	7.56	7.21	
6529.00	42.500	326.530	6302.93	-141.04	-546.94	-1207.54	1675835.97	14288288.97	39°20'49.061"N	80°52'28.971"W	1325.64	245.632	9.39	8.60	5.83	
6576.00†	46.573	328.648	6336.43	-109.08	-519.11	-1225.19	1675818.34	14288316.79	39°20'49.336"N	80°52'29.195"W	1330.62	247.038	9.22	8.67	4.57	Middlesex: 6576' MD
6577.00	46.660	328.690	6337.11	-108.37	-518.49	-1225.57	1675817.96	14288317.41	39°20'49.343"N	80°52'29.200"W	1330.73	247.069	9.22	8.71	4.19	
6624.00	51.190	330.500	6367.99	-73.74	-487.93	-1243.48	1675800.06	14288347.96	39°20'49.645"N	80°52'29.427"W	1335.78	248.575	10.07	9.64	3.85	
6671.00	54.700	331.800	6396.31	-36.88	-455.08	-1261.56	1675781.98	14288380.80	39°20'49.970"N	80°52'29.657"W	1341.13	250.164	7.79	7.47	2.77	
6718.00	58.330	332.840	6422.23	1.78	-420.37	-1279.76	1675763.78	14288415.49	39°20'50.313"N	80°52'29.888"W	1347.03	251.816	7.94	7.72	2.21	
6765.00	62.460	334.150	6445.94	43.08	-383.03	-1298.37	1675745.18	14288452.82	39°20'50.682"N	80°52'30.124"W	1353.69	253.564	8.93	8.60	2.73	
6774.00†	63.083	334.445	6449.60	50.13	-376.62	-1301.46	1675742.10	14288459.23	39°20'50.746"N	80°52'30.163"W	1354.86	253.861	8.45	7.79	3.68	Burkett: 6774' MD
6813.00	66.130	335.840	6466.33	85.13	-344.65	-1316.26	1675727.30	14288491.18	39°20'51.062"N	80°52'30.351"W	1360.64	255.327	8.45	7.81	3.58	
6852.00†	69.045	337.485	6481.19	121.03	-311.55	-1330.54	1675713.03	14288524.27	39°20'51.389"N	80°52'30.532"W	1366.52	256.821	8.43	7.47	4.23	Tully: 6852' MD
6861.00	69.720	337.860	6484.36	129.44	-303.76	-1333.73	1675709.83	14288532.06	39°20'51.466"N	80°52'30.573"W	1367.89	257.170	8.43	7.50	4.12	
6908.00	73.390	338.470	6499.23	173.93	-262.38	-1350.31	1675693.26	14288573.42	39°20'51.876"N	80°52'30.783"W	1375.57	259.004	7.90	7.81	1.30	
6956.00	76.860	339.110	6511.55	220.25	-219.14	-1367.09	1675676.49	14288616.65	39°20'52.303"N	80°52'30.996"W	1384.54	260.893	7.34	7.23	1.33	
6961.00†	77.118	339.243	6512.68	225.12	-214.58	-1368.82	1675674.76	14288621.20	39°20'52.348"N	80°52'31.018"W	1385.54	261.991	5.84	5.16	2.79	Marcellus POE: 6961' MD
7003.00	79.290	340.410	6521.26	266.20	-175.99	-1383.00	1675660.59	14288659.77	39°20'52.730"N	80°52'31.197"W	1394.15	262.748	5.84	5.17	2.76	
7051.00	83.150	342.020	6528.59	313.63	-131.09	-1398.27	1675645.33	14288704.66	39°20'53.174"N	80°52'31.391"W	1404.40	264.644	8.70	8.04	3.35	
7098.00	87.440	345.510	6532.44	360.42	-86.13	-1411.35	1675632.25	14288749.60	39°20'53.618"N	80°52'31.557"W	1413.98	266.508	11.75	9.13	7.43	
7145.00	90.550	346.270	6533.27	407.29	-40.56	-1422.81	1675620.80	14288795.15	39°20'54.069"N	80°52'31.702"W	1423.39	268.367	6.81	6.62	1.62	



# Actual Wellpath Report

Sterling Unit 2H AWP Proj: 17147'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Sterling Unit 2H
Field	Tyler	Wellbore	Sterling Unit 2H AWB
Facility	Meredith Pad		

## WELLPATH DATA (227 stations)

ID	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)	(°)	(ft)	(ft)	(°)	(ft/100ft)	(ft/100ft)	(°/100ft)	
7240.00	90.400	343.880	6532.48	502.11	51.22	-1447.27	1675595.34	1428886.90	39°20'54.976"N	80°52'32.012"W	1448.18	272.027	2.52	-0.16	-2.52	
7335.00	90.280	342.470	6531.92	597.08	142.15	-1474.77	1675568.86	1428897.79	39°20'55.875"N	80°52'32.360"W	1481.60	275.506	1.49	-0.13	-1.48	
7430.00	90.710	341.250	6531.10	692.08	232.42	-1504.34	1675539.29	1428906.03	39°20'56.768"N	80°52'32.735"W	1522.19	278.783	1.36	0.45	-1.28	
7525.00	90.740	340.700	6529.89	787.06	322.23	-1535.31	1675508.34	14289157.79	39°20'57.656"N	80°52'33.128"W	1568.78	281.853	0.58	0.03	-0.58	
7620.00	90.680	343.460	6528.72	882.04	412.60	-1564.53	1675479.12	14289248.13	39°20'58.550"N	80°52'33.498"W	1618.03	284.774	2.91	-0.06	-2.91	
7714.00	91.290	346.020	6527.10	975.89	503.27	-1589.27	1675454.40	14289338.76	39°20'59.446"N	80°52'33.811"W	1667.05	287.571	2.80	0.65	2.72	
7809.00	90.650	344.020	6525.49	1070.72	595.02	-1613.82	1675429.86	14289430.48	39°21'00.353"N	80°52'34.122"W	1720.02	290.239	2.21	-0.67	-2.11	
7904.00	89.850	340.360	6525.08	1165.69	685.45	-1642.87	1675400.82	14289520.87	39°21'01.247"N	80°52'34.490"W	1780.13	292.647	3.94	-0.84	-3.85	
7999.00	89.850	339.690	6525.33	1260.65	774.73	-1675.33	1675368.38	14289610.12	39°21'02.130"N	80°52'34.902"W	1845.79	294.818	0.71	0.00	-0.71	
8093.00	90.030	341.320	6525.42	1354.63	863.34	-1706.69	1675337.02	14289698.69	39°21'03.007"N	80°52'35.300"W	1912.63	296.833	1.74	0.19	1.73	
8188.00	89.690	341.260	6525.66	1449.62	953.32	-1737.17	1675308.56	14289788.63	39°21'03.896"N	80°52'35.686"W	1981.56	298.757	0.36	-0.36	-0.06	
8283.00	89.630	342.920	6526.22	1544.62	1043.71	-1766.38	1675277.36	14289878.99	39°21'04.790"N	80°52'36.056"W	2051.69	300.578	1.75	-0.06	1.75	
8378.00	90.310	343.540	6526.27	1639.58	1134.67	-1793.79	1675249.96	14289969.91	39°21'05.689"N	80°52'36.404"W	2122.54	302.316	0.97	0.72	0.65	
8473.00	90.310	342.130	6525.76	1734.56	1225.44	-1821.83	1675221.94	14290060.64	39°21'06.587"N	80°52'36.759"W	2195.62	303.926	1.48	0.00	-1.48	
8568.00	92.740	343.480	6523.23	1829.50	1316.15	-1849.90	1675193.87	14290151.32	39°21'07.484"N	80°52'37.115"W	2270.33	305.431	2.93	2.56	1.42	
8662.00	89.940	338.960	6521.03	1923.44	1405.06	-1880.22	1675163.56	14290240.19	39°21'08.363"N	80°52'37.489"W	2347.22	306.770	5.75	-2.98	-4.91	
8757.00	89.110	336.150	6521.82	2018.16	1492.82	-1916.56	1675127.24	14290327.92	39°21'09.231"N	80°52'37.960"W	2429.35	307.915	2.98	-0.87	-2.85	
8852.00	89.260	339.450	6523.17	2112.92	1580.76	-1952.45	1675091.37	14290415.82	39°21'10.101"N	80°52'38.416"W	2512.14	308.996	3.48	0.16	3.47	
8947.00	89.050	338.480	6524.57	2207.79	1669.42	-1986.54	1675057.28	14290504.44	39°21'10.977"N	80°52'38.848"W	2594.86	310.042	1.04	-0.22	-1.02	
9042.00	89.080	338.470	6526.12	2302.63	1757.78	-2021.40	1675022.45	14290592.77	39°21'11.851"N	80°52'39.290"W	2678.77	311.010	0.03	0.03	-0.01	
9137.00	88.830	340.480	6527.85	2397.53	1846.73	-2054.70	1674989.16	14290681.68	39°21'12.731"N	80°52'39.713"W	2762.64	311.949	2.13	-0.26	2.12	
9232.00	89.050	342.710	6529.61	2492.51	1936.85	-2084.68	1674959.18	14290771.77	39°21'13.622"N	80°52'40.093"W	2845.57	312.895	2.36	0.23	2.35	
9327.00	89.850	345.660	6530.52	2587.41	2028.21	-2110.65	1674933.23	14290863.10	39°21'14.525"N	80°52'40.422"W	2927.20	313.859	3.12	0.84	3.00	
9422.00	90.030	345.830	6530.62	2682.19	2120.27	-2134.12	1674909.76	14290955.11	39°21'15.435"N	80°52'40.719"W	3008.33	314.813	0.34	0.19	0.28	
9517.00	90.090	341.880	6530.52	2777.10	2211.50	-2160.54	1674883.36	14291046.31	39°21'16.337"N	80°52'41.054"W	3091.71	315.668	4.16	0.06	-4.16	
9611.00	89.780	339.880	6530.63	2871.09	2300.31	-2191.32	1674852.59	14291135.09	39°21'17.216"N	80°52'41.444"W	3177.00	316.390	2.15	-0.33	-2.13	
9706.00	89.910	337.250	6530.89	2965.93	2388.73	-2226.04	1674817.89	14291223.47	39°21'18.090"N	80°52'41.885"W	3265.16	317.019	2.77	0.14	-2.77	
9801.00	90.680	337.220	6530.40	3060.64	2476.33	-2262.80	1674781.14	14291311.04	39°21'18.956"N	80°52'42.351"W	3354.47	317.580	0.81	0.81	-0.03	
9896.00	90.150	339.170	6529.71	3155.45	2564.53	-2298.08	1674745.87	14291399.20	39°21'19.828"N	80°52'42.799"W	3443.54	318.136	2.13	-0.56	2.05	
9991.00	90.090	338.090	6529.51	3250.31	2653.01	-2332.70	1674711.27	14291487.63	39°21'20.703"N	80°52'43.238"W	3532.69	318.676	1.14	-0.06	-1.14	





# Actual Wellpath Report

Sterling Unit 2H AWP Proj: 17147'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #02
ANTERO RESOURCES CORPORATION	Well	Sterling Unit 2H
Tyler County, WV	Wellbore	Sterling Unit 2H AWB
Tyler		
Facility		
		Meredith Pad

## WELLPATH DATA (227 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
10086.00	89.570	340.790	6529.79	3345.22	2741.94	-2366.06	1674677.92	14291576.53	39°21'21.583"N	80°52'43.663"W	3621.66	319.209	2.89	-0.55	2.84	
10181.00	89.570	345.160	6530.50	3440.17	2832.75	-2393.87	1674650.13	14291667.31	39°21'22.481"N	80°52'44.014"W	3708.78	319.800	4.60	0.00	4.60	
10276.00	89.570	349.490	6531.22	3534.70	2925.41	-2414.70	1674629.30	14291759.93	39°21'23.397"N	80°52'44.277"W	3793.26	320.463	4.56	0.00	4.56	
10371.00	89.630	349.930	6531.88	3628.78	3018.88	-2431.67	1674612.33	14291853.36	39°21'24.321"N	80°52'44.492"W	3876.42	321.149	0.47	0.06	0.46	
10466.00	89.660	348.640	6532.47	3722.95	3112.22	-2449.34	1674594.68	14291946.67	39°21'25.243"N	80°52'44.715"W	3960.45	321.797	1.36	0.03	-1.36	
10561.00	89.750	343.940	6532.96	3817.62	3204.48	-2471.85	1674572.18	14292038.90	39°21'26.156"N	80°52'45.000"W	4047.06	322.354	4.95	0.09	-4.95	
10656.00	89.230	342.980	6533.80	3912.57	3295.55	-2498.89	1674545.15	14292129.92	39°21'27.056"N	80°52'45.343"W	4135.83	322.828	1.15	-0.55	-1.01	
10750.00	89.200	343.940	6535.09	4006.52	3385.65	-2525.65	1674518.40	14292219.99	39°21'27.947"N	80°52'45.682"W	4223.92	323.278	1.02	-0.03	1.02	
10845.00	89.140	345.430	6536.47	4101.38	3477.26	-2550.73	1674493.32	14292311.56	39°21'28.853"N	80°52'46.000"W	4312.49	323.738	1.57	-0.06	1.57	
10940.00	89.260	344.960	6537.80	4196.20	3569.10	-2575.01	1674469.06	14292403.37	39°21'29.761"N	80°52'46.307"W	4401.04	324.191	0.51	0.13	-0.48	
11034.00	89.230	343.980	6539.03	4290.11	3659.46	-2600.88	1674443.19	14292493.68	39°21'30.654"N	80°52'46.635"W	4489.57	324.597	2.00	-0.03	-2.00	
11129.00	89.690	342.990	6539.93	4385.09	3750.32	-2628.60	1674415.48	14292584.51	39°21'31.553"N	80°52'46.986"W	4579.78	324.973	0.49	0.48	-0.08	
11223.00	89.570	342.040	6540.54	4479.07	3839.97	-2656.84	1674387.25	14292674.13	39°21'32.439"N	80°52'47.344"W	4669.50	325.321	1.02	-0.13	-1.01	
11318.00	89.540	341.800	6541.27	4574.07	3930.28	-2686.33	1674357.78	14292764.40	39°21'33.332"N	80°52'47.718"W	4760.61	325.648	0.25	-0.03	-0.25	
11413.00	89.690	340.340	6541.91	4669.06	4020.13	-2717.14	1674326.98	14292854.22	39°21'34.221"N	80°52'48.109"W	4852.25	325.946	1.54	0.16	-1.54	
11507.00	89.570	339.970	6542.52	4763.02	4108.55	-2749.05	1674295.08	14292942.60	39°21'35.095"N	80°52'48.514"W	4943.43	326.213	0.41	-0.13	-0.39	
11602.00	89.570	340.550	6543.23	4857.99	4197.96	-2781.14	1674263.01	14293031.98	39°21'35.979"N	80°52'48.921"W	5035.64	326.476	0.61	0.00	0.61	
11697.00	89.780	342.320	6543.77	4952.98	4288.02	-2811.38	1674232.78	14293121.99	39°21'36.869"N	80°52'49.304"W	5127.47	326.750	1.88	0.22	1.86	
11791.00	89.970	341.070	6543.98	5046.98	4377.26	-2840.91	1674203.27	14293211.20	39°21'37.752"N	80°52'49.679"W	5218.35	327.016	1.35	0.20	-1.33	
11886.00	89.940	338.630	6544.05	5141.92	4466.44	-2873.63	1674170.56	14293300.34	39°21'38.634"N	80°52'50.094"W	5311.01	327.243	2.57	-0.03	-2.57	
11980.00	90.280	339.410	6543.87	5235.81	4554.20	-2907.28	1674136.91	14293388.07	39°21'39.502"N	80°52'50.521"W	5403.06	327.447	0.91	0.36	0.83	
12075.00	90.060	337.640	6543.59	5330.66	4642.60	-2942.06	1674102.15	14293476.44	39°21'40.376"N	80°52'50.962"W	5496.32	327.637	1.88	-0.23	-1.86	
12170.00	90.150	337.350	6543.41	5425.40	4730.37	-2978.42	1674065.80	14293564.17	39°21'41.244"N	80°52'51.423"W	5589.94	327.804	0.32	0.09	-0.31	
12264.00	90.000	337.230	6543.29	5519.11	4817.08	-3014.71	1674029.53	14293650.85	39°21'42.101"N	80°52'51.884"W	5682.67	327.960	0.20	-0.16	-0.13	
12359.00	90.030	338.120	6543.27	5613.87	4904.96	-3050.80	1673993.45	14293738.69	39°21'42.970"N	80°52'52.342"W	5776.33	328.119	0.94	0.03	0.94	
12454.00	89.970	338.620	6543.32	5708.63	4992.82	-3086.93	1673957.34	14293826.51	39°21'43.839"N	80°52'52.801"W	5870.04	328.273	1.01	-0.13	-1.00	
12548.00	89.970	338.620	6543.42	5802.42	5079.91	-3122.30	1673921.98	14293913.57	39°21'44.700"N	80°52'53.249"W	5962.74	328.424	1.54	0.06	1.54	
12643.00	89.970	342.040	6543.46	5897.37	5169.35	-3154.28	1673890.02	14294002.98	39°21'45.585"N	80°52'53.655"W	6055.71	328.609	3.60	0.00	3.60	
12738.00	90.180	339.610	6543.34	5982.35	5259.07	-3185.48	1673858.83	14294092.66	39°21'46.472"N	80°52'54.051"W	6148.59	328.796	2.57	0.22	-2.56	
12832.00	90.150	336.510	6543.07	6086.15	5346.25	-3220.59	1673823.73	14294179.81	39°21'47.334"N	80°52'54.496"W	6241.37	328.935	3.30	-0.03	-3.30	





# Actual Wellpath Report

Sterling Unit 2H AWP Proj: 17147

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Sterling Unit 2H
Field	Tyler	Wellbore	Sterling Unit 2H AWB
Facility	Meredith Pad		

## WELLPATH DATA (227 stations)

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (°/100ft)	Comments
12927.00	90.180	340.176	6542.80	6180.96	5434.53	-3255.65	1673788.68	14294268.05	39°21'48.207"N	80°52'54.941"W	6335.09	329.076	3.85	0.03	0.03	3.85
13022.00	90.340	341.890	6542.36	6275.95	5524.37	-3286.53	1673757.82	14294357.85	39°21'49.095"N	80°52'55.333"W	6428.06	329.251	1.82	0.17	1.81	1.81
13117.00	90.800	344.520	6541.42	6370.91	5615.30	-3313.98	1673730.38	14294448.75	39°21'49.994"N	80°52'55.681"W	6520.28	329.452	2.81	0.48	2.77	2.77
13211.00	90.370	347.260	6540.46	6464.65	5706.45	-3336.89	1673707.48	14294539.86	39°21'50.895"N	80°52'55.971"W	6610.48	329.683	2.95	-0.46	2.91	2.91
13306.00	90.400	346.340	6539.82	6559.27	5798.94	-3358.58	1673685.79	14294632.31	39°21'51.810"N	80°52'56.246"W	6701.33	329.922	0.97	0.03	-0.97	-0.97
13401.00	90.460	343.650	6539.11	6654.11	5890.69	-3383.18	1673661.21	14294724.03	39°21'52.717"N	80°52'56.557"W	6793.09	330.130	2.83	0.06	-2.83	-2.83
13496.00	90.370	343.580	6538.42	6749.06	5981.83	-3409.98	1673634.42	14294815.13	39°21'53.618"N	80°52'56.897"W	6885.51	330.314	0.12	-0.09	-0.07	-0.07
13591.00	90.000	344.410	6538.11	6843.98	6073.14	-3436.17	1673608.24	14294906.41	39°21'54.521"N	80°52'57.229"W	6977.85	330.499	0.96	-0.39	0.87	0.87
13685.00	90.060	347.120	6538.06	6937.74	6164.25	-3459.28	1673585.14	14294997.48	39°21'55.422"N	80°52'57.522"W	7068.56	330.700	2.88	0.06	2.88	2.88
13780.00	90.090	346.990	6537.94	7032.33	6256.84	-3480.56	1673563.86	14295090.02	39°21'56.337"N	80°52'57.791"W	7159.77	330.914	0.14	0.03	-0.14	-0.14
13875.00	89.850	345.470	6537.99	7127.04	6349.10	-3503.17	1673541.26	14295182.25	39°21'57.249"N	80°52'58.078"W	7251.44	331.112	1.62	-0.25	-1.60	-1.60
13970.00	89.010	344.940	6538.93	7221.86	6440.95	-3527.43	1673517.01	14295274.06	39°21'58.157"N	80°52'58.365"W	7343.61	331.292	1.05	-0.88	-0.56	-0.56
14064.00	89.780	343.360	6539.93	7315.77	6531.36	-3553.10	1673491.35	14295364.44	39°21'59.051"N	80°52'58.710"W	7435.27	331.454	1.87	0.82	-1.68	-1.68
14159.00	89.660	344.520	6540.39	7410.69	6622.65	-3579.38	1673465.08	14295455.70	39°21'59.954"N	80°52'59.043"W	7528.05	331.610	1.23	-0.13	1.22	1.22
14253.00	89.480	340.770	6541.10	7504.66	6712.36	-3607.42	1673437.06	14295545.36	39°22'00.841"N	80°52'59.399"W	7620.31	331.745	3.99	-0.19	-3.99	-3.99
14348.00	89.780	339.830	6541.71	7599.63	6801.79	-3639.44	1673405.05	14295634.76	39°22'01.725"N	80°52'59.805"W	7714.27	331.850	1.04	0.32	-0.99	-0.99
14443.00	89.540	341.240	6542.27	7694.60	6891.36	-3671.10	1673373.41	14295724.29	39°22'02.611"N	80°53'00.207"W	7808.19	331.955	1.51	-0.25	1.48	1.48
14537.00	89.910	339.720	6542.73	7788.58	6979.95	-3702.50	1673342.01	14295812.85	39°22'03.487"N	80°53'00.605"W	7901.16	332.056	1.66	0.39	-1.62	-1.62
14632.00	89.540	332.350	6542.85	7883.04	7066.70	-3741.06	1673303.47	14295899.57	39°22'04.345"N	80°53'01.095"W	7995.86	332.104	7.76	0.03	-7.76	-7.76
14727.00	89.690	332.850	6543.16	7976.83	7151.05	-3784.78	1673259.77	14295983.88	39°22'05.179"N	80°53'01.650"W	8090.86	332.109	0.59	-0.26	0.53	0.53
14821.00	89.540	339.100	6544.55	8164.98	7236.26	-3824.40	1673220.16	14296069.06	39°22'06.022"N	80°53'02.153"W	8184.71	332.143	4.72	0.00	4.71	4.71
14916.00	89.540	339.100	6544.55	8164.98	7324.45	-3859.69	1673184.89	14296157.22	39°22'06.894"N	80°53'02.601"W	8279.18	332.213	1.92	0.00	1.92	1.92
15011.00	89.660	344.010	6545.22	8259.95	7414.54	-3889.74	1673154.85	14296247.27	39°22'07.785"N	80°53'03.082"W	8372.90	332.318	5.17	0.13	5.17	5.17
15105.00	90.030	346.900	6545.47	8353.74	7505.52	-3913.34	1673131.26	14296338.21	39°22'08.684"N	80°53'03.281"W	8464.46	332.463	3.10	0.39	3.07	3.07
15200.00	90.090	345.960	6545.37	8448.42	7597.87	-3935.63	1673108.97	14296430.52	39°22'09.597"N	80°53'03.563"W	8556.68	332.616	0.99	0.06	-0.99	-0.99
15295.00	89.970	345.420	6545.32	8543.20	7689.92	-3959.12	1673085.50	14296522.53	39°22'10.507"N	80°53'03.861"W	8649.25	332.759	0.58	-0.13	-0.57	-0.57
15389.00	90.180	344.150	6545.20	8637.06	7780.62	-3983.78	1673060.84	14296613.20	39°22'11.404"N	80°53'04.174"W	8741.20	332.887	1.37	0.22	-1.35	-1.35
15484.00	90.030	344.060	6545.02	8731.98	7871.99	-4009.80	1673034.84	14296704.53	39°22'12.307"N	80°53'04.503"W	8834.41	333.007	0.18	-0.16	-0.09	-0.09
15578.00	89.690	341.400	6545.25	8825.96	7961.74	-4037.71	1673006.94	14296794.25	39°22'13.195"N	80°53'04.857"W	8927.06	333.109	2.85	-0.36	-2.83	-2.83
15673.00	89.660	340.760	6545.79	8920.95	8051.61	-4068.51	1672976.15	14296884.08	39°22'14.083"N	80°53'05.248"W	9021.15	333.192	0.67	-0.03	-0.67	-0.67



# Actual Wellpath Report

Sterling Unit 2H AWP Proj: 17147

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REFERENCE WELLPATH IDENTIFICATION		Slot #02
Operator	ANTERO RESOURCES CORPORATION	Sterling Unit 2H
Area	Tyler County, WV	Sterling Unit 2H AWB
Field	Tyler	
Wellbore		
Facility	Meredith Pad	

WELLPATH DATA (227 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
15768.00	89.540	342.550	6546.46	9015.94	8141.78	-4098.41	1672946.27	14296974.21	39°22'14.975"N	80°53'05.627"W	9115.12	333.280	1.89	-0.13	1.88	
15862.00	89.540	342.620	6547.21	9109.93	8231.46	-4126.54	1672918.15	14297063.86	39°22'15.862"N	80°53'05.984"W	9207.89	333.375	0.07	0.00	0.07	
15957.00	89.820	341.200	6547.74	9204.93	8321.76	-4156.04	1672888.66	14297154.13	39°22'16.755"N	80°53'06.358"W	9301.85	333.462	1.52	0.29	-1.49	
16052.00	90.460	339.030	6547.51	9299.88	8411.09	-4188.35	1672856.36	14297243.42	39°22'17.638"N	80°53'06.768"W	9396.21	333.529	2.38	0.67	-2.28	
16147.00	90.150	335.210	6547.00	9394.55	8498.60	-4225.28	1672819.45	14297330.89	39°22'18.503"N	80°53'07.237"W	9491.01	333.565	4.03	-0.33	-4.02	
16241.00	89.420	337.130	6547.36	9488.10	8584.58	-4263.25	1672781.49	14297416.84	39°22'19.353"N	80°53'07.719"W	9584.90	333.590	2.19	-0.78	2.04	
16336.00	88.520	341.920	6549.06	9582.99	8673.54	-4296.47	1672748.29	14297505.76	39°22'20.233"N	80°53'08.141"W	9679.36	333.648	5.13	-0.95	5.04	
16431.00	89.450	345.150	6550.75	9677.91	8764.62	-4323.39	1672721.38	14297596.80	39°22'21.134"N	80°53'08.482"W	9772.93	333.744	3.54	0.98	3.40	
16526.00	90.120	343.370	6551.10	9772.82	8856.05	-4349.16	1672695.62	14297688.20	39°22'22.038"N	80°53'08.809"W	9866.35	333.845	2.00	0.71	-1.87	
16621.00	89.910	341.340	6551.08	9867.81	8946.58	-4377.95	1672666.84	14297778.69	39°22'22.933"N	80°53'09.174"W	9960.30	333.925	2.15	-0.22	-2.14	
16716.00	89.320	343.680	6551.72	9962.79	9037.17	-4406.50	1672638.30	14297869.25	39°22'23.828"N	80°53'09.536"W	10054.24	334.006	2.54	-0.62	2.46	
16811.00	89.850	348.000	6552.41	10057.52	9129.26	-4428.73	1672615.07	14297961.30	39°22'24.739"N	80°53'09.830"W	10147.22	334.116	4.58	0.56	4.55	
16905.00	90.340	349.170	6552.25	10150.85	9221.40	-4448.34	1672596.48	14298053.40	39°22'25.650"N	80°53'10.088"W	10238.26	334.248	1.35	0.52	1.24	
17000.00	90.890	346.450	6551.23	10245.30	9314.25	-4468.39	1672576.43	14298146.21	39°22'26.568"N	80°53'10.319"W	10330.62	334.371	2.92	0.58	-2.86	
17095.00	90.150	340.620	6550.37	10340.21	9405.31	-4495.31	1672549.53	14298237.24	39°22'27.488"N	80°53'10.661"W	10424.37	334.454	6.19	-0.78	-6.14	
17123.00	90.150	340.620	6550.29	10368.20	9431.72	-4504.60	1672540.24	14298263.64	39°22'27.729"N	80°53'10.779"W	10452.21	334.471	0.00	0.00	0.00	
17147.00	90.150	340.620	6550.23	10392.20	9454.36	-4512.56	1672532.28	14298286.27	39°22'27.953"N	80°53'10.980"W	10476.07	334.485	0.00	0.00	0.00	Projected MD at TD: 17147





# Actual Wellpath Report

Sterling Unit 2H AWP Proj: 17147'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator:	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Sterling Unit 2H
Field	Tyler	Wellbore	Sterling Unit 2H AWB
Facility	Meredith Pad		

## HOLE & CASING SECTIONS - Ref Wellbore: Sterling Unit 2H AWB Ref Wellpath: Sterling Unit 2H AWP Proj: 17147'

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	25.50	120.50	95.00	25.50	120.50	0.00	0.00	-0.47	0.48
17.5in Open Hole	120.50	842.50	722.00	120.50	842.48	-0.47	0.48	-3.21	1.81
13.375in Casing Surface	25.50	842.50	817.00	25.50	842.48	0.00	0.00	-3.21	1.81
12.25in Open Hole	842.50	2650.50	1808.00	842.48	2604.01	-3.21	1.81	-189.72	-286.94
9.625in Casing Intermediate	25.50	2650.50	2625.00	25.50	2604.01	0.00	0.00	-189.72	-286.94
8.75in Open Hole	2650.50	5672.50	3022.00	2604.01	5509.91	-189.72	-286.94	-649.41	-973.92
8.5in Open Hole	5672.50	17147.00	11474.50	5509.91	6550.23	-649.41	-973.92	9454.36	-4512.56
5.5in Casing Production	25.50	17147.00	17121.50	25.50	6550.23	0.00	0.00	9454.36	-4512.56

## TARGETS

Name	TVD (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Shape
Sterling Unit 2H - BHL - Rev-1	6442.64	9457.09	-4544.85	1672500.00	14298289.00	39°22'27.980"N	80°53'11.291"W	point
Sterling Unit 2H - POE - Rev-1	6507.00	-223.78	-1350.57	1675693.00	14288612.00	39°20'52.257"N	80°52'30.786"W	point
Sterling Unit 2H - LP - Rev-1	6530.00	-49.61	-1408.04	1675635.56	14288786.10	39°20'53.979"N	80°52'31.514"W	point



# Actual Wellpath Report

Sterling Unit 2H AWP Proj: 17147'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Sterling Unit 2H
Field	Tyler	Wellbore	Sterling Unit 2H AWB
Facility	Meredith Pad		

WELLPATH COMPOSITION - Ref Wellbore: Sterling Unit 2H AWB Ref Wellpath: Sterling Unit 2H AWP Proj: 17147'			
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment
25.50	818.50	Gyrodala standard - Drop gyro or Multi-shot	01 Gyrodala MS Gyro <17-1/2">(25'-808')
818.50	2567.50	ISCWSA MWD, Rev. 4 (Standard)	02 Panther EM <12-1/4">(808')(922'-2557')
2567.50	5572.50	ISCWSA MWD, Rev. 4 (Standard)	03 Panther EM <8-3/4">(2557')(2856'-5562')
5572.50	17123.00	BHI AutoTrak Curve (Short)	04 BH AT Curve <8-1/2">(5572.5')(5643'-17123')
17123.00	17147.00	Blind Drilling (std)	Protection to bit
			Wellbore





# Actual Wellpath Report

Sterling Unit 2H AWP Proj: 17147  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Slot	Slot #02	
ANTERO RESOURCES CORPORATION	Well	Sterling Unit 2H	
Area Tyler County, WV	Wellbore	Sterling Unit 2H AWB	
Field Tyler			
Facility Meredith Pad			

COMMENTS
<p><b>Wellpath general comments</b>            API: 47-095-02529-0000            BHI Job #: 109627524            Rig: H&amp;P 317            Duration: 03/06/2019-03/10/2019            Gyrodatta MS Gyro &lt;17-1/2"&gt;(25'-808')            Panther EM &lt;12-1/4"&gt;(808')(922'-2557')            Panther EM &lt;8-3/4"&gt;(2557')(2656'-5562')            BH AT Curve &lt;8-1/2"&gt;(5572.5')(5643'-17123')            Middlesex: 6576' MD            Burkett: 6774' MD            Tully: 6852' MD            Marcellus POE: 6961' MD            Projected MD at TD: 17147</p>