



Actual Wellpath Report

Grounds Unit 3H AWP Proj: 17988'

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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Gorrell Pad
Slot	Slot #01
Well	Grounds Unit 3H
Wellbore	Grounds Unit 3H AWB

REPORT SETUP INFORMATION	
Projection System	NAD27 / UTM Zone 17 North, US feet
North Reference	Grid
Scale	0.999600
Convergence at slot	0.01° East
Software System	WellArchitect@ 5.1
User	Delaset
Report Generated	6/6/2019 at 3:24:56 PM
Database/Source file	WA_MPL_EasternUS_Defn/Grounds_Unit_3H_AWP_Proj_17988_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Northing[US ft]	Latitude	Longitude	
Slot Location	49.37	-8.01	14314350.83	39°25'06.990"N	80°59'25.460"W	
Facility Reference Pt			14314301.48	39°25'06.502"N	80°59'25.358"W	
Field Reference Pt			0.00	0°00'00.000"	85°29'19.301"W	

WELLPATH DATUM	
Calculation method	Minimum curvature
Horizontal Reference Pt	Slot
Vertical Reference Pt	H&P 519 (RKB)
MD Reference Pt	H&P 519 (RKB)
Field Vertical Reference	Mean Sea Level
	H&P 519 (RKB) to Facility Vertical Datum
	H&P 519 (RKB) to Mean Sea Level
	H&P 519 (RKB) to Ground Level at Slot (Slot #01)
	Section Origin
	Section Azimuth
	30.00ft
	1075.00ft
	30.00ft
	N 0.00, E 0.00 ft
	160.22°



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Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #01
Area	Tyler County, WV	Well	Grounds Unit 3H
Field	Tyler	Wellbore	Grounds Unit 3H AWB
Facility	Correll Pad		

WELLPATH DATA (214 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 (1/100ft)	Build Rate (1/100ft)	Turn Rate (1/100ft)	Comments
0.00	0.00	107.140	0.00	0.00	0.00	0.00	1643126.32	14314350.83	39°25'06.990"N	80°59'25.460"W	0.00	0.00	0.00	0.00	0.00	
30.00	0.00	107.140	30.00	0.00	0.00	0.00	1643126.32	14314350.83	39°25'06.990"N	80°59'25.460"W	0.00	0.00	0.00	0.00	0.00	
100.00	0.460	107.140	100.00	0.17	-0.08	0.27	1643126.59	14314350.75	39°25'06.989"N	80°59'25.457"W	0.28	107.140	0.66	0.66	153.06	Gyrodota MS Gyro <17-1/2">(100-607')
200.00	0.290	128.050	200.00	0.62	-0.36	0.85	1643127.17	14314350.47	39°25'06.986"N	80°59'25.449"W	0.92	112.754	0.22	-0.17	20.91	
300.00	0.110	87.550	300.00	0.87	-0.51	1.15	1643127.46	14314350.32	39°25'06.985"N	80°59'25.445"W	1.25	113.936	0.22	-0.18	-40.50	
400.00	0.140	212.130	400.00	0.97	-0.61	1.18	1643127.50	14314350.22	39°25'06.984"N	80°59'25.445"W	1.33	117.322	0.22	0.03	124.58	
500.00	0.100	178.230	500.00	1.13	-0.80	1.12	1643127.43	14314350.03	39°25'06.982"N	80°59'25.446"W	1.37	125.620	0.08	-0.04	-33.90	
600.00	0.220	142.520	600.00	1.40	-1.04	1.23	1643127.55	14314349.79	39°25'06.980"N	80°59'25.444"W	1.61	130.068	0.15	0.12	-35.71	
607.00	0.210	132.020	607.00	1.42	-1.06	1.25	1643127.57	14314349.77	39°25'06.980"N	80°59'25.444"W	1.64	130.185	0.58	-0.14	-150.00	
724.00	1.260	41.420	723.99	0.99	-0.24	2.26	1643128.58	14314350.59	39°25'06.988"N	80°59'25.431"W	2.28	95.972	1.09	0.90	-77.44	APS EM <12-1/4">(607)(724-2626')
816.00	4.200	51.550	815.87	-0.58	2.62	5.57	1643131.89	14314353.45	39°25'07.016"N	80°59'25.389"W	6.16	64.836	3.23	3.20	11.01	
906.00	7.350	55.340	905.40	-3.11	7.94	12.89	1643139.20	14314358.77	39°25'07.068"N	80°59'25.296"W	15.14	58.360	3.52	3.50	4.21	
997.00	10.010	59.050	995.35	-6.14	15.32	24.46	1643150.77	14314366.15	39°25'07.141"N	80°59'25.148"W	28.86	57.940	2.99	2.92	4.08	
1088.00	11.410	56.160	1084.77	-9.86	24.40	38.72	1643165.02	14314375.22	39°25'07.231"N	80°59'24.967"W	45.77	57.782	1.65	1.54	-3.18	
1179.00	12.850	52.870	1173.73	-15.06	35.52	54.27	1643180.56	14314386.34	39°25'07.341"N	80°59'24.768"W	64.86	56.791	1.75	1.58	-3.62	
1278.00	14.600	50.740	1269.90	-22.51	50.07	72.71	1643199.00	14314400.88	39°25'07.485"N	80°59'24.534"W	88.28	55.449	1.84	1.77	-2.15	
1373.00	18.960	58.190	1360.85	-29.72	65.79	95.11	1643221.39	14314416.59	39°25'07.640"N	80°59'24.248"W	115.64	55.327	5.11	4.59	7.84	
1467.00	23.160	60.770	1449.55	-35.94	82.87	124.23	1643250.50	14314433.67	39°25'07.809"N	80°59'23.877"W	149.33	56.293	4.57	4.47	2.74	
1562.00	27.550	58.990	1534.38	-43.29	103.32	159.38	1643285.63	14314454.11	39°25'08.011"N	80°59'23.429"W	189.94	57.045	4.69	4.62	-1.87	
1656.00	31.640	64.660	1616.12	-49.92	125.09	200.32	1643326.56	14314475.87	39°25'08.226"N	80°59'22.907"W	236.17	58.018	5.27	4.35	6.03	
1751.00	32.720	69.850	1696.54	-52.50	144.60	246.95	1643373.17	14314495.37	39°25'08.419"N	80°59'22.313"W	286.17	59.649	3.12	1.14	5.46	
1845.00	28.860	76.420	1777.30	-50.21	158.69	292.88	1643419.09	14314509.45	39°25'08.558"N	80°59'21.728"W	333.11	61.551	5.44	-4.11	6.99	
1940.00	27.200	75.610	1861.15	-45.69	169.47	336.20	1643462.39	14314520.23	39°25'08.665"N	80°59'21.176"W	376.50	63.249	1.79	-1.75	-0.85	
2029.00	29.540	72.860	1939.46	-42.77	180.99	376.88	1643503.05	14314531.75	39°25'08.778"N	80°59'20.658"W	418.09	64.348	3.01	2.63	-3.09	
2124.00	29.800	73.010	2022.00	-40.55	194.79	421.84	1643547.98	14314546.54	39°25'08.915"N	80°59'20.085"W	464.64	65.214	0.28	0.27	0.16	
2219.00	28.710	71.490	2104.89	-38.89	208.93	466.05	1643592.18	14314559.68	39°25'09.054"N	80°59'19.521"W	510.74	65.853	1.39	-1.15	-1.60	
2313.00	27.720	71.320	2187.72	-37.97	223.10	508.17	1643634.29	14314573.84	39°25'09.194"N	80°59'18.985"W	554.99	66.297	1.06	-1.09	-0.18	
2408.00	28.140	72.500	2271.65	-36.66	236.92	550.47	1643676.57	14314587.65	39°25'09.331"N	80°59'18.446"W	599.29	66.713	0.73	0.44	1.24	
2502.00	29.070	71.520	2354.18	-35.26	250.82	593.27	1643719.35	14314601.55	39°25'09.468"N	80°59'17.900"W	644.11	67.082	1.11	0.99	-1.04	
2597.00	31.310	67.590	2436.29	-35.86	267.55	637.99	1643764.05	14314618.27	39°25'09.634"N	80°59'17.330"W	691.82	67.248	3.14	2.36	-4.14	



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Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #01
Area	Tyler County, WV	Well	Grounds Unit 3H
Field	Tyler	Wellbore	Grounds Unit 3H AWB
Facility	Gorrell Pad		

WELLPATH DATA (214 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
2626.00	30.640	67.650	2461.16	-36.54	273.23	651.79	1643777.85	14314623.95	39°25'09.690"N	80°59'17.155"W	706.74	67.256	2.31	-2.31	0.21	
2700.00	28.120	64.310	2525.64	-39.18	287.97	684.95	1643811.00	14314638.68	39°25'09.835"N	80°59'16.732"W	743.02	67.197	4.06	-3.41	-4.51	BH NavTrak <8-3/4">(2700-6067')
2756.00	26.550	62.080	2575.39	-42.31	299.55	707.91	1643833.94	14314650.26	39°25'09.950"N	80°59'16.439"W	768.67	67.064	3.35	-2.80	-3.98	
2850.00	30.440	66.620	2657.99	-46.79	318.85	748.35	1643874.36	14314669.55	39°25'10.140"N	80°59'15.924"W	813.44	66.923	4.73	4.14	4.83	
2945.00	33.780	66.950	2738.45	-49.80	338.74	794.75	1643920.75	14314689.44	39°25'10.337"N	80°59'15.333"W	863.93	66.915	3.52	3.52	0.35	
3042.00	33.180	65.980	2819.36	-53.31	360.10	843.81	1643969.79	14314710.79	39°25'10.548"N	80°59'14.708"W	917.44	66.889	0.83	-0.62	-1.00	
3137.00	32.100	65.780	2899.35	-57.18	381.04	890.57	1644016.53	14314731.22	39°25'10.755"N	80°59'14.112"W	968.67	66.836	1.14	-1.14	-0.21	
3231.00	31.500	67.840	2979.24	-60.13	400.55	936.10	1644062.04	14314751.22	39°25'10.948"N	80°59'13.532"W	1018.19	66.834	1.32	-0.64	2.19	
3326.00	30.910	69.960	3060.50	-61.28	418.28	982.01	1644107.93	14314768.94	39°25'11.123"N	80°59'12.947"W	1067.38	66.929	1.31	-0.62	2.23	
3420.00	29.890	66.450	3141.58	-62.93	435.91	1026.16	1644152.07	14314786.56	39°25'11.297"N	80°59'12.384"W	1114.91	66.984	2.18	-1.03	-3.73	
3515.00	28.270	68.300	3224.61	-65.24	453.69	1088.77	1644194.66	14314804.33	39°25'11.473"N	80°59'11.841"W	1161.08	66.999	1.95	-1.71	1.95	
3609.00	27.570	71.740	3307.67	-65.41	468.73	1110.11	1644235.99	14314819.38	39°25'11.621"N	80°59'11.314"W	1205.02	67.109	1.87	-0.74	3.66	
3704.00	26.840	67.230	3392.17	-65.94	483.92	1150.77	1644276.63	14314834.56	39°25'11.771"N	80°59'10.796"W	1248.38	67.192	2.30	-0.77	-4.75	
3798.00	27.140	65.830	3475.93	-68.69	500.92	1189.90	1644315.74	14314851.54	39°25'11.939"N	80°59'10.297"W	1291.04	67.170	0.75	0.32	-1.49	
3893.00	29.460	66.160	3559.57	-72.00	519.23	1231.04	1644356.86	14314869.85	39°25'12.120"N	80°59'09.773"W	1336.06	67.131	2.45	2.44	0.35	
3987.00	29.680	64.760	3641.33	-75.85	538.50	1273.23	1644399.04	14314889.11	39°25'12.311"N	80°59'09.236"W	1382.43	67.075	0.77	0.23	-1.49	
4082.00	30.070	64.990	3723.70	-80.26	558.59	1316.08	1644441.87	14314909.20	39°25'12.509"N	80°59'08.690"W	1429.71	67.002	0.43	0.41	0.24	
4176.00	31.480	66.940	3804.47	-83.81	578.16	1360.00	1644485.78	14314928.76	39°25'12.702"N	80°59'08.130"W	1477.80	66.969	1.84	1.50	2.07	
4271.00	30.950	68.170	3885.72	-86.10	596.96	1405.51	1644531.26	14314947.55	39°25'12.888"N	80°59'07.550"W	1527.03	66.988	0.87	-0.56	1.23	
4365.00	30.300	69.040	3966.60	-87.46	614.43	1450.09	1644575.82	14314965.02	39°25'13.061"N	80°59'06.982"W	1574.89	67.037	0.84	-0.68	0.93	
4460.00	30.820	67.730	4048.41	-89.01	632.23	1494.99	1644620.71	14314982.80	39°25'13.237"N	80°59'06.410"W	1623.18	67.077	0.89	0.55	-1.38	
4554.00	29.490	65.840	4129.69	-91.82	650.83	1538.39	1644664.09	14315001.39	39°25'13.420"N	80°59'05.857"W	1670.39	67.069	1.74	-1.41	-2.01	
4649.00	28.580	63.650	4212.75	-96.21	670.48	1580.09	1644705.77	14315021.04	39°25'13.615"N	80°59'05.325"W	1716.45	67.007	1.47	-0.96	-2.31	
4743.00	28.390	59.700	4295.38	-102.86	691.74	1619.53	1644745.20	14315042.29	39°25'13.825"N	80°59'04.823"W	1761.07	66.872	2.01	-0.20	-4.20	
4838.00	31.000	59.060	4377.90	-111.72	715.72	1680.02	1644785.67	14315066.26	39°25'14.061"N	80°59'04.307"W	1807.74	66.677	2.77	2.75	-0.67	
4932.00	33.010	66.560	4457.64	-118.04	738.36	1704.30	1644829.93	14315088.89	39°25'14.285"N	80°59'03.742"W	1857.36	66.576	4.73	2.14	7.98	
5027.00	31.420	72.960	4538.03	-118.51	755.91	1751.73	1644877.35	14315106.44	39°25'14.459"N	80°59'03.138"W	1907.87	66.659	3.96	-1.67	6.74	
5121.00	31.360	73.170	4618.27	-116.08	770.18	1798.57	1644924.16	14315120.70	39°25'14.600"N	80°59'02.541"W	1956.53	66.819	0.13	-0.06	0.22	
5216.00	31.680	76.310	4699.26	-112.16	783.24	1846.47	1644972.05	14315133.75	39°25'14.729"N	80°59'01.931"W	2005.72	67.014	1.76	0.34	3.31	
5310.00	29.800	74.210	4780.05	-107.92	795.44	1892.93	1645018.49	14315145.95	39°25'14.849"N	80°59'01.339"W	2053.27	67.207	2.30	-2.00	-2.23	



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5405.00	27.770	67.680	4863.33	-107.26	810.27	1936.14	1645061.68	14315160.78	39°25'14.936"N	80°59'00.788"W	2098.85	67.291	3.94	-2.14	-6.87	
5499.00	27.300	70.290	4946.69	-108.20	825.86	1978.69	1645102.22	14315176.36	39°25'15.150"N	80°59'00.271"W	2142.28	67.325	1.38	-0.50	2.78	
5594.00	27.900	71.940	5030.88	-107.51	840.10	2018.33	1645143.84	14315190.59	39°25'15.290"N	80°58'59.741"W	2186.19	67.401	1.02	0.63	1.74	
5688.00	27.680	70.240	5114.04	-106.84	854.30	2059.79	1645185.28	14315204.78	39°25'15.430"N	80°58'59.212"W	2229.92	67.474	0.88	-0.23	-1.81	
5783.00	27.590	66.870	5198.20	-108.12	870.40	2100.79	1645226.26	14315220.88	39°25'15.590"N	80°58'58.690"W	2273.96	67.495	1.65	-0.09	-3.55	
5878.00	26.780	66.470	5282.71	-110.80	887.59	2140.64	1645266.10	14315238.06	39°25'15.759"N	80°58'58.182"W	2317.36	67.479	0.87	-0.85	-0.42	
5972.00	28.500	65.920	5365.98	-113.87	905.19	2180.54	1645305.98	14315255.66	39°25'15.933"N	80°58'57.674"W	2360.96	67.466	1.85	1.83	-0.52	
6066.00	30.530	58.660	5473.28	-122.32	933.96	2236.56	1645360.98	14315284.42	39°25'16.217"N	80°58'56.972"W	2422.82	67.326	4.39	-2.31	-7.28	BH AT Curve <-8-1/2">(6067)(6096)-(17963')
6180.00	29.550	57.850	5545.99	-131.03	956.08	2271.33	1645396.73	14315306.53	39°25'16.436"N	80°58'56.517"W	2464.35	67.172	1.26	-1.17	-0.96	
6227.00	30.700	61.490	5586.65	-135.34	967.98	2291.68	1645417.08	14315318.42	39°25'16.554"N	80°58'56.257"W	2487.73	67.101	4.59	2.49	7.74	
6275.00	31.760	68.490	5627.70	-137.58	978.46	2314.21	1645439.60	14315328.90	39°25'16.657"N	80°58'55.970"W	2512.56	67.081	7.87	2.21	14.53	
6322.00	32.810	76.510	5667.46	-136.56	985.97	2338.11	1645463.49	14315336.40	39°25'16.731"N	80°58'55.665"W	2537.50	67.135	9.38	2.23	17.05	
6369.00	33.640	83.470	5706.79	-132.18	990.42	2363.44	1645488.81	14315340.86	39°25'16.775"N	80°58'55.343"W	2562.67	67.263	8.30	1.77	14.81	
6416.00	33.930	93.340	5745.88	-124.04	991.14	2389.49	1645514.85	14315341.57	39°25'16.782"N	80°58'55.011"W	2586.89	67.472	11.68	0.62	21.01	
6511.00	35.450	108.060	5824.13	-96.61	980.96	2442.23	1645567.57	14315333.39	39°25'16.682"N	80°58'54.339"W	2631.88	68.116	8.74	2.06	14.83	
6558.00	36.600	115.460	5862.16	-78.29	970.70	2487.86	1645593.18	14315321.14	39°25'16.580"N	80°58'54.012"W	2651.90	68.528	9.57	2.45	15.74	
6605.00	37.390	120.900	5899.71	-57.29	957.35	2492.76	1645618.07	14315307.79	39°25'16.448"N	80°58'53.695"W	2670.27	68.991	7.16	1.68	11.57	
6653.00	39.400	125.590	5937.33	-33.47	940.99	2517.66	1645642.97	14315291.44	39°25'16.286"N	80°58'53.378"W	2687.76	69.506	7.37	4.19	9.77	
6700.00	42.440	130.920	5972.85	-7.36	921.91	2541.78	1645667.08	14315272.37	39°25'16.098"N	80°58'53.070"W	2703.81	70.064	9.85	6.47	11.34	
6747.00	44.710	136.110	6006.91	21.58	899.60	2565.24	1645690.53	14315250.07	39°25'15.877"N	80°58'52.772"W	2718.41	70.675	9.01	4.83	11.04	
6794.00	47.650	140.860	6039.46	53.07	874.20	2587.68	1645712.95	14315224.68	39°25'15.626"N	80°58'52.486"W	2731.36	71.333	9.60	6.26	10.11	
6842.00	50.020	144.180	6071.06	87.49	845.53	2609.64	1645734.91	14315196.02	39°25'15.343"N	80°58'52.206"W	2743.20	72.048	7.17	4.94	6.92	
6889.00	53.210	146.900	6100.24	123.12	815.15	2630.47	1645755.73	14315165.65	39°25'15.042"N	80°58'51.941"W	2753.87	72.782	8.16	6.79	5.78	
6936.00	56.150	149.410	6127.41	160.62	782.57	2650.68	1645775.93	14315133.09	39°25'14.720"N	80°58'51.683"W	2763.79	73.552	7.62	6.26	5.34	
6947.00†	56.990	150.279	6133.47	169.65	774.63	2655.29	1645780.54	14315125.15	39°25'14.642"N	80°58'51.624"W	2765.98	73.736	10.09	7.64	7.90	Middlesex: 6947 MD
6983.00	59.780	153.010	6152.35	199.95	747.66	2669.84	1645795.09	14315098.19	39°25'14.375"N	80°58'51.439"W	2772.55	74.356	10.09	7.75	7.53	
7031.00	63.010	156.520	6175.33	241.89	709.54	2687.76	1645813.02	14315060.09	39°25'13.999"N	80°58'51.211"W	2779.86	75.212	9.30	6.73	7.31	
7078.00	66.150	160.340	6195.51	284.31	670.07	2703.36	1645828.60	14315020.63	39°25'13.608"N	80°58'51.012"W	2785.17	76.079	9.92	6.68	8.13	



Actual Wellpath Report

Grounds Unit 3H AWP Proj: 17988'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #01
Area	Tyler County, WV	Well	Grounds Unit 3H
Field	Tyler	Wellbore	Grounds Unit 3H AWB
Facility	Gorrell Pad		

WELLPATH DATA (214 stations) † = 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 (1/100ft)	Build Rate (1/100ft)	Turn Rate (1/100ft)	Comments
7125.00	68.780	163.180	6213.52	327.69	628.85	2716.94	1645842.17	14314979.43	39°25'13.20"N	80°58'50.839"W	2788.77	76.968	7.90	5.60	6.04	
7144.00†	70.553	163.915	6220.12	345.48	611.76	2721.98	1645847.21	14314962.35	39°25'13.03"N	80°58'50.775"W	2789.88	77.333	10.01	9.33	3.87	Burkett: 7144' MD
7172.00	73.170	164.970	6228.84	372.01	586.13	2729.12	1645854.34	14314936.73	39°25'12.779"N	80°58'50.684"W	2791.35	77.879	10.01	9.35	3.71	
7210.00†	76.645	166.258	6238.73	408.53	550.60	2738.23	1645863.45	14314901.21	39°25'12.428"N	80°58'50.566"W	2793.04	78.631	9.71	9.14	3.39	Tully: 7210' MD
7220.00	77.560	166.590	6240.97	418.22	541.12	2740.52	1645866.73	14314891.74	39°25'12.334"N	80°58'50.539"W	2793.43	78.830	9.71	9.15	3.32	
7234.00†	77.831	166.548	6243.95	431.81	527.82	2743.69	1645868.91	14314878.44	39°25'12.202"N	80°58'50.499"W	2794.00	79.111	1.96	1.94	-0.30	Marcellus POE: 7234' MD
7287.00	78.470	166.450	6250.73	463.92	496.42	2751.23	1645876.45	14314847.05	39°25'11.892"N	80°58'50.263"W	2795.66	79.772	1.96	1.94	-0.30	
7314.00	80.230	165.860	6259.41	509.86	451.57	2762.29	1645887.50	14314802.22	39°25'11.449"N	80°58'50.262"W	2798.95	80.716	3.94	3.74	-1.26	
7361.00	84.110	164.800	6265.81	556.23	406.53	2774.08	1645899.28	14314757.20	39°25'11.004"N	80°58'50.112"W	2803.71	81.663	8.55	8.26	-2.26	
7409.00	87.350	163.950	6269.39	603.96	360.44	2786.97	1645912.17	14314711.13	39°25'10.548"N	80°58'49.948"W	2810.18	82.631	6.98	6.75	-1.77	
7456.00	89.010	162.290	6270.88	650.87	315.50	2800.63	1645925.83	14314666.20	39°25'10.104"N	80°58'49.774"W	2818.35	83.573	5.08	3.53	-3.66	
7504.00	89.110	160.560	6271.67	698.86	270.02	2815.95	1645941.13	14314620.74	39°25'09.654"N	80°58'49.579"W	2828.86	84.523	3.48	0.21	-3.48	
7598.00	89.780	160.820	6272.58	792.85	181.31	2847.03	1645972.20	14314532.07	39°25'08.777"N	80°58'49.183"W	2852.79	86.356	0.76	0.71	0.28	
7693.00	88.090	159.850	6274.34	887.83	91.87	2878.99	1646004.15	14314442.66	39°25'07.993"N	80°58'48.776"W	2880.45	88.172	2.05	-1.78	-1.02	
7787.00	88.060	157.760	6277.50	981.74	4.28	2912.95	1646038.10	14314355.11	39°25'07.028"N	80°58'48.343"W	2912.96	89.916	2.22	-0.03	-2.22	
7881.00	89.080	158.100	6279.85	1075.63	-82.80	2948.26	1646073.39	14314268.06	39°25'06.167"N	80°58'47.894"W	2949.42	91.609	1.14	1.09	0.36	
7976.00	89.010	158.390	6281.43	1170.56	-171.02	2983.47	1646108.59	14314179.88	39°25'05.295"N	80°58'47.445"W	2988.36	93.281	0.31	-0.07	0.31	
8070.00	90.030	158.940	6282.22	1264.52	-258.57	3017.66	1646142.77	14314092.36	39°25'04.429"N	80°58'47.010"W	3028.72	94.898	1.23	1.09	0.59	
8165.00	90.090	158.650	6282.12	1359.50	-347.14	3052.03	1646177.12	14314003.83	39°25'03.554"N	80°58'46.572"W	3071.71	96.489	0.31	0.06	-0.31	
8259.00	90.060	159.110	6282.00	1453.47	-434.83	3085.90	1646210.97	14313916.18	39°25'02.887"N	80°58'46.141"W	3116.38	98.021	0.49	-0.03	0.49	
8354.00	90.120	158.810	6281.85	1548.45	-523.49	3120.00	1646245.07	14313827.55	39°25'01.811"N	80°58'45.707"W	3163.62	99.525	0.32	0.06	-0.32	
8448.00	90.180	157.630	6281.60	1642.39	-610.78	3154.88	1646279.93	14313740.29	39°25'00.948"N	80°58'45.263"W	3213.46	100.957	1.26	0.06	-1.26	
8543.00	90.000	156.770	6281.45	1737.25	-698.36	3191.69	1646316.73	14313652.75	39°25'00.082"N	80°58'44.794"W	3267.20	102.342	0.92	-0.19	-0.91	
8637.00	90.000	158.210	6281.45	1831.14	-785.19	3227.68	1646352.70	14313565.95	39°24'59.224"N	80°58'44.336"W	3321.81	103.673	1.53	0.00	1.53	
8732.00	90.150	160.020	6281.33	1926.12	-873.95	3261.55	1646386.55	14313477.23	39°24'58.347"N	80°58'43.904"W	3376.61	105.000	1.91	0.16	1.91	
8826.00	90.030	160.710	6281.18	2020.12	-962.48	3293.13	1646418.13	14313388.73	39°24'57.472"N	80°58'43.502"W	3430.90	106.292	0.75	-0.13	0.73	
8921.00	90.030	161.580	6281.13	2115.11	-1052.38	3323.83	1646448.82	14313298.87	39°24'56.583"N	80°58'43.111"W	3486.46	107.569	0.92	0.00	0.92	
9016.00	90.060	162.640	6281.06	2210.06	-1142.79	3353.02	1646477.99	14313208.50	39°24'55.690"N	80°58'42.740"W	3542.41	108.820	1.12	0.03	1.12	
9110.00	90.090	164.090	6280.93	2303.91	-1232.85	3379.93	1646504.84	14313118.47	39°24'54.799"N	80°58'42.397"W	3597.75	110.040	1.54	0.03	1.54	
9205.00	89.940	165.310	6280.91	2398.62	-1324.48	3404.99	1646529.99	14313026.88	39°24'53.994"N	80°58'42.078"W	3653.52	111.255	1.29	-0.16	1.28	



Actual Wellpath Report

Grounds Unit 3H AWP Proj: 17988'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #01
Area	Tyler County, WV	Well	Grounds Unit 3H
Field	Tyler	Wellbore	Grounds Unit 3H AWB
Facility	Correll Pad		

WELLPATH DATA (214 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 (1/100ft)	Build Rate (1/100ft)	Turn Rate (1/100ft)	Comments
9299.00	90.030	165.370	6280.93	2492.24	-1415.42	3428.78	1646553.72	14312935.98	39°24'52.995"N	80°58'41.775"W	3709.44	112.431	0.12	0.10	0.06	
9394.00	89.940	163.440	6280.96	2586.99	-1506.92	3454.32	1646679.25	14312844.51	39°24'52.090"N	80°58'41.450"W	3768.71	113.569	2.03	-0.09	-2.03	
9488.00	90.000	161.650	6281.01	2680.91	-1596.59	3482.52	1646607.43	14312754.88	39°24'51.204"N	80°58'41.091"W	3831.06	114.629	1.91	0.06	-1.90	
9583.00	90.030	159.330	6280.98	2775.90	-1686.13	3514.24	1646639.15	14312665.38	39°24'50.319"N	80°58'40.687"W	3897.81	115.632	2.44	0.03	-2.44	
9677.00	89.970	157.640	6280.98	2869.85	-1773.58	3548.71	1646673.61	14312577.97	39°24'49.455"N	80°58'40.248"W	3967.23	116.555	1.80	-0.06	-1.80	
9772.00	90.090	156.900	6280.93	2964.72	-1861.20	3585.42	1646710.30	14312490.38	39°24'48.589"N	80°58'39.781"W	4039.71	117.434	0.79	0.13	-0.78	
9866.00	90.030	157.770	6280.83	3058.60	-1947.94	3621.64	1646746.50	14312403.68	39°24'47.731"N	80°58'39.320"W	4112.27	118.274	0.93	-0.06	0.93	
9961.00	90.000	159.180	6280.81	3153.56	-2036.31	3656.50	1646781.35	14312315.34	39°24'46.858"N	80°58'38.876"W	4185.27	119.114	1.48	-0.03	1.48	
10056.00	90.060	159.030	6280.76	3248.54	-2125.06	3690.38	1646815.21	14312226.62	39°24'45.980"N	80°58'38.444"W	4258.50	119.936	0.17	0.06	-0.16	
10150.00	90.060	158.190	6280.66	3342.50	-2212.59	3724.66	1646849.48	14312139.13	39°24'45.115"N	80°58'38.008"W	4332.28	120.712	0.89	0.00	-0.89	
10245.00	90.580	158.640	6280.13	3437.45	-2300.92	3759.61	1646884.42	14312050.83	39°24'44.242"N	80°58'37.563"W	4407.82	121.467	0.72	0.55	0.47	
10339.00	90.580	159.560	6279.18	3531.43	-2388.73	3793.14	1646917.94	14311963.06	39°24'43.374"N	80°58'37.136"W	4482.63	122.201	0.98	0.00	0.98	
10433.00	91.140	161.990	6277.77	3625.41	-2477.47	3824.09	1646948.87	14311874.35	39°24'42.497"N	80°58'36.742"W	4556.48	122.938	2.65	0.60	2.59	
10528.00	91.080	160.340	6275.93	3720.37	-2567.37	3854.75	1646979.52	14311784.50	39°24'41.608"N	80°58'36.352"W	4631.47	123.665	1.74	-0.06	-1.74	
10623.00	91.110	159.190	6274.11	3815.35	-2656.48	3887.60	1647012.36	14311695.41	39°24'40.728"N	80°58'35.933"W	4708.54	124.346	1.21	0.03	-1.21	
10717.00	91.080	158.160	6272.31	3909.30	-2744.03	3921.78	1647046.52	14311607.90	39°24'39.862"N	80°58'35.498"W	4786.45	124.980	1.10	-0.03	-1.10	
10812.00	91.140	160.090	6270.47	4004.26	-2832.77	3955.62	1647080.35	14311519.19	39°24'38.985"N	80°58'35.067"W	4865.34	125.608	2.03	0.06	2.03	
10906.00	91.110	161.260	6268.63	4098.24	-2921.46	3986.72	1647111.44	14311430.54	39°24'38.108"N	80°58'34.671"W	4942.56	126.234	1.24	-0.03	1.24	
11000.00	91.170	162.690	6266.76	4192.17	-3010.83	4015.80	1647140.51	14311341.21	39°24'37.225"N	80°58'34.301"W	5019.14	126.861	1.52	0.06	1.52	
11094.00	91.050	160.420	6264.94	4286.12	-3099.97	4045.54	1647170.23	14311252.10	39°24'36.344"N	80°58'33.923"W	5096.69	127.462	2.42	-0.13	-2.41	
11189.00	90.340	159.830	6263.78	4381.11	-3189.31	4077.83	1647202.51	14311162.80	39°24'35.461"N	80°58'33.511"W	5176.91	128.029	0.97	-0.75	-0.62	
11283.00	90.120	159.130	6263.41	4475.10	-3277.34	4110.78	1647235.45	14311074.80	39°24'34.591"N	80°58'33.092"W	5257.33	128.564	0.78	0.23	-0.74	
11378.00	90.090	156.700	6263.23	4570.02	-3365.37	4146.50	1647271.15	14310986.82	39°24'33.721"N	80°58'32.637"W	5340.33	129.063	2.56	-0.03	-2.56	
11473.00	90.120	155.860	6263.06	4664.79	-3452.34	4184.71	1647309.35	14310898.88	39°24'32.861"N	80°58'32.151"W	5424.39	129.522	0.88	0.03	-0.88	
11567.00	90.060	154.100	6262.91	4758.40	-3537.52	4224.47	1647349.09	14310814.74	39°24'32.019"N	80°58'31.645"W	5510.00	129.942	1.87	-0.06	-1.87	
11661.00	89.940	153.550	6262.91	4851.81	-3621.88	4265.93	1647390.53	14310730.41	39°24'31.185"N	80°58'31.117"W	5596.08	130.332	0.60	-0.13	-0.59	
11756.00	89.910	155.500	6263.04	4946.34	-3707.63	4306.79	1647431.38	14310644.69	39°24'30.337"N	80°58'30.596"W	5682.87	130.725	2.05	-0.03	2.05	
11851.00	89.880	156.330	6263.21	5041.07	-3794.36	4345.56	1647470.13	14310557.99	39°24'29.480"N	80°58'30.103"W	5768.97	131.126	0.87	-0.03	0.87	
11945.00	89.230	156.160	6263.94	5134.84	-3880.40	4383.42	1647507.98	14310471.99	39°24'28.630"N	80°58'29.621"W	5854.22	131.517	0.71	-0.69	-0.18	
12040.00	89.110	157.280	6265.32	5229.65	-3967.65	4420.96	1647545.51	14310384.77	39°24'27.767"N	80°58'29.143"W	5940.30	131.907	1.19	-0.13	-1.18	



Actual Wellpath Report

Grounds Unit 3H AWP Proj: 17988'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #01
Area	Tyler County, WV	Well	Grounds Unit 3H
Field	Tyler	Wellbore	Grounds Unit 3H AWB
Facility	Correll Pad		

WELLPATH DATA (214 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 (ft/100ft)	Comments
12134.00	88.620	160.800	6267.18	5323.60	-4055.40	4454.58	1647579.11	14310297.06	39°24'26.900"N	80°58'28.715"W	8024.08	132.314	3.78	-0.52	3.74	
12229.00	88.680	162.830	6269.42	5418.53	-4145.62	4484.22	1647608.73	14310206.87	39°24'26.008"N	80°58'28.337"W	6106.91	132.753	2.14	0.06	2.14	
12323.00	88.680	165.970	6271.58	5512.24	-4236.13	4509.48	1647633.99	14310116.41	39°24'25.114"N	80°58'28.016"W	6187.10	133.210	3.34	0.00	3.34	
12418.00	88.740	168.140	6273.72	5606.54	-4328.68	4530.76	1647655.26	14310023.89	39°24'24.199"N	80°58'27.745"W	6268.20	133.693	2.28	0.06	2.28	
12512.00	90.030	165.020	6274.73	5699.94	-4420.10	4552.57	1647677.06	14309932.51	39°24'23.295"N	80°58'27.488"W	6345.33	134.154	3.59	1.37	-3.32	
12607.00	89.020	161.400	6275.52	5794.79	-4511.03	4580.01	1647704.49	14309841.61	39°24'22.396"N	80°58'27.118"W	6428.52	134.565	3.96	-1.06	-3.81	
12702.00	89.510	160.450	6276.74	5889.77	-4600.80	4611.05	1647735.52	14309751.88	39°24'21.509"N	80°58'26.723"W	6513.77	134.936	1.13	0.52	-1.00	
12796.00	89.100	161.450	6277.54	5983.76	-4689.65	4641.73	1647766.18	14309663.06	39°24'20.631"N	80°58'26.333"W	6598.37	135.294	1.06	0.00	1.06	
12891.00	89.570	164.620	6278.30	6078.63	-4780.50	4669.45	1647793.89	14309572.25	39°24'19.733"N	80°58'25.980"W	6682.58	135.673	3.34	0.06	3.34	
12985.00	90.090	166.500	6278.58	6172.22	-4871.53	4692.89	1647817.32	14309481.26	39°24'18.833"N	80°58'25.682"W	6764.24	136.070	2.08	0.55	2.00	
13080.00	89.970	165.100	6278.53	6266.77	-4963.62	4716.19	1647840.61	14309389.20	39°24'17.923"N	80°58'25.385"W	6848.90	136.484	1.48	-0.13	-1.47	
13175.00	89.910	164.540	6278.63	6361.46	-5055.31	4741.06	1647865.48	14309297.55	39°24'17.016"N	80°58'25.069"W	6930.64	136.837	0.59	-0.06	-0.59	
13269.00	89.940	163.810	6278.76	6455.24	-5145.74	4766.70	1647891.10	14309207.15	39°24'16.123"N	80°58'24.742"W	7014.28	137.190	0.78	0.03	-0.78	
13364.00	89.080	161.410	6279.57	6550.14	-5236.39	4795.09	1647919.48	14309116.54	39°24'15.227"N	80°58'24.381"W	7100.19	137.519	2.68	-0.91	-2.53	
13458.00	89.020	158.000	6281.13	6644.11	-5324.53	4827.68	1647952.06	14309028.44	39°24'14.355"N	80°58'23.966"W	7187.29	137.802	3.63	-0.06	-3.63	
13552.00	89.020	157.710	6282.74	6738.02	-5411.58	4863.11	1647987.47	14308941.42	39°24'13.495"N	80°58'23.515"W	7276.65	138.056	0.31	0.00	-0.31	
13647.00	89.050	158.740	6284.34	6832.95	-5499.79	4898.35	1648022.70	14308853.25	39°24'12.623"N	80°58'23.067"W	7364.88	138.310	1.08	0.03	1.08	
13741.00	88.980	159.660	6285.95	6926.92	-5587.65	4931.72	1648056.06	14308765.42	39°24'11.754"N	80°58'22.642"W	7452.77	138.568	0.98	-0.07	0.98	
13836.00	88.950	159.490	6287.67	7021.89	-5676.66	4964.87	1648089.19	14308676.45	39°24'10.875"N	80°58'22.220"W	7541.52	138.827	0.18	-0.03	-0.18	
13930.00	89.290	158.420	6289.11	7115.86	-5764.38	4998.82	1648122.93	14308588.76	39°24'10.008"N	80°58'21.790"W	7629.83	139.070	1.19	0.36	-1.14	
14025.00	89.450	157.400	6290.16	7210.77	-5852.40	5034.34	1648158.64	14308500.78	39°24'09.137"N	80°58'21.336"W	7719.80	139.297	1.09	0.17	-1.07	
14119.00	89.200	155.410	6291.26	7304.56	-5938.53	5071.96	1648196.24	14308414.68	39°24'08.286"N	80°58'20.857"W	7809.87	139.500	2.13	-0.27	-2.12	
14214.00	89.290	155.200	6292.51	7399.20	-6024.84	5111.65	1648235.91	14308328.41	39°24'07.433"N	80°58'20.351"W	7901.12	139.688	0.24	0.09	-0.22	
14308.00	89.320	154.610	6293.66	7492.79	-6109.96	5151.52	1648275.76	14308243.33	39°24'06.592"N	80°58'19.844"W	7991.85	139.865	0.63	0.03	-0.63	
14403.00	89.420	155.450	6294.70	7587.39	-6196.07	5191.82	1648315.85	14308157.25	39°24'05.740"N	80°58'19.333"W	8083.58	140.041	0.89	0.11	0.88	
14497.00	89.200	156.700	6295.83	7681.14	-6281.99	5229.73	1648353.95	14308071.37	39°24'04.891"N	80°58'18.848"W	8173.95	140.223	1.35	-0.23	1.33	
14592.00	89.200	157.540	6297.16	7775.99	-6369.50	5266.87	1648390.87	14307983.89	39°24'04.026"N	80°58'18.378"W	8264.89	140.414	0.88	0.00	0.88	
14686.00	89.080	159.430	6298.57	7869.93	-6456.94	5301.13	1648425.32	14307896.49	39°24'03.162"N	80°58'17.939"W	8354.29	140.614	2.01	-0.13	2.01	
14781.00	89.320	162.720	6299.90	7964.90	-6546.78	5331.97	1648465.11	14307806.68	39°24'02.274"N	80°58'17.547"W	8443.34	140.839	3.47	0.25	3.46	
14876.00	89.140	164.840	6301.17	8059.70	-6637.99	5358.44	1648482.64	14307715.51	39°24'01.372"N	80°58'17.210"W	8530.89	141.088	2.24	-0.19	2.23	



Actual Wellpath Report

Grounds Unit 3H AWP Proj: 17988'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #01
Area	Tyler County, WV	Well	Grounds Unit 3H
Field	Tyler	Wellbore	Grounds Unit 3H AWP
Facility	Correll Pad		

WELLPATH DATA (214 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 (1/100ft)	Build Rate (1/100ft)	Turn Rate (1/100ft)	Comments
14970.00	89.110	165.780	6302.61	8153.32	-6728.90	5382.30	1648506.46	14307624.63	39°24'00.473"N	80°58'16.906"W	8616.69	141.344	1.00	-0.03	1.00	
15065.00	88.550	165.400	6304.55	8247.88	-6820.90	5405.94	1648530.09	14307532.68	39°23'59.564"N	80°58'16.606"W	8703.38	141.601	0.71	-0.59	-0.40	
15159.00	88.520	162.830	6306.95	8341.62	-6911.27	5431.66	1648555.79	14307442.34	39°23'58.671"N	80°58'16.278"W	8790.25	141.836	2.73	-0.03	-2.73	
15254.00	88.580	160.410	6309.36	8436.56	-7001.39	5461.60	1648585.73	14307352.26	39°23'57.780"N	80°58'15.897"W	8879.67	142.043	2.55	0.06	-2.55	
15348.00	88.490	158.420	6311.76	8530.51	-7089.35	5494.64	1648618.75	14307264.33	39°23'56.911"N	80°58'15.477"W	8969.39	142.222	2.12	-0.10	-2.12	
15443.00	88.580	159.010	6314.19	8625.45	-7177.84	5529.11	1648653.21	14307175.87	39°23'56.036"N	80°58'15.038"W	9060.49	142.393	0.63	0.09	0.62	
15537.00	88.490	157.760	6316.59	8719.37	-7265.20	5563.73	1648687.81	14307088.55	39°23'55.172"N	80°58'14.598"W	9150.86	142.555	1.33	-0.10	-1.33	
15632.00	88.550	158.090	6319.05	8814.26	-7353.21	5599.42	1648723.49	14307000.58	39°23'54.302"N	80°58'14.143"W	9242.47	142.711	0.35	0.06	0.35	
15727.00	88.520	159.010	6321.47	8909.19	-7441.60	5634.15	1648758.20	14306912.22	39°23'53.429"N	80°58'13.701"W	9333.86	142.870	0.97	-0.03	0.97	
15821.00	88.710	160.810	6323.75	9003.15	-7529.85	5666.43	1648790.47	14306824.01	39°23'52.556"N	80°58'13.290"W	9423.75	143.037	1.92	0.20	1.91	
15916.00	88.620	162.330	6325.96	9098.10	-7619.95	5696.45	1648820.48	14306733.94	39°23'51.666"N	80°58'12.908"W	9513.84	143.219	1.60	-0.09	1.60	
16010.00	88.580	163.880	6328.26	9191.95	-7709.86	5723.76	1648847.78	14306644.07	39°23'50.777"N	80°58'12.561"W	9602.26	143.410	1.65	-0.04	1.65	
16105.00	88.620	164.880	6330.58	9286.67	-7801.33	5749.33	1648873.34	14306552.64	39°23'49.873"N	80°58'12.236"W	9691.00	143.611	1.05	0.04	1.05	
16200.00	88.550	164.120	6332.92	9381.37	-7892.84	5774.71	1648898.71	14306461.16	39°23'48.968"N	80°58'11.913"W	9779.79	143.809	0.80	-0.07	-0.80	
16294.00	88.580	161.070	6335.28	9475.25	-7982.50	5802.82	1648926.80	14306371.54	39°23'48.082"N	80°58'11.555"W	9868.79	143.985	3.24	0.03	-3.24	
16389.00	88.490	159.710	6337.71	9570.22	-8071.96	5834.69	1648958.66	14306282.12	39°23'47.198"N	80°58'11.149"W	9959.93	144.139	1.43	-0.09	-1.43	
16483.00	88.460	160.060	6340.21	9664.18	-8160.19	5867.01	1648990.97	14306193.92	39°23'46.326"N	80°58'10.738"W	10050.40	144.285	0.37	-0.03	0.37	
16578.00	88.550	160.000	6342.69	9759.15	-8249.45	5899.44	1649023.39	14306104.69	39°23'45.443"N	80°58'10.325"W	10141.84	144.430	0.11	0.09	-0.06	
16672.00	88.890	160.050	6344.79	9853.13	-8337.77	5931.54	1649055.48	14306016.41	39°23'44.570"N	80°58'09.917"W	10232.38	144.572	0.37	0.36	0.05	
16767.00	89.200	159.590	6346.37	9948.11	-8426.91	5964.36	1649088.28	14305927.30	39°23'43.689"N	80°58'09.499"W	10324.07	144.710	0.64	0.33	-0.55	
16861.00	89.230	159.070	6347.66	10042.09	-8514.84	5997.58	1649121.49	14305839.42	39°23'42.820"N	80°58'09.076"W	10415.06	144.840	0.49	0.03	-0.49	
16956.00	89.170	157.980	6348.98	10137.04	-8603.23	6032.36	1649156.25	14305751.06	39°23'41.946"N	80°58'08.634"W	10507.37	144.963	1.15	-0.06	-1.15	
17050.00	89.140	157.170	6350.37	10230.93	-8690.11	6068.21	1649192.09	14305664.21	39°23'41.088"N	80°58'08.178"W	10599.11	145.074	0.86	-0.03	-0.86	
17145.00	89.200	156.360	6351.75	10325.74	-8777.40	6105.68	1649229.55	14305576.96	39°23'40.225"N	80°58'07.701"W	10692.15	145.177	0.85	0.06	-0.85	
17240.00	89.200	156.360	6353.07	10420.50	-8864.33	6143.97	1649267.82	14305490.06	39°23'39.365"N	80°58'07.213"W	10785.39	145.274	0.27	0.00	-0.27	
17334.00	89.200	157.580	6354.39	10514.33	-8950.74	6180.94	1649304.77	14305403.68	39°23'38.511"N	80°58'06.743"W	10877.49	145.373	1.57	0.00	1.57	
17428.00	89.110	160.500	6355.77	10608.29	-9038.51	6214.55	1649338.37	14305315.96	39°23'37.644"N	80°58'06.315"W	10968.83	145.489	3.11	-0.10	3.11	
17523.00	89.540	164.120	6356.89	10703.20	-9126.99	6243.41	1649371.22	14305225.51	39°23'36.749"N	80°58'05.948"W	11059.78	145.631	3.84	0.45	3.81	
17617.00	89.880	165.650	6357.37	10796.89	-9219.74	6267.92	1649391.72	14305134.80	39°23'35.852"N	80°58'05.636"W	11148.56	145.791	1.67	0.36	1.63	
17712.00	89.850	163.630	6357.59	10891.60	-9311.34	6293.09	1649416.88	14305043.24	39°23'34.947"N	80°58'05.316"W	11238.50	145.947	2.13	-0.03	-2.13	



Actual Wellpath Report

Grounds Unit 3H AWP Proj: 17988'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #01
Area	Tyler County, WV	Well	Grounds Unit 3H
Field	Tyler	Wellbore	Grounds Unit 3H AWB
Facility	Correll Pad		

WELLPATH DATA (214 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 (°/100ft)	Comments
17806.00	89.750	160.580	6357.92	10985.54	-9400.78	6321.97	1649445.74	14304953.83	39°23'34.063"N	80°58'04.949"W	11328.81	146.079	3.25	-0.11	-3.24	
17901.00	89.750	157.180	6358.33	11080.50	-9489.38	6356.19	1649479.96	14304865.26	39°23'33.187"N	80°58'04.513"W	11421.45	146.185	3.58	0.00	-3.58	
17963.00	89.820	154.960	6358.57	11142.33	-9548.05	6381.34	1649505.09	14304808.62	39°23'32.627"N	80°58'04.193"W	11482.53	146.238	3.58	0.11	-3.58	
17988.00	89.820	154.960	6358.65	11167.22	-9568.70	6391.92	1649515.67	14304785.98	39°23'32.403"N	80°58'04.058"W	11507.24	146.257	0.00	0.00	0.00	Projected MD at TD: 17988'

HOLE & CASING SECTIONS - Ref Wellbore: Grounds Unit 3H AWB Ref Wellpath: Grounds Unit 3H AWP Proj: 17988'

String/Diameter	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start N/S (ft)	End N/S (ft)	Start E/W (ft)	End E/W (ft)
17.5in Open Hole	30.00	633.00	603.00	30.00	633.00	0.00	-1.07	0.00	1.36
13.375in Casing Surface	30.00	633.00	603.00	30.00	633.00	0.00	-1.07	0.00	1.36
12.25in Open Hole	30.00	2694.00	2664.00	30.00	2520.35	0.00	286.74	0.00	682.39
9.625in Casing Intermediate	30.00	2694.00	2664.00	30.00	2520.35	0.00	286.74	0.00	682.39
8.75in Open Hole	2694.00	6130.00	3436.00	2520.35	5502.62	286.74	942.93	682.39	2250.20
8.5in Open Hole	6130.00	17988.00	11858.00	5502.62	6358.65	942.93	-9568.70	2250.20	6391.92
5.5in Casing Production	30.00	17988.00	17958.00	30.00	6358.65	0.00	-9568.70	0.00	6391.92



Actual Wellpath Report

Grounds Unit 3H AWP Proj: 17988'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #01
Area	Tyler County, WV	Well	Grounds Unit 3H
Field	Tyler	Wellbore	Grounds Unit 3H AWB
Facility	Gorrell Pad		

TARGETS

Name	TVD (ft)	North (ft)	East (ft)	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Grounds Unit 3H - POE - Rev-2	6235.00	572.84	2728.32	1645853.54	14314923.44	39°25'12.647"N	80°58'50.694"W	point
Grounds Unit 3H - BHL - Rev-4	6273.00	-9579.74	6378.92	1649502.67	14304774.94	39°23'32.294"N	80°58'04.224"W	point
Grounds Unit 3H - LP - Rev-2	6273.00	356.23	2806.21	1645931.40	14314706.92	39°25'10.506"N	80°58'49.703"W	point

WELLPATH COMPOSITION - Ref Wellbore: Grounds Unit 3H AWB Ref Wellpath: Grounds Unit 3H AWP Proj: 17988'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	607.00	Gyrodata standard - Drop gyro or Multi-shot	01 Gyrodata MS Gyro <17-1/2">(100'-607')	Grounds Unit 3H AWB
607.00	2626.00	BHI NavITrak (Axial)	02 APS EM <12-1/4">(607')(724'-2626')	Grounds Unit 3H AWB
2626.00	6067.00	BHI NavITrak (Axial)	03 BHI NavITrak <8-3/4">(2626')(2700'-6067')	Grounds Unit 3H AWB
6067.00	17963.00	BHI AutoTrak Curve (Short)	04 BH AT Curve <8-1/2">(6067')(6096'-17963')	Grounds Unit 3H AWB
17963.00	17988.00	Blind Drilling (std)	Projection to bit	Grounds Unit 3H AWB



Actual Wellpath Report

Grounds Unit 3H AWP Proj: 17988'
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REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #01
ANTERO RESOURCES CORPORATION	Well	Grounds Unit 3H
Tyler County, WV	Wellbore	Grounds Unit 3H AWB
Tyler		
Gorrell Pad		

COMMENTS

Wellpath general comments
 API: 47-095-02592-0000
 BHI Job #: 109806380
 Rig: H&P 519
 Duration: 05/16/2019-05/25/2019
 Gyrodatta MS Gyro <17-1/2">(100'-607')
 APS EM <12-1/4">(607')(724'-2626')
 BHI NaviTrak <8-3/4">(2626')(2700'-6067')
 BH AT Curve <8-1/2">(6067')(6096'-17963')
 Middlesex: 6947' MD
 Burkett: 7144' MD
 Tully: 7210' MD
 Marcellus POE: 7234' MD
 Projected MD at TD: 17988'