



ANTERO RESOURCES CORPORATION



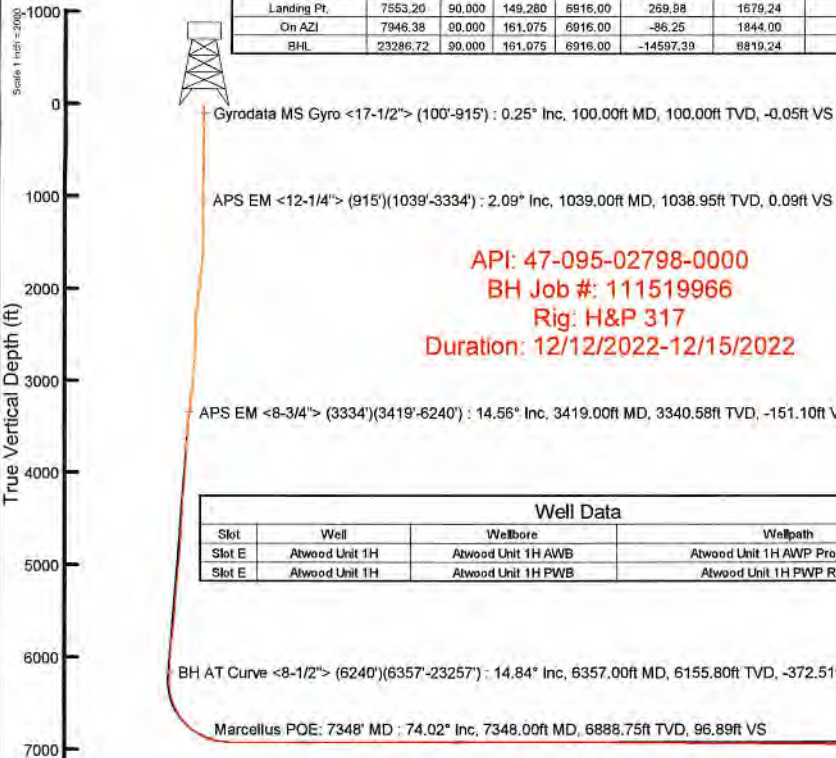
Location: Tyler County, WV
 Field: Tyler
 Facility: Beech Run Pad

Slot: Slot E
 Well: Atwood Unit 1H
 Wellbore: Atwood Unit 1H PWB

Plot reference wellpath is: Atwood Unit 1H PWP Rev-C.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 wellbore measured depths are referenced to H&P 317 (RKB)	Scale: True distance
H&P 317 (RKB) to Mean Sea Level: 1247.5 feet	Coordinates are in feet referenced to SKI
Mean Sea Level to Ground level (At Slot Slot E) : -1222 feet	Depths are in feet
Offset wellbore MDs are referenced to each path's default MD datum	Created by: odsbaron on 2022-12-21; Database: WA_MPL_EASTERNUS_Data

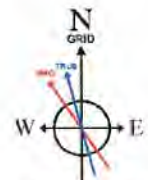
Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Beech Run Pad	1701783.750	14354455.970	39°31'42.7928"N	80°46'56.5204"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
Slot E	14.60	3.29	1701787.040	14354470.560	39°31'42.9370"N
Comment: Atwood Unit 1H					
H&P 317 (RKB) to Ground level (At Slot Slot E)	25.5ft				
Mean Sea Level to Ground level (At Slot Slot E)	-1222ft				
H&P 317 (RKB) to Mean Sea Level	1247.5ft				

Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	VS (ft)
Tie On	3334.00	15.280	45.400	3258.44	303.80	451.49	-140.99
Proj. to Bottom	3410.00	15.280	45.400	3331.76	317.86	465.75	-149.67
Drill Out	3490.00	15.280	45.400	3408.93	332.67	480.76	-158.81
End of 3D Arc	3651.11	16.815	55.673	3563.79	360.72	515.13	-174.20
Curve KOP	6406.12	16.815	55.673	6201.01	810.13	1173.29	-385.93
POE	7345.18	73.358	149.280	6886.00	446.31	1574.46	88.32
Landing Pt.	7553.20	90.000	149.280	6916.00	269.98	1679.24	289.10
On AZI	7946.38	90.000	161.075	6916.00	-86.25	1844.00	679.50
BHL	23286.72	90.000	161.075	6916.00	-14597.39	6819.24	16019.84

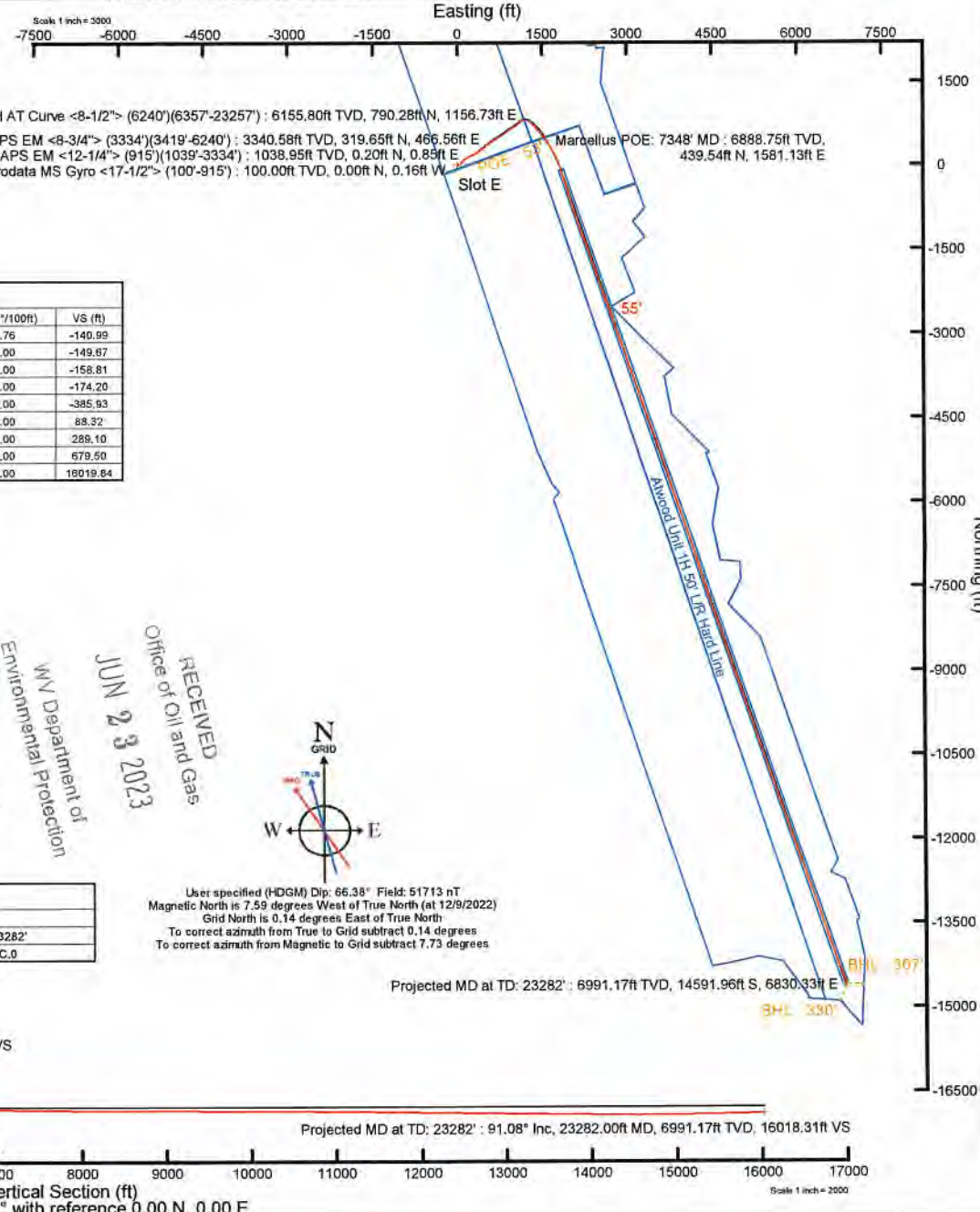


Well Data			
Slot	Well	Wellbore	Wellpath
Slot E	Atwood Unit 1H	Atwood Unit 1H AWB	Atwood Unit 1H AWP Proj: 23282'
Slot E	Atwood Unit 1H	Atwood Unit 1H PWB	Atwood Unit 1H PWP Rev-C.0

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User specified (HDGM) Dip: 66.38° Field: 51713 nT
 Magnetic North is 7.59 degrees West of True North (at 12/9/2022)
 Grid North is 0.14 degrees East of True North
 To correct azimuth from True to Grid subtract 0.14 degrees
 To correct azimuth from Magnetic to Grid subtract 7.73 degrees



API: 47-095-02798-0000
 BH Job #: 111519966
 Rig: H&P 317
 Duration: 12/12/2022-12/15/2022

Vertical Section (ft)
 Azimuth 161.08° with reference 0.00 N, 0.00 E



Actual Wellpath Report

Atwood Unit 1H AWP Proj: 23282'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Atwood Unit 1H
Field	Tyler	API	47-095-02798-0000
Facility	Beech Run Pad	Wellbore	Atwood Unit 1H AWB
Slot	Slot E		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999604	Report Generated	12/21/2022 at 10:09:02 AM
Convergence at slot	0.14° 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	14.60	3.29	1701787.04	14354470.56	39°31'42.9370"N	80°46'56.4780"W
Facility Reference Pt			1701783.75	14354455.97	39°31'42.7928"N	80°46'56.5204"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	1247.50ft
Horizontal Reference Pt	Slot	H&P 317 (RKB) to Mean Sea Level	1247.50ft
Vertical Reference Pt	H&P 317 (RKB)	H&P 317 (RKB) to Ground Level at Slot (Slot E)	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	161.08°

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Field	Tyler		API	47-095-02798-0000
Facility	Beech Run Pad		Wellbore	Atwood Unit 1H AWB
Slot	Slot E			

WELLPATH DATA (253 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	269.720	0.00	0.00	0.00	0.00	1701787.04	14354470.56	39°31'42.9370"N	80°46'56.4780"W	0.00	0.000	0.00	0.00	0.00	
25.50	0.000	269.720	25.50	0.00	0.00	0.00	1701787.04	14354470.56	39°31'42.9370"N	80°46'56.4780"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.250	269.720	100.00	-0.05	0.00	-0.16	1701786.88	14354470.56	39°31'42.9370"N	80°46'56.4801"W	0.16	269.720	0.34	0.34	0.00	Gyrodata MS Gyro <17-1/2"> (100'-915')
200.00	0.550	290.880	200.00	-0.43	0.17	-0.83	1701786.21	14354470.73	39°31'42.9387"N	80°46'56.4886"W	0.85	281.534	0.33	0.30	21.16	
300.00	0.360	230.590	299.99	-0.63	0.14	-1.52	1701785.52	14354470.70	39°31'42.9384"N	80°46'56.4974"W	1.53	275.292	0.49	-0.19	-60.29	
400.00	0.250	216.260	399.99	-0.39	-0.23	-1.89	1701785.15	14354470.33	39°31'42.9347"N	80°46'56.5021"W	1.91	262.933	0.13	-0.11	-14.33	
500.00	0.290	234.200	499.99	-0.19	-0.56	-2.23	1701784.81	14354470.00	39°31'42.9315"N	80°46'56.5064"W	2.30	255.918	0.09	0.04	17.94	
600.00	0.260	221.170	599.99	-0.01	-0.88	-2.58	1701784.46	14354469.68	39°31'42.9284"N	80°46'56.5110"W	2.73	251.226	0.07	-0.03	-13.03	
700.00	0.140	73.460	699.99	0.11	-1.01	-2.61	1701784.43	14354469.55	39°31'42.9270"N	80°46'56.5114"W	2.80	248.805	0.39	-0.12	-147.71	
800.00	0.230	95.650	799.99	0.20	-1.00	-2.30	1701784.74	14354469.56	39°31'42.9271"N	80°46'56.5073"W	2.50	246.503	0.11	0.09	22.19	
900.00	0.380	74.760	899.99	0.30	-0.93	-1.78	1701785.26	14354469.63	39°31'42.9278"N	80°46'56.5007"W	2.01	242.347	0.18	0.15	-20.89	
915.00	0.450	66.040	914.99	0.30	-0.89	-1.67	1701785.37	14354469.67	39°31'42.9282"N	80°46'56.4994"W	1.90	241.910	0.63	0.47	-58.13	
1039.00	2.090	66.670	1038.95	0.09	0.20	0.85	1701787.89	14354470.76	39°31'42.9389"N	80°46'56.4672"W	0.87	76.748	1.32	1.32	0.51	APS EM <12-1/4"> (915')(1039'-3334')
1143.00	3.910	70.880	1142.81	-0.07	2.11	5.94	1701792.98	14354472.67	39°31'42.9577"N	80°46'56.4021"W	6.30	70.423	1.76	1.75	4.05	
1332.00	6.210	67.530	1331.06	-0.73	8.13	21.48	1701808.51	14354478.69	39°31'43.0168"N	80°46'56.2037"W	22.96	69.264	1.23	1.22	-1.77	
1427.00	6.950	69.870	1425.43	-1.17	12.07	31.82	1701818.65	14354482.63	39°31'43.0555"N	80°46'56.0741"W	33.85	69.103	0.83	0.78	2.46	
1522.00	8.370	59.200	1519.59	-2.71	17.59	42.96	1701829.98	14354488.14	39°31'43.1098"N	80°46'55.9292"W	46.42	67.730	2.11	1.49	-11.23	
1617.00	9.950	49.350	1613.38	-7.17	26.48	55.12	1701842.14	14354497.03	39°31'43.1973"N	80°46'55.7737"W	61.15	64.342	2.34	1.66	-10.37	
1711.00	11.620	46.660	1705.71	-14.10	38.27	68.17	1701855.19	14354508.81	39°31'43.3135"N	80°46'55.6068"W	78.18	60.693	1.86	1.78	-2.86	
1806.00	13.360	43.700	1798.46	-23.10	52.77	82.71	1701869.72	14354523.31	39°31'43.4565"N	80°46'55.4208"W	98.11	57.463	1.95	1.83	-3.12	
1900.00	15.490	44.800	1889.50	-33.65	69.53	99.06	1701886.07	14354540.06	39°31'43.6218"N	80°46'55.2116"W	121.03	54.936	2.28	2.27	1.17	
1995.00	17.330	48.430	1980.62	-44.72	87.92	118.59	1701905.58	14354558.45	39°31'43.8031"N	80°46'54.9618"W	147.63	53.447	2.22	1.94	3.82	
2090.00	18.140	50.400	2071.11	-55.39	106.74	140.57	1701927.56	14354577.26	39°31'43.9885"N	80°46'54.6807"W	176.50	52.790	1.06	0.89	2.07	
2185.00	19.440	54.460	2161.05	-65.14	125.36	164.83	1701951.81	14354595.87	39°31'44.1719"N	80°46'54.3705"W	207.08	52.747	1.94	1.37	4.27	
2279.00	20.010	58.470	2249.54	-73.12	142.86	191.27	1701978.24	14354613.36	39°31'44.3443"N	80°46'54.0326"W	238.73	53.244	1.56	0.61	4.27	
2374.00	19.420	64.450	2338.98	-78.49	158.17	219.38	1702006.33	14354628.67	39°31'44.4950"N	80°46'53.6734"W	270.45	54.208	2.21	-0.62	6.29	
2469.00	17.670	66.220	2429.04	-81.54	170.80	246.82	1702033.76	14354641.29	39°31'44.6191"N	80°46'53.3228"W	300.16	55.317	1.93	-1.84	1.86	
2563.00	17.040	64.800	2518.76	-84.26	182.42	272.34	1702059.27	14354652.90	39°31'44.7333"N	80°46'52.9968"W	327.79	56.185	0.81	-0.67	-1.51	
2658.00	16.850	62.410	2609.64	-87.85	194.72	297.14	1702084.06	14354665.20	39°31'44.8543"N	80°46'52.6799"W	355.26	56.762	0.76	-0.20	-2.52	
2752.00	16.970	60.860	2699.57	-92.34	207.71	321.19	1702108.11	14354678.19	39°31'44.9821"N	80°46'52.3725"W	382.50	57.110	0.50	0.13	-1.65	

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Actual Wellpath Report

Atwood Unit 1H AWP Proj: 23282'
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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Atwood Unit 1H
Field	Tyler		API	47-095-02798-0000
Facility	Beech Run Pad		Wellbore	Atwood Unit 1H AWB
Slot	Slot E			

WELLPATH DATA (253 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
2847.00	16.740	58.980	2790.49	-97.67	221.51	345.03	1702131.93	14354691.98	39°31'45.1180"N	80°46'52.0679"W	410.01	57.299	0.62	-0.24	-1.98	
2942.00	16.470	55.510	2881.53	-104.15	236.19	367.85	1702154.75	14354706.65	39°31'45.2625"N	80°46'51.7761"W	437.15	57.297	1.08	-0.28	-3.65	
3036.00	16.150	53.810	2971.75	-111.61	251.45	389.39	1702176.27	14354721.91	39°31'45.4128"N	80°46'51.5008"W	463.52	57.147	0.61	-0.34	-1.81	
3131.00	16.050	51.790	3063.03	-119.87	267.38	410.37	1702197.25	14354737.83	39°31'45.5697"N	80°46'51.2326"W	489.79	56.914	0.60	-0.11	-2.13	
3226.00	15.710	48.380	3154.40	-129.17	284.04	430.30	1702217.17	14354754.49	39°31'45.7339"N	80°46'50.9777"W	515.60	56.571	1.05	-0.36	-3.59	
3320.00	15.470	45.990	3244.95	-139.40	301.21	448.83	1702235.70	14354771.65	39°31'45.9031"N	80°46'50.7406"W	540.53	56.135	0.73	-0.26	-2.54	
3334.00	15.280	45.400	3258.44	-140.99	303.80	451.49	1702238.35	14354774.24	39°31'45.9287"N	80°46'50.7067"W	544.19	56.064	1.76	-1.36	-4.21	
3419.00	14.560	41.610	3340.58	-151.10	319.65	466.56	1702253.42	14354790.09	39°31'46.0850"N	80°46'50.5138"W	565.56	55.584	1.43	-0.85	-4.46	APS EM <8-3/4"> (3334')(3419'-6240')
3498.00	14.330	42.460	3417.08	-160.67	334.29	479.75	1702266.60	14354804.72	39°31'46.2293"N	80°46'50.3450"W	584.73	55.132	0.40	-0.29	1.08	
3592.00	15.770	56.040	3507.88	-169.56	350.01	498.21	1702285.05	14354820.43	39°31'46.3843"N	80°46'50.1090"W	608.87	54.910	4.04	1.53	14.45	
3686.00	17.010	59.250	3598.06	-175.69	364.18	520.62	1702307.45	14354834.59	39°31'46.5238"N	80°46'49.8225"W	635.35	55.027	1.63	1.32	3.41	
3780.00	18.980	61.580	3687.46	-181.04	378.49	545.88	1702332.71	14354848.90	39°31'46.6645"N	80°46'49.4997"W	664.26	55.265	2.23	2.10	2.48	
3875.00	19.080	60.800	3777.27	-186.36	393.41	573.03	1702359.84	14354863.82	39°31'46.8114"N	80°46'49.1528"W	695.08	55.528	0.29	0.11	-0.82	
3969.00	18.240	59.390	3866.33	-192.08	408.40	599.10	1702385.90	14354878.80	39°31'46.9589"N	80°46'48.8196"W	725.06	55.718	1.01	-0.89	-1.50	
4066.00	17.600	57.290	3958.62	-198.65	424.05	624.50	1702411.30	14354894.45	39°31'47.1130"N	80°46'48.4949"W	754.87	55.822	0.94	-0.66	-2.16	
4160.00	18.570	56.110	4047.98	-205.90	440.08	648.89	1702435.67	14354910.47	39°31'47.2708"N	80°46'48.1832"W	784.04	55.855	1.10	1.03	-1.26	
4255.00	17.360	55.200	4138.35	-213.69	456.60	673.08	1702459.86	14354926.98	39°31'47.4335"N	80°46'47.8739"W	813.34	55.848	1.31	-1.27	-0.96	
4349.00	15.820	52.520	4228.43	-221.61	472.41	694.77	1702481.53	14354942.78	39°31'47.5892"N	80°46'47.5967"W	840.16	55.786	1.83	-1.64	-2.85	
4443.00	15.840	55.490	4318.87	-229.13	487.47	715.51	1702502.26	14354957.84	39°31'47.7376"N	80°46'47.3315"W	865.78	55.734	0.86	0.02	3.16	
4538.00	16.200	59.450	4410.18	-235.29	501.55	737.60	1702524.35	14354971.91	39°31'47.8762"N	80°46'47.0491"W	891.97	55.785	1.21	0.38	4.17	
4632.00	14.650	58.590	4500.79	-240.50	514.41	759.04	1702545.78	14354984.77	39°31'48.0028"N	80°46'46.7751"W	916.93	55.874	1.67	-1.65	-0.91	
4726.00	14.190	59.240	4591.83	-245.44	526.50	779.09	1702565.82	14354996.85	39°31'48.1218"N	80°46'46.5189"W	940.31	55.950	0.52	-0.49	0.69	
4821.00	15.130	61.800	4683.74	-249.83	538.32	800.02	1702586.74	14355008.66	39°31'48.2380"N	80°46'46.2513"W	964.27	56.064	1.20	0.99	2.69	
4917.00	16.140	60.520	4776.19	-254.29	550.80	822.68	1702609.39	14355021.14	39°31'48.3609"N	80°46'45.9618"W	990.04	56.197	1.11	1.05	-1.33	
5012.00	17.530	53.500	4867.12	-261.03	565.81	845.68	1702632.38	14355036.15	39°31'48.5087"N	80°46'45.6678"W	1017.51	56.215	2.59	1.46	-7.39	
5106.00	17.960	50.240	4956.65	-270.47	583.50	868.20	1702654.90	14355053.83	39°31'48.6830"N	80°46'45.3798"W	1046.06	56.096	1.15	0.46	-3.47	
5201.00	17.310	52.570	5047.19	-280.16	601.46	890.68	1702677.37	14355071.78	39°31'48.8599"N	80°46'45.0923"W	1074.74	55.970	1.01	-0.68	2.45	
5295.00	16.550	54.260	5137.11	-288.48	617.78	912.66	1702699.33	14355088.10	39°31'49.0207"N	80°46'44.8114"W	1102.09	55.906	0.96	-0.81	1.80	
5390.00	16.610	52.860	5228.16	-296.64	633.88	934.46	1702721.13	14355104.19	39°31'49.1793"N	80°46'44.5326"W	1129.17	55.849	0.43	0.06	-1.47	
5484.00	16.030	55.570	5318.38	-304.31	649.33	955.88	1702742.54	14355119.63	39°31'49.3315"N	80°46'44.2588"W	1155.57	55.812	1.02	-0.62	2.88	

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Slot	Slot E			

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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
5579.00	16.350	58.780	5409.61	-310.67	663.68	978.13	1702764.78	14355133.98	39°31'49.4727"N	80°46'43.9743"W	1182.04	55.842	1.00	0.34	3.38	
5673.00	15.510	57.140	5500.00	-316.51	677.36	1000.00	1702786.65	14355147.65	39°31'49.6074"N	80°46'43.6948"W	1207.82	55.888	1.01	-0.89	-1.74	
5768.00	17.140	56.550	5591.17	-323.09	691.97	1022.36	1702808.99	14355162.25	39°31'49.7512"N	80°46'43.4090"W	1234.52	55.908	1.72	1.72	-0.62	
5862.00	18.520	53.280	5680.65	-331.12	708.53	1045.88	1702832.50	14355178.81	39°31'49.9143"N	80°46'43.1083"W	1263.28	55.884	1.81	1.47	-3.48	
5957.00	18.800	49.910	5770.66	-341.27	727.41	1069.69	1702856.30	14355197.68	39°31'50.1004"N	80°46'42.8039"W	1293.58	55.783	1.17	0.29	-3.55	
6051.00	16.880	49.690	5860.14	-351.71	745.99	1091.68	1702878.29	14355216.26	39°31'50.2835"N	80°46'42.5226"W	1322.22	55.654	2.04	-2.04	-0.23	
6146.00	14.960	55.820	5951.50	-359.97	761.81	1112.35	1702898.94	14355232.06	39°31'50.4393"N	80°46'42.2583"W	1348.21	55.594	2.68	-2.02	6.45	
6240.00	14.080	59.960	6042.50	-365.37	774.35	1132.28	1702918.87	14355244.60	39°31'50.5628"N	80°46'42.0035"W	1371.74	55.632	1.45	-0.94	4.40	
6357.00	14.840	54.020	6155.80	-372.51	790.28	1156.73	1702943.31	14355260.52	39°31'50.7196"N	80°46'41.6910"W	1400.91	55.659	1.42	0.65	-5.08	BH AT Curve <8-1/2"> (6240')(6357'-23257')
6451.00	18.200	75.050	6245.98	-375.03	801.15	1180.68	1702967.25	14355271.39	39°31'50.8264"N	80°46'41.3850"W	1426.83	55.841	7.24	3.57	22.37	
6545.00	19.080	93.830	6335.13	-368.07	803.91	1210.22	1702996.78	14355274.15	39°31'50.8530"N	80°46'41.0079"W	1452.90	56.405	6.43	0.94	19.98	
6640.00	22.500	108.940	6424.00	-350.89	796.97	1242.94	1703029.49	14355267.21	39°31'50.7836"N	80°46'40.5906"W	1476.50	57.332	6.67	3.60	15.91	
6735.00	26.620	121.370	6510.44	-323.33	779.97	1278.35	1703064.88	14355250.22	39°31'50.6147"N	80°46'40.1393"W	1497.50	58.611	6.93	4.34	13.08	
6813.00†	31.785	130.344	6578.54	-292.19	757.55	1308.96	1703095.48	14355227.81	39°31'50.3924"N	80°46'39.7493"W	1512.37	59.940	8.67	6.62	11.51	Sycamore: 6813' MD
6829.00	32.910	131.860	6592.06	-284.78	751.92	1315.41	1703101.92	14355222.18	39°31'50.3366"N	80°46'39.6671"W	1515.15	60.247	8.67	7.03	9.47	
6923.00	39.270	136.650	6667.99	-235.34	713.20	1354.90	1703141.40	14355183.47	39°31'49.9530"N	80°46'39.1644"W	1531.14	62.238	7.40	6.77	5.10	
6961.00†	42.809	137.600	6696.65	-212.54	694.91	1371.86	1703158.36	14355165.19	39°31'49.7718"N	80°46'38.9484"W	1537.83	63.136	9.46	9.31	2.50	Middlesex: 6961' MD
7018.00	48.130	138.810	6736.61	-175.11	664.62	1398.92	1703185.40	14355134.91	39°31'49.4717"N	80°46'38.6041"W	1548.77	64.588	9.46	9.34	2.12	
7107.00†	57.067	138.744	6790.61	-109.77	611.49	1445.47	1703231.93	14355081.81	39°31'48.9456"N	80°46'38.0117"W	1569.49	67.070	10.04	10.04	-0.07	Burkett: 7107' MD
7113.00	57.670	138.740	6793.85	-105.09	607.69	1448.80	1703235.26	14355078.01	39°31'48.9079"N	80°46'37.9693"W	1571.09	67.245	10.04	10.04	-0.07	
7175.00†	62.222	140.149	6824.89	-55.22	566.92	1483.67	1703270.12	14355037.26	39°31'48.5042"N	80°46'37.5256"W	1588.29	69.088	7.60	7.34	2.27	Tully: 7175' MD
7208.00	64.650	140.850	6839.65	-27.59	544.15	1502.44	1703288.88	14355014.49	39°31'48.2786"N	80°46'37.2867"W	1597.94	70.091	7.60	7.36	2.13	
7302.00	71.160	143.670	6874.99	54.81	475.29	1555.68	1703342.10	14354945.66	39°31'47.5967"N	80°46'36.6095"W	1626.66	73.011	7.46	6.93	3.00	
7348.00†	74.024	145.415	6888.75	96.89	439.54	1581.13	1703367.54	14354909.92	39°31'47.2428"N	80°46'36.2858"W	1641.09	74.465	7.20	6.23	3.79	Marcellus POE: 7348' MD
7397.00	77.090	147.220	6900.98	142.76	400.06	1607.44	1703393.84	14354870.46	39°31'46.8519"N	80°46'35.9513"W	1656.47	76.024	7.20	6.26	3.68	
7491.00	84.700	149.910	6915.84	233.30	320.92	1655.78	1703442.17	14354791.35	39°31'46.0686"N	80°46'35.3368"W	1686.60	79.031	8.57	8.10	2.86	
7586.00	90.250	151.690	6920.03	326.65	238.10	1702.06	1703488.43	14354708.57	39°31'45.2490"N	80°46'34.7488"W	1718.64	82.036	6.13	5.84	1.87	
7680.00	90.340	154.300	6919.54	419.71	154.36	1744.74	1703531.09	14354624.86	39°31'44.4203"N	80°46'34.2068"W	1751.56	84.944	2.78	0.10	2.78	
7775.00	89.940	156.910	6919.31	514.26	67.85	1783.97	1703570.31	14354538.38	39°31'43.5643"N	80°46'33.7089"W	1785.26	87.822	2.78	-0.42	2.75	
7870.00	89.970	159.680	6919.38	609.14	-20.40	1819.10	1703605.42	14354450.16	39°31'42.6912"N	80°46'33.2633"W	1819.22	90.643	2.92	0.03	2.92	

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Actual Wellpath Report

Atwood Unit 1H AWP Proj: 23282'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Atwood Unit 1H
Field	Tyler	API	47-095-02798-0000
Facility	Beech Run Pad	Wellbore	Atwood Unit 1H AWB
Slot	Slot E		

WELLPATH DATA (253 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	
7964.00	89.720	162.690	6919.64	703.13	-109.37	1849.42	1703635.72	14354361.23	39°31'41.8112"N	80°46'32.8793"W	1852.65	93.384	3.21	-0.27	3.20		
8059.00	89.570	162.530	6920.23	798.10	-200.03	1877.81	1703664.10	14354270.61	39°31'40.9145"N	80°46'32.5199"W	1888.43	96.080	0.23	-0.16	-0.17		
8154.00	89.720	163.120	6920.82	893.05	-290.79	1905.86	1703692.14	14354179.89	39°31'40.0168"N	80°46'32.1647"W	1927.92	98.675	0.64	0.16	0.62		
8248.00	89.540	162.470	6921.42	987.00	-380.58	1933.67	1703719.94	14354090.13	39°31'39.1287"N	80°46'31.8128"W	1970.76	101.135	0.72	-0.19	-0.69		
8343.00	90.120	161.510	6921.71	1081.99	-470.92	1963.04	1703749.30	14353999.82	39°31'38.2350"N	80°46'31.4408"W	2018.73	103.490	1.18	0.61	-1.01		
8438.00	89.970	165.310	6921.63	1176.89	-561.95	1990.16	1703776.41	14353908.83	39°31'37.3347"N	80°46'31.0976"W	2067.97	105.768	4.00	-0.16	4.00		
8532.00	91.760	162.760	6920.21	1270.75	-852.30	2016.01	1703802.24	14353818.51	39°31'36.4411"N	80°46'30.7706"W	2118.91	107.930	3.31	1.90	-2.71		
8626.00	89.910	163.240	6918.84	1364.68	-742.18	2043.48	1703829.71	14353728.67	39°31'35.5521"N	80°46'30.4228"W	2174.09	109.961	2.03	-1.97	0.51		
8721.00	89.600	162.110	6919.25	1459.64	-832.87	2071.77	1703857.99	14353638.02	39°31'34.6551"N	80°46'30.0647"W	2232.92	111.901	1.23	-0.33	-1.19		
8816.00	90.740	161.880	6918.97	1554.63	-923.22	2101.14	1703887.34	14353547.71	39°31'33.7615"N	80°46'29.6929"W	2295.02	113.720	1.22	1.20	-0.24		
8910.00	89.750	160.180	6918.56	1648.62	-1012.11	2131.69	1703917.88	14353458.86	39°31'32.8822"N	80°46'29.3058"W	2359.76	115.398	2.09	-1.05	-1.81		
9005.00	89.890	160.830	6919.03	1743.61	-1101.66	2163.40	1703949.58	14353369.34	39°31'31.9964"N	80°46'28.9041"W	2427.74	116.986	0.69	-0.06	0.68		
9099.00	89.690	160.340	6919.54	1837.61	-1190.31	2194.64	1703980.81	14353280.72	39°31'31.1194"N	80°46'28.5082"W	2496.66	118.474	0.52	0.00	-0.52		
9194.00	89.630	160.720	6920.10	1932.60	-1279.88	2226.31	1704012.46	14353191.19	39°31'30.2334"N	80°46'28.1069"W	2567.98	119.894	0.40	-0.06	0.40		
9289.00	89.600	159.750	6920.74	2027.59	-1369.28	2258.43	1704044.57	14353101.83	39°31'29.3490"N	80°46'27.6999"W	2641.10	121.228	1.02	-0.03	-1.02		
9384.00	89.720	158.600	6921.30	2122.53	-1458.07	2292.20	1704078.33	14353013.07	39°31'28.4707"N	80°46'27.2717"W	2716.64	122.460	1.22	0.13	-1.21		
9479.00	91.690	162.130	6920.13	2217.50	-1547.52	2324.12	1704110.23	14352923.66	39°31'27.5858"N	80°46'26.8673"W	2792.19	123.658	4.25	2.07	3.72		
9574.00	89.750	161.270	6918.94	2312.48	-1637.70	2353.94	1704140.05	14352833.51	39°31'26.6938"N	80°46'26.4896"W	2867.60	124.827	2.23	-2.04	-0.91		
9668.00	89.290	160.640	6919.73	2406.48	-1726.55	2384.61	1704170.71	14352744.69	39°31'25.8149"N	80°46'26.1010"W	2944.04	125.906	0.83	-0.49	-0.67		
9763.00	89.660	160.230	6920.60	2501.47	-1816.06	2416.43	1704202.50	14352655.22	39°31'24.9294"N	80°46'25.6980"W	3022.78	126.927	0.58	0.39	-0.43		
9858.00	89.820	160.570	6921.03	2596.46	-1905.56	2448.29	1704234.36	14352565.76	39°31'24.0441"N	80°46'25.2942"W	3102.47	127.894	0.40	0.17	0.36		
9952.00	89.630	160.390	6921.48	2690.45	-1994.15	2479.70	1704265.76	14352477.20	39°31'23.1677"N	80°46'24.8962"W	3182.07	128.806	0.28	-0.20	-0.19		
10047.00	89.880	161.060	6921.89	2785.45	-2083.83	2511.06	1704297.10	14352387.56	39°31'22.2807"N	80°46'24.4989"W	3263.09	129.688	0.75	0.26	0.71		
10141.00	91.820	160.470	6920.49	2879.43	-2172.57	2542.02	1704328.05	14352298.86	39°31'21.4029"N	80°46'24.1066"W	3343.94	130.519	2.16	2.06	-0.63		
10236.00	92.280	161.590	6917.09	2974.37	-2262.35	2572.89	1704358.90	14352209.11	39°31'20.5148"N	80°46'23.7157"W	3426.07	131.325	1.27	0.48	1.18		
10331.00	89.050	159.180	6915.99	3069.34	-2351.81	2604.77	1704390.77	14352119.69	39°31'19.6298"N	80°46'23.3117"W	3509.39	132.078	4.24	-3.40	-2.54		
10425.00	89.630	159.600	6917.07	3163.29	-2439.79	2637.85	1704423.85	14352031.74	39°31'18.7595"N	80°46'22.8924"W	3593.17	132.766	0.76	0.62	0.45		
10520.00	90.000	160.330	6917.38	3258.27	-2529.04	2670.40	1704456.38	14351942.53	39°31'17.8766"N	80°46'22.4799"W	3677.92	133.443	0.86	0.39	0.77		
10615.00	90.950	160.630	6916.59	3353.26	-2618.57	2702.14	1704488.11	14351853.03	39°31'16.9909"N	80°46'22.0778"W	3762.78	134.100	1.05	1.00	0.32		
10709.00	89.780	160.560	6915.99	3447.25	-2707.23	2733.37	1704519.32	14351764.41	39°31'16.1139"N	80°46'21.6821"W	3847.13	134.725	1.25	-1.24	-0.07		

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Atwood Unit 1H AWP Proj: 23282'

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Field	Tyler		API	47-095-02798-0000
Facility	Beech Run Pad		Wellbore	Atwood Unit 1H AWB
Slot	Slot E			

WELLPATH DATA (253 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
10804.00	89.720	160.600	6916.41	3542.25	-2796.82	2764.96	1704550.90	14351674.85	39°31'15.2276"N	80°46'21.2819"W	3932.84	135.328	0.08	-0.06	0.04	
10899.00	90.120	160.710	6916.54	3637.25	-2886.46	2796.43	1704582.35	14351585.25	39°31'14.3409"N	80°46'20.8833"W	4018.91	135.908	0.44	0.42	0.12	
10994.00	89.940	160.980	6916.49	3732.24	-2976.20	2827.60	1704613.51	14351495.54	39°31'13.4532"N	80°46'20.4884"W	4105.25	136.467	0.34	-0.19	0.28	
11088.00	89.820	160.750	6916.69	3826.24	-3065.01	2858.41	1704644.31	14351406.77	39°31'12.5747"N	80°46'20.0981"W	4191.04	136.998	0.28	-0.13	-0.24	
11183.00	89.450	159.080	6917.29	3921.22	-3154.22	2891.03	1704676.92	14351317.59	39°31'11.6922"N	80°46'19.6847"W	4278.69	137.493	1.80	-0.39	-1.76	
11278.00	89.200	159.140	6918.41	4016.16	-3242.97	2924.91	1704710.78	14351228.88	39°31'10.8142"N	80°46'19.2553"W	4367.14	137.952	0.27	-0.26	0.06	
11373.00	90.090	161.010	6919.00	4111.13	-3332.28	2957.28	1704743.14	14351139.61	39°31'9.9307"N	80°46'18.8451"W	4455.29	138.412	2.18	0.94	1.97	
11467.00	90.180	161.720	6918.78	4205.13	-3421.35	2987.31	1704773.17	14351050.57	39°31'9.0497"N	80°46'18.4647"W	4541.99	138.875	0.76	0.10	0.76	
11561.00	89.140	160.910	6919.34	4299.13	-3510.39	3017.43	1704803.27	14350961.56	39°31'8.1689"N	80°46'18.0834"W	4629.01	139.319	1.40	-1.11	-0.86	
11656.00	89.140	160.400	6920.76	4394.11	-3600.02	3048.89	1704834.72	14350871.97	39°31'7.2823"N	80°46'17.6848"W	4717.61	139.738	0.54	0.00	-0.54	
11751.00	89.660	160.350	6921.76	4489.10	-3689.49	3080.80	1704866.61	14350782.53	39°31'6.3972"N	80°46'17.2806"W	4806.63	140.137	0.55	0.55	-0.05	
11846.00	89.690	161.340	6922.30	4584.10	-3779.23	3111.97	1704897.77	14350692.83	39°31'5.5095"N	80°46'16.8857"W	4895.61	140.531	1.04	0.03	1.04	
11941.00	89.380	160.660	6923.07	4679.09	-3869.05	3142.90	1704928.69	14350603.05	39°31'4.6210"N	80°46'16.4940"W	4984.71	140.912	0.79	-0.33	-0.72	
12035.00	89.260	160.740	6924.18	4773.09	-3957.76	3173.96	1704959.74	14350514.37	39°31'3.7435"N	80°46'16.1005"W	5073.26	141.272	0.15	-0.13	0.09	
12130.00	89.780	161.400	6924.98	4868.08	-4047.62	3204.78	1704990.55	14350424.55	39°31'2.8546"N	80°46'15.7101"W	5162.74	141.629	0.88	0.55	0.69	
12225.00	89.420	160.550	6925.64	4963.08	-4137.43	3235.75	1705021.50	14350334.78	39°31'1.9662"N	80°46'15.3179"W	5252.47	141.972	0.97	-0.38	-0.89	
12319.00	89.080	160.350	6926.87	5057.06	-4226.00	3267.20	1705052.94	14350246.24	39°31'1.0900"N	80°46'14.9195"W	5341.69	142.292	0.42	-0.36	-0.21	
12414.00	89.780	160.140	6927.82	5152.05	-4315.41	3299.31	1705085.04	14350156.87	39°31'0.2056"N	80°46'14.5127"W	5432.14	142.601	0.77	0.74	-0.22	
12509.00	89.540	160.900	6928.38	5247.04	-4404.97	3330.99	1705116.70	14350067.35	39°30'59.3197"N	80°46'14.1114"W	5522.61	142.904	0.84	-0.25	0.80	
12604.00	89.010	160.180	6929.58	5342.03	-4494.53	3362.63	1705148.34	14349977.82	39°30'58.4337"N	80°46'13.7105"W	5613.21	143.198	0.94	-0.56	-0.76	
12698.00	89.050	160.020	6931.18	5436.00	-4582.91	3394.63	1705180.32	14349889.48	39°30'57.5594"N	80°46'13.3052"W	5703.20	143.472	0.18	0.04	-0.17	
12793.00	89.690	160.480	6932.22	5530.98	-4672.31	3426.73	1705212.40	14349800.11	39°30'56.6750"N	80°46'12.8985"W	5794.22	143.743	0.83	0.67	0.48	
12888.00	90.120	160.320	6932.38	5625.98	-4761.81	3458.59	1705244.26	14349710.65	39°30'55.7897"N	80°46'12.4948"W	5885.29	144.008	0.48	0.45	-0.17	
12982.00	89.230	160.430	6932.91	5719.97	-4850.34	3490.16	1705275.82	14349622.15	39°30'54.9139"N	80°46'12.0949"W	5975.54	144.262	0.95	-0.95	0.12	
13077.00	89.940	160.460	6933.60	5814.96	-4939.86	3521.96	1705307.60	14349532.66	39°30'54.0283"N	80°46'11.6921"W	6066.83	144.512	0.75	0.75	0.03	
13172.00	89.750	163.290	6933.86	5909.94	-5030.14	3551.51	1705337.14	14349442.42	39°30'53.1354"N	80°46'11.3180"W	6157.56	144.776	2.99	-0.20	2.98	
13266.00	88.950	160.770	6934.92	6003.91	-5119.54	3580.51	1705366.12	14349353.06	39°30'52.2510"N	80°46'10.9509"W	6247.38	145.032	2.81	-0.85	-2.68	
13361.00	89.630	161.100	6936.10	6098.90	-5209.32	3611.54	1705397.14	14349263.31	39°30'51.3629"N	80°46'10.5579"W	6338.79	145.267	0.80	0.72	0.35	
13456.00	89.380	161.800	6936.92	6193.90	-5299.38	3641.76	1705427.35	14349173.29	39°30'50.4721"N	80°46'10.1753"W	6430.07	145.503	0.78	-0.26	0.74	
13551.00	89.480	161.880	6937.87	6288.88	-5389.64	3671.36	1705456.94	14349083.06	39°30'49.5792"N	80°46'9.8005"W	6521.29	145.738	0.13	0.11	0.08	

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Actual Wellpath Report

Atwood Unit 1H AWP Proj: 23282'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Atwood Unit 1H
Field	Tyler		API	47-095-02798-0000
Facility	Beech Run Pad		Wellbore	Atwood Unit 1H AWB
Slot	Slot E			

WELLPATH DATA (253 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
13646.00	89.820	161.600	6938.45	6383.88	-5479.86	3701.13	1705486.70	14348992.88	39°30'48.6868"N	80°46'9.4236"W	6612.66	145.965	0.46	0.36	-0.29	
13740.00	89.380	163.360	6939.10	6477.84	-5569.49	3729.43	1705514.98	14348903.28	39°30'47.8003"N	80°46'9.0655"W	6702.82	146.193	1.93	-0.47	1.87	
13835.00	88.920	161.360	6940.51	6572.80	-5660.01	3758.21	1705543.75	14348812.80	39°30'46.9049"N	80°46'8.7012"W	6794.10	146.416	2.16	-0.48	-2.11	
13930.00	90.030	162.170	6941.38	6667.79	-5750.23	3787.93	1705573.47	14348722.61	39°30'46.0124"N	80°46'8.3249"W	6885.76	146.625	1.45	1.17	0.85	
14025.00	89.050	161.470	6942.14	6762.78	-5840.49	3817.57	1705603.09	14348632.40	39°30'45.1197"N	80°46'7.9497"W	6977.47	146.830	1.27	-1.03	-0.74	
14120.00	88.920	160.840	6943.83	6857.76	-5930.38	3848.25	1705633.76	14348542.54	39°30'44.2305"N	80°46'7.5612"W	7069.54	147.020	0.68	-0.14	-0.66	
14215.00	89.140	161.400	6945.44	6952.75	-6020.26	3878.99	1705664.49	14348452.70	39°30'43.3414"N	80°46'7.1720"W	7161.71	147.205	0.63	0.23	0.59	
14309.00	89.260	160.130	6946.75	7046.74	-6109.00	3909.95	1705695.44	14348363.99	39°30'42.4636"N	80°46'6.7798"W	7253.11	147.379	1.36	0.13	-1.35	
14404.00	89.690	161.410	6947.62	7141.73	-6198.69	3941.24	1705726.71	14348274.33	39°30'41.5763"N	80°46'6.3836"W	7345.55	147.551	1.42	0.45	1.35	
14499.00	89.260	161.530	6948.49	7236.72	-6288.76	3971.43	1705756.89	14348184.30	39°30'40.6853"N	80°46'6.0014"W	7437.79	147.727	0.47	-0.45	0.13	
14593.00	88.650	161.170	6950.20	7330.70	-6377.81	4001.49	1705786.93	14348095.29	39°30'39.8045"N	80°46'5.6208"W	7529.17	147.896	0.75	-0.65	-0.38	
14688.00	89.510	161.620	6951.73	7425.69	-6467.83	4031.79	1705817.23	14348005.30	39°30'38.9140"N	80°46'5.2371"W	7621.56	148.062	1.02	0.91	0.47	
14783.00	88.890	161.280	6953.06	7520.68	-6557.89	4062.01	1705847.43	14347915.28	39°30'38.0232"N	80°46'4.8545"W	7714.00	148.226	0.74	-0.65	-0.36	
14877.00	89.820	161.920	6954.11	7614.67	-6647.08	4091.68	1705877.09	14347826.13	39°30'37.1410"N	80°46'4.4789"W	7805.48	148.385	1.20	0.99	0.68	
14972.00	90.370	161.550	6953.96	7709.66	-6737.29	4121.45	1705906.85	14347735.95	39°30'36.2486"N	80°46'4.1020"W	7897.94	148.544	0.70	0.58	-0.39	
15067.00	89.320	161.570	6954.21	7804.65	-6827.41	4151.50	1705936.89	14347645.87	39°30'35.3571"N	80°46'3.7216"W	7990.52	148.698	1.11	-1.11	0.02	
15256.00	89.720	162.000	6955.80	7993.63	-7006.93	4210.58	1705995.94	14347466.42	39°30'33.5814"N	80°46'2.9738"W	8174.72	148.998	0.31	0.21	0.23	
15350.00	89.480	161.690	6956.45	8087.62	-7096.25	4239.87	1706025.22	14347377.13	39°30'32.6979"N	80°46'2.6031"W	8266.39	149.143	0.42	-0.26	-0.33	
15445.00	89.850	160.910	6957.01	8182.62	-7186.23	4270.32	1706055.66	14347287.19	39°30'31.8078"N	80°46'2.2174"W	8359.28	149.280	0.91	0.39	-0.82	
15540.00	89.540	162.490	6957.51	8277.61	-7276.42	4300.15	1706085.48	14347197.03	39°30'30.9156"N	80°46'1.8399"W	8452.08	149.418	1.69	-0.33	1.66	
15634.00	88.980	160.250	6958.73	8371.59	-7365.48	4330.18	1706115.49	14347108.00	39°30'30.0346"N	80°46'1.4598"W	8544.05	149.549	2.46	-0.60	-2.38	
15728.00	91.720	162.500	6958.15	8465.57	-7454.55	4360.19	1706145.50	14347018.98	39°30'29.1536"N	80°46'1.0797"W	8636.06	149.676	3.77	2.91	2.39	
15823.00	89.720	161.380	6956.96	8560.55	-7544.85	4389.64	1706174.93	14346928.71	39°30'28.2604"N	80°46'0.7070"W	8728.90	149.809	2.41	-2.11	-1.18	
15918.00	89.260	161.260	6957.81	8655.55	-7634.84	4420.06	1706205.35	14346838.75	39°30'27.3702"N	80°46'0.3218"W	8822.01	149.932	0.50	-0.48	-0.13	
16013.00	89.600	161.390	6958.75	8750.54	-7724.84	4450.48	1706235.75	14346748.79	39°30'26.4800"N	80°45'59.9367"W	8915.15	150.053	0.38	0.36	0.14	
16107.00	89.780	161.470	6959.26	8844.54	-7813.94	4480.42	1706265.67	14346659.73	39°30'25.5985"N	80°45'59.5578"W	9007.32	150.171	0.21	0.19	0.09	
16202.00	89.850	161.610	6959.57	8939.53	-7904.05	4510.50	1706295.74	14346569.65	39°30'24.7072"N	80°45'59.1770"W	9100.47	150.288	0.16	0.07	0.15	
16297.00	89.820	161.180	6959.84	9034.53	-7994.09	4540.81	1706326.04	14346479.65	39°30'23.8166"N	80°45'58.7933"W	9193.71	150.403	0.45	-0.03	-0.45	
16391.00	89.720	161.250	6960.22	9128.53	-8083.08	4571.08	1706356.30	14346390.69	39°30'22.9362"N	80°45'58.4101"W	9286.06	150.511	0.13	-0.11	0.07	
16486.00	89.720	161.550	6960.68	9223.53	-8173.12	4601.38	1706386.59	14346300.69	39°30'22.0456"N	80°45'58.0265"W	9379.37	150.621	0.32	0.00	0.32	

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Actual Wellpath Report

Atwood Unit 1H AWP Proj: 23282'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Atwood Unit 1H
Field	Tyler		API	47-095-02798-0000
Facility	Beech Run Pad		Wellbore	Atwood Unit 1H AWB
Slot	Slot E			

WELLPATH DATA (253 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
16581.00	89.630	161.380	6961.22	9318.52	-8263.19	4631.57	1706416.77	14346210.66	39°30'21.1546"N	80°45'57.6442"W	9472.68	150.729	0.20	-0.09	-0.18	
16675.00	89.910	161.180	6961.60	9412.52	-8352.21	4661.74	1706446.93	14346121.67	39°30'20.2740"N	80°45'57.2623"W	9565.11	150.832	0.37	0.30	-0.21	
16770.00	89.020	162.310	6962.48	9507.51	-8442.43	4691.50	1706476.67	14346031.49	39°30'19.3816"N	80°45'56.8856"W	9658.40	150.939	1.51	-0.94	1.19	
16864.00	90.370	161.940	6962.98	9601.49	-8531.89	4720.35	1706505.51	14345942.07	39°30'18.4967"N	80°45'56.5205"W	9750.63	151.046	1.49	1.44	-0.39	
16958.00	90.460	160.190	6962.30	9695.48	-8620.79	4750.85	1706536.00	14345853.20	39°30'17.6172"N	80°45'56.1344"W	9843.20	151.141	1.86	0.10	-1.86	
17053.00	90.090	161.360	6961.85	9790.48	-8710.49	4782.13	1706567.27	14345763.53	39°30'16.7299"N	80°45'55.7383"W	9936.87	151.233	1.29	-0.39	1.23	
17148.00	89.780	161.730	6961.96	9885.48	-8800.61	4812.20	1706597.33	14345673.45	39°30'15.8385"N	80°45'55.3576"W	10030.35	151.330	0.51	-0.33	0.39	
17242.00	89.910	161.770	6962.21	9979.47	-8889.88	4841.64	1706626.76	14345584.22	39°30'14.9554"N	80°45'54.9850"W	10122.82	151.426	0.14	0.14	0.04	
17337.00	89.510	159.440	6962.69	10074.46	-8979.48	4873.19	1706658.29	14345494.65	39°30'14.0691"N	80°45'54.5856"W	10216.60	151.511	2.49	-0.42	-2.45	
17432.00	89.570	159.540	6963.45	10169.42	-9068.45	4906.47	1706691.56	14345405.71	39°30'13.1888"N	80°45'54.1639"W	10310.69	151.584	0.12	0.06	0.11	
17526.00	89.690	161.890	6964.06	10263.41	-9157.17	4937.51	1706722.59	14345317.03	39°30'12.3112"N	80°45'53.7709"W	10403.50	151.667	2.50	0.13	2.50	
17620.00	89.380	161.690	6964.82	10357.40	-9246.46	4966.89	1706751.95	14345227.78	39°30'11.4280"N	80°45'53.3991"W	10496.05	151.757	0.39	-0.33	-0.21	
17715.00	89.570	161.490	6965.69	10452.39	-9336.60	4996.89	1706781.94	14345137.68	39°30'10.5364"N	80°45'53.0194"W	10589.66	151.845	0.29	0.20	-0.21	
17810.00	89.450	161.420	6966.51	10547.38	-9426.66	5027.10	1706812.14	14345047.65	39°30'9.6455"N	80°45'52.6369"W	10683.34	151.930	0.15	-0.13	-0.07	
17904.00	89.540	161.640	6967.33	10641.38	-9515.81	5056.88	1706841.91	14344958.53	39°30'9.7636"N	80°45'52.2600"W	10776.03	152.013	0.25	0.10	0.23	
17999.00	89.350	161.600	6968.25	10736.37	-9605.96	5086.83	1706871.85	14344868.42	39°30'7.8718"N	80°45'51.8809"W	10869.70	152.097	0.20	-0.20	-0.04	
18094.00	89.140	160.990	6969.51	10831.36	-9695.94	5117.30	1706902.30	14344778.48	39°30'6.9818"N	80°45'51.4953"W	10963.48	152.176	0.68	-0.22	-0.64	
18188.00	89.720	161.530	6970.44	10925.35	-9784.95	5147.50	1706932.49	14344689.50	39°30'6.1013"N	80°45'51.1130"W	11056.31	152.253	0.84	0.62	0.57	
18283.00	89.170	161.000	6971.36	11020.35	-9874.91	5178.01	1706962.99	14344599.58	39°30'5.2114"N	80°45'50.7268"W	11150.14	152.329	0.80	-0.58	-0.56	
18378.00	89.420	161.010	6972.53	11115.34	-9964.73	5208.93	1706993.89	14344509.79	39°30'4.3229"N	80°45'50.3354"W	11244.05	152.402	0.26	0.26	0.01	
18472.00	89.570	161.410	6973.36	11209.34	-10053.72	5239.20	1707024.16	14344420.84	39°30'3.4426"N	80°45'49.9521"W	11336.95	152.475	0.45	0.16	0.43	
18567.00	89.850	162.260	6973.84	11304.33	-10143.98	5268.82	1707053.76	14344330.61	39°30'2.5497"N	80°45'49.5773"W	11430.69	152.552	0.94	0.29	0.89	
18662.00	89.510	161.510	6974.37	11399.31	-10234.27	5298.36	1707083.29	14344240.36	39°30'1.6566"N	80°45'49.2035"W	11524.45	152.629	0.87	-0.36	-0.79	
18756.00	89.170	160.790	6975.45	11493.31	-10323.22	5328.72	1707113.64	14344151.44	39°30'0.7767"N	80°45'48.8191"W	11617.41	152.698	0.85	-0.36	-0.77	
18851.00	89.480	160.830	6976.57	11588.30	-10412.94	5359.95	1707144.86	14344061.77	39°29'59.8892"N	80°45'48.4238"W	11711.46	152.763	0.33	0.33	0.04	
18945.00	89.260	160.970	6977.61	11682.29	-10501.76	5390.71	1707175.60	14343972.98	39°29'59.0106"N	80°45'48.0344"W	11804.52	152.828	0.28	-0.23	0.15	
19040.00	89.140	160.800	6978.93	11777.28	-10591.51	5421.81	1707206.70	14343883.26	39°29'58.1227"N	80°45'47.6406"W	11898.58	152.892	0.22	-0.13	-0.18	
19135.00	89.230	160.450	6980.28	11872.27	-10681.12	5453.32	1707238.20	14343793.69	39°29'57.2362"N	80°45'47.2416"W	11992.71	152.953	0.38	0.09	-0.37	
19230.00	89.290	160.610	6981.51	11967.26	-10770.68	5484.99	1707269.84	14343704.16	39°29'56.3502"N	80°45'46.8407"W	12086.88	153.012	0.18	0.06	0.17	
19324.00	89.380	161.090	6982.60	12061.25	-10859.47	5515.82	1707300.67	14343615.41	39°29'55.4719"N	80°45'46.4504"W	12180.00	153.073	0.52	0.10	0.51	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION		Well: Atwood Unit 1H
Field	Tyler		API: 47-095-02798-0000
Facility	Beech Run Pad		Wellbore: Atwood Unit 1H AWB
Slot	Slot E		

WELLPATH DATA (253 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
19419.00	89.140	160.810	6983.83	12156.24	-10949.26	5546.82	1707331.66	14343525.65	39°29'54.5837"N	80°45'46.0579"W	12274.10	153.134	0.39	-0.25	-0.29	
19513.00	89.170	160.500	6985.22	12250.23	-11037.94	5577.96	1707362.78	14343437.01	39°29'53.7064"N	80°45'45.6637"W	12367.29	153.191	0.33	0.03	-0.33	
19608.00	89.230	161.240	6986.54	12345.22	-11127.69	5609.09	1707393.90	14343347.30	39°29'52.8186"N	80°45'45.2696"W	12461.43	153.249	0.78	0.06	0.78	
19702.00	89.230	160.500	6987.80	12439.21	-11216.49	5639.89	1707424.69	14343258.53	39°29'51.9401"N	80°45'44.8797"W	12554.60	153.306	0.79	0.00	-0.79	
19797.00	89.200	160.590	6989.11	12534.20	-11306.06	5671.53	1707456.31	14343169.00	39°29'51.0541"N	80°45'44.4791"W	12648.84	153.360	0.10	-0.03	0.09	
19892.00	89.260	160.700	6990.38	12629.18	-11395.68	5703.01	1707487.78	14343079.41	39°29'50.1675"N	80°45'44.0805"W	12743.07	153.414	0.13	0.06	0.12	
19987.00	89.230	160.710	6991.63	12724.17	-11485.34	5734.40	1707519.16	14342989.79	39°29'49.2806"N	80°45'43.6832"W	12837.30	153.468	0.03	-0.03	0.01	
20081.00	89.200	160.520	6992.92	12818.16	-11574.00	5765.60	1707550.34	14342901.16	39°29'48.4035"N	80°45'43.2882"W	12930.57	153.520	0.20	-0.03	-0.20	
20176.00	89.290	160.250	6994.17	12913.15	-11663.48	5797.49	1707582.22	14342811.72	39°29'47.5183"N	80°45'42.8844"W	13024.88	153.570	0.30	0.09	-0.28	
20270.00	89.230	160.660	6995.39	13007.13	-11752.05	5828.93	1707613.65	14342723.18	39°29'46.6420"N	80°45'42.4863"W	13118.20	153.619	0.44	-0.06	0.44	
20364.00	89.200	160.620	6996.68	13101.12	-11840.73	5860.09	1707644.80	14342634.54	39°29'45.7648"N	80°45'42.0918"W	13211.49	153.669	0.05	-0.03	-0.04	
20459.00	89.420	161.140	6997.82	13196.11	-11930.48	5891.20	1707675.90	14342544.82	39°29'44.8769"N	80°45'41.6980"W	13305.74	153.720	0.59	0.23	0.55	
20554.00	89.350	160.940	6998.84	13291.11	-12020.32	5922.07	1707706.75	14342455.02	39°29'43.9882"N	80°45'41.3073"W	13399.96	153.772	0.22	-0.07	-0.21	
20648.00	89.200	160.620	7000.03	13385.10	-12109.08	5953.01	1707737.68	14342366.30	39°29'43.1102"N	80°45'40.9156"W	13493.26	153.821	0.38	-0.16	-0.34	
20743.00	89.140	160.740	7001.41	13480.09	-12198.72	5984.44	1707769.10	14342276.69	39°29'42.2235"N	80°45'40.5178"W	13587.57	153.868	0.14	-0.06	0.13	
20837.00	89.420	160.970	7002.59	13574.08	-12287.51	6015.26	1707799.91	14342187.94	39°29'41.3451"N	80°45'40.1276"W	13680.87	153.916	0.39	0.30	0.24	
20932.00	89.480	160.370	7003.50	13669.07	-12377.15	6046.71	1707831.34	14342098.33	39°29'40.4583"N	80°45'39.7295"W	13775.21	153.963	0.63	0.06	-0.63	
21026.00	88.920	160.060	7004.81	13763.05	-12465.59	6078.52	1707863.14	14342009.92	39°29'39.5834"N	80°45'39.3267"W	13868.65	154.005	0.68	-0.60	-0.33	
21121.00	89.260	160.550	7006.32	13858.03	-12555.02	6110.53	1707895.14	14341920.53	39°29'38.6986"N	80°45'38.9214"W	13963.07	154.048	0.63	0.36	0.52	
21215.00	89.260	160.290	7007.53	13952.02	-12643.58	6142.03	1707926.63	14341832.01	39°29'37.8226"N	80°45'38.5226"W	14056.48	154.090	0.28	0.00	-0.28	
21310.00	89.260	160.840	7008.76	14047.00	-12733.16	6173.64	1707958.22	14341742.46	39°29'36.9364"N	80°45'38.1225"W	14150.87	154.134	0.58	0.00	0.58	
21404.00	89.110	160.670	7010.10	14140.99	-12821.90	6204.62	1707989.19	14341653.76	39°29'36.0586"N	80°45'37.7303"W	14244.24	154.177	0.24	-0.16	-0.18	
21499.00	88.980	159.150	7011.68	14235.96	-12911.10	6237.25	1708021.81	14341564.59	39°29'35.1761"N	80°45'37.3172"W	14338.75	154.215	1.61	-0.14	-1.60	
21593.00	89.380	160.230	7013.03	14329.92	-12999.25	6269.87	1708054.42	14341476.48	39°29'34.3041"N	80°45'36.9040"W	14432.31	154.251	1.23	0.43	1.15	
21688.00	89.660	160.710	7013.82	14424.91	-13088.78	6301.63	1708086.16	14341388.99	39°29'33.4184"N	80°45'36.5020"W	14526.76	154.291	0.58	0.29	0.51	
21782.00	89.260	160.610	7014.71	14518.90	-13177.47	6332.76	1708117.28	14341298.33	39°29'32.5410"N	80°45'36.1079"W	14620.17	154.332	0.44	-0.43	-0.11	
21877.00	91.140	163.120	7014.38	14613.88	-13267.74	6362.32	1708146.83	14341208.10	39°29'31.6480"N	80°45'35.7339"W	14714.35	154.381	3.30	1.98	2.64	
21971.00	88.890	158.260	7014.35	14707.84	-13356.42	6393.39	1708177.89	14341119.45	39°29'30.7708"N	80°45'35.3406"W	14807.75	154.421	5.70	-2.39	-5.17	
22066.00	91.690	163.350	7013.87	14802.80	-13446.10	6424.61	1708209.10	14341029.81	39°29'29.8836"N	80°45'34.9454"W	14902.12	154.461	6.11	2.95	5.36	
22161.00	90.000	160.690	7012.47	14897.77	-13536.44	6453.93	1708238.41	14340939.51	39°29'28.9900"N	80°45'34.5745"W	14996.28	154.509	3.32	-1.78	-2.80	



Actual Wellpath Report

Atwood Unit 1H AWP Proj: 23282'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Atwood Unit 1H
Field	Tyler		API	47-095-02798-0000
Facility	Beech Run Pad		Wellbore	Atwood Unit 1H AWB
Slot	Slot E			

WELLPATH DATA (253 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
22256.00	90.890	161.510	7011.73	14992.76	-13626.31	6484.70	1708269.17	14340849.67	39°29'28.1009"N	80°45'34.1851"W	15090.65	154.550	1.27	0.94	0.86	
22350.00	90.680	160.300	7010.44	15086.75	-13715.13	6515.45	1708299.90	14340760.89	39°29'27.2223"N	80°45'33.7959"W	15184.07	154.590	1.31	-0.22	-1.29	
22445.00	91.480	161.270	7008.65	15181.73	-13804.82	6546.71	1708331.15	14340671.23	39°29'26.3350"N	80°45'33.4003"W	15278.50	154.628	1.32	0.84	1.02	
22540.00	90.950	161.660	7006.64	15276.71	-13894.87	6576.90	1708361.33	14340581.22	39°29'25.4442"N	80°45'33.0182"W	15372.80	154.670	0.69	-0.56	0.41	
22634.00	90.680	158.750	7005.30	15370.88	-13983.30	6608.73	1708393.14	14340492.82	39°29'24.5694"N	80°45'32.6153"W	15466.35	154.704	3.11	-0.29	-3.10	
22729.00	91.350	161.250	7003.62	15465.64	-14072.55	6641.21	1708425.61	14340403.61	39°29'23.6865"N	80°45'32.2040"W	15560.92	154.736	2.72	0.71	2.63	
22824.00	91.630	160.720	7001.15	15560.60	-14162.33	6672.16	1708456.54	14340313.86	39°29'22.7983"N	80°45'31.8124"W	15655.33	154.774	0.63	0.29	-0.56	
22918.00	91.350	157.340	6998.70	15654.50	-14250.06	6705.78	1708490.15	14340226.16	39°29'21.9303"N	80°45'31.3865"W	15749.03	154.799	3.61	-0.30	-3.60	
23013.00	90.650	160.050	6997.05	15749.39	-14338.55	6740.29	1708524.65	14340137.71	39°29'21.0549"N	80°45'30.9494"W	15843.78	154.823	2.95	-0.74	2.85	
23108.00	91.570	160.460	6995.21	15844.36	-14427.95	6772.38	1708556.72	14340048.35	39°29'20.1705"N	80°45'30.5432"W	15938.34	154.855	1.06	0.97	0.43	
23202.00	91.350	160.470	6992.81	15938.33	-14516.51	6803.80	1708588.13	14339959.83	39°29'19.2944"N	80°45'30.1455"W	16031.86	154.888	0.23	-0.23	0.01	
23257.00	91.080	160.710	6991.64	15993.31	-14568.37	6822.07	1708606.40	14339907.99	39°29'18.7813"N	80°45'29.9142"W	16086.58	154.907	0.66	-0.49	0.44	
23282.00‡	91.080	160.710	6991.17	16018.31	-14591.96	6830.33	1708614.65	14339884.40	39°29'18.5479"N	80°45'29.8096"W	16111.45	154.916	0.00	0.00	0.00	Projected MD at TD: 23282'

HOLE & CASING SECTIONS - Ref Wellbore: Atwood Unit 1H AWB Ref Wellpath: Atwood Unit 1H AWP Proj: 23282'									
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	0.01	-0.29
17.5in Open Hole	126.00	982.00	856.00	126.00	981.98	0.01	-0.29	-0.48	-0.72
13.375in Casing Surface	25.50	962.00	936.50	25.50	961.98	0.00	0.00	-0.64	-1.10
12.25in Open Hole	982.00	3410.00	2428.00	981.98	3331.87	-0.48	-0.72	317.96	465.05
9.625in Casing Intermediate	25.50	3390.00	3364.50	25.50	3312.53	0.00	0.00	314.22	461.62
8.75in Open Hole	3410.00	6318.00	2908.00	3331.87	6118.07	317.96	465.05	784.59	1148.62
8.5in Open Hole	6318.00	23282.00	16964.00	6118.07	6991.17	784.59	1148.62	-14591.96	6830.33
5.5in Casing Production	25.50	23262.00	23236.50	25.50	6991.55	0.00	0.00	-14573.09	6823.72

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Actual Wellpath Report

Atwood Unit 1H AWP Proj: 23282'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Atwood Unit 1H
Field	Tyler	API	47-095-02798-0000
Facility	Beech Run Pad	Wellbore	Atwood Unit 1H AWB
Slot	Slot E		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Atwood Unit 1H POE Rev-3	6886.00	446.31	1574.46	1703360.87	14354916.69	39°31'47.3098"N	80°46'36.3708"W	point
Atwood Unit 1H AZI Rev-3	6916.00	-86.25	1844.01	1703630.31	14354384.35	39°31'42.0398"N	80°46'32.9477"W	point
Atwood Unit 1H BHL Rev-3	6916.00	-14597.39	6819.24	1708603.57	14339878.98	39°29'18.4946"N	80°45'29.9512"W	point
Atwood Unit 1H LP Rev-3	6916.00	269.98	1679.24	1703465.61	14354740.43	39°31'45.5645"N	80°46'35.0391"W	point
Atwood Unit 1H 50' L/R Hard Line	7250.00	-7339.61	4330.87	1706116.19	14347133.87	39°30'30.2903"N	80°46'1.4500"W	rectangle
2D Rectangle 15345 x 100.								

WELLPATH COMPOSITION - Ref Wellbore: Atwood Unit 1H AWB Ref Wellpath: Atwood Unit 1H AWP Proj: 23282'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
25.50	915.00	Gyrodata 2015 - GC+WIR+DPIPE	01_Gyrodata MS Gyro <17-1/2"> (100'-915')	Atwood Unit 1H AWB	10/28/2022
915.00	3334.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02_APS EM <12-1/4"> (915')(1039'-3334')	Atwood Unit 1H AWB	10/28/2022
3334.00	6240.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03_APS EM <8-3/4"> (3334')(3419'-6240')	Atwood Unit 1H AWB	12/9/2022
6240.00	23282.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04_BH AT Curve <8-1/2"> (6240')(6357'-23257')	Atwood Unit 1H AWB	12/9/2022

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Actual Wellpath Report

Atwood Unit 1H AWP Proj: 23282'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Atwood Unit 1H
Field	Tyler	API	47-095-02798-0000
Facility	Beech Run Pad	Wellbore	Atwood Unit 1H AWB
Slot	Slot E		

COMMENTS
<p>Wellpath general comments API: 47-095-02798-0000 BH Job #: 111519966 Rig: H&P 317 Duration: 12/12/2022-12/15/2022 Gyrodata MS Gyro <17-1/2"> (100'-915') APS EM <12-1/4"> (915')(1039'-3334') APS EM <8-3/4"> (3334')(3419'-6240') BH AT Curve <8-1/2"> (6240')(6357'-23257') Sycamore: 6813' MD Middlesex: 6961' MD Burkett: 7107' MD Tully: 7175' MD Marcellus POE: 7348' MD Projected MD at TD: 23282'</p>

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