ANTERO RESOURCES CORPORATION

Location: Tyler County, WV
Field: Tyler
Facility: Margery Pad

Slot: Slot #10
Well: National Unit 2H
Wellbore: National Unit 2H PWB

Plot reference wellpath is National Unit 2H PWP Rev-B.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 317 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 317 (RKB)	Scale: True distance
H&P 317 (RKB) to Mean Sea Level: 1066.5 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot #10): -1041 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: adracyar on 2021-11-29, Database: WA_MPI_EASTERNUS_Deh

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Margery Pad			1688470.750	14350316.150	39°31'2.1450"N	80°49'46.5880"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot #10	116.57	153.23	1688623.920	14350432.670	39°31'3.2942"N	80°49'44.6300"W
Comment	National Unit 2H					

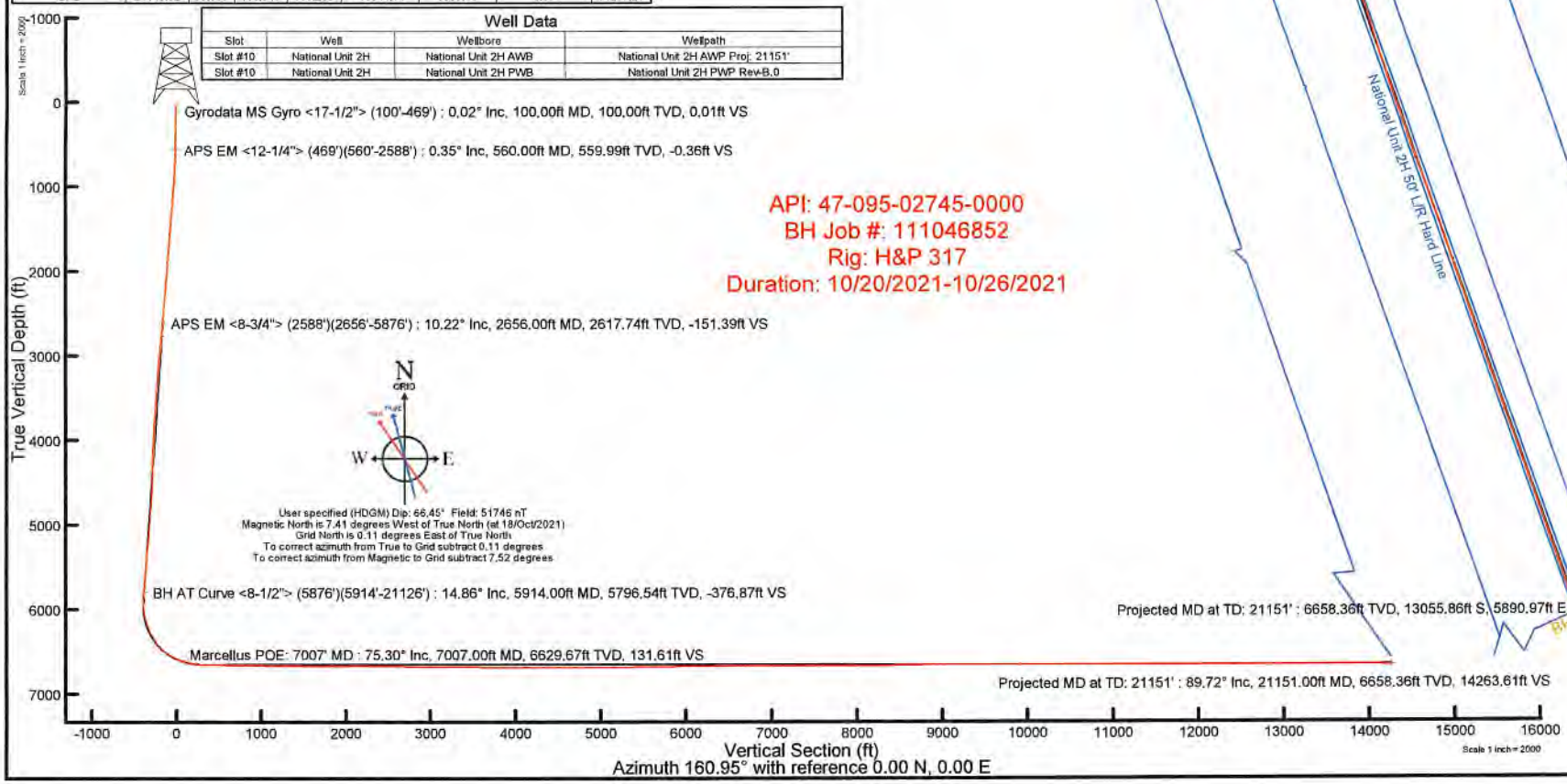
H&P 317 (RKB) to Ground level (At Slot: Slot #10)	25.5ft
Mean Sea Level to Ground level (At Slot: Slot #10)	-1041ft
H&P 317 (RKB) to Mean Sea Level	1066.5ft

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	2588.00	10.710	44.690	2550.88	248.94	274.56	0.37	-145.70
Proj. to Bottom	2651.00	10.710	44.690	2612.78	257.27	282.80	0.00	-150.88
Drill Out	2731.00	10.710	44.690	2691.38	267.84	293.25	0.00	-157.45
End of 3D Arc	2839.44	12.269	52.282	2797.65	282.05	309.45	2.00	-165.60
Curve KOP	6039.45	12.269	52.282	5924.58	698.06	847.36	0.00	-383.25
POE	6998.52	74.617	149.653	6627.00	299.61	1219.07	8.00	114.69
Landing Pt.	7188.31	90.000	149.653	6652.00	137.73	1313.84	8.00	298.64
On AZI	7564.80	90.000	160.948	6652.00	-203.76	1470.90	3.00	672.69
BHL	21149.32	90.000	160.948	6652.00	-13044.14	5905.30	0.00	14257.21

Well Data

Slot	Well	Wellbore	Wellpath
Slot #10	National Unit 2H	National Unit 2H AWB	National Unit 2H AWP Proj: 21151'
Slot #10	National Unit 2H	National Unit 2H PWB	National Unit 2H PWP Rev-B.0



API: 47-095-02745-0000
BH Job #: 111046852
Rig: H&P 317
Duration: 10/20/2021-10/26/2021

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	**ANTERO RESOURCES CORPORATION**	Well	**National Unit 2H**
Field	**Tyler**	API	**47-095-02745-0000**
Facility	**Margery Pad**	Wellbore	**National Unit 2H AWB**
Slot	**Slot #10**		

REPORT SETUP INFORMATION			
Projection System	**NAD27 / UTM Zone 17 North, US feet**	Software System	**WellArchitect® 6.0**
North Reference	**Grid**	User	**Edsaryar**
Scale	**0.999603**	Report Generated	**29/Nov/2021 at 12:51**
Convergence at slot	**0.11° East**	Database	**WA_MPL_EASTERNUS_Defn**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	116.57	153.23	**1688623.92**	**14350432.67**	39°31'3.2942"N	80°49'44.6300"W
Facility Reference Pt			**1688470.75**	**14350316.15**	39°31'2.1450"N	80°49'46.5880"W
Field Reference Pt			**0.00**	**0.00**	0°00'0.0000"	85°29'19.3013"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	H&P 317 (RKB) to Facility Vertical Datum	**1066.50ft**
Horizontal Reference Pt	**Slot**	H&P 317 (RKB) to Mean Sea Level	**1066.50ft**
Vertical Reference Pt	**H&P 317 (RKB)**	H&P 317 (RKB) to Ground Level at Slot (Slot #10)	**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	**160.95°**

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	National Unit 2H
Field	Tyler	API	47-095-02745-0000
Facility	Margery Pad	Wellbore	National Unit 2H AWB
Slot	Slot #10		

WELLPATH DATA (236 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	157.500	0.00	0.00	0.00	0.00	1688623.92	14350432.67	39°31'3.2942"N	80°49'44.6300"W	0.00	0.000	0.00	0.00	0.00	
25.50	0.000	157.500	25.50	0.00	0.00	0.00	1688623.92	14350432.67	39°31'3.2942"N	80°49'44.6300"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.020	157.500	100.00	0.01	-0.01	0.00	1688623.92	14350432.66	39°31'3.2941"N	80°49'44.6299"W	0.01	157.500	0.03	0.03	0.00	Gyrodata MS Gyro <17-1/2"> (100'-469')
200.00	0.040	328.030	200.00	0.00	0.00	-0.01	1688623.91	14350432.67	39°31'3.2943"N	80°49'44.6301"W	0.01	282.187	0.06	0.02	170.53	
300.00	0.060	263.250	300.00	-0.05	0.02	-0.08	1688623.84	14350432.69	39°31'3.2945"N	80°49'44.6310"W	0.08	287.875	0.06	0.02	-64.78	
400.00	0.320	244.980	400.00	-0.03	-0.10	-0.38	1688623.54	14350432.57	39°31'3.2933"N	80°49'44.6349"W	0.40	255.438	0.26	0.26	-18.27	
469.00	0.760	255.850	469.00	-0.05	-0.29	-1.00	1688622.92	14350432.38	39°31'3.2914"N	80°49'44.6428"W	1.04	253.696	0.65	0.64	15.75	
560.00	0.350	317.450	559.99	-0.36	-0.24	-1.77	1688622.15	14350432.43	39°31'3.2919"N	80°49'44.6526"W	1.79	262.439	0.73	-0.45	67.69	APS EM <12-1/4"> (469')(560'-2588')
688.00	3.580	47.380	687.91	-2.31	2.76	0.90	1688624.82	14350435.43	39°31'3.3215"N	80°49'44.6184"W	2.90	18.126	2.81	2.52	70.26	
779.00	6.730	50.430	778.53	-5.32	8.08	7.11	1688631.02	14350440.75	39°31'3.3740"N	80°49'44.5391"W	10.76	41.325	3.47	3.46	3.35	
869.00	9.050	48.870	867.67	-9.83	16.10	16.50	1688640.42	14350448.76	39°31'3.4530"N	80°49'44.4190"W	23.05	45.714	2.59	2.58	-1.73	
958.00	10.230	46.140	955.41	-15.78	26.18	27.48	1688651.38	14350458.84	39°31'3.5525"N	80°49'44.2788"W	37.95	46.384	1.42	1.33	-3.07	
1048.00	11.590	46.180	1043.78	-22.92	37.98	39.76	1688663.67	14350470.63	39°31'3.6688"N	80°49'44.1217"W	54.98	46.315	1.51	1.51	0.04	
1143.00	13.140	50.960	1136.58	-30.61	51.39	55.04	1688678.93	14350484.04	39°31'3.8011"N	80°49'43.9265"W	75.30	46.964	1.95	1.63	5.03	
1238.00	13.180	51.350	1229.09	-37.93	64.95	71.88	1688695.77	14350497.60	39°31'3.9348"N	80°49'43.7112"W	96.88	47.899	0.10	0.04	0.41	
1332.00	12.740	48.810	1320.69	-45.44	78.47	88.05	1688711.93	14350511.11	39°31'4.0681"N	80°49'43.5046"W	117.94	48.292	0.77	-0.47	-2.70	
1427.00	12.260	48.390	1413.44	-53.25	92.07	103.47	1688727.35	14350524.70	39°31'4.2022"N	80°49'43.3074"W	138.50	48.338	0.51	-0.51	-0.44	
1521.00	12.110	47.730	1505.32	-60.97	105.33	118.23	1688742.11	14350537.96	39°31'4.3330"N	80°49'43.1188"W	158.34	48.304	0.22	-0.16	-0.70	
1615.00	11.850	47.300	1597.27	-68.73	118.51	132.62	1688756.49	14350551.13	39°31'4.4630"N	80°49'42.9349"W	177.85	48.217	0.29	-0.28	-0.46	
1710.00	11.720	50.010	1690.27	-76.09	131.32	147.18	1688771.04	14350563.94	39°31'4.5894"N	80°49'42.7488"W	197.25	48.260	0.60	-0.14	2.85	
1804.00	12.830	51.000	1782.12	-83.06	144.02	162.61	1688786.46	14350576.64	39°31'4.7146"N	80°49'42.5516"W	217.22	48.468	1.20	1.18	1.05	
1899.00	12.160	49.470	1874.87	-90.33	157.17	178.41	1688802.26	14350589.77	39°31'4.8442"N	80°49'42.3497"W	237.76	48.623	0.79	-0.71	-1.61	
1993.00	11.840	48.510	1966.82	-97.63	169.99	193.16	1688817.00	14350602.59	39°31'4.9706"N	80°49'42.1612"W	257.31	48.651	0.40	-0.34	-1.02	
2088.00	11.530	48.160	2059.85	-105.03	182.78	207.53	1688831.37	14350615.37	39°31'5.0968"N	80°49'41.9774"W	276.55	48.629	0.33	-0.33	-0.37	
2182.00	11.310	48.410	2151.99	-112.20	195.16	221.43	1688845.26	14350627.75	39°31'5.2189"N	80°49'41.7999"W	295.16	48.607	0.24	-0.23	0.27	
2277.00	10.950	44.280	2245.20	-119.82	207.81	234.69	1688858.52	14350640.39	39°31'5.3436"N	80°49'41.6303"W	313.47	48.477	0.92	-0.38	-4.35	
2372.00	10.210	41.230	2338.59	-128.05	220.60	246.54	1688870.36	14350653.18	39°31'5.4698"N	80°49'41.4788"W	330.83	48.179	0.98	-0.78	-3.21	
2466.00	10.740	46.420	2431.02	-135.81	232.90	258.38	1688882.20	14350665.48	39°31'5.5912"N	80°49'41.3274"W	347.85	47.969	1.15	0.56	5.52	
2561.00	10.800	44.470	2524.35	-143.46	245.36	271.03	1688894.84	14350677.93	39°31'5.7141"N	80°49'41.1658"W	365.59	47.846	0.39	0.06	-2.05	
2588.00	10.710	44.690	2550.88	-145.70	248.94	274.56	1688898.37	14350681.52	39°31'5.7495"N	80°49'41.1205"W	370.62	47.802	0.37	-0.33	0.81	

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department of
Environmental Protection

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	National Unit 2H
Field	Tyler	API	47-095-02745-0000
Facility	Margery Pad	Wellbore	National Unit 2H AWB
Slot	Slot #10		

WELLPATH DATA (236 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
2656.00	10.220	42.220	2617.74	-151.39	257.90	283.06	1688906.87	14350690.47	39°31'5.8379"N	80°49'41.0119"W	382.93	47.662	0.98	-0.72	-3.63	APS EM <8-3/4"> (2588')(2656'-5876')
2750.00	12.700	45.340	2709.86	-159.87	271.34	296.02	1688919.82	14350703.91	39°31'5.9705"N	80°49'40.8463"W	401.56	47.490	2.72	2.64	3.32	
2845.00	13.760	43.380	2802.34	-169.61	286.90	311.20	1688935.00	14350719.45	39°31'6.1239"N	80°49'40.6521"W	423.27	47.327	1.21	1.12	-2.06	
2941.00	13.800	53.980	2895.59	-178.24	301.93	328.31	1688952.10	14350734.48	39°31'6.2721"N	80°49'40.4334"W	446.04	47.397	2.63	0.04	11.04	
3036.00	13.870	51.510	2987.84	-185.33	315.68	346.39	1688970.17	14350748.22	39°31'6.4077"N	80°49'40.2024"W	468.65	47.655	0.63	0.07	-2.60	
3130.00	14.850	47.170	3078.90	-193.94	330.88	364.04	1688987.81	14350763.42	39°31'6.5576"N	80°49'39.9768"W	491.94	47.732	1.55	1.04	-4.62	
3225.00	13.070	48.900	3171.09	-202.88	346.22	381.06	1689004.83	14350778.75	39°31'6.7089"N	80°49'39.7592"W	514.86	47.743	1.92	-1.87	1.82	
3320.00	12.440	45.200	3263.75	-211.36	360.49	396.42	1689020.18	14350793.02	39°31'6.8496"N	80°49'39.5629"W	535.82	47.717	1.09	-0.66	-3.89	
3415.00	12.740	53.570	3356.47	-218.94	373.92	412.11	1689035.86	14350806.45	39°31'6.9821"N	80°49'39.3624"W	556.46	47.781	1.94	0.32	8.81	
3509.00	12.990	50.950	3448.11	-225.65	386.74	428.65	1689052.40	14350819.25	39°31'7.1084"N	80°49'39.1510"W	577.33	47.943	0.68	0.27	-2.79	
3604.00	11.920	55.630	3540.88	-231.89	399.00	445.04	1689068.79	14350831.51	39°31'7.2293"N	80°49'38.9415"W	597.72	48.122	1.55	-1.13	4.93	
3699.00	12.180	51.280	3633.79	-237.86	410.81	460.96	1689084.70	14350843.32	39°31'7.3457"N	80°49'38.7381"W	617.45	48.292	0.99	0.27	-4.58	
3794.00	12.210	48.670	3726.65	-245.04	423.71	476.32	1689100.05	14350856.21	39°31'7.4729"N	80°49'38.5418"W	637.51	48.345	0.58	0.03	-2.75	
3888.00	12.210	60.390	3818.53	-250.63	435.19	492.43	1689116.16	14350867.69	39°31'7.5861"N	80°49'38.3359"W	657.18	48.531	2.63	0.00	12.47	
3983.00	12.450	59.830	3911.34	-254.45	445.30	510.02	1689133.74	14350877.79	39°31'7.6857"N	80°49'38.1113"W	677.06	48.876	0.28	0.25	-0.59	
4078.00	12.190	55.510	4004.16	-259.09	456.13	527.14	1689150.85	14350888.61	39°31'7.7923"N	80°49'37.8926"W	697.09	49.131	1.01	-0.27	-4.55	
4172.00	11.890	50.990	4096.09	-265.04	467.84	542.84	1689166.55	14350900.33	39°31'7.9078"N	80°49'37.6919"W	716.63	49.244	1.05	-0.32	-4.81	
4267.00	9.560	56.560	4189.43	-270.34	478.35	557.03	1689180.73	14350910.83	39°31'8.0114"N	80°49'37.5106"W	734.24	49.346	2.68	-2.45	5.86	
4362.00	11.870	66.480	4282.77	-273.06	486.60	572.58	1689196.27	14350919.07	39°31'8.0926"N	80°49'37.3120"W	751.42	49.641	3.10	2.43	10.44	
4456.00	11.300	63.670	4374.86	-274.98	494.54	589.70	1689213.38	14350927.01	39°31'8.1708"N	80°49'37.0934"W	769.62	50.016	0.85	-0.61	-2.99	
4551.00	14.510	65.030	4467.45	-277.39	503.70	608.83	1689232.51	14350936.17	39°31'8.2609"N	80°49'36.8490"W	790.18	50.399	3.39	3.38	1.43	
4646.00	13.850	60.780	4559.55	-280.63	514.27	629.55	1689253.22	14350946.74	39°31'8.3651"N	80°49'36.5844"W	812.90	50.755	1.30	-0.69	-4.47	
4740.00	13.800	57.300	4650.83	-285.26	525.82	648.80	1689272.46	14350958.28	39°31'8.4788"N	80°49'36.3384"W	835.12	50.977	0.89	-0.05	-3.70	
4835.00	13.320	52.230	4743.19	-291.45	538.65	666.99	1689290.64	14350971.10	39°31'8.6052"N	80°49'36.1061"W	857.33	51.076	1.35	-0.51	-5.34	
4930.00	12.550	46.510	4835.78	-299.23	552.45	683.13	1689306.77	14350984.90	39°31'8.7414"N	80°49'35.8998"W	878.56	51.037	1.57	-0.81	-6.02	
5024.00	11.180	50.050	4927.77	-306.71	565.33	697.52	1689321.16	14350997.78	39°31'8.8684"N	80°49'35.7158"W	897.85	50.976	1.65	-1.46	3.77	
5119.00	10.580	46.690	5021.06	-313.58	577.23	710.93	1689334.57	14351009.67	39°31'8.9857"N	80°49'35.5444"W	915.76	50.926	0.92	-0.63	-3.54	
5214.00	13.510	51.930	5113.96	-320.78	590.06	726.02	1689349.65	14351022.49	39°31'9.1122"N	80°49'35.3516"W	935.56	50.898	3.29	3.08	5.52	
5308.00	15.020	47.920	5205.07	-329.12	604.99	743.70	1689367.32	14351037.42	39°31'9.2595"N	80°49'35.1255"W	958.70	50.872	1.92	1.61	-4.27	
5403.00	13.900	49.310	5297.06	-338.14	620.68	761.49	1689385.11	14351053.10	39°31'9.4142"N	80°49'34.8982"W	982.40	50.817	1.23	-1.18	1.46	

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department of
Environmental Protection

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

Antero Resources

Baker Hughes

REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	National Unit 2H
Field	Tyler	API	47-095-02745-0000
Facility	Margery Pad	Wellbore	National Unit 2H AWB
Slot	Slot #10		

WELLPATH DATA (236 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
5498.00	13.040	50.380	5389.44	-346.12	634.96	778.40	1689402.01	14351067.37	39°31'9.5550"N	80°49'34.6821"W	1004.53	50.795	0.94	-0.91	1.13	
5593.00	10.910	55.080	5482.37	-352.34	646.94	794.03	1689417.63	14351079.35	39°31'9.6731"N	80°49'34.4823"W	1024.21	50.828	2.46	-2.24	4.95	
5687.00	9.790	53.370	5574.84	-357.19	656.80	807.74	1689431.33	14351089.21	39°31'9.7703"N	80°49'34.3072"W	1041.07	50.884	1.24	-1.19	-1.82	
5781.00	11.840	46.810	5667.17	-363.55	668.17	821.18	1689444.77	14351100.57	39°31'9.8824"N	80°49'34.1353"W	1058.67	50.866	2.54	2.18	-6.98	
5876.00	14.070	44.840	5759.75	-372.62	683.03	836.43	1689460.02	14351115.43	39°31'10.0290"N	80°49'33.9403"W	1079.88	50.765	2.39	2.35	-2.07	
5914.00	14.860	43.880	5796.54	-376.87	689.82	843.07	1689466.65	14351122.21	39°31'10.0960"N	80°49'33.8555"W	1089.32	50.709	2.17	2.08	-2.53	BH AT Curve <8-1/2"> (5876')(5914'-21126')
5980.00	9.710	50.740	5861.01	-382.65	699.45	853.25	1689476.83	14351131.84	39°31'10.1909"N	80°49'33.7253"W	1103.30	50.657	8.10	-7.80	10.39	
6075.00	9.600	84.230	5954.74	-383.60	705.32	867.35	1689490.92	14351137.71	39°31'10.2487"N	80°49'33.5453"W	1117.93	50.882	5.83	-0.12	35.25	
6170.00	13.620	112.080	6047.85	-374.41	701.91	885.61	1689509.18	14351134.30	39°31'10.2146"N	80°49'33.3123"W	1130.04	51.601	7.14	4.23	29.32	
6264.00	18.500	124.610	6138.18	-355.10	689.26	908.16	1689531.72	14351121.66	39°31'10.0892"N	80°49'33.0249"W	1140.11	52.803	6.34	5.19	13.33	
6359.00	24.630	135.810	6226.52	-324.99	666.48	934.40	1689557.95	14351098.88	39°31'9.8635"N	80°49'32.6906"W	1147.74	54.501	7.75	6.45	11.79	
6453.00	31.890	136.050	6309.26	-284.69	634.51	965.33	1689588.86	14351066.93	39°31'9.5470"N	80°49'32.2968"W	1155.19	56.683	7.72	7.72	0.26	
6490.00†	34.194	137.339	6340.28	-266.29	619.83	979.16	1689602.69	14351052.25	39°31'9.4016"N	80°49'32.1207"W	1158.85	57.665	6.51	6.23	3.49	Sycamore: 6490' MD
6548.00	37.830	139.080	6387.19	-234.84	594.40	1001.86	1689625.38	14351026.83	39°31'9.1498"N	80°49'31.8316"W	1164.92	59.320	6.51	6.27	3.00	
6620.00†	44.214	144.468	6441.50	-190.22	557.23	1030.95	1689654.46	14350989.68	39°31'8.7820"N	80°49'31.4613"W	1171.91	61.609	10.13	8.87	7.48	Middlesex: 6620' MD
6643.00	46.300	145.930	6457.69	-174.50	543.82	1040.27	1689663.78	14350976.27	39°31'8.6492"N	80°49'31.3427"W	1173.84	62.401	10.13	9.07	6.36	
6737.00	55.090	146.790	6517.17	-104.17	483.30	1080.50	1689703.99	14350915.78	39°31'8.0504"N	80°49'30.8309"W	1183.66	65.901	9.38	9.35	0.91	
6783.00†	57.263	145.253	6542.78	-67.25	451.62	1101.86	1689725.34	14350884.11	39°31'7.7368"N	80°49'30.5592"W	1190.82	67.713	5.48	4.72	-3.34	Burkett: 6783' MD
6784.00	57.310	145.220	6543.32	-66.44	450.93	1102.34	1689725.82	14350883.42	39°31'7.7300"N	80°49'30.5530"W	1191.00	67.752	5.48	4.74	-3.26	
6832.00	60.970	142.860	6567.94	-27.03	417.60	1126.54	1689750.01	14350850.10	39°31'7.4001"N	80°49'30.2450"W	1201.45	69.661	8.71	7.63	-4.92	
6834.00†	61.183	143.034	6568.91	-25.37	416.20	1127.60	1689751.07	14350848.70	39°31'7.3863"N	80°49'30.2316"W	1201.96	69.741	13.12	10.67	8.71	Tully: 6834' MD
6879.00	66.040	146.780	6588.91	13.36	383.22	1150.74	1689774.20	14350815.73	39°31'7.0598"N	80°49'29.9372"W	1212.87	71.581	13.12	10.79	8.32	
6927.00	70.270	148.650	6606.76	56.72	345.56	1174.52	1689797.97	14350778.09	39°31'6.6872"N	80°49'29.6347"W	1224.30	73.605	9.53	8.81	3.90	
6974.00	74.360	148.740	6621.04	100.47	307.31	1197.78	1689821.22	14350739.85	39°31'6.3087"N	80°49'29.3388"W	1236.57	75.610	8.70	8.70	0.19	
7007.00†	75.302	148.974	6629.67	131.61	280.05	1214.25	1689837.69	14350712.60	39°31'6.0389"N	80°49'29.1293"W	1246.13	77.013	2.94	2.85	0.71	Marcellus POE: 7007' MD
7022.00	75.730	149.080	6633.42	145.82	267.59	1221.73	1689845.16	14350700.16	39°31'5.9157"N	80°49'29.0342"W	1250.69	77.646	2.94	2.85	0.71	
7117.00	83.430	150.290	6650.59	237.39	186.99	1268.84	1689892.25	14350619.59	39°31'5.1182"N	80°49'28.4350"W	1282.54	81.617	8.20	8.11	1.27	
7211.00	90.310	150.150	6655.72	329.55	105.58	1315.43	1689938.82	14350538.20	39°31'4.3127"N	80°49'27.8426"W	1319.66	85.411	7.32	7.32	-0.15	
7306.00	89.720	150.670	6655.70	422.95	22.97	1362.34	1689985.71	14350455.63	39°31'3.4953"N	80°49'27.2461"W	1362.53	89.034	0.83	-0.62	0.55	
7401.00	89.170	153.430	6656.62	516.79	-60.94	1406.86	1690030.22	14350371.75	39°31'2.6652"N	80°49'26.6801"W	1408.18	92.480	2.96	-0.58	2.91	

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department of
Environmental Protection

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	National Unit 2H
Field	Tyler	API	47-095-02745-0000
Facility	Margery Pad	Wellbore	National Unit 2H AWB
Slot	Slot #10		

WELLPATH DATA (236 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
7496.00	89.230	157.520	6657.95	611.33	-147.34	1446.28	1690069.62	14350285.39	39°31'1.8105"N	80°49'26.1792"W	1453.77	95.817	4.31	0.06	4.31	
7591.00	89.230	159.980	6659.22	706.24	-235.87	1480.71	1690104.03	14350196.90	39°31'0.9349"N	80°49'25.7422"W	1499.37	99.051	2.59	0.00	2.59	
7684.00	89.200	159.660	6660.50	799.22	-323.15	1512.79	1690136.10	14350109.65	39°31'0.0716"N	80°49'25.3350"W	1546.91	102.058	0.35	-0.03	-0.34	
7779.00	89.290	159.740	6661.75	894.18	-412.24	1545.74	1690169.04	14350020.59	39°30'59.1905"N	80°49'24.9168"W	1599.77	104.933	0.13	0.09	0.08	
7873.00	88.950	160.270	6663.19	988.16	-500.57	1577.88	1690201.17	14349932.30	39°30'58.3169"N	80°49'24.5089"W	1655.38	107.601	0.67	-0.36	0.56	
7968.00	89.050	160.800	6664.85	1083.14	-590.12	1609.53	1690232.81	14349842.78	39°30'57.4312"N	80°49'24.1073"W	1714.30	110.135	0.57	0.11	0.56	
8062.00	89.260	160.730	6666.24	1177.13	-678.86	1640.50	1690263.76	14349754.08	39°30'56.5535"N	80°49'23.7144"W	1775.41	112.481	0.24	0.22	-0.07	
8157.00	89.380	160.560	6667.36	1272.12	-768.49	1671.98	1690295.23	14349664.49	39°30'55.6671"N	80°49'23.3149"W	1840.13	114.685	0.22	0.13	-0.18	
8251.00	89.230	160.860	6668.50	1366.12	-857.21	1703.03	1690326.27	14349575.81	39°30'54.7897"N	80°49'22.9210"W	1906.60	116.718	0.36	-0.16	0.32	
8346.00	88.430	159.680	6670.44	1461.09	-946.61	1735.09	1690358.32	14349486.44	39°30'53.9055"N	80°49'22.5141"W	1976.51	118.615	1.50	-0.84	-1.24	
8441.00	90.030	162.040	6671.72	1556.07	-1036.34	1766.23	1690389.45	14349396.75	39°30'53.0180"N	80°49'22.1190"W	2047.82	120.402	3.00	1.68	2.48	
8535.00	89.450	159.990	6672.15	1650.06	-1125.22	1796.81	1690420.01	14349307.90	39°30'52.1390"N	80°49'21.7311"W	2120.06	122.056	2.27	-0.62	-2.18	
8630.00	90.950	161.770	6671.82	1745.06	-1214.97	1827.93	1690451.12	14349218.18	39°30'51.2513"N	80°49'21.3363"W	2194.87	123.611	2.45	1.58	1.87	
8725.00	89.940	159.210	6671.08	1840.04	-1304.51	1859.65	1690482.83	14349128.69	39°30'50.3658"N	80°49'20.9338"W	2271.57	125.049	2.90	-1.06	-2.69	
8820.00	89.750	159.560	6671.34	1935.00	-1393.42	1893.10	1690516.26	14349039.80	39°30'49.4864"N	80°49'20.5093"W	2350.63	126.355	0.42	-0.20	0.37	
8914.00	90.460	158.160	6671.16	2028.94	-1481.09	1927.00	1690550.15	14348952.17	39°30'48.6193"N	80°49'20.0789"W	2430.42	127.546	1.67	0.76	-1.49	
9009.00	91.170	158.370	6669.81	2123.82	-1569.33	1962.17	1690585.31	14348863.97	39°30'47.7465"N	80°49'19.6323"W	2512.55	128.653	0.78	0.75	0.22	
9104.00	88.710	160.020	6669.91	2218.77	-1658.13	1995.91	1690619.04	14348775.21	39°30'46.8682"N	80°49'19.2041"W	2594.81	129.718	3.12	-2.59	1.74	
9199.00	88.980	159.820	6671.83	2313.73	-1747.33	2028.52	1690651.63	14348686.04	39°30'45.9859"N	80°49'18.7903"W	2677.33	130.741	0.35	0.28	-0.21	
9294.00	88.950	160.530	6673.54	2408.71	-1836.69	2060.74	1690683.83	14348596.72	39°30'45.1022"N	80°49'18.3815"W	2760.44	131.710	0.75	-0.03	0.75	
9388.00	89.480	159.610	6674.83	2502.69	-1925.05	2092.78	1690715.86	14348508.39	39°30'44.2283"N	80°49'17.9750"W	2843.50	132.610	1.13	0.56	-0.98	
9483.00	89.290	158.100	6675.85	2597.62	-2013.64	2127.04	1690750.11	14348419.83	39°30'43.3520"N	80°49'17.5400"W	2929.00	133.431	1.60	-0.20	-1.59	
9577.00	88.650	161.250	6677.54	2691.57	-2101.76	2159.68	1690782.74	14348331.74	39°30'42.4804"N	80°49'17.1258"W	3013.58	134.221	3.42	-0.68	3.35	
9672.00	89.450	161.080	6679.11	2786.55	-2191.66	2190.35	1690813.39	14348241.88	39°30'41.5913"N	80°49'16.7368"W	3098.55	135.017	0.86	0.84	-0.18	
9766.00	89.570	161.410	6679.92	2880.55	-2280.67	2220.57	1690843.60	14348152.91	39°30'40.7110"N	80°49'16.3534"W	3183.14	135.765	0.37	0.13	0.35	
9861.00	89.600	161.500	6680.61	2975.54	-2370.73	2250.78	1690873.81	14348062.88	39°30'39.8203"N	80°49'15.9702"W	3269.01	136.487	0.10	0.03	0.09	
9956.00	90.950	160.840	6680.15	3070.54	-2460.65	2281.45	1690904.45	14347973.01	39°30'38.9311"N	80°49'15.5813"W	3355.56	137.164	1.58	1.42	-0.69	
10050.00	89.480	161.080	6679.80	3164.53	-2549.50	2312.11	1690935.11	14347884.19	39°30'38.0523"N	80°49'15.1923"W	3441.77	137.796	1.58	-1.56	0.26	
10145.00	89.820	160.990	6680.38	3259.53	-2639.34	2342.98	1690965.97	14347794.38	39°30'37.1638"N	80°49'14.8007"W	3529.26	138.404	0.37	0.36	-0.09	
10239.00	89.850	160.910	6680.65	3353.53	-2728.19	2373.66	1690996.64	14347705.57	39°30'36.2850"N	80°49'14.4115"W	3616.26	138.975	0.09	0.03	-0.09	

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department of
Environmental Protection

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	National Unit 2H
Field	Tyler	API	47-095-02745-0000
Facility	Margery Pad	Wellbore	National Unit 2H AWB
Slot	Slot #10		

WELLPATH DATA (236 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
10334.00	89.720	161.200	6681.01	3448.53	-2818.05	2404.51	1691027.47	14347615.75	39°30'35.3964"N	80°49'14.0203"W	3704.46	139.527	0.33	-0.14	0.31	
10428.00	88.120	159.380	6682.78	3542.50	-2906.52	2436.20	1691059.15	14347527.31	39°30'34.5213"N	80°49'13.6182"W	3792.48	140.031	2.58	-1.70	-1.94	
10523.00	88.310	161.400	6685.74	3637.44	-2995.96	2468.07	1691091.00	14347437.91	39°30'33.6367"N	80°49'13.2139"W	3881.64	140.518	2.13	0.20	2.13	
10617.00	89.970	160.170	6687.15	3731.43	-3084.71	2499.00	1691121.92	14347349.19	39°30'32.7590"N	80°49'12.8215"W	3969.94	140.988	2.20	1.77	-1.31	
10712.00	89.910	160.790	6687.25	3826.42	-3174.25	2530.74	1691153.65	14347259.69	39°30'31.8734"N	80°49'12.4188"W	4059.62	141.436	0.66	-0.06	0.65	
10806.00	89.600	160.210	6687.65	3920.42	-3262.85	2562.12	1691185.02	14347171.12	39°30'30.9971"N	80°49'12.0208"W	4148.57	141.860	0.70	-0.33	-0.62	
10901.00	90.250	161.560	6687.77	4015.42	-3352.61	2593.23	1691216.11	14347081.40	39°30'30.1093"N	80°49'11.6262"W	4238.50	142.278	1.58	0.68	1.42	
10995.00	90.310	160.850	6687.31	4109.41	-3441.60	2623.51	1691246.38	14346992.44	39°30'29.2293"N	80°49'11.2420"W	4327.52	142.682	0.76	0.06	-0.76	
11090.00	89.820	161.730	6687.21	4204.41	-3531.58	2653.99	1691276.85	14346902.50	39°30'28.3394"N	80°49'10.8556"W	4417.66	143.075	1.06	-0.52	0.93	
11185.00	90.060	162.270	6687.31	4299.39	-3621.93	2683.34	1691306.19	14346812.19	39°30'27.4458"N	80°49'10.4833"W	4507.63	143.467	0.62	0.25	0.57	
11280.00	89.690	161.480	6687.51	4394.38	-3712.21	2712.89	1691335.73	14346721.94	39°30'26.5529"N	80°49'10.1086"W	4597.86	143.841	0.92	-0.39	-0.83	
11375.00	89.450	160.120	6688.23	4489.38	-3801.92	2744.14	1691366.96	14346632.26	39°30'25.6657"N	80°49'9.7123"W	4688.81	144.179	1.45	-0.25	-1.43	
11470.00	89.970	159.580	6688.71	4584.36	-3891.11	2776.86	1691399.67	14346543.12	39°30'24.7836"N	80°49'9.2971"W	4780.34	144.487	0.79	0.55	-0.57	
11564.00	89.880	159.610	6688.83	4678.33	-3979.21	2809.63	1691432.43	14346455.05	39°30'23.9122"N	80°49'8.8812"W	4871.15	144.775	0.10	-0.10	0.03	
11659.00	89.970	160.160	6688.95	4773.31	-4068.41	2842.30	1691465.09	14346365.88	39°30'23.0299"N	80°49'8.4667"W	4962.93	145.061	0.59	0.09	0.58	
11753.00	90.920	162.890	6688.22	4867.30	-4157.56	2872.09	1691494.86	14346276.77	39°30'22.1483"N	80°49'8.0890"W	5053.14	145.363	3.07	1.01	2.90	
11847.00	90.090	164.480	6687.40	4961.18	-4247.77	2898.49	1691521.26	14346186.60	39°30'21.2562"N	80°49'7.7545"W	5142.45	145.692	1.91	-0.88	1.69	
11941.00	90.310	164.190	6687.07	5055.02	-4338.27	2923.87	1691546.63	14346096.13	39°30'20.3612"N	80°49'7.4330"W	5231.60	146.021	0.39	0.23	-0.31	
12036.00	90.090	164.130	6686.74	5149.87	-4429.67	2949.80	1691572.55	14346004.77	39°30'19.4574"N	80°49'7.1045"W	5321.96	146.340	0.24	-0.23	-0.06	
12130.00	90.460	164.230	6686.28	5243.72	-4520.10	2975.43	1691598.16	14345914.37	39°30'18.5631"N	80°49'6.7799"W	5411.52	146.644	0.41	0.39	0.11	
12225.00	90.980	163.400	6685.09	5338.59	-4611.33	3001.91	1691624.63	14345823.18	39°30'17.6609"N	80°49'6.4445"W	5502.35	146.936	1.03	0.55	-0.87	
12319.00	90.550	162.270	6683.84	5432.53	-4701.13	3029.65	1691652.36	14345733.41	39°30'16.7728"N	80°49'6.0929"W	5592.80	147.200	1.29	-0.46	-1.20	
12413.00	90.460	162.210	6683.01	5526.50	-4790.65	3058.32	1691681.02	14345643.93	39°30'15.8875"N	80°49'5.7294"W	5683.63	147.446	0.12	-0.10	-0.06	
12508.00	90.220	161.040	6682.44	5621.49	-4880.80	3088.26	1691710.95	14345553.82	39°30'14.9959"N	80°49'5.3497"W	5775.78	147.677	1.26	-0.25	-1.23	
12602.00	90.830	161.430	6681.58	5715.48	-4969.80	3118.50	1691741.18	14345464.85	39°30'14.1157"N	80°49'4.9663"W	5867.20	147.892	0.77	0.65	0.41	
12697.00	91.510	163.820	6679.64	5810.42	-5060.44	3146.86	1691769.53	14345374.25	39°30'13.2193"N	80°49'4.6068"W	5959.09	148.124	2.62	0.72	2.52	
12791.00	90.860	164.730	6677.70	5904.24	-5150.90	3172.33	1691794.99	14345283.82	39°30'12.3247"N	80°49'4.2842"W	6049.42	148.372	1.19	-0.69	0.97	
12886.00	91.110	162.160	6676.07	5999.12	-5241.94	3199.40	1691822.04	14345192.82	39°30'11.4244"N	80°49'3.9413"W	6141.18	148.602	2.72	0.26	-2.71	
12980.00	90.550	162.350	6674.70	6093.09	-5331.46	3228.04	1691850.67	14345103.34	39°30'10.5391"N	80°49'3.5781"W	6232.55	148.806	0.63	-0.60	0.20	
13075.00	90.950	161.970	6673.46	6188.06	-5421.89	3257.14	1691879.76	14345012.95	39°30'9.6448"N	80°49'3.2092"W	6325.02	149.005	0.58	0.42	-0.40	

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department of
Environmental Protection

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	National Unit 2H
Field	Tyler	API	47-095-02745-0000
Facility	Margery Pad	Wellbore	National Unit 2H AWB
Slot	Slot #10		

WELLPATH DATA (236 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
13169.00	90.650	160.210	6672.15	6282.05	-5510.80	3287.60	1691910.21	14344924.07	39°30'8.7655"N	80°49'2.8229"W	6416.95	149.181	1.90	-0.32	-1.87	
13264.00	91.290	160.210	6670.54	6377.02	-5600.18	3319.76	1691942.36	14344834.73	39°30'7.8815"N	80°49'2.4150"W	6510.21	149.341	0.67	0.67	0.00	
13358.00	90.340	160.520	6669.20	6471.01	-5688.70	3351.35	1691973.93	14344746.24	39°30'7.0059"N	80°49'2.0144"W	6602.49	149.497	1.06	-1.01	0.33	
13452.00	90.220	160.610	6668.74	6565.01	-5777.34	3382.62	1692005.19	14344657.63	39°30'6.1292"N	80°49'1.6177"W	6694.76	149.651	0.16	-0.13	0.10	
13547.00	89.880	159.880	6668.66	6660.00	-5866.75	3414.73	1692037.29	14344568.26	39°30'5.2449"N	80°49'1.2104"W	6788.16	149.799	0.85	-0.36	-0.77	
13641.00	90.860	160.600	6668.05	6753.99	-5955.21	3446.51	1692069.05	14344479.84	39°30'4.3700"N	80°49'0.8073"W	6880.62	149.940	1.29	1.04	0.77	
13736.00	90.250	160.780	6667.13	6848.98	-6044.86	3477.92	1692100.45	14344390.22	39°30'3.4833"N	80°49'0.4089"W	6973.97	150.086	0.67	-0.64	0.19	
13830.00	90.920	161.260	6666.17	6942.98	-6133.75	3508.49	1692131.01	14344301.37	39°30'2.6042"N	80°49'0.0212"W	7066.28	150.231	0.88	0.71	0.51	
13925.00	89.200	160.050	6666.07	7037.97	-6223.38	3539.96	1692162.47	14344211.78	39°30'1.7177"N	80°48'59.6221"W	7159.73	150.368	2.21	-1.81	-1.27	
14019.00	89.660	160.190	6667.01	7131.95	-6311.77	3571.92	1692194.42	14344123.42	39°30'0.8435"N	80°48'59.2166"W	7252.39	150.494	0.51	0.49	0.15	
14114.00	89.230	160.380	6667.93	7226.94	-6401.20	3603.97	1692226.45	14344034.03	39°29'59.9590"N	80°48'58.8102"W	7346.02	150.620	0.49	-0.45	0.20	
14208.00	89.910	160.250	6668.63	7320.93	-6489.70	3635.63	1692258.10	14343945.56	39°29'59.0836"N	80°48'58.4085"W	7438.69	150.742	0.74	0.72	-0.14	
14302.00	89.660	159.720	6668.99	7414.92	-6578.02	3667.81	1692290.26	14343857.27	39°29'58.2101"N	80°48'58.0004"W	7531.48	150.857	0.62	-0.27	-0.56	
14397.00	90.120	160.260	6669.17	7509.91	-6667.29	3700.31	1692322.76	14343768.04	39°29'57.3272"N	80°48'57.5881"W	7625.29	150.970	0.75	0.48	0.57	
14492.00	90.150	160.870	6668.95	7604.90	-6756.87	3731.92	1692354.35	14343678.49	39°29'56.4411"N	80°48'57.1872"W	7718.98	151.087	0.64	0.03	0.64	
14586.00	90.340	160.470	6668.54	7698.90	-6845.57	3763.04	1692385.45	14343589.83	39°29'55.5639"N	80°48'56.7926"W	7811.68	151.202	0.47	0.20	-0.43	
14681.00	90.150	160.380	6668.14	7793.90	-6935.08	3794.87	1692417.27	14343500.36	39°29'54.6786"N	80°48'56.3889"W	7905.47	151.313	0.22	-0.20	-0.09	
14775.00	89.970	160.570	6668.04	7887.89	-7023.68	3826.28	1692448.67	14343411.80	39°29'53.8023"N	80°48'55.9904"W	7998.28	151.420	0.28	-0.19	0.20	
14869.00	89.940	160.490	6668.11	7981.89	-7112.30	3857.61	1692479.99	14343323.21	39°29'52.9258"N	80°48'55.5931"W	8091.11	151.525	0.09	-0.03	-0.09	
14964.00	90.310	160.250	6667.91	8076.88	-7201.78	3889.53	1692511.89	14343233.77	39°29'52.0408"N	80°48'55.1883"W	8184.99	151.627	0.46	0.39	-0.25	
15058.00	90.580	160.030	6667.18	8170.87	-7290.19	3921.46	1692543.81	14343145.39	39°29'51.1664"N	80°48'54.7833"W	8277.96	151.724	0.37	0.29	-0.23	
15153.00	90.520	161.240	6666.26	8265.86	-7379.81	3952.96	1692575.30	14343055.81	39°29'50.2800"N	80°48'54.3838"W	8371.82	151.824	1.28	-0.06	1.27	
15247.00	90.400	160.840	6665.51	8359.86	-7468.70	3983.50	1692605.83	14342966.95	39°29'49.4008"N	80°48'53.9966"W	8464.62	151.926	0.44	-0.13	-0.43	
15342.00	91.050	161.770	6664.31	8454.85	-7558.68	4013.95	1692636.26	14342877.01	39°29'48.5109"N	80°48'53.6105"W	8558.36	152.030	1.19	0.68	0.98	
15436.00	91.110	162.320	6662.53	8548.82	-7648.09	4042.92	1692665.22	14342787.64	39°29'47.6267"N	80°48'53.2433"W	8650.92	152.138	0.59	0.06	0.59	
15531.00	91.140	161.920	6660.67	8643.78	-7738.48	4072.08	1692694.37	14342697.28	39°29'46.7327"N	80°48'52.8737"W	8744.48	152.246	0.42	0.03	-0.42	
15625.00	91.390	162.090	6658.59	8737.74	-7827.86	4101.11	1692723.40	14342607.93	39°29'45.8487"N	80°48'52.5057"W	8837.11	152.349	0.32	0.27	0.18	
15720.00	90.000	162.200	6657.44	8832.71	-7918.28	4130.24	1692752.51	14342517.55	39°29'44.9545"N	80°48'52.1366"W	8930.73	152.453	1.47	-1.46	0.12	
15815.00	90.430	162.380	6657.09	8927.68	-8008.78	4159.14	1692781.40	14342427.09	39°29'44.0595"N	80°48'51.7703"W	9024.35	152.556	0.49	0.45	0.19	
15909.00	90.120	161.010	6656.63	9021.67	-8098.02	4188.66	1692810.91	14342337.89	39°29'43.1769"N	80°48'51.3961"W	9117.17	152.650	1.49	-0.33	-1.46	

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	National Unit 2H
Field	Tyler	API	47-095-02745-0000
Facility	Margery Pad	Wellbore	National Unit 2H AWB
Slot	Slot #10		

WELLPATH DATA (236 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
16004.00	90.220	160.990	6656.35	9116.67	-8187.84	4219.59	1692841.82	14342248.10	39°29'42.2885"N	80°48'51.0039"W	9211.17	152.736	0.11	0.11	-0.02	
16099.00	90.400	161.210	6655.84	9211.67	-8277.72	4250.36	1692872.58	14342158.26	39°29'41.3996"N	80°48'50.6138"W	9305.17	152.821	0.30	0.19	0.23	
16193.00	89.750	161.150	6655.72	9305.67	-8366.69	4280.68	1692902.89	14342069.32	39°29'40.5196"N	80°48'50.2293"W	9398.18	152.904	0.69	-0.69	-0.06	
16288.00	89.940	161.150	6655.97	9400.67	-8456.59	4311.38	1692933.58	14341979.45	39°29'39.6305"N	80°48'49.8402"W	9492.21	152.986	0.20	0.20	0.00	
16382.00	89.690	161.070	6656.28	9494.66	-8545.53	4341.81	1692964.00	14341890.55	39°29'38.7509"N	80°48'49.4543"W	9585.27	153.066	0.28	-0.27	-0.09	
16477.00	89.820	161.040	6656.68	9589.66	-8635.38	4372.65	1692994.83	14341800.73	39°29'37.8622"N	80°48'49.0633"W	9679.36	153.144	0.14	0.14	-0.03	
16571.00	89.750	161.000	6657.03	9683.66	-8724.27	4403.22	1693025.39	14341711.88	39°29'36.9830"N	80°48'48.6756"W	9772.48	153.219	0.09	-0.07	-0.04	
16666.00	90.000	161.260	6657.24	9778.66	-8814.17	4433.95	1693056.10	14341622.02	39°29'36.0939"N	80°48'48.2861"W	9866.58	153.295	0.38	0.26	0.27	
16761.00	89.540	161.020	6657.62	9873.66	-8904.07	4464.66	1693086.80	14341532.16	39°29'35.2048"N	80°48'47.8968"W	9960.70	153.370	0.55	-0.48	-0.25	
16855.00	90.490	160.940	6657.60	9967.66	-8992.93	4495.29	1693117.42	14341443.33	39°29'34.3259"N	80°48'47.5084"W	10053.88	153.441	1.01	1.01	-0.09	
16950.00	90.370	160.940	6656.89	10062.66	-9082.72	4526.31	1693148.43	14341353.58	39°29'33.4378"N	80°48'47.1150"W	10148.07	153.511	0.13	-0.13	0.00	
17045.00	90.370	160.990	6656.27	10157.65	-9172.53	4557.30	1693179.40	14341263.81	39°29'32.5496"N	80°48'46.7222"W	10242.27	153.580	0.05	0.00	0.05	
17139.00	90.220	160.960	6655.79	10251.65	-9261.39	4587.94	1693210.03	14341174.98	39°29'31.6707"N	80°48'46.3337"W	10335.50	153.647	0.16	-0.16	-0.03	
17234.00	90.120	161.010	6655.51	10346.65	-9351.20	4618.89	1693240.97	14341085.20	39°29'30.7824"N	80°48'45.9413"W	10429.73	153.714	0.12	-0.11	0.05	
17328.00	89.970	161.060	6655.43	10440.65	-9440.10	4649.44	1693271.50	14340996.34	39°29'29.9032"N	80°48'45.5540"W	10522.97	153.779	0.17	-0.16	0.05	
17422.00	89.970	160.910	6655.48	10534.65	-9528.97	4680.07	1693302.12	14340907.50	39°29'29.0242"N	80°48'45.1657"W	10616.23	153.842	0.16	0.00	-0.16	
17517.00	90.150	160.940	6655.38	10629.65	-9618.76	4711.11	1693333.15	14340817.75	39°29'28.1362"N	80°48'44.7721"W	10710.51	153.905	0.19	0.19	0.03	
17611.00	90.030	161.140	6655.23	10723.65	-9707.66	4741.66	1693363.68	14340728.89	39°29'27.2570"N	80°48'44.3849"W	10803.79	153.967	0.25	-0.13	0.21	
17706.00	90.090	160.960	6655.14	10818.65	-9797.51	4772.51	1693394.52	14340639.07	39°29'26.3683"N	80°48'43.9938"W	10898.07	154.029	0.20	0.06	-0.19	
17800.00	90.220	161.000	6654.88	10912.65	-9886.38	4803.14	1693425.14	14340550.24	39°29'25.4894"N	80°48'43.6054"W	10991.39	154.088	0.14	0.14	0.04	
17894.00	90.060	160.690	6654.65	11006.65	-9975.17	4833.98	1693455.97	14340461.48	39°29'24.6111"N	80°48'43.2144"W	11084.74	154.145	0.37	-0.17	-0.33	
17989.00	90.250	161.130	6654.39	11101.65	-10064.95	4865.05	1693487.03	14340371.74	39°29'23.7232"N	80°48'42.8205"W	11179.08	154.202	0.50	0.20	0.46	
18084.00	90.030	160.640	6654.16	11196.65	-10154.71	4896.16	1693518.13	14340282.02	39°29'22.8354"N	80°48'42.4261"W	11273.44	154.259	0.57	-0.23	-0.52	
18178.00	90.220	161.030	6653.96	11290.65	-10243.50	4927.02	1693548.97	14340193.26	39°29'21.9572"N	80°48'42.0348"W	11366.83	154.313	0.46	0.20	0.41	
18273.00	90.180	161.040	6653.63	11385.65	-10333.34	4957.90	1693579.84	14340103.46	39°29'21.0687"N	80°48'41.6434"W	11461.18	154.368	0.04	-0.04	0.01	
18367.00	89.970	161.050	6653.50	11479.65	-10422.24	4988.43	1693610.36	14340014.59	39°29'20.1894"N	80°48'41.2564"W	11554.55	154.423	0.22	-0.22	0.01	
18461.00	90.120	160.890	6653.43	11573.65	-10511.10	5019.08	1693640.99	14339925.76	39°29'19.3105"N	80°48'40.8678"W	11647.94	154.475	0.23	0.16	-0.17	
18556.00	90.060	160.710	6653.28	11668.65	-10600.82	5050.32	1693672.22	14339836.08	39°29'18.4231"N	80°48'40.4717"W	11742.37	154.526	0.20	-0.06	-0.19	
18650.00	90.180	160.890	6653.08	11762.65	-10689.59	5081.23	1693703.13	14339747.35	39°29'17.5451"N	80°48'40.0798"W	11835.81	154.576	0.23	0.13	0.19	
18744.00	89.970	160.850	6652.96	11856.65	-10778.40	5112.04	1693733.92	14339658.57	39°29'16.6668"N	80°48'39.6893"W	11929.24	154.626	0.23	-0.22	-0.04	

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department of
Environmental Protection

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	National Unit 2H
Field	Tyler	API	47-095-02745-0000
Facility	Margery Pad	Wellbore	National Unit 2H AWB
Slot	Slot #10		

WELLPATH DATA (236 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
18839.00	90.180	161.040	6652.84	11951.65	-10868.19	5143.05	1693764.92	14339568.82	39°29'15.7787"N	80°48'39.2961"W	12023.67	154.676	0.30	0.22	0.20	
18933.00	89.970	160.840	6652.71	12045.65	-10957.04	5173.75	1693795.61	14339480.00	39°29'14.8999"N	80°48'38.9070"W	12117.11	154.724	0.31	-0.22	-0.21	
19027.00	90.180	160.980	6652.59	12139.65	-11045.87	5204.49	1693826.34	14339391.21	39°29'14.0213"N	80°48'38.5172"W	12210.57	154.772	0.27	0.22	0.15	
19122.00	90.430	161.260	6652.08	12234.64	-11135.76	5235.23	1693857.06	14339301.36	39°29'13.1323"N	80°48'38.1276"W	12304.99	154.820	0.40	0.26	0.29	
19216.00	89.880	161.170	6651.83	12328.64	-11224.75	5265.50	1693887.32	14339212.40	39°29'12.2521"N	80°48'37.7439"W	12398.41	154.869	0.59	-0.59	-0.10	
19311.00	89.850	161.030	6652.05	12423.64	-11314.63	5296.28	1693918.08	14339122.56	39°29'11.3632"N	80°48'37.3538"W	12492.85	154.916	0.15	-0.03	-0.15	
19405.00	89.970	161.130	6652.20	12517.64	-11403.55	5326.76	1693948.55	14339033.67	39°29'10.4837"N	80°48'36.9675"W	12586.31	154.962	0.17	0.13	0.11	
19500.00	89.910	161.180	6652.30	12612.64	-11493.46	5357.44	1693979.22	14338943.80	39°29'9.5945"N	80°48'36.5785"W	12680.76	155.008	0.08	-0.06	0.05	
19595.00	89.910	161.190	6652.45	12707.64	-11583.38	5388.08	1694009.85	14338853.91	39°29'8.7051"N	80°48'36.1902"W	12775.22	155.054	0.01	0.00	0.01	
19690.00	89.850	161.080	6652.65	12802.64	-11673.28	5418.80	1694040.55	14338764.05	39°29'7.8160"N	80°48'35.8008"W	12869.68	155.099	0.13	-0.06	-0.12	
19784.00	89.910	161.110	6652.85	12896.64	-11762.21	5449.25	1694071.00	14338675.16	39°29'6.9364"N	80°48'35.4148"W	12963.17	155.142	0.07	0.06	0.03	
19879.00	90.030	161.380	6652.89	12991.64	-11852.16	5479.80	1694101.53	14338585.24	39°29'6.0467"N	80°48'35.0276"W	13057.64	155.187	0.31	0.13	0.28	
19974.00	89.880	161.250	6652.97	13086.64	-11942.16	5510.23	1694131.95	14338495.28	39°29'5.1567"N	80°48'34.6419"W	13152.10	155.231	0.21	-0.16	-0.14	
20069.00	89.880	161.060	6653.17	13181.63	-12032.06	5540.92	1694162.63	14338405.41	39°29'4.2674"N	80°48'34.2530"W	13246.60	155.273	0.20	0.00	-0.20	
20163.00	89.720	160.810	6653.50	13275.63	-12120.91	5571.62	1694193.32	14338316.60	39°29'3.3887"N	80°48'33.8638"W	13340.14	155.313	0.32	-0.17	-0.27	
20258.00	89.720	161.220	6653.96	13370.63	-12210.74	5602.53	1694224.21	14338226.81	39°29'2.5003"N	80°48'33.4720"W	13434.67	155.353	0.43	0.00	0.43	
20352.00	89.660	161.190	6654.47	13464.63	-12299.72	5632.81	1694254.48	14338137.86	39°29'1.6201"N	80°48'33.0882"W	13528.18	155.394	0.07	-0.06	-0.03	
20447.00	89.720	160.990	6654.98	13559.63	-12389.60	5663.60	1694285.26	14338048.02	39°29'0.7313"N	80°48'32.6980"W	13622.72	155.434	0.22	0.06	-0.21	
20541.00	89.910	161.260	6655.29	13653.63	-12478.54	5694.01	1694315.65	14337959.11	39°28'59.8516"N	80°48'32.3125"W	13716.26	155.473	0.35	0.20	0.29	
20636.00	89.780	161.220	6655.54	13748.63	-12568.49	5724.56	1694346.19	14337869.20	39°28'58.9619"N	80°48'31.9253"W	13810.78	155.512	0.14	-0.14	-0.04	
20825.00	89.600	161.080	6656.57	13937.62	-12747.35	5785.62	1694407.23	14337690.41	39°28'57.1929"N	80°48'31.1514"W	13998.87	155.588	0.12	-0.10	-0.07	
20920.00	89.720	161.380	6657.13	14032.62	-12837.30	5816.19	1694437.79	14337600.50	39°28'56.3032"N	80°48'30.7640"W	14093.41	155.626	0.34	0.13	0.32	
21015.00	89.660	161.040	6657.64	14127.62	-12927.24	5846.79	1694468.38	14337510.60	39°28'55.4137"N	80°48'30.3762"W	14187.97	155.663	0.36	-0.06	-0.36	
21109.00	89.720	161.040	6658.15	14221.61	-13016.13	5877.33	1694498.90	14337421.73	39°28'54.5345"N	80°48'29.9891"W	14281.55	155.699	0.06	0.06	0.00	
21126.00	89.720	161.060	6658.24	14238.61	-13032.21	5882.85	1694504.42	14337405.66	39°28'54.3754"N	80°48'29.9191"W	14298.48	155.705	0.12	0.00	0.12	
21151.00‡	89.720	161.060	6658.36	14263.61	-13055.86	5890.97	1694512.53	14337382.03	39°28'54.1416"N	80°48'29.8163"W	14323.37	155.715	0.00	0.00	0.00	Projected MD at TD: 21151'

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department of
Environmental Protection

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	**ANTERO RESOURCES CORPORATION**	Well	**National Unit 2H**
Field	**Tyler**	API	**47-095-02745-0000**
Facility	**Margery Pad**	Wellbore	**National Unit 2H AWB**
Slot	**Slot #10**		

HOLE & CASING SECTIONS - Ref Wellbore: National Unit 2H AWB Ref Wellpath: National Unit 2H AWP Proj: 21151'

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	126.00	100.50	25.50	126.00	0.00	0.00	-0.02	0.01
17.5in Open Hole	126.00	405.00	279.00	126.00	405.00	-0.02	0.01	-0.11	-0.41
13.375in Casing Surface	25.50	385.00	359.50	25.50	385.00	0.00	0.00	-0.07	-0.31
12.25in Open Hole	405.00	2651.00	2246.00	405.00	2612.82	-0.11	-0.41	257.25	282.46
9.625in Casing Intermediate	25.50	2631.00	2605.50	25.50	2593.15	0.00	0.00	254.62	280.03
8.75in Open Hole	2651.00	5939.00	3288.00	2612.82	5820.81	257.25	282.46	694.07	847.29
8.5in Open Hole	5939.00	21151.00	15212.00	5820.81	6658.36	694.07	847.29	-13055.86	5890.97
5.5in Casing Production	25.50	21131.00	21105.50	25.50	6658.26	0.00	0.00	-13036.94	5884.48

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department of
Environmental Protection

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	National Unit 2H
Field	Tyler	API	47-095-02745-0000
Facility	Margery Pad	Wellbore	National Unit 2H AWB
Slot	Slot #10		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
National Unit 2H POE Rev-2	6627.00	299.61	1219.07	1689842.50	14350732.16	39°31'6.2322"N	80°49'29.0673"W	point
National Unit 2H AZI Rev-2	6652.00	-203.76	1470.90	1690094.24	14350228.99	39°31'1.2524"N	80°49'25.8664"W	point
National Unit 2H BHL Rev-2	6652.00	-13044.14	5905.30	1694526.86	14337393.74	39°28'54.2571"N	80°48'29.6332"W	point
National Unit 2H LP Rev-2	6652.00	137.74	1313.84	1689937.23	14350570.35	39°31'4.6305"N	80°49'27.8621"W	point
National Unit 2H 50' L/R Hard Line	7000.00	-6622.78	3687.70	1692310.14	14343812.54	39°29'57.7674"N	80°48'57.7478"W	rectangle
	2D Rectangle 13587 x 100.							

WELLPATH COMPOSITION - Ref Wellbore: National Unit 2H AWB Ref Wellpath: National Unit 2H AWP Proj: 21151'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
25.50	469.00	Gyrodata 2015 - GC+WIR+DPIPE	01_Gyrodata MS Gyro <17-1/2"> (100'-469')	National Unit 2H AWB	21/Sep/2021
469.00	2588.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02_APS EM <12-1/4"> (469')(560'-2588')	National Unit 2H AWB	21/Sep/2021
2588.00	5876.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03_APS EM <8-3/4"> (2588')(2656'-5876')	National Unit 2H AWB	16/Oct/2021
5876.00	21151.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04_BH AT Curve <8-1/2"> (5876')(5914'-21126')	National Unit 2H AWB	16/Oct/2021

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department of
Environmental Protection

Actual Wellpath Report

National Unit 2H AWP Proj: 21151'

REFERENCE WELLPATH IDENTIFICATION			
Operator	**ANTERO RESOURCES CORPORATION**	Well	**National Unit 2H**
Field	**Tyler**	API	**47-095-02745-0000**
Facility	**Margery Pad**	Wellbore	**National Unit 2H AWB**
Slot	**Slot #10**		

COMMENTS

Wellpath general comments
API: 47-095-02745-0000
BH Job #: 111046852
Rig: H&P 317
Duration: 10/20/2021-10/26/2021
Gyrodata MS Gyro <17-1/2"> (100'-469')
APS EM <12-1/4"> (469')(560'-2588')
APS EM <8-3/4"> (2588')(2656'-5876')
BH AT Curve <8-1/2"> (5876')(5914'-21126')
Sycamore: 6490' MD
Middlesex: 6620' MD
Burkett: 6783' MD
Tully: 6834' MD
Marcellus POE: 7007' MD
Projected MD at TD: 21151'

RECEIVED
Office of Oil and Gas
MAR 03 2023
WV Department
Environmental Protection