



ANTERO RESOURCES CORPORATION

Location: Tyler County, WV
 Field: Tyler
 Facility: Vera Pad
 Slot: Slot #04
 Well: Ant Unit 1H
 Wellbore: Ant Unit 1H PWB



Plot reference wellpath is Ant Unit 1H PWB Rev-A.0

True vertical depths are referenced to Frontier 22 (RKB)

Measured depths are referenced to Frontier 22 (RKB)

Frontier 22 (RKB) to Mean Sea Level: 1189.5 feet

Mean Sea Level to Mud line (At Slot Slot #04): -1145 feet

Coordinates are in feet referenced to Slot

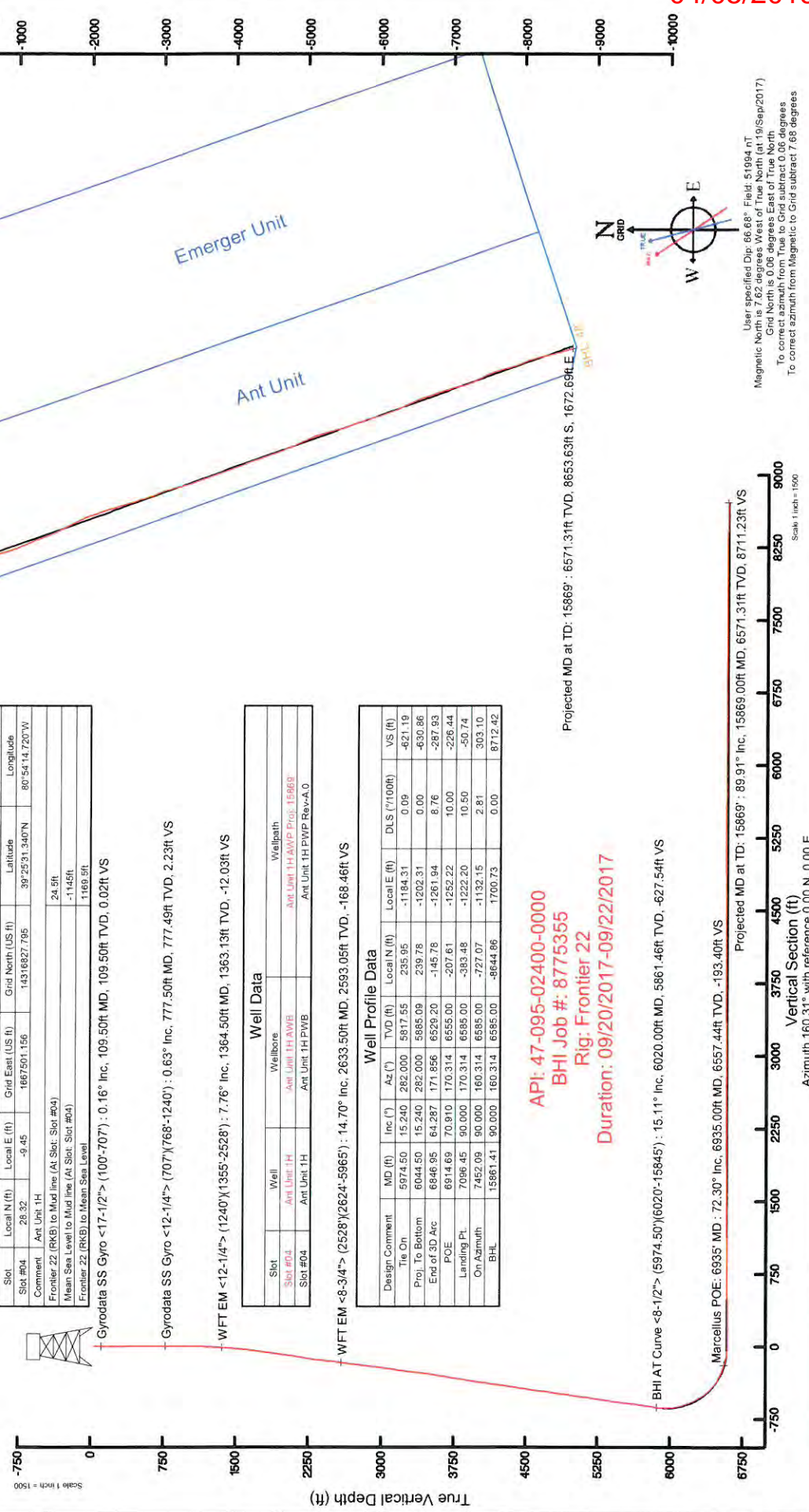
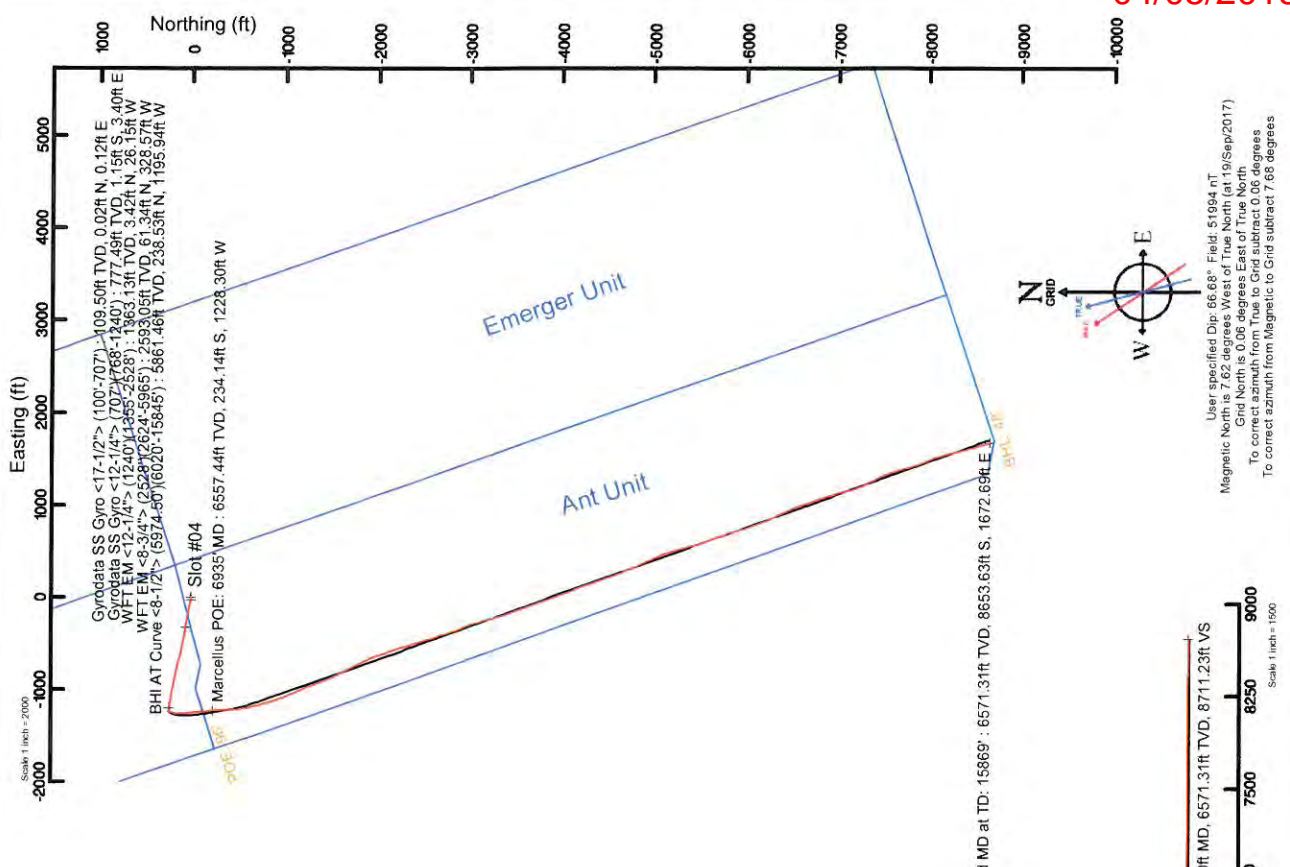
Grid System: NAD27 / UTM, Zone 17 North, US feet
North Reference: Grid north
Scale: True distance
Depths are in feet
Created by: dlabson on 2017-11-01
Database: WA_MPL_EasdemUS_Defn

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
Vera Pad	1667510.600	14316799.487	80°54'14.600"W
Slot	Local E (ft)	Grid North (US ft)	Latitude
Slot #04	28.32	1667501.156	39°25'31.340"N
Comment	Ant Unit 1H	14316827.795	80°54'14.720"W
Frontier 22 (RKB) to Mud line (At Slot Slot #04)			24.5ft
Mean Sea Level to Mud line (At Slot Slot #04)			-1145ft
Frontier 22 (RKB) to Mean Sea Level			1169.5ft

Well Data	
Well	Wellpath
Slot #04	Ant Unit 1H AWB
Ant Unit 1H	Ant Unit 1H PWB
Ant Unit 1H	Ant Unit 1H PWB Rev-A.0

Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	5974.50	15.240	282.000	5817.55	-1184.31	0.09	-621.19
Prop. To Bottom	6044.50	15.240	282.000	5885.09	-1202.31	0.00	-630.86
End of 3D Arc	6846.95	64.287	171.856	6529.20	-145.78	8.76	-287.93
POE	6914.69	70.910	170.314	6555.00	-207.61	-1252.22	10.00
Landing Pt.	7096.45	90.000	170.314	6585.00	-383.48	-1222.20	10.50
On Azimuth	7452.09	90.000	160.314	6585.00	-727.07	-1132.15	2.81
BHL	15861.41	90.000	160.314	6585.00	-8644.86	1700.73	0.00

API: 47-095-02400-0000
 BHI Job #: 8775355
 Rig: Frontier 22
 Duration: 09/20/2017-09/22/2017



User specified Dip: 66.68° Field: 51094 AT
 Magnetic North is 7.62 degrees West of True North (at 19/Sep/2017)
 Grid North is 0.06 degrees East of True North
 To correct azimuth from True to Grid subtract 0.06 degrees
 To correct azimuth from Magnetic to Grid subtract 7.68 degrees

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Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'

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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Vera Pad
Slot	Slot #04
Well	Ant Unit 1H
Wellbore	Ant Unit 1H AWB

REPORT SETUP INFORMATION	
Projection System	NAD27 / UTM Zone 17 North, US feet
North Reference	Grid
Scale	0.999601
Convergence at slot	0.06° East
Software System	WellArchitect® 5.1
User	Delaset
Report Generated	01/Nov/2017 at 11:59
Database/Source file	WA_MPL_EasternUS_Defn/Ant_Unit_1H_AWP_Proj_15869_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Northing[US ft]	Latitude	Longitude	
Slot Location	28.32	-9.45	14316827.80	39°25'31.340"N	80°54'14.720"W	
Facility Reference Pt			14316799.49	39°25'31.060"N	80°54'14.600"W	
Field Reference Pt			0.00	0°00'00.000"	85°29'19.301"W	

WELLPATH DATUM	
Calculation method	Minimum curvature
Horizontal Reference Pt	Slot
Vertical Reference Pt	Frontier 22 (RKB)
IMD Reference Pt	Frontier 22 (RKB)
Field Vertical Reference	Mean Sea Level
Frontier 22 (RKB) to Facility Vertical Datum	24.50ft
Frontier 22 (RKB) to Mean Sea Level	1169.50ft
Frontier 22 (RKB) to Mud Line at Slot (Slot #04)	24.50ft
Section Origin	N 0.00, E 0.00 ft
Section Azimuth	160.31°



Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Tyler County, WV	Well	Ant Unit 1H
Field	Tyler	Wellbore	Ant Unit 1H AWB
Facility	Vera Pad		

WELLPATH DATA (187 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 P/100ft	Build Rate P/100ft	Turn Rate P/100ft	Comments
0.00H	0.000	81.860	0.00	0.00	0.00	0.00	1667501.16	14316827.80	39°25'31.340"N	80°54'14.720"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.000	81.860	24.50	0.00	0.00	0.00	1667501.16	14316827.80	39°25'31.340"N	80°54'14.720"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.160	81.860	109.50	0.02	0.02	0.12	1667501.27	14316827.81	39°25'31.340"N	80°54'14.719"W	0.12	81.860	0.19	0.19	96.31	Syrodatta SS Gyro <17-12'> (100'-707')
209.50	0.250	55.800	209.50	0.00	0.16	0.44	1667501.59	14316827.95	39°25'31.342"N	80°54'14.714"W	0.46	69.947	0.13	0.09	-26.06	
309.50	0.290	124.780	309.50	0.15	0.14	0.82	1667501.98	14316827.93	39°25'31.341"N	80°54'14.709"W	0.84	80.533	0.31	0.04	68.98	
409.50	0.120	112.730	409.50	0.42	-0.05	1.13	1667502.28	14316827.75	39°25'31.340"N	80°54'14.706"W	1.13	92.402	0.17	-0.17	-12.05	
509.50	0.540	122.060	509.50	0.87	-0.34	1.62	1667502.78	14316827.46	39°25'31.337"N	80°54'14.699"W	1.66	101.749	0.42	0.42	9.33	
609.50	0.170	107.360	609.49	1.33	-0.63	2.17	1667503.32	14316827.16	39°25'31.334"N	80°54'14.692"W	2.26	106.276	0.38	-0.37	-14.70	
709.50	0.570	113.190	709.49	1.75	-0.87	2.76	1667503.92	14316826.92	39°25'31.331"N	80°54'14.685"W	2.90	107.515	0.40	0.40	5.83	
716.50	0.540	114.040	716.49	1.80	-0.90	2.83	1667503.98	14316826.90	39°25'31.331"N	80°54'14.684"W	2.97	107.654	0.44	-0.43	12.14	
777.50	0.630	113.390	777.49	2.23	-1.15	3.40	1667504.55	14316826.65	39°25'31.329"N	80°54'14.677"W	3.59	108.700	0.15	0.15	-1.07	Syrodatta SS Gyro <12-1/4'> (707')(768'-1240')
870.50	0.470	134.230	870.48	2.92	-1.62	4.14	1667505.29	14316826.18	39°25'31.324"N	80°54'14.667"W	4.44	111.359	0.27	-0.17	22.41	
964.50	1.240	259.590	964.48	3.10	-2.07	3.42	1667504.57	14316825.72	39°25'31.319"N	80°54'14.677"W	3.99	121.238	1.66	0.82	133.36	
1059.50	2.800	270.350	1059.42	2.14	-2.24	0.08	1667501.24	14316825.55	39°25'31.318"N	80°54'14.719"W	2.24	177.856	1.68	1.64	11.33	
1154.50	4.150	277.690	1154.24	-0.24	-1.77	-5.64	1667495.52	14316826.03	39°25'31.323"N	80°54'14.792"W	5.91	252.595	1.49	1.42	7.73	
1249.50	5.450	285.550	1248.90	-4.42	-0.10	-13.40	1667487.77	14316827.70	39°25'31.339"N	80°54'14.891"W	13.40	269.574	1.53	1.37	8.27	
1364.50	7.760	285.360	1363.13	-12.03	3.42	-26.15	1667475.02	14316831.22	39°25'31.374"N	80°54'15.083"W	26.37	277.455	2.01	2.01	-0.17	MFT EM <12-1/4'> (1240')(1355'-2528')
1488.50	9.270	282.030	1456.10	-19.66	6.68	-39.67	1667461.50	14316834.47	39°25'31.406"N	80°54'15.225"W	40.23	279.559	1.69	1.61	-3.54	
1553.50	11.400	280.750	1549.55	-28.44	10.03	-56.38	1667444.80	14316837.82	39°25'31.440"N	80°54'15.438"W	57.27	280.084	2.25	2.24	-1.35	
1648.50	12.860	279.930	1642.43	-38.42	13.60	-76.02	1667425.17	14316841.39	39°25'31.475"N	80°54'15.689"W	77.23	280.144	1.55	1.54	-0.86	
1742.50	14.360	281.530	1733.78	-49.63	17.74	-97.75	1667403.45	14316845.52	39°25'31.516"N	80°54'15.965"W	99.34	280.284	1.65	1.60	1.70	
1837.50	14.470	280.330	1825.79	-61.68	22.22	-120.97	1667380.24	14316850.01	39°25'31.561"N	80°54'16.261"W	122.99	280.408	0.34	0.12	-1.26	
1932.50	15.300	281.380	1917.60	-74.08	26.82	-144.93	1667356.28	14316854.60	39°25'31.607"N	80°54'16.567"W	147.39	280.484	0.92	0.87	1.11	
2026.50	15.250	281.860	2008.28	-86.95	31.81	-169.19	1667332.04	14316859.59	39°25'31.656"N	80°54'16.876"W	172.15	280.648	0.14	-0.05	0.51	
2121.50	16.150	281.830	2099.74	-100.40	37.08	-194.35	1667306.89	14316864.87	39°25'31.709"N	80°54'17.196"W	197.85	280.803	0.95	0.95	-0.03	
2216.50	17.110	281.830	2190.76	-114.61	42.66	-220.96	1667280.29	14316870.44	39°25'31.764"N	80°54'17.535"W	225.04	280.927	1.01	1.01	0.00	
2310.50	17.480	281.310	2280.51	-129.11	48.26	-248.33	1667252.92	14316876.04	39°25'31.820"N	80°54'17.884"W	252.98	280.988	0.43	0.39	-0.55	
2404.50	14.550	279.760	2370.86	-142.19	53.03	-273.82	1667227.45	14316880.81	39°25'31.867"N	80°54'18.209"W	278.91	280.961	3.15	-3.12	-1.65	
2498.50	12.940	276.820	2462.16	-152.69	56.28	-295.91	1667205.37	14316884.06	39°25'31.899"N	80°54'18.490"W	301.21	280.770	1.87	-1.71	-3.13	
2537.50	14.160	278.150	2500.08	-156.87	57.48	-304.97	1667196.31	14316885.25	39°25'31.911"N	80°54'18.605"W	310.34	280.674	3.23	3.13	3.41	



Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'
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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Vera Pad
Slot	Slot #04
Well	Ant Unit 1H
Wellbore	Ant Unit 1H AWB

WELLPATH DATA (187 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
2633.50	14.700	280.390	2593.05	-168.46	61.34	-328.57	1667172.72	14316889.11	39°25'31.950"N	80°54'18.906"W	334.25	280.575	0.81	0.56	2.93	MFT EM <-8.3/4"> (2528)/(2624/-5965)
2728.50	14.260	277.900	2685.03	-179.92	65.12	-352.02	1667149.28	14316892.89	39°25'31.987"N	80°54'19.205"W	357.99	280.481	0.80	-0.46	-2.62	
2822.50	15.490	276.400	2775.88	-190.80	68.11	-375.96	1667125.35	14316895.88	39°25'32.017"N	80°54'19.510"W	382.08	280.269	1.37	1.31	-1.60	
2916.50	15.090	280.130	2866.55	-202.41	71.67	-400.48	1667100.84	14316899.43	39°25'32.052"N	80°54'19.822"W	406.84	280.146	1.13	-0.43	3.97	
3012.50	14.570	279.200	2959.36	-214.46	75.79	-424.70	1667076.63	14316903.56	39°25'32.094"N	80°54'20.131"W	431.41	280.119	0.60	-0.54	-0.97	
3107.50	15.320	282.970	3051.14	-227.00	80.52	-448.73	1667052.61	14316908.28	39°25'32.141"N	80°54'20.437"W	455.89	280.173	1.29	0.79	3.97	
3201.50	15.010	282.340	3141.87	-240.16	85.91	-472.72	1667028.63	14316913.67	39°25'32.194"N	80°54'20.743"W	480.46	280.300	0.37	-0.33	-0.67	
3390.50	15.820	279.870	3324.40	-265.38	95.49	-520.80	1666980.57	14316923.25	39°25'32.244"N	80°54'21.046"W	504.78	280.378	0.44	-0.37	-0.92	
3485.50	15.000	277.590	3415.98	-277.40	99.33	-545.74	1666955.63	14316927.09	39°25'32.289"N	80°54'21.355"W	529.48	280.390	1.31	1.23	-1.70	
3579.50	14.550	281.530	3506.88	-289.10	103.30	-569.37	1666932.01	14316931.08	39°25'32.367"N	80°54'21.673"W	554.71	280.316	1.07	-0.86	-2.40	
3673.50	14.950	285.120	3597.78	-302.14	108.82	-592.65	1666908.75	14316936.58	39°25'32.422"N	80°54'22.271"W	578.67	280.283	1.17	-0.48	4.19	
3768.50	15.550	287.730	3689.44	-316.88	115.90	-616.61	1666884.80	14316943.85	39°25'32.492"N	80°54'22.576"W	602.56	280.405	1.06	0.43	3.82	
3862.50	14.830	287.200	3780.15	-331.75	123.29	-640.10	1666861.31	14316951.04	39°25'32.565"N	80°54'22.875"W	627.40	280.645	0.96	0.63	2.75	
3956.50	15.730	286.320	3870.83	-346.47	130.43	-663.82	1666837.60	14316958.17	39°25'32.636"N	80°54'23.177"W	651.87	280.903	0.78	-0.77	-0.56	
4051.50	14.860	284.410	3962.46	-360.87	137.08	-687.98	1666813.45	14316964.82	39°25'32.702"N	80°54'23.485"W	676.51	281.116	0.99	0.96	-0.94	
4146.50	15.540	284.930	4054.14	-374.93	143.39	-712.07	1666789.37	14316971.13	39°25'32.765"N	80°54'23.792"W	701.50	281.269	1.06	-0.92	-2.01	
4240.50	15.160	282.280	4144.91	-388.35	149.16	-735.82	1666765.63	14316976.89	39°25'32.822"N	80°54'24.095"W	726.37	281.385	0.73	0.72	0.55	
4335.50	15.160	282.730	4236.72	-401.35	154.44	-759.63	1666741.83	14316982.17	39°25'32.874"N	80°54'24.398"W	750.78	281.459	1.24	-1.00	-2.82	
4429.50	14.370	280.990	4327.62	-413.89	159.37	-783.07	1666718.40	14316987.10	39°25'32.923"N	80°54'24.697"W	775.17	281.492	0.60	0.59	0.47	
4524.50	14.890	281.070	4419.53	-426.15	163.96	-806.62	1666694.86	14316991.69	39°25'32.969"N	80°54'24.997"W	799.13	281.504	0.96	-0.84	-1.85	
4619.50	15.920	282.020	4511.12	-439.24	169.02	-831.35	1666670.14	14316996.75	39°25'33.019"N	80°54'25.312"W	823.12	281.490	0.55	0.55	0.08	
4713.50	15.310	282.030	4601.65	-452.54	174.29	-856.09	1666645.41	14317002.02	39°25'33.071"N	80°54'25.627"W	848.35	281.492	1.12	1.08	1.00	
4808.50	14.510	280.980	4693.45	-465.21	179.17	-880.04	1666621.47	14317006.90	39°25'33.120"N	80°54'25.932"W	873.66	281.508	0.65	-0.65	0.01	
4903.50	15.390	281.840	4785.24	-477.87	184.03	-904.07	1666597.45	14317011.75	39°25'33.168"N	80°54'26.238"W	898.10	281.508	0.89	-0.84	-1.11	
5092.50	14.830	281.140	4875.98	-490.56	188.91	-928.08	1666573.45	14317016.63	39°25'33.217"N	80°54'26.544"W	922.61	281.506	0.96	0.93	0.91	
5186.50	15.290	282.270	4967.72	-503.42	193.92	-952.25	1666549.29	14317021.64	39°25'33.266"N	80°54'26.852"W	947.11	281.511	0.63	-0.60	-0.74	
5281.50	14.770	282.490	5058.51	-516.36	199.15	-976.06	1666525.49	14317026.86	39°25'33.318"N	80°54'27.156"W	971.79	281.511	0.57	0.48	1.19	
5376.50	16.180	281.760	5150.06	-529.72	204.46	-1000.84	1666500.72	14317032.18	39°25'33.371"N	80°54'27.471"W	996.16	281.532	0.56	-0.55	0.23	
5471.50	16.000	279.720	5241.34	-543.06	209.37	-1026.70	1666474.87	14317037.08	39°25'33.420"N	80°54'27.801"W	1021.51	281.546	1.50	1.48	-0.77	
5566.50	16.000	279.720	5332.62	-556.32	214.28	-1053.04	1666449.02	14317041.98	39°25'33.469"N	80°54'28.116"W	1047.83	281.526	0.62	-0.19	-2.15	



Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'
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REFERENCE WELLPATH IDENTIFICATION									
Operator	ANTERO RESOURCES CORPORATION								
Area	Tyler County, WV								
Field	Tyler								
Facility	Vera Pad								
	Slot	Slot #04							
	Well	Ant Unit 1H							
	Wellbore	Ant Unit 1H AWB							

WELLPATH DATA (187 stations) † = interpolated/extrapolated station																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude (°)	Longitude (°)	Closure Dir (ft)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (°/100ft)	Comments	
5470.50	15.850	279.560	5331.73	-555.69	213.69	-1052.13	1666449.45	14317041.40	39°25'33.463"N	80°54'28.125"W	1073.61	0.17	0.16	-0.17		
5565.50	15.780	277.960	5423.14	-568.02	217.63	-1077.71	1666423.87	14317045.34	39°25'33.502"N	80°54'28.451"W	1099.47	0.46	-0.07	-1.68		
5659.50	15.510	276.470	5513.65	-579.50	220.82	-1102.86	1666398.74	14317048.53	39°25'33.534"N	80°54'28.771"W	1124.75	0.51	-0.29	-1.59		
5754.50	15.260	279.550	5605.25	-591.20	224.32	-1127.81	1666373.80	14317052.03	39°25'33.569"N	80°54'29.089"W	1149.90	0.90	-0.26	3.24		
5848.50	15.160	282.310	5695.96	-603.76	229.00	-1152.02	1666349.60	14317056.70	39°25'33.615"N	80°54'29.397"W	1174.56	0.78	-0.11	2.94		
5974.50	15.240	282.000	5817.55	-621.19	235.95	-1184.31	1666317.32	14317063.65	39°25'33.684"N	80°54'29.809"W	1207.59	0.09	0.06	-0.25		
6020.00	15.110	283.040	5861.46	-627.94	238.53	-1195.94	1666305.69	14317066.23	39°25'33.710"N	80°54'29.957"W	1219.50	0.66	-0.29	2.29	BHI AT Curve <-8.1/2"> (5974.50)-(6020.158845)	
6102.00	14.590	259.550	5940.80	-634.98	239.07	-1216.53	1666285.12	14317066.77	39°25'33.715"N	80°54'30.219"W	1239.80	281.118	7.32	-0.63	-28.65	
6149.00	14.550	240.290	5986.31	-634.90	235.07	-1227.48	1666274.16	14317067.77	39°25'33.676"N	80°54'30.359"W	1249.79	280.841	10.26	-0.09	-40.98	
6197.00	15.440	221.640	6032.71	-630.79	227.30	-1236.97	1666264.68	14317055.01	39°25'33.599"N	80°54'30.480"W	1257.68	280.412	10.18	1.85	-38.85	
6244.00	18.730	206.360	6077.65	-622.54	215.86	-1244.49	1666257.17	14317043.57	39°25'33.486"N	80°54'30.576"W	1263.07	279.840	11.79	7.00	-32.51	
6291.00	21.560	197.960	6121.78	-610.46	200.88	-1250.50	1666245.16	14317028.59	39°25'33.338"N	80°54'30.653"W	1266.53	279.126	8.60	6.02	-17.87	
6338.00	23.750	192.520	6165.15	-595.61	183.42	-1255.22	1666246.44	14317011.14	39°25'33.166"N	80°54'30.713"W	1268.55	278.313	6.44	4.66	-11.57	
6386.00	25.260	187.040	6208.83	-578.29	163.81	-1258.57	1666243.09	14316991.54	39°25'32.972"N	80°54'30.756"W	1269.18	277.416	5.68	3.15	-11.42	
6433.00	27.930	181.580	6250.86	-559.07	142.85	-1260.10	1666241.56	14316970.59	39°25'32.765"N	80°54'30.776"W	1268.17	276.468	7.69	5.68	-11.60	
6481.00	31.280	178.380	6292.59	-536.74	119.15	-1260.06	1666241.60	14316946.90	39°25'32.531"N	80°54'30.776"W	1265.68	275.402	7.72	6.98	-6.69	
6528.00	35.740	176.010	6331.77	-511.91	93.24	-1258.76	1666242.90	14316921.00	39°25'32.274"N	80°54'30.759"W	1262.21	274.237	9.89	9.49	-5.04	
6575.00	38.730	174.890	6369.19	-484.46	64.90	-1256.50	1666245.16	14316892.67	39°25'31.994"N	80°54'30.731"W	1258.17	272.957	6.52	6.36	-2.38	
6622.00	44.110	173.850	6404.42	-454.30	33.97	-1253.43	1666248.23	14316861.75	39°25'31.689"N	80°54'30.692"W	1253.89	271.552	11.54	11.45	-2.21	
6625.00†	44.466	173.881	6406.57	-452.27	31.89	-1253.21	1666248.45	14316859.67	39°25'31.668"N	80°54'30.689"W	1253.61	271.458	11.87	11.85	1.09	Middlesex 6625' MD
6670.00	49.800	174.310	6437.17	-420.25	-0.91	-1249.82	1666251.83	14316826.89	39°25'31.344"N	80°54'30.647"W	1249.82	269.958	11.87	11.85	0.95	
6717.00	54.960	174.560	6465.85	-384.16	-37.95	-1246.22	1666255.44	14316789.86	39°25'30.978"N	80°54'30.601"W	1246.79	268.256	10.99	10.98	0.53	
6764.00	60.580	174.850	6490.91	-345.67	-77.52	-1242.55	1666259.10	14316750.31	39°25'30.587"N	80°54'30.555"W	1244.97	266.430	11.97	11.96	0.62	
6785.00†	62.801	174.974	6500.87	-327.78	-95.94	-1240.91	1666260.74	14316731.90	39°25'30.405"N	80°54'30.534"W	1244.62	265.579	10.59	10.57	0.59	Burkett 6785' MD
6811.00	65.550	175.120	6512.19	-305.14	-119.25	-1238.89	1666262.76	14316708.59	39°25'30.174"N	80°54'30.509"W	1244.62	264.502	10.59	10.57	0.56	
6850.00†	67.458	174.957	6527.74	-270.55	-154.88	-1235.80	1666265.85	14316672.98	39°25'29.822"N	80°54'30.470"W	1245.47	262.856	4.91	4.90	-0.42	Tully 6850' MD
6859.00	67.900	174.920	6531.16	-262.50	-163.17	-1235.06	1666266.59	14316664.69	39°25'29.740"N	80°54'30.461"W	1245.80	262.474	4.91	4.90	-0.41	
6906.00	69.940	174.280	6548.06	-220.00	-206.83	-1230.94	1666270.71	14316621.05	39°25'29.308"N	80°54'30.409"W	1248.19	260.462	4.52	4.34	-1.36	
6935.00†	72.302	174.701	6557.44	-193.40	-234.14	-1228.30	1666273.35	14316593.75	39°25'29.038"N	80°54'30.375"W	1250.42	259.208	8.26	8.14	1.45	Marcellus POE: 6935' MD
6954.00	73.850	174.970	6562.97	-175.81	-252.24	-1226.67	1666274.98	14316575.65	39°25'28.860"N	80°54'30.355"W	1252.33	258.380	8.26	8.15	1.42	



Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'
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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Vera Pad
Slot	Slot #04
Well	Ant Unit 1H
Wellbore	Ant Unit 1H AWB

WELLPATH DATA (187 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert.Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Comments
7001.00	78.290	175.720	6574.29	-131.76	-297.70	-1222.97	1666278.68	14316530.21	39°25'28.410"N	80°54'30.308"W	1258.68	256.319	9.57	9.45	1.60	
7049.00	82.720	176.900	6582.20	-86.27	-344.93	-1219.93	1666281.72	14316483.00	39°25'27.943"N	80°54'30.270"W	1267.75	254.212	9.54	9.23	2.46	
7096.00	87.170	176.680	6586.34	-41.38	-391.66	-1217.30	1666284.34	14316436.29	39°25'27.481"N	80°54'30.232"W	1278.76	252.165	9.48	9.47	-0.47	
7144.00	91.170	176.400	6587.04	4.69	-439.56	-1214.41	1666287.24	14316388.41	39°25'27.008"N	80°54'30.201"W	1291.51	250.102	8.35	8.33	-0.58	
7239.00	89.690	172.090	6586.32	96.87	-534.06	-1204.88	1666296.76	14316293.95	39°25'26.074"N	80°54'30.081"W	1317.94	246.095	4.80	-1.56	-4.54	
7334.00	89.850	168.870	6586.71	190.36	-627.73	-1189.17	1666312.46	14316200.31	39°25'25.148"N	80°54'29.882"W	1344.69	242.172	3.39	0.17	-3.39	
7429.00	90.220	165.410	6586.62	284.67	-720.34	-1168.03	1666333.59	14316107.75	39°25'24.233"N	80°54'29.614"W	1372.29	238.337	3.67	0.42	-3.64	
7523.00	90.250	162.150	6586.24	378.49	-810.58	-1141.78	1666359.83	14316017.54	39°25'23.940"N	80°54'29.280"W	1400.25	234.628	3.47	-0.03	-3.47	
7617.00	90.180	161.290	6585.91	472.46	-899.84	-1112.30	1666389.31	14315928.32	39°25'22.458"N	80°54'28.908"W	1430.70	231.027	0.92	-0.04	-0.91	
7711.00	91.080	160.350	6584.88	566.44	-988.61	-1081.42	1666420.17	14315839.58	39°25'21.580"N	80°54'28.513"W	1465.20	227.567	1.38	0.96	-1.00	
7807.00	90.060	155.680	6583.92	662.34	-1077.60	-1045.49	1666456.09	14315750.63	39°25'20.700"N	80°54'28.057"W	1501.42	224.133	4.98	-1.06	-4.86	
7901.00	90.120	155.130	6583.77	755.99	-1163.07	-1006.37	1666495.19	14315665.19	39°25'19.855"N	80°54'27.559"W	1538.02	220.869	0.59	0.06	-0.59	
7995.00	90.220	158.570	6583.49	849.80	-1249.49	-969.42	1666532.13	14315578.81	39°25'19.001"N	80°54'27.090"W	1581.45	217.806	3.66	0.11	3.66	
8090.00	90.550	160.310	6582.86	944.79	-1338.43	-936.06	1666565.48	14315489.90	39°25'18.121"N	80°54'26.666"W	1633.28	214.968	1.86	0.35	1.83	
8184.00	90.740	158.820	6581.80	1038.77	-1426.51	-903.24	1666598.28	14315401.86	39°25'17.250"N	80°54'26.249"W	1688.42	212.341	1.60	0.20	-1.59	
8278.00	90.550	154.730	6580.74	1132.57	-1512.87	-866.18	1666635.32	14315315.53	39°25'16.397"N	80°54'25.778"W	1743.28	209.793	4.36	-0.20	-4.35	
8374.00	90.280	152.850	6580.04	1227.94	-1598.99	-823.79	1666677.70	14315229.45	39°25'15.545"N	80°54'25.239"W	1798.72	207.257	1.98	-0.28	-1.96	
8469.00	90.310	152.920	6579.55	1322.14	-1683.55	-780.49	1666720.98	14315144.92	39°25'14.709"N	80°54'24.688"W	1855.67	204.872	0.08	0.03	0.07	
8564.00	90.400	152.460	6578.97	1416.30	-1767.96	-736.90	1666764.55	14315060.55	39°25'13.874"N	80°54'24.134"W	1915.39	202.627	0.49	0.09	-0.48	
8657.00	90.370	155.310	6578.34	1508.70	-1851.45	-695.97	1666805.46	14314977.08	39°25'13.048"N	80°54'23.613"W	1977.94	200.601	3.06	-0.03	3.06	
8752.00	90.430	157.240	6577.68	1603.46	-1938.42	-657.75	1666843.67	14314890.15	39°25'12.188"N	80°54'23.127"W	2046.97	198.743	2.03	0.06	2.03	
8848.00	90.370	159.740	6577.01	1699.40	-2027.72	-622.55	1666878.85	14314800.89	39°25'11.305"N	80°54'22.680"W	2121.14	197.068	2.60	-0.06	2.60	
8942.00	90.370	161.920	6576.40	1793.39	-2116.50	-591.69	1666909.70	14314712.14	39°25'10.428"N	80°54'22.288"W	2197.65	195.619	2.32	0.00	2.32	
9037.00	90.550	161.550	6575.64	1888.36	-2206.71	-561.92	1666939.47	14314621.97	39°25'09.536"N	80°54'21.910"W	2277.13	194.286	0.43	0.19	-0.39	
9131.00	90.460	162.950	6574.81	1982.30	-2296.23	-533.26	1666968.11	14314532.48	39°25'08.651"N	80°54'21.546"W	2357.34	193.074	1.48	-0.10	1.49	
9226.00	90.310	163.170	6574.17	2077.19	-2387.11	-505.58	1666995.78	14314441.64	39°25'07.752"N	80°54'21.194"W	2440.06	191.958	0.28	-0.16	0.23	
9321.00	90.340	164.210	6573.63	2172.02	-2478.28	-478.90	1667022.45	14314350.51	39°25'06.851"N	80°54'20.856"W	2524.13	190.937	1.10	0.03	1.09	
9416.00	90.400	163.720	6573.02	2266.82	-2569.59	-452.66	1667048.68	14314259.24	39°25'05.948"N	80°54'20.523"W	2609.15	189.991	0.52	0.06	-0.52	
9511.00	90.370	162.520	6572.38	2361.71	-2660.49	-425.08	1667076.25	14314168.37	39°25'05.050"N	80°54'20.172"W	2694.23	189.078	1.26	-0.03	-1.26	
9607.00	90.370	161.340	6571.76	2457.66	-2751.75	-395.30	1667106.01	14314077.15	39°25'04.147"N	80°54'19.794"W	2780.00	188.175	1.23	0.00	-1.23	



Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'

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04/05/2019

REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #04
ANTERO RESOURCES CORPORATION	Well	Ant Unit 1H
Tyler County, WV	Wellbore	Ant Unit 1H AWB
Tyler		
Vera Pad		

WELLPATH DATA (187 stations)

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (IUS ft)	Grid North (IUS ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Comments
9702.00	90.280	160.200	6571.22	2562.66	-2841.45	-364.01	1667137.29	14313897.49	39°25'03.260"N	80°54'19.397"W	2864.67	187.300	1.20	-0.09	-1.20	
9796.00	90.180	159.930	6570.84	2646.66	-2929.81	-331.97	1667169.32	14313899.16	39°25'02.387"N	80°54'18.989"W	2948.56	186.464	0.31	-0.11	-0.29	
9891.00	89.850	160.350	6570.82	2741.66	-3019.16	-299.69	1667201.58	14313809.84	39°25'01.503"N	80°54'18.579"W	3034.00	185.669	0.56	-0.35	0.44	
9886.00	89.970	162.830	6570.97	2836.62	-3109.29	-269.69	1667231.57	14313719.75	39°25'00.612"N	80°54'18.198"W	3120.97	184.957	2.61	0.13	2.61	
10081.00	90.030	164.490	6570.97	2931.46	-3200.45	-242.97	1667268.29	14313628.63	39°24'59.711"N	80°54'17.859"W	3209.66	184.341	1.75	0.06	1.75	
10176.00	89.910	164.070	6571.02	3026.23	-3291.90	-217.23	1667284.02	14313537.22	39°24'58.807"N	80°54'17.532"W	3299.06	183.775	0.46	-0.13	-0.44	
10270.00	90.030	163.430	6571.07	3120.06	-3382.14	-190.92	1667310.31	14313447.01	39°24'57.915"N	80°54'17.198"W	3387.53	183.231	0.69	0.13	-0.68	
10366.00	90.030	160.680	6571.02	3216.01	-3473.47	-161.35	1667339.87	14313355.72	39°24'57.021"N	80°54'16.823"W	3477.21	182.660	2.86	0.00	-2.86	
10461.00	90.150	160.630	6570.87	3311.00	-3563.10	-129.88	1667371.33	14313266.12	39°24'56.125"N	80°54'16.423"W	3565.47	182.088	0.14	0.13	-0.05	
10555.00	90.180	160.550	6570.80	3405.00	-3651.76	-98.64	1667402.56	14313177.50	39°24'55.249"N	80°54'16.026"W	3653.09	181.547	0.09	0.03	-0.09	
10650.00	90.220	158.900	6570.28	3499.99	-3740.87	-65.72	1667435.46	14313088.43	39°24'54.368"N	80°54'15.608"W	3741.45	181.006	1.74	0.04	-1.74	
10745.00	90.150	159.350	6569.96	3594.97	-3829.63	-31.87	1667469.30	14312999.70	39°24'53.490"N	80°54'15.178"W	3829.76	180.477	0.48	-0.07	0.47	
10840.00	90.150	160.060	6569.71	3689.97	-3918.73	1.08	1667502.24	14312910.63	39°24'52.609"N	80°54'14.759"W	3918.73	179.984	0.75	0.00	0.75	
10935.00	90.220	160.550	6569.40	3784.97	-4008.18	33.10	1667534.24	14312821.23	39°24'51.725"N	80°54'14.353"W	4008.31	179.527	0.52	0.07	0.52	
11031.00	90.220	160.340	6569.03	3880.97	-4098.64	65.23	1667566.36	14312730.80	39°24'50.830"N	80°54'13.944"W	4098.16	179.088	0.22	0.00	-0.22	
11126.00	90.310	158.910	6568.59	3975.95	-4187.69	98.30	1667599.42	14312641.78	39°24'49.950"N	80°54'13.524"W	4188.84	178.655	1.51	0.09	-1.51	
11221.00	90.180	158.780	6568.19	4070.92	-4276.29	132.59	1667633.69	14312553.22	39°24'49.074"N	80°54'13.089"W	4278.34	178.224	0.19	-0.14	-0.14	
11316.00	90.060	160.450	6567.99	4165.91	-4365.33	165.68	1667666.77	14312464.21	39°24'48.193"N	80°54'12.669"W	4368.48	177.827	1.76	-0.13	1.76	
11412.00	90.250	161.340	6567.73	4261.91	-4456.05	197.10	1667698.17	14312373.54	39°24'47.297"N	80°54'12.269"W	4460.40	177.467	0.95	0.20	0.93	
11507.00	90.180	160.090	6567.37	4356.90	-4545.71	228.47	1667729.54	14312283.91	39°24'46.410"N	80°54'11.871"W	4551.45	177.123	1.32	-0.07	-1.32	
11602.00	90.090	159.490	6567.15	4451.90	-4634.86	261.29	1667762.34	14312194.79	39°24'45.529"N	80°54'11.454"W	4642.22	176.773	0.64	-0.09	-0.63	
11697.00	90.060	158.630	6567.02	4546.87	-4723.59	295.24	1667796.28	14312106.10	39°24'44.651"N	80°54'11.022"W	4732.81	176.423	0.91	-0.03	-0.91	
11792.00	90.030	157.390	6566.95	4641.79	-4811.67	330.81	1667831.84	14312018.05	39°24'43.780"N	80°54'10.570"W	4823.03	176.067	1.31	-0.03	-1.31	
11887.00	90.430	155.420	6566.57	4736.57	-4898.73	368.84	1667869.85	14311931.03	39°24'42.920"N	80°54'10.087"W	4912.59	175.694	2.12	0.42	-2.07	
11982.00	90.250	154.920	6566.00	4831.18	-4984.94	408.73	1667909.72	14311844.85	39°24'42.067"N	80°54'09.580"W	5001.67	175.313	0.56	-0.19	-0.53	
12077.00	90.220	157.590	6565.62	4925.94	-5071.89	446.98	1667947.96	14311757.94	39°24'41.207"N	80°54'09.094"W	5091.55	174.964	2.81	-0.03	2.81	
12171.00	90.220	161.210	6565.25	5019.91	-5159.87	480.05	1667981.01	14311670.01	39°24'40.337"N	80°54'08.674"W	5182.15	174.685	3.85	0.00	3.85	
12266.00	90.400	163.900	6564.74	5114.83	-5250.49	508.52	1668009.48	14311579.41	39°24'39.441"N	80°54'08.312"W	5275.06	174.468	2.84	0.19	2.83	
12361.00	89.880	165.630	6564.51	5209.53	-5342.15	533.49	1668034.43	14311487.79	39°24'38.535"N	80°54'07.995"W	5368.72	174.297	1.90	-0.55	1.82	
12456.00	89.780	164.300	6564.79	5304.22	-5433.89	558.13	1668059.06	14311396.08	39°24'37.628"N	80°54'07.683"W	5462.48	174.136	1.40	-0.11	-1.40	



Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'
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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Vera Pad
Slot	Slot #04
Well	Ant Unit 1H
Wellbore	Ant Unit 1H AWB

WELLPATH DATA (187 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
12551.00	89.940	160.360	6565.02	5399.14	-5524.39	586.96	1668087.88	14311305.62	39°24'36.733"N	80°54'07.317"W	5555.48	173.935	4.15	0.17	-4.15	
12646.00	89.750	159.610	6565.28	5494.14	-5613.65	619.47	1668120.38	14311216.40	39°24'35.851"N	80°54'06.904"W	5647.73	173.703	0.81	-0.20	-0.79	
12740.00	89.720	159.400	6565.71	5588.13	-5701.70	652.39	1668153.28	14311128.38	39°24'34.980"N	80°54'06.486"W	5738.90	173.473	0.23	-0.03	-0.22	
12835.00	88.340	159.040	6567.32	5683.09	-5790.51	686.08	1668186.97	14311039.61	39°24'34.102"N	80°54'06.058"W	5831.01	173.243	1.50	-1.45	-0.38	
12930.00	89.720	165.470	6568.93	5777.97	-5880.92	715.02	1668215.89	14310949.23	39°24'33.208"N	80°54'05.690"W	5924.23	173.068	6.92	1.45	6.77	
13024.00	89.720	162.920	6569.39	5871.75	-5971.36	740.62	1668241.48	14310858.83	39°24'32.314"N	80°54'05.365"W	6017.11	172.930	2.71	0.00	-2.71	
13119.00	90.030	160.500	6569.60	5969.60	-6061.56	770.43	1668271.28	14310768.67	39°24'31.422"N	80°54'04.987"W	6110.32	172.757	2.57	0.33	-2.55	
13214.00	90.180	159.430	6569.42	6061.71	-6150.80	802.97	1668303.81	14310679.46	39°24'30.540"N	80°54'04.573"W	6203.00	172.562	1.14	0.16	-1.13	
13310.00	89.910	158.600	6569.35	6157.62	-6239.81	838.91	1668339.73	14310590.48	39°24'29.660"N	80°54'04.117"W	6295.96	172.343	2.96	-0.28	-2.95	
13405.00	90.030	158.530	6569.40	6252.42	-6326.98	876.69	1668377.50	14310503.36	39°24'28.798"N	80°54'03.637"W	6387.43	172.111	0.15	0.13	-0.07	
13500.00	89.600	154.080	6569.71	6347.05	-6413.28	916.38	1668417.17	14310417.09	39°24'27.945"N	80°54'03.132"W	6478.42	171.868	2.62	-0.45	-2.58	
13595.00	89.720	157.530	6570.27	6441.74	-6499.92	955.31	1668456.08	14310330.48	39°24'27.088"N	80°54'02.638"W	6569.75	171.639	3.63	0.13	3.63	
13689.00	90.000	160.200	6570.50	6535.70	-6587.59	989.20	1668489.96	14310242.85	39°24'26.221"N	80°54'02.207"W	6661.45	171.460	2.86	0.30	2.84	
13784.00	90.090	161.910	6570.42	6630.69	-6677.44	1020.04	1668520.79	14310153.03	39°24'25.333"N	80°54'01.815"W	6754.90	171.315	1.80	0.09	1.80	
13879.00	89.970	160.990	6570.37	6725.67	-6767.51	1050.26	1668551.00	14310063.00	39°24'24.442"N	80°54'01.432"W	6848.52	171.179	0.98	-0.13	-0.97	
13974.00	90.030	161.880	6570.37	6820.65	-6857.56	1080.51	1668581.23	14309972.99	39°24'23.552"N	80°54'01.048"W	6942.16	171.046	0.94	0.06	0.94	
14068.00	90.740	162.980	6569.74	6914.58	-6947.17	1108.88	1668609.59	14309883.41	39°24'22.666"N	80°54'00.687"W	7035.11	170.931	1.39	0.76	1.17	
14164.00	89.880	165.400	6569.22	7010.35	-7039.53	1135.03	1668635.73	14309791.09	39°24'21.753"N	80°54'00.355"W	7130.45	170.841	2.68	-0.90	2.52	
14257.00	90.000	164.490	6569.32	7103.05	-7129.34	1159.19	1668659.88	14309701.32	39°24'20.865"N	80°54'00.049"W	7222.96	170.765	0.99	0.13	-0.98	
14352.00	90.030	159.690	6569.30	7197.97	-7219.71	1188.40	1668689.08	14309610.98	39°24'19.971"N	80°53'59.678"W	7316.86	170.653	5.05	0.03	-5.05	
14447.00	89.940	154.960	6569.32	7292.82	-7307.34	1225.01	1668725.67	14309523.39	39°24'19.105"N	80°53'59.213"W	7409.31	170.483	4.98	-0.09	-4.98	
14542.00	90.000	152.990	6569.37	7387.23	-7392.70	1266.69	1668767.34	14309438.06	39°24'18.261"N	80°53'58.683"W	7500.44	170.277	2.07	0.06	-2.07	
14637.00	90.090	155.320	6569.30	7481.68	-7478.20	1308.10	1668808.73	14309352.60	39°24'17.415"N	80°53'58.157"W	7591.74	170.078	2.45	0.09	2.45	
14732.00	90.060	161.610	6569.17	7576.58	-7566.52	1342.95	1668843.57	14309264.31	39°24'16.542"N	80°53'57.714"W	7684.77	169.936	6.62	-0.03	6.62	
14827.00	90.060	165.160	6569.07	7671.43	-7657.54	1370.11	1668870.72	14309173.33	39°24'15.642"N	80°53'57.369"W	7779.15	169.856	3.74	0.00	3.74	
14922.00	89.910	164.610	6569.10	7766.13	-7749.25	1394.89	1668895.48	14309081.65	39°24'14.735"N	80°53'57.055"W	7873.79	169.796	0.60	-0.16	-0.58	
15018.00	89.850	161.310	6569.30	7862.01	-7841.02	1423.01	1668923.60	14308989.92	39°24'13.828"N	80°53'56.698"W	7969.10	169.714	3.44	-0.06	-3.44	
15113.00	89.630	160.720	6569.73	7957.00	-7930.85	1453.92	1668954.49	14308900.12	39°24'12.940"N	80°53'56.306"W	8063.02	169.612	0.66	-0.23	-0.62	
15207.00	89.750	158.890	6570.24	8050.95	-8018.48	1487.90	1668988.46	14308812.53	39°24'12.073"N	80°53'55.874"W	8155.36	169.488	4.08	0.13	-4.07	
15302.00	90.090	162.040	6570.37	8145.91	-8107.41	1521.21	1669021.76	14308723.64	39°24'11.194"N	80°53'55.451"W	8248.89	169.373	5.43	0.36	5.42	



Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Tyler County, WV	Well	Ant Unit 1H
Field	Tyler	Wellbore	Ant Unit 1H AWB
Facility	Vera Pad		

WELLPATH DATA (187 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
15396.00	89.970	164.890	6570.32	8239.76	-8197.52	1547.96	1669048.49	14308633.57	39°24'10.303"N	80°53'55.114"W	8342.39	169.307	3.03	-0.13	3.03	
15490.00	89.820	165.130	6570.49	8333.44	-8288.32	1572.27	1669072.80	14308542.80	39°24'09.405"N	80°53'54.803"W	8436.13	169.259	0.30	-0.16	0.26	
15585.00	89.820	165.850	6570.79	8428.05	-8380.29	1596.07	1669096.59	14308450.87	39°24'08.496"N	80°53'54.501"W	8530.92	169.217	0.76	0.00	0.76	
15679.00	89.910	165.560	6571.01	8521.63	-8471.37	1619.28	1669119.79	14308359.82	39°24'07.596"N	80°53'54.207"W	8624.75	169.179	0.32	0.10	-0.31	
15774.00	89.970	164.550	6571.16	8616.31	-8563.16	1643.78	1669144.28	14308268.07	39°24'06.688"N	80°53'53.896"W	8719.50	169.134	1.06	0.00	-1.06	
15845.00	89.910	160.930	6571.27	8687.23	-8630.95	1664.85	1669165.33	14308200.31	39°24'06.018"N	80°53'53.629"W	8790.05	169.082	5.10	0.00	-5.10	
15869.00	89.970	160.930	6571.31	8711.23	-8653.63	1672.69	1669173.17	14308177.63	39°24'05.794"N	80°53'53.529"W	8813.81	169.060	0.00	0.00	0.00	Projected MD at TD: 15869'

HOLE & CASING SECTIONS - Ref Wellbore: Ant Unit 1H AWP Proj: 15869'

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	End N/S [ft]	Start E/W [ft]	End E/W [ft]
20in Conductor	24.50	104.50	80.00	24.50	104.50	0.00	0.01	0.00	0.10
17.5in Open Hole	104.50	752.70	648.20	104.50	752.69	0.01	-1.04	0.10	3.15
13.375in Casing Surface	24.50	752.70	728.20	24.50	752.69	0.00	-1.04	0.00	3.15
12.5in Open Hole	752.70	2620.50	1867.80	752.69	2580.47	-1.04	60.76	3.15	-325.33
9.625in Casing Intermediate	24.50	2620.50	2596.00	24.50	2580.47	0.00	60.76	0.00	-325.33
8.75in Open Hole	2620.50	6044.50	3424.00	2580.47	5885.14	60.76	239.59	-325.33	-1202.14
8.5in Open Hole	6044.50	15869.00	9824.50	5885.14	6571.31	239.59	-8653.63	-1202.14	1672.69
5.5in Casing Production	24.50	15869.00	15844.50	24.50	6571.31	0.00	-8653.63	0.00	1672.69



Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Tyler County, WV	Well	Ant Unit 1H
Field	Tyler	Wellbore	Ant Unit 1H AWB
Facility	Vera Pad		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Ant Unit 1H POE Rev-3	6555.00	-207.61	-1252.22	1666249.44	14316620.27	39°25'29.301"N	80°54'30.680"W	point
Ant Unit 1H BHL Rev-3	6585.00	-8644.86	1700.73	1669201.20	14308186.40	39°24'05.880"N	80°53'53.172"W	point
Ant Unit 1H LP Rev-1	6585.00	-383.48	-1222.20	1666279.45	14316444.47	39°25'27.562"N	80°54'30.300"W	point

WELLPATH COMPOSITION - Ref Wellbore: Ant Unit 1H AWB Ref Wellpath: Ant Unit 1H AWP Proj: 15869'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	716.50	Gyrodata standard - Single-shot	01. Gyrodata SS Gyro <17-1/2">(100'-707')	Ant Unit 1H AWB
716.50	1249.50	Gyrodata standard - Single-shot	02. Gyrodata SS Gyro <12-1/4">(707')(768'-1240')	Ant Unit 1H AWB
1249.50	2537.50	ISCVSA MWD, Rev. 4 (Standard)	03. WFT EM <12-1/4">(1240')(1355'-2528')	Ant Unit 1H AWB
2537.50	5974.50	ISCVSA MWD, Rev. 4 (Standard)	04. WFT EM <8-3/4">(2624'-5965')	Ant Unit 1H AWB
5974.50	15845.00	BHI AutoTrak Curve (Short)	05. BHI AT Curve <8-1/2">(6974.50')(6020'-15845')	Ant Unit 1H AWB
15845.00	15869.00	Blind Drilling (std)	Projection to bit	Ant Unit 1H AWB



Actual Wellpath Report

Ant Unit 1H AWP Proj: 15869'
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REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #04
ANTERO RESOURCES CORPORATION	Well	Ant Unit 1H
Tyler County, WV	Wellbore	Ant Unit 1H AWB
Tyler		
Vera Pad		

COMMENTS

Wellpath general comments

API: 47-095-02400-0000
 BHI Job #: 8775355
 Rig: Frontier 22
 Duration: 09/20/2017-09/22/2017
 Gyrodatta SS Gyro <17-1/2"> (100'-707')
 Gyrodatta SS Gyro <12-1/4"> (707')(768'-1240')
 WFT EM <12-1/4"> (1240')(1355'-2528')
 WFT EM <8-3/4"> (2528')(2624'-5965')
 BHI AT Curve <8-1/2"> (5974.50')(6020'-15845')
 Middlesex: 6625' MD
 Burkett: 6785' MD
 Tully: 6850' MD
 Marcellus POE: 6935' MD
 Projected MD at TD: 15869'