

ANTERO RESOURCES CORPORATION

Location: Doddridge Co., WV
 Field: Addridge
 Facility: Addie Pad

Slot: Slot #04
 Well: Warrior Unit 1H
 Wellbore: Warrior Unit 1H PWB

POB reference wellbore is Warrior 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 914.5 feet
 Mean Sea Level to Mud line (At Slot: Slot #04) -480 feet
 Coordinates are in feet referenced to Slot

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
Addie Pad	1695325.147	14283415.126	80°48'20.930"W
Slot	Local E (ft)	Grid East (US ft)	Longitude
Slot #04	20.43	1695345.571	80°48'20.670"W
Comment	Warrior Unit 1H		
Frontier 22 (RKB) to Mud line (At Slot: Slot #04)		24.5ft	
Mean Sea Level to Mud line (At Slot: Slot #04)		-490ft	
Frontier 22 (RKB) to Mean Sea Level		914.5ft	

Scale 1 inch = 1000 ft

Gyrodata MS Gyro <17-1/2"> (100°-47'1") : 0.15° Inc. 109.50ft MD, 109.50ft TVD, -0.08ft VS

Gyrodata MS Gyro <12-1/4"> (471°)(528-732) : 0.24° Inc. 537.50ft MD, 537.50ft TVD, -0.53ft VS

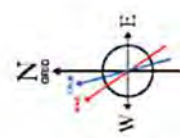
WFT EM <12-1/4"> (732°)(822-2524) : 2.65° Inc. 831.50ft MD, 831.43ft TVD, 0.89ft VS

Well Profile Data						
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local E (ft)	VS (ft)
Tie Oh	6797.50	48.890	143.740	6316.84	560.61	228.67
Prof. To Bottom	6871.50	54.680	147.970	6302.11	512.15	7.89
End of 3D Arc	6979.41	63.802	148.227	6417.24	433.51	2040.07
POE	7091.73	68.193	157.581	6463.00	342.26	2096.60
Landing Pt.	7309.80	90.000	157.581	6504.00	145.50	2167.77
BHL	19136.67	90.000	157.581	6504.00	-10787.48	6678.30
						12519.14

Well Data			
Slot	Well	Wellbore	Wellbath
Slot #04	Warrior Unit 1H	Warrior Unit 1H AWB	Warrior Unit 1H AWP Proj 19135
Slot #04	Warrior Unit 1H	Warrior Unit 1H PWB	Warrior Unit 1H PWP Rev-A.0

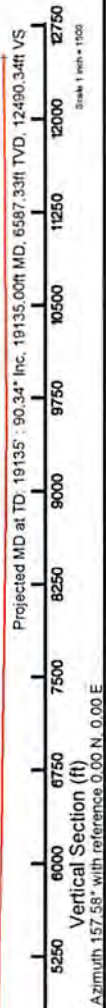
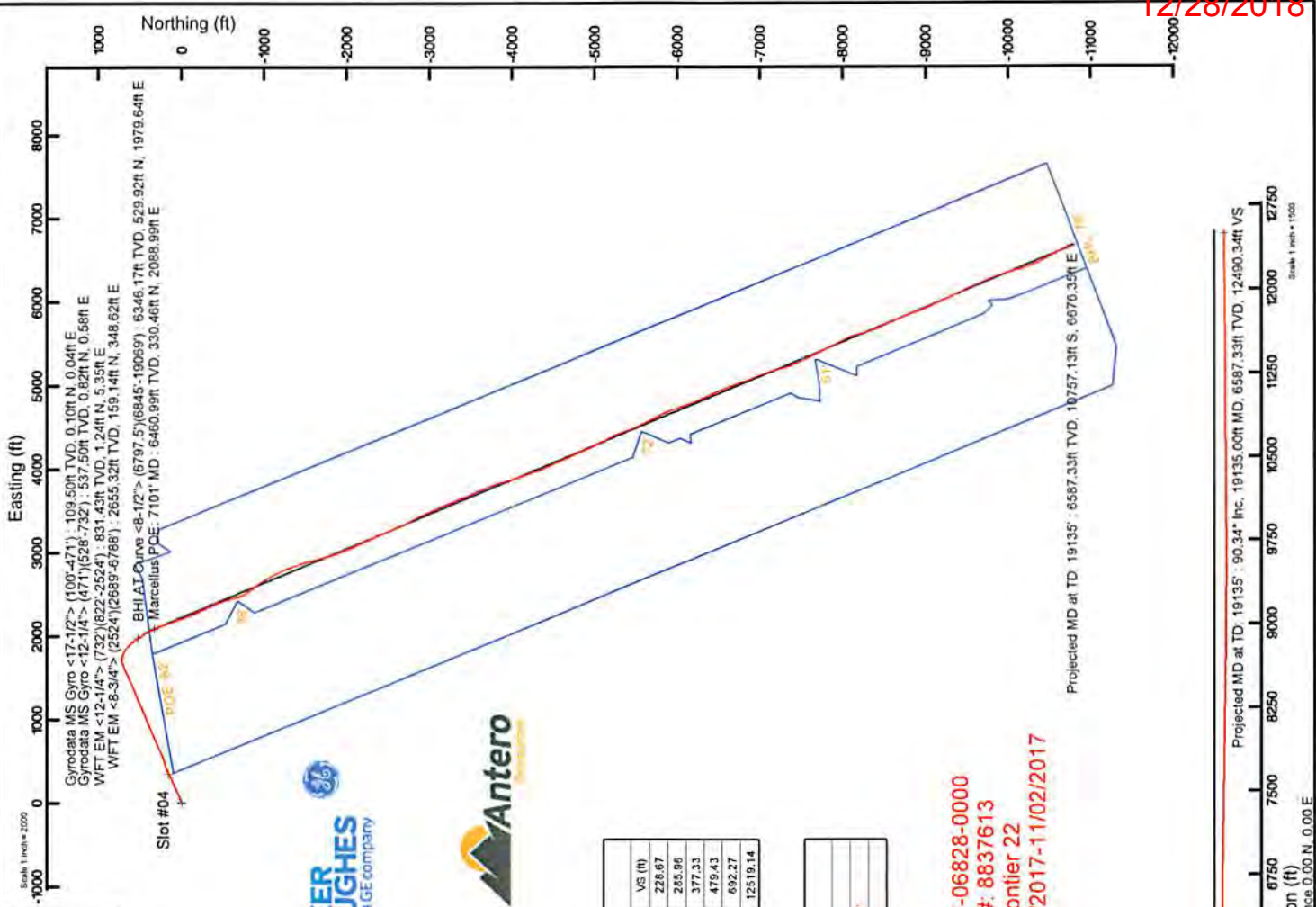
WFT EM <8-3/4"> (2524°)(2689-6788) : 13.05° Inc. 2698.50ft MD, 2655.32ft TVD, -14.15ft VS

API: 47-017-06828-0000
 BHI Job #: 8837613
 Rig: Frontier 22
 Duration: 10/30/2017-11/02/2017



User specified Dip: 96.60° Field 52080 nT
 Magnetic North is 7.63 degrees West of True North (at 27/02/2017)
 Grid North is 0.12 degrees East of True North
 To correct azimuth from True to Grid subtract 0.12 degrees
 To correct azimuth from Magnetic to Grid subtract 7.75 degrees

BHI AT Curve <8-1/2"> (6797.5°)(6845-190669) : 53.83° Inc. 6845.00ft MD, 6346.17ft TVD, 265.15ft VS
 Marcellus POE: 7101° MD: 69.72° Inc. 7101.00ft MD, 6460.99ft TVD, 491.24ft VS



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Actual Wellpath Report

Warrior Unit 1H AWP Proj: 19135'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addie Pad		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Delaset
Scale	0.999603	Report Generated	10/Jan/2018 at 16:49
Convergence at slot	0.12° East	Database/Source file	WA_MPL_EasternUS_Defn/Warrior_Unit_1H_AWP_Proj_19135_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.97	20.43	1695345.57	14283414.16	39°20'00.520"N	80°48'20.670"W
Facility Reference Pt			1695325.15	14283415.13	39°20'00.530"N	80°48'20.930"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Frontier 22 (RKB) to Facility Vertical Datum	24.50ft
Horizontal Reference Pt	Slot	Frontier 22 (RKB) to Mean Sea Level	914.50ft
Vertical Reference Pt	Frontier 22 (RKB)	Frontier 22 (RKB) to Mud Line at Slot (Slot #04)	24.50ft
MD Reference Pt	Frontier 22 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	157.58°

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION		Slot #04
Area	Doddridge Co., WV		Well
Field	Doddridge		Wellbore
Facility	Addie Pad		Warrior Unit 1H AWP

WELLPATH DATA (226 stations) † = interpolated/extrapolated station																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)			(ft)	(°)	(/100ft)	(/100ft)	(/100ft)	
0.00	0.00	22.390	0.00	0.00	0.00	0.00	1695345.57	14283414.16	39°20'00.520"N	80°48'20.670"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.00	22.390	24.50	0.00	0.00	0.00	1695345.57	14283414.16	39°20'00.520"N	80°48'20.670"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.15	22.390	109.50	-0.08	0.10	0.04	1695345.61	14283414.26	39°20'00.521"N	80°48'20.669"W	0.11	22.390	0.18	0.18	26.34	Gyrodata MS Gyro <17-1/2"> (100'-471')
209.50	0.16	41.260	209.50	-0.23	0.33	0.18	1695345.75	14283414.49	39°20'00.523"N	80°48'20.668"W	0.38	29.270	0.05	0.01	18.87	
309.50	0.16	11.590	309.50	-0.41	0.57	0.30	1695345.87	14283414.73	39°20'00.526"N	80°48'20.666"W	0.65	28.083	0.08	0.00	-29.67	
409.50	0.07	46.050	409.50	-0.55	0.75	0.38	1695345.95	14283414.91	39°20'00.527"N	80°48'20.665"W	0.84	26.662	0.11	-0.09	34.46	
480.50	0.16	38.490	480.50	-0.61	0.86	0.47	1695346.04	14283415.02	39°20'00.528"N	80°48'20.664"W	0.98	28.698	0.13	0.13	-10.65	
537.50	0.24	149.680	537.50	-0.53	0.82	0.58	1695346.15	14283414.98	39°20'00.528"N	80°48'20.663"W	1.00	35.344	0.58	0.14	195.07	Gyrodata MS Gyro <12-1/4"> (471')(528'-732')
627.50	0.43	118.480	627.50	-0.09	0.49	0.97	1695346.54	14283414.65	39°20'00.525"N	80°48'20.658"W	1.09	63.089	0.29	0.21	-34.67	
741.50	1.25	89.320	741.48	0.71	0.30	2.59	1695348.16	14283414.46	39°20'00.523"N	80°48'20.637"W	2.61	83.313	0.79	0.72	-25.58	
831.50	2.55	62.360	831.43	0.89	1.24	5.35	1695350.91	14283415.40	39°20'00.532"N	80°48'20.602"W	5.49	76.898	1.72	1.44	-29.96	WFT EM <12-1/4"> (732')(822'-2524')
927.50	4.21	58.360	927.26	0.13	4.08	10.24	1695355.80	14283418.24	39°20'00.560"N	80°48'20.540"W	11.02	68.255	1.75	1.73	-4.17	
1021.50	5.94	56.670	1020.89	-1.34	8.57	17.24	1695362.80	14283422.72	39°20'00.604"N	80°48'20.450"W	19.25	63.577	1.85	1.84	-1.80	
1116.50	6.92	54.850	1115.29	-3.54	14.56	26.03	1695371.59	14283428.72	39°20'00.663"N	80°48'20.338"W	29.82	60.772	1.05	1.03	-1.92	
1210.50	7.01	61.150	1208.60	-5.43	20.59	35.68	1695381.24	14283434.74	39°20'00.723"N	80°48'20.215"W	41.20	60.012	0.82	0.10	6.70	
1304.50	7.48	69.800	1301.85	-5.83	25.47	46.45	1695392.00	14283439.62	39°20'00.771"N	80°48'20.078"W	52.97	61.261	1.26	0.50	9.20	
1398.50	9.73	73.830	1394.79	-4.73	29.80	59.82	1695405.37	14283443.94	39°20'00.813"N	80°48'19.908"W	66.83	63.522	2.48	2.39	4.29	
1492.50	12.29	71.510	1487.05	-3.18	35.18	76.94	1695422.48	14283449.33	39°20'00.866"N	80°48'19.690"W	84.60	65.427	2.76	2.72	-2.47	
1587.50	13.76	66.850	1579.61	-2.63	42.83	96.92	1695442.45	14283456.97	39°20'00.941"N	80°48'19.435"W	105.96	66.158	1.90	1.55	-4.91	
1682.50	14.38	62.980	1671.76	-3.72	52.63	117.82	1695463.34	14283466.77	39°20'01.038"N	80°48'19.169"W	129.04	65.928	1.19	0.65	-4.07	
1776.50	14.60	62.590	1762.77	-5.69	63.39	138.73	1695484.25	14283477.52	39°20'01.144"N	80°48'18.903"W	152.53	65.444	0.26	0.23	-0.41	
1871.50	15.44	66.950	1854.53	-6.87	73.85	161.00	1695506.51	14283487.98	39°20'01.247"N	80°48'18.619"W	177.13	65.358	1.48	0.88	4.59	
1966.50	16.61	66.700	1945.83	-7.21	84.18	185.11	1695530.60	14283498.30	39°20'01.348"N	80°48'18.312"W	203.35	65.547	1.23	1.23	-0.26	
2060.50	14.62	66.020	2036.36	-7.74	94.31	208.29	1695553.78	14283508.43	39°20'01.448"N	80°48'18.017"W	228.65	65.639	2.13	-2.12	-0.72	
2154.50	13.92	65.310	2127.46	-8.51	103.86	229.40	1695574.88	14283517.97	39°20'01.542"N	80°48'17.748"W	251.82	65.642	0.77	-0.74	-0.76	
2249.50	14.76	65.100	2219.50	-9.49	113.73	250.76	1695596.23	14283527.84	39°20'01.639"N	80°48'17.476"W	275.34	65.605	0.89	0.88	-0.22	
2343.50	14.30	66.700	2310.49	-10.19	123.36	272.28	1695617.75	14283537.47	39°20'01.733"N	80°48'17.201"W	298.92	65.627	0.65	-0.49	1.70	
2438.50	14.02	67.490	2402.61	-10.39	132.40	293.69	1695639.14	14283546.51	39°20'01.822"N	80°48'16.929"W	322.16	65.733	0.36	-0.29	0.83	
2533.50	13.79	64.510	2494.82	-11.01	141.68	314.54	1695659.99	14283555.79	39°20'01.914"N	80°48'16.663"W	344.98	65.751	0.79	-0.24	-3.14	
2698.50	13.06	61.150	2655.32	-14.15	159.14	348.62	1695694.05	14283573.24	39°20'02.085"N	80°48'16.229"W	383.23	65.464	0.65	-0.44	-2.04	WFT EM <8-3/4"> (2524')(2689'-6788')

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addie Pad		

WELLPATH DATA (226 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
2792.50	14.320	67.490	2746.65	-15.36	168.72	368.67	1695714.09	14283582.81	39°20'02.180"N	80°48'15.974"W	405.44	65.409	2.08	1.34	6.74	
2887.50	14.000	67.290	2838.76	-15.44	177.65	390.12	1695735.54	14283591.74	39°20'02.268"N	80°48'15.700"W	428.67	65.516	0.34	-0.34	-0.21	
2982.50	13.160	65.050	2931.11	-15.97	186.65	410.53	1695755.93	14283600.74	39°20'02.356"N	80°48'15.440"W	450.97	65.550	1.04	-0.88	-2.36	
3078.50	12.850	64.760	3024.64	-16.98	195.81	430.09	1695775.49	14283609.89	39°20'02.446"N	80°48'15.191"W	472.57	65.521	0.33	-0.32	-0.30	
3172.50	15.920	75.920	3115.70	-15.62	203.41	452.06	1695797.45	14283617.49	39°20'02.521"N	80°48'14.911"W	495.71	65.774	4.39	3.27	11.87	
3267.50	17.510	76.130	3206.69	-11.61	210.01	478.57	1695823.95	14283624.08	39°20'02.585"N	80°48'14.574"W	522.62	66.307	1.67	1.67	0.22	
3361.50	19.070	73.840	3295.94	-7.83	217.67	507.05	1695852.42	14283631.74	39°20'02.661"N	80°48'14.211"W	551.80	66.767	1.83	1.66	-2.44	
3456.50	21.410	70.500	3385.07	-5.25	227.78	538.31	1695883.67	14283641.85	39°20'02.760"N	80°48'13.813"W	584.52	67.065	2.75	2.46	-3.52	
3551.50	23.570	67.780	3472.84	-4.30	240.75	572.24	1695917.59	14283654.81	39°20'02.887"N	80°48'13.381"W	620.82	67.183	2.52	2.27	-2.86	
3646.50	25.490	65.230	3559.26	-5.08	256.50	608.39	1695953.72	14283670.56	39°20'03.042"N	80°48'12.920"W	660.25	67.139	2.31	2.02	-2.88	
3740.50	27.140	63.700	3643.52	-7.36	274.48	645.98	1695991.29	14283688.53	39°20'03.219"N	80°48'12.441"W	701.87	66.979	1.90	1.76	-1.63	
3835.50	28.450	65.560	3727.56	-9.62	293.44	686.01	1696031.31	14283707.48	39°20'03.406"N	80°48'11.931"W	746.13	66.841	1.65	1.38	1.96	
3929.50	29.740	66.540	3809.70	-10.83	311.99	727.78	1696073.06	14283726.02	39°20'03.588"N	80°48'11.399"W	791.84	66.796	1.46	1.37	1.04	
4023.50	28.910	65.500	3891.65	-12.08	330.69	769.85	1696115.11	14283744.72	39°20'03.772"N	80°48'10.863"W	837.87	66.754	1.04	-0.88	-1.11	
4118.50	28.890	67.410	3974.82	-12.98	349.03	811.93	1696157.18	14283763.05	39°20'03.952"N	80°48'10.327"W	883.77	66.738	0.97	-0.02	2.01	
4213.50	28.260	65.970	4058.25	-13.68	367.00	853.66	1696198.89	14283781.02	39°20'04.129"N	80°48'09.796"W	929.21	66.736	0.98	-0.66	-1.52	
4307.50	28.820	67.480	4140.83	-14.35	384.74	894.92	1696240.13	14283798.75	39°20'04.304"N	80°48'09.270"W	974.12	66.736	0.97	0.60	1.61	
4402.50	29.470	69.160	4223.80	-13.74	401.83	937.91	1696283.11	14283815.83	39°20'04.471"N	80°48'08.723"W	1020.36	66.808	1.10	0.68	1.77	
4496.50	28.760	68.130	4305.92	-12.89	418.48	980.51	1696325.69	14283832.47	39°20'04.635"N	80°48'08.180"W	1066.07	66.887	0.92	-0.76	-1.10	
4591.50	28.810	66.390	4389.19	-13.14	436.16	1022.69	1696367.85	14283850.14	39°20'04.809"N	80°48'07.643"W	1111.81	66.903	0.88	0.05	-1.83	
4686.50	29.140	67.750	4472.30	-13.55	454.09	1065.07	1696410.22	14283868.06	39°20'04.985"N	80°48'07.103"W	1157.83	66.909	0.78	0.35	1.43	
4780.50	28.610	66.820	4554.61	-13.78	471.61	1106.94	1696452.07	14283885.58	39°20'05.157"N	80°48'06.569"W	1203.22	66.924	0.74	-0.56	-0.99	
4874.50	27.490	64.580	4637.57	-15.22	489.78	1147.23	1696492.34	14283903.75	39°20'05.336"N	80°48'06.056"W	1247.41	66.881	1.64	-1.19	-2.38	
4969.50	27.510	66.230	4721.84	-16.88	508.04	1187.11	1696532.21	14283921.99	39°20'05.516"N	80°48'05.548"W	1291.26	66.831	0.80	0.02	1.74	
5063.50	27.150	65.370	4805.34	-18.22	525.73	1226.48	1696571.56	14283939.68	39°20'05.690"N	80°48'05.047"W	1334.40	66.798	0.57	-0.38	-0.91	
5158.50	27.890	66.900	4889.59	-19.32	543.48	1266.62	1696611.69	14283957.42	39°20'05.864"N	80°48'04.535"W	1378.29	66.777	1.08	0.78	1.61	
5252.50	27.710	70.500	4972.75	-18.47	559.40	1307.45	1696652.50	14283973.34	39°20'06.021"N	80°48'04.015"W	1422.09	66.836	1.80	-0.19	3.83	
5346.50	27.300	69.110	5056.13	-16.78	574.38	1348.19	1696693.22	14283988.31	39°20'06.168"N	80°48'03.496"W	1465.44	66.924	0.81	-0.44	-1.48	
5441.50	27.020	66.530	5140.65	-16.59	590.75	1388.34	1696733.35	14284004.67	39°20'06.329"N	80°48'02.985"W	1508.79	66.950	1.27	-0.29	-2.72	
5535.50	26.470	64.490	5224.60	-18.11	608.27	1426.83	1696771.83	14284022.19	39°20'06.501"N	80°48'02.495"W	1551.08	66.911	1.14	-0.59	-2.17	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addle Pad		

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grd East	Grd North	Latitude	Longitude	Closure	Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments	Wellpath Data (226 stations)	
																		† = Interpolated/extrapolated station	
L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
5630.50	25.800	65.540	5309.89	-19.99	625.95	1464.76	1696809.74	14284039.86	39°20'06.675"N	80°48'02.011"W	1592.90	66.861	0.86	-0.71	1.11				
5724.50	26.110	67.590	5394.41	-20.71	642.31	1502.50	1696847.47	14284056.21	39°20'06.836"N	80°48'01.531"W	1634.03	66.854	1.01	0.33	2.18				
5819.50	25.640	64.680	5479.89	-21.75	659.07	1640.41	1696885.36	14284072.96	39°20'07.001"N	80°48'01.048"W	1675.48	66.836	1.43	-0.49	-3.06				
5914.50	26.020	64.730	5565.40	-23.83	676.75	1677.83	1696922.77	14284090.64	39°20'07.175"N	80°48'00.571"W	1716.84	66.785	0.40	0.05					
6008.50	26.020	66.030	5649.87	-25.41	693.93	1615.32	1696960.24	14284107.81	39°20'07.344"N	80°48'00.093"W	1758.06	66.752	0.61	0.00	1.38				
6103.50	26.030	69.270	5735.24	-25.36	709.78	1653.85	1696998.77	14284123.65	39°20'07.499"N	80°47'59.602"W	1799.73	66.773	1.50	0.01	3.41				
6198.50	26.900	77.150	5820.31	-21.17	721.94	1694.32	1697039.21	14284135.81	39°20'07.619"N	80°47'59.087"W	1841.71	66.921	3.81	0.92	8.29				
6229.50	26.690	82.990	5847.99	-18.15	724.35	1708.07	1697052.96	14284138.22	39°20'07.642"N	80°47'58.912"W	1855.31	67.019	8.52	-0.68	18.84				
6291.50	26.300	89.430	5876.63	-13.60	725.29	1722.29	1697067.17	14284139.16	39°20'07.651"N	80°47'58.731"W	1868.78	67.163	9.06	-1.22	20.13				
6293.50	26.240	94.860	5905.33	-7.71	724.75	1736.43	1697081.31	14284138.62	39°20'07.646"N	80°47'58.551"W	1881.61	67.345	7.65	-0.19	17.28				
6324.50	26.120	100.370	5933.15	-0.86	722.93	1749.97	1697094.84	14284136.80	39°20'07.627"N	80°47'58.379"W	1893.42	67.554	7.71	-0.39	17.45				
6356.50	26.230	105.880	5961.88	7.34	719.73	1763.70	1697108.57	14284133.60	39°20'07.595"N	80°47'58.204"W	1904.90	68.001	7.60	0.34	17.22				
6387.50	26.040	110.840	5989.71	16.25	715.43	1776.65	1697121.52	14284129.31	39°20'07.553"N	80°47'58.039"W	1915.29	68.066	7.07	-0.61	16.00				
6419.50	26.400	114.790	6018.42	26.28	709.95	1789.68	1697134.53	14284123.83	39°20'07.498"N	80°47'57.874"W	1925.36	68.362	5.57	1.12	12.34				
6450.50	27.430	118.290	6046.06	36.87	703.68	1802.22	1697147.08	14284117.56	39°20'07.436"N	80°47'57.714"W	1934.73	68.672	6.09	3.32	11.29				
6482.50	29.610	119.430	6074.18	48.79	696.30	1815.60	1697160.45	14284110.18	39°20'07.363"N	80°47'57.544"W	1944.54	69.018	7.02	6.81	3.56				
6513.50	32.040	120.200	6100.80	61.35	688.40	1829.38	1697174.22	14284102.28	39°20'07.284"N	80°47'57.369"W	1954.62	69.379	7.94	7.84	2.48				
6545.50	34.500	123.630	6127.55	75.61	679.11	1844.26	1697189.10	14284092.99	39°20'07.192"N	80°47'57.180"W	1965.32	69.785	9.68	7.69	10.72				
6576.50	36.240	127.480	6152.83	90.83	668.67	1858.85	1697203.68	14284082.56	39°20'07.089"N	80°47'56.995"W	1975.46	70.215	9.12	5.61	12.42				
6608.50	37.590	131.120	6178.42	107.75	656.49	1873.71	1697218.53	14284070.39	39°20'06.968"N	80°47'56.806"W	1985.39	70.691	8.03	4.22	11.38				
6639.50	38.800	134.100	6202.79	125.13	643.51	1887.81	1697232.63	14284057.41	39°20'06.839"N	80°47'56.627"W	1994.48	71.177	7.11	3.90	9.61				
6671.50	40.250	136.750	6227.47	143.99	629.00	1902.09	1697246.91	14284042.91	39°20'06.696"N	80°47'56.445"W	2003.40	71.701	6.95	4.53	8.28				
6703.50	42.390	138.820	6251.50	163.87	613.35	1916.28	1697261.09	14284027.27	39°20'06.541"N	80°47'56.265"W	2012.05	72.251	7.93	6.69	6.47				
6704.00†	42.424	138.854	6251.87	164.19	613.10	1916.50	1697261.31	14284027.01	39°20'06.538"N	80°47'56.262"W	2012.18	72.260	8.20	6.81	6.77	Middlesex: 6704 MD			
6734.50	44.520	140.840	6274.01	184.17	597.06	1930.03	1697274.83	14284010.98	39°20'06.379"N	80°47'56.091"W	2020.27	72.810	8.20	6.87	6.51				
6766.50	47.130	141.970	6296.30	206.21	579.12	1944.34	1697289.14	14283993.05	39°20'06.202"N	80°47'55.909"W	2028.75	73.414	8.54	8.16	3.53				
6797.50	49.890	143.740	6316.84	228.67	560.61	1958.35	1697303.14	14283974.54	39°20'06.018"N	80°47'55.731"W	2037.01	74.025	9.88	8.90	5.71				
6845.00	53.830	146.680	6346.17	265.15	529.92	1979.64	1697324.42	14283943.87	39°20'05.715"N	80°47'55.461"W	2049.34	75.014	9.62	8.29	6.19	BHI AT Curve <-8.1/2> (6797.5)(6845-19069)			
6921.00†	59.900	148.920	6387.70	327.84	476.08	2013.50	1697358.26	14283890.05	39°20'05.182"N	80°47'55.032"W	2069.01	76.697	8.36	7.99	2.95	Burkett: 6921 MD			
6925.00	60.220	149.030	6389.70	331.27	473.11	2015.28	1697360.05	14283887.08	39°20'05.152"N	80°47'55.009"W	2070.07	76.788	8.36	8.01	2.75				



Actual Wellpath Report

Warrior Unit 1H AWP Proj: 19135'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addie Pad		

WELLPATH DATA (226 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
6972.00	64.150	151.010	6411.63	372.47	437.10	2036.04	1697380.80	14283851.09	39°20'04.796"N	80°47'54.746"W	2082.43	77.883	9.15	8.36	4.21	
6985.00†	64.990	151.342	6417.21	384.13	426.82	2041.70	1697386.46	14283840.81	39°20'04.694"N	80°47'54.674"W	2085.83	78.192	6.86	6.46	2.55	Tully: 6985' MD
7019.00	67.180	152.190	6430.99	415.05	399.44	2056.40	1697401.15	14283813.43	39°20'04.423"N	80°47'54.488"W	2094.83	79.008	6.86	6.47	2.49	
7066.00	68.810	155.240	6448.60	458.52	360.37	2075.69	1697420.43	14283774.38	39°20'04.037"N	80°47'54.244"W	2106.74	80.151	6.93	3.45	6.49	
7083.00†	69.250	155.995	6454.68	474.39	345.91	2082.24	1697426.98	14283759.93	39°20'03.894"N	80°47'54.161"W	2110.78	80.568	4.89	2.59	4.44	Hamilton: 7083' MD
7101.00†	69.719	156.789	6460.99	491.24	330.46	2088.99	1697433.73	14283744.49	39°20'03.741"N	80°47'54.075"W	2114.97	81.011	4.89	2.61	4.41	Marcellus POE: 7101' MD
7114.00	70.060	157.360	6465.46	503.45	319.22	2093.75	1697438.48	14283733.25	39°20'03.630"N	80°47'54.015"W	2117.94	81.331	4.89	2.62	4.39	
7161.00	73.790	158.660	6480.04	548.12	277.60	2110.47	1697455.20	14283691.84	39°20'03.220"N	80°47'53.803"W	2128.67	82.501	8.36	7.94	2.77	
7210.00	78.160	158.960	6491.91	595.64	233.48	2127.65	1697472.37	14283647.55	39°20'02.782"N	80°47'53.586"W	2140.42	83.738	8.94	8.92	0.61	
7257.00	83.270	158.790	6499.49	641.99	190.23	2144.36	1697489.08	14283604.31	39°20'02.354"N	80°47'53.375"W	2152.78	84.931	10.88	10.87	-0.36	
7305.00	89.200	160.130	6502.64	689.84	145.40	2161.15	1697505.86	14283559.50	39°20'01.910"N	80°47'53.162"W	2166.04	86.151	12.66	12.35	2.79	
7400.00	90.060	161.160	6503.26	784.70	55.77	2192.64	1697537.34	14283469.91	39°20'01.024"N	80°47'52.764"W	2193.35	88.543	1.41	0.91	1.08	
7495.00	89.750	159.920	6503.41	879.57	-33.80	2224.29	1697568.97	14283380.37	39°20'00.138"N	80°47'52.364"W	2224.54	90.871	1.35	-0.33	-1.31	
7590.00	89.780	158.550	6503.80	974.53	-122.63	2257.97	1697602.64	14283291.58	39°19'59.259"N	80°47'51.938"W	2261.29	93.109	1.44	0.03	-1.44	
7685.00	89.880	155.120	6504.09	1069.51	-209.95	2295.33	1697639.99	14283204.29	39°19'58.395"N	80°47'51.465"W	2304.91	95.226	3.61	0.11	-3.61	
7780.00	89.780	154.920	6504.37	1164.41	-296.07	2335.45	1697680.09	14283118.21	39°19'57.543"N	80°47'50.957"W	2354.14	97.225	0.24	-0.11	-0.21	
7875.00	89.880	157.960	6504.65	1259.38	-383.14	2373.42	1697718.04	14283031.17	39°19'56.682"N	80°47'50.476"W	2404.14	99.170	3.20	0.11	3.20	
7970.00	89.780	160.360	6504.93	1354.34	-471.92	2407.21	1697751.82	14282942.43	39°19'55.804"N	80°47'50.048"W	2453.03	101.092	2.53	-0.11	2.53	
8065.00	89.880	164.430	6505.21	1448.98	-562.45	2435.94	1697780.54	14282851.94	39°19'54.908"N	80°47'49.685"W	2500.03	103.001	4.29	0.11	4.28	
8160.00	90.490	164.580	6504.91	1543.29	-653.99	2461.32	1697805.91	14282760.43	39°19'54.003"N	80°47'49.365"W	2546.72	104.880	0.66	0.64	0.16	
8255.00	89.600	153.620	6504.83	1638.11	-742.61	2495.16	1697839.73	14282671.85	39°19'53.126"N	80°47'48.937"W	2603.32	106.574	11.57	-0.94	-11.54	
8349.00	89.690	141.860	6505.42	1730.56	-821.95	2545.24	1697889.80	14282592.53	39°19'52.341"N	80°47'48.302"W	2674.67	107.897	12.51	0.10	-12.51	
8445.00	89.570	144.940	6506.04	1823.62	-899.01	2602.47	1697947.00	14282515.50	39°19'51.578"N	80°47'47.576"W	2753.38	109.057	3.21	-0.13	3.21	
8540.00	89.820	145.460	6506.54	1916.41	-977.02	2656.69	1698001.20	14282437.53	39°19'50.806"N	80°47'46.888"W	2830.65	110.191	0.61	0.26	0.55	
8635.00	89.750	152.220	6506.90	2010.26	-1058.27	2705.82	1698050.31	14282356.31	39°19'50.002"N	80°47'46.265"W	2905.40	111.361	7.12	-0.07	7.12	
8729.00	89.720	154.260	6507.33	2103.98	-1142.20	2748.14	1698092.61	14282272.42	39°19'49.171"N	80°47'45.729"W	2976.05	112.569	2.17	-0.03	2.17	
8824.00	89.320	156.080	6508.13	2198.89	-1228.41	2788.03	1698132.49	14282186.24	39°19'48.318"N	80°47'45.224"W	3046.65	113.778	1.96	-0.42	1.92	
8918.00	89.260	159.530	6509.30	2292.87	-1315.42	2823.53	1698167.97	14282099.26	39°19'47.457"N	80°47'44.774"W	3114.91	114.980	3.67	-0.06	3.67	
9012.00	89.450	160.350	6510.35	2386.78	-1403.71	2855.77	1698200.20	14282011.01	39°19'46.584"N	80°47'44.367"W	3182.11	116.176	0.90	0.20	0.87	
9107.00	89.540	163.180	6511.19	2481.51	-1493.93	2885.49	1698229.91	14281920.83	39°19'45.692"N	80°47'43.991"W	3249.29	117.372	2.98	0.09	2.98	



Actual Wellpath Report

Warrior Unit 1H AWP Proj: 19135'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addie Pad		

WELLPATH DATA (226 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
9202.00	89.600	166.460	6511.90	2575.74	-1585.60	2910.36	1698254.77	14281829.19	39°19'44.785"N	80°47'43.677"W	3314.26	118.582	3.45	0.06	3.45	
9297.00	89.510	163.250	6512.64	2669.96	-1677.29	2935.18	1698279.58	14281737.54	39°19'43.878"N	80°47'43.364"W	3380.61	119.745	3.38	-0.09	-3.38	
9391.00	89.600	166.540	6513.37	2763.18	-1768.02	2959.67	1698304.06	14281646.84	39°19'42.981"N	80°47'43.055"W	3447.54	120.853	3.50	0.10	3.50	
9486.00	89.380	161.300	6514.22	2857.56	-1859.27	2985.97	1698330.35	14281555.63	39°19'42.079"N	80°47'42.723"W	3517.52	121.909	5.52	-0.23	-5.52	
9581.00	89.290	158.510	6515.32	2952.47	-1948.47	3018.61	1698362.97	14281466.46	39°19'41.196"N	80°47'42.310"W	3592.84	122.842	2.94	-0.09	-2.94	
9675.00	89.290	156.850	6516.49	3046.46	-2035.42	3054.30	1698398.66	14281379.55	39°19'40.336"N	80°47'41.858"W	3670.38	123.680	1.77	0.00	-1.77	
9770.00	89.450	155.960	6517.53	3141.43	-2122.47	3092.32	1698436.66	14281292.53	39°19'39.475"N	80°47'41.377"W	3750.65	124.464	0.95	0.17	-0.94	
9866.00	89.450	155.820	6518.45	3237.38	-2210.09	3131.54	1698475.86	14281204.95	39°19'38.608"N	80°47'40.881"W	3832.89	125.213	0.15	0.00	-0.15	
9960.00	89.420	155.630	6519.38	3331.33	-2295.78	3170.18	1698514.49	14281119.30	39°19'37.760"N	80°47'40.391"W	3914.16	125.911	0.20	-0.03	-0.20	
10055.00	89.380	155.880	6520.37	3426.28	-2382.39	3209.19	1698553.48	14281032.72	39°19'36.903"N	80°47'39.898"W	3996.84	126.589	0.27	-0.04	0.26	
10150.00	89.480	157.340	6521.32	3521.26	-2469.58	3246.90	1698591.18	14280945.56	39°19'36.041"N	80°47'39.420"W	4079.36	127.256	1.54	0.11	1.54	
10246.00	89.290	157.750	6522.35	3617.25	-2558.30	3283.57	1698627.83	14280856.88	39°19'35.163"N	80°47'38.956"W	4162.53	127.923	0.47	-0.20	0.43	
10340.00	89.260	156.060	6523.54	3711.23	-2644.75	3320.43	1698664.68	14280770.46	39°19'34.308"N	80°47'38.490"W	4245.00	128.538	1.80	-0.03	-1.80	
10434.00	89.450	154.260	6524.60	3805.14	-2730.05	3359.92	1698704.15	14280685.20	39°19'33.464"N	80°47'37.990"W	4329.23	129.095	1.93	0.20	-1.91	
10529.00	89.230	152.540	6525.69	3899.88	-2814.98	3402.45	1698746.67	14280600.30	39°19'32.623"N	80°47'37.451"W	4415.97	129.602	1.83	-0.23	-1.81	
10624.00	89.110	153.840	6527.07	3994.59	-2899.76	3445.29	1698789.49	14280515.56	39°19'31.784"N	80°47'36.908"W	4503.18	130.086	1.37	-0.13	1.37	
10720.00	89.350	155.990	6528.36	4090.47	-2986.69	3485.99	1698830.17	14280428.66	39°19'30.924"N	80°47'36.393"W	4590.47	130.589	2.25	0.25	2.24	
10815.00	89.170	155.500	6529.59	4185.41	-3073.30	3525.01	1698869.18	14280342.09	39°19'30.067"N	80°47'35.899"W	4676.63	131.084	0.55	-0.19	-0.52	
10910.00	89.170	156.560	6530.96	4280.36	-3160.09	3563.60	1698907.75	14280255.32	39°19'29.209"N	80°47'35.410"W	4762.92	131.566	1.12	0.00	1.12	
11005.00	89.110	158.540	6532.39	4375.35	-3247.88	3599.87	1698944.01	14280167.57	39°19'28.340"N	80°47'34.951"W	4848.49	132.057	2.08	-0.06	2.08	
11099.00	89.290	158.800	6533.70	4469.32	-3335.43	3634.06	1698978.18	14280080.05	39°19'27.474"N	80°47'34.519"W	4932.70	132.547	0.34	0.19	0.28	
11194.00	89.290	158.530	6534.88	4564.30	-3423.92	3668.62	1699012.73	14279991.61	39°19'26.599"N	80°47'34.082"W	5018.16	133.024	0.28	0.00	-0.28	
11289.00	88.740	155.210	6536.51	4659.26	-3511.25	3705.93	1699050.02	14279904.30	39°19'25.735"N	80°47'33.609"W	5105.17	133.455	3.54	-0.58	-3.49	
11384.00	88.830	156.360	6538.53	4754.19	-3597.87	3744.88	1699088.96	14279817.72	39°19'24.878"N	80°47'33.116"W	5193.15	133.853	1.21	0.09	1.21	
11478.00	88.800	159.330	6540.47	4848.16	-3684.91	3780.32	1699124.38	14279730.72	39°19'24.017"N	80°47'32.668"W	5279.14	134.268	3.16	-0.03	-3.16	
11574.00	88.710	159.970	6542.56	4944.08	-3774.89	3813.70	1699157.75	14279640.77	39°19'23.127"N	80°47'32.246"W	5366.01	134.707	0.67	-0.09	0.67	
11668.00	89.050	164.240	6544.39	5037.74	-3864.31	3842.57	1699186.61	14279551.39	39°19'22.242"N	80°47'31.881"W	5449.61	135.162	4.56	0.36	4.54	
11763.00	89.230	164.230	6545.82	5132.09	-3955.72	3868.38	1699212.40	14279460.01	39°19'21.338"N	80°47'31.555"W	5532.82	135.640	0.19	0.19	-0.01	
11858.00	89.510	161.450	6546.86	5226.68	-4046.48	3896.40	1699240.42	14279369.29	39°19'20.440"N	80°47'31.201"W	5617.47	136.082	2.94	0.29	-2.93	
11953.00	88.890	159.670	6548.19	5321.54	-4136.05	3928.01	1699272.02	14279279.76	39°19'19.554"N	80°47'30.802"W	5704.05	136.478	1.98	-0.65	-1.87	

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Actual Wellpath Report

Warrior Unit 1H AWP Proj: 19135'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addie Pad		

WELLPATH DATA (226 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
12048.00	88.860	162.320	6550.06	5416.34	-4225.85	3958.94	1699302.93	14279190.00	39°19'18.666"N	80°47'30.411"W	5790.60	136.868	2.79	-0.03	2.79	
12143.00	88.800	162.120	6552.00	5511.01	-4316.29	3987.95	1699331.93	14279099.59	39°19'17.772"N	80°47'30.044"W	5876.57	137.264	0.22	-0.06	-0.21	
12237.00	88.860	153.750	6553.92	5604.90	-4403.31	4023.22	1699367.19	14279012.60	39°19'16.911"N	80°47'29.598"W	5964.51	137.583	8.90	0.06	-8.90	
12332.00	88.860	154.600	6555.81	5699.72	-4488.80	4064.59	1699408.54	14278927.14	39°19'16.065"N	80°47'29.074"W	6055.60	137.839	0.89	0.00	0.89	
12427.00	89.170	158.190	6557.44	5794.67	-4575.83	4102.62	1699446.56	14278840.15	39°19'15.204"N	80°47'28.593"W	6145.71	138.121	3.79	0.33	3.78	
12522.00	88.580	156.240	6559.31	5889.64	-4663.39	4139.40	1699483.33	14278752.62	39°19'14.338"N	80°47'28.127"W	6235.54	138.407	2.14	-0.62	-2.05	
12617.00	88.770	154.730	6561.51	5984.55	-4749.80	4178.81	1699522.72	14278666.25	39°19'13.483"N	80°47'27.629"W	6326.38	138.659	1.60	0.20	-1.59	
12712.00	89.050	158.590	6563.31	6079.50	-4837.00	4216.44	1699560.33	14278579.09	39°19'12.620"N	80°47'27.152"W	6416.77	138.921	4.07	0.29	4.06	
12807.00	88.860	155.890	6565.05	6174.48	-4924.58	4253.18	1699597.05	14278491.54	39°19'11.753"N	80°47'26.687"W	6507.00	139.184	2.85	-0.20	-2.84	
12902.00	88.770	154.080	6567.01	6269.35	-5010.64	4293.34	1699637.20	14278405.51	39°19'10.902"N	80°47'26.179"W	6598.43	139.409	1.91	-0.09	-1.91	
12998.00	89.110	154.370	6568.79	6365.17	-5097.08	4335.08	1699678.92	14278319.11	39°19'10.047"N	80°47'25.650"W	6691.27	139.619	0.47	0.35	0.30	
13093.00	88.950	152.050	6570.40	6459.88	-5181.86	4377.89	1699721.71	14278234.36	39°19'09.208"N	80°47'25.108"W	6783.63	139.807	2.45	-0.17	-2.44	
13187.00	89.290	158.920	6571.84	6553.75	-5267.33	4416.86	1699760.67	14278148.93	39°19'08.362"N	80°47'24.615"W	6874.11	140.019	7.32	0.36	7.31	
13282.00	89.940	162.880	6572.48	6648.57	-5357.08	4447.94	1699791.74	14278059.22	39°19'07.474"N	80°47'24.222"W	6962.93	140.297	4.22	0.68	4.17	
13377.00	89.260	157.490	6573.14	6743.43	-5446.42	4480.13	1699823.92	14277969.91	39°19'06.591"N	80°47'23.815"W	7052.31	140.560	5.72	-0.72	-5.67	
13472.00	89.230	154.120	6574.40	6838.36	-5533.05	4519.06	1699862.83	14277883.31	39°19'05.733"N	80°47'23.322"W	7143.99	140.760	3.55	-0.03	-3.55	
13565.00	89.320	152.660	6575.57	6931.10	-5616.19	4560.71	1699904.46	14277800.20	39°19'04.911"N	80°47'22.795"W	7234.76	140.921	1.57	0.10	-1.57	
13660.00	89.170	152.320	6576.82	7025.72	-5700.44	4604.59	1699948.32	14277715.99	39°19'04.077"N	80°47'22.239"W	7327.84	141.070	0.39	-0.16	-0.36	
13755.00	89.260	153.380	6578.13	7120.39	-5784.97	4647.93	1699991.65	14277631.50	39°19'03.241"N	80°47'21.690"W	7420.86	141.220	1.12	0.09	1.12	
13849.00	89.260	157.130	6579.34	7214.29	-5870.31	4687.27	1700030.97	14277546.18	39°19'02.396"N	80°47'21.192"W	7512.06	141.394	3.99	0.00	3.99	
13944.00	89.200	160.580	6580.62	7309.24	-5958.90	4721.53	1700065.22	14277457.64	39°19'01.520"N	80°47'20.759"W	7602.71	141.608	3.63	-0.06	3.63	
14038.00	89.290	161.060	6581.86	7403.08	-6047.67	4752.41	1700096.08	14277368.90	39°19'00.642"N	80°47'20.369"W	7691.53	141.839	0.52	0.10	0.51	
14133.00	89.200	161.690	6583.11	7497.86	-6137.69	4782.75	1700126.41	14277278.92	39°18'59.751"N	80°47'19.985"W	7781.12	142.073	0.67	-0.09	0.66	
14228.00	89.140	156.470	6584.48	7592.79	-6226.38	4816.65	1700160.30	14277190.26	39°18'58.874"N	80°47'19.557"W	7871.97	142.275	5.49	-0.06	-5.49	
14323.00	89.140	155.200	6585.91	7687.73	-6313.05	4855.54	1700199.17	14277103.63	39°18'58.016"N	80°47'19.064"W	7964.35	142.435	1.34	0.00	-1.34	
14419.00	89.170	154.180	6587.33	7783.60	-6399.82	4896.57	1700240.19	14277016.89	39°18'57.158"N	80°47'18.545"W	8058.17	142.580	1.06	0.03	-1.06	
14514.00	89.170	157.390	6588.70	7878.53	-6486.44	4935.53	1700279.13	14276930.30	39°18'56.301"N	80°47'18.052"W	8150.67	142.733	3.38	0.00	3.38	
14608.00	89.110	158.300	6590.11	7972.52	-6573.49	4970.97	1700314.56	14276843.29	39°18'55.440"N	80°47'17.603"W	8241.44	142.903	0.97	-0.06	0.97	
14704.00	89.200	159.710	6591.53	8068.47	-6663.11	5005.36	1700348.94	14276753.71	39°18'54.553"N	80°47'17.168"W	8333.71	143.086	1.47	0.09	1.47	
14798.00	89.080	160.560	6592.94	8162.37	-6751.50	5037.30	1700380.86	14276665.35	39°18'53.679"N	80°47'16.765"W	8423.61	143.273	0.91	-0.13	0.90	

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Actual Wellpath Report

Warrior Unit 1H AWP Proj: 19135'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addie Pad		

WELLPATH DATA (226 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
14894.00	89.260	161.890	6594.33	8258.16	-6842.38	5068.20	1700411.75	14276574.50	39°18'52.780"N	80°47'16.374"W	8514.98	143.472	1.40	0.19	1.39	
14988.00	89.290	156.670	6595.52	8352.08	-6930.27	5101.44	1700444.98	14276486.66	39°18'51.910"N	80°47'15.954"W	8605.42	143.643	5.55	0.03	-5.55	
15082.00	89.380	160.070	6596.61	8446.05	-7017.63	5136.08	1700479.60	14276399.33	39°18'51.046"N	80°47'15.516"W	8696.35	143.800	3.62	0.10	3.62	
15177.00	89.200	160.970	6597.79	8540.92	-7107.18	5167.76	1700511.27	14276309.81	39°18'50.160"N	80°47'15.116"W	8787.38	143.978	0.97	-0.19	0.95	
15273.00	89.350	165.310	6599.00	8636.44	-7199.03	5195.59	1700539.09	14276218.00	39°18'49.252"N	80°47'14.764"W	8878.07	144.182	4.52	0.16	4.52	
15368.00	89.510	165.390	6599.95	8730.56	-7290.93	5219.62	1700563.11	14276126.13	39°18'48.343"N	80°47'14.461"W	8966.72	144.401	0.19	0.17	0.08	
15464.00	89.380	156.510	6600.88	8826.29	-7381.58	5250.92	1700594.40	14276035.52	39°18'47.446"N	80°47'14.066"W	9058.69	144.574	9.25	-0.14	-9.25	
15558.00	89.320	154.020	6601.95	8920.20	-7466.94	5290.24	1700633.71	14275950.19	39°18'46.602"N	80°47'13.568"W	9151.06	144.683	2.65	-0.06	-2.65	
15653.00	89.480	155.770	6602.94	9015.09	-7552.96	5330.55	1700673.99	14275864.21	39°18'45.751"N	80°47'13.058"W	9244.56	144.787	1.85	0.17	1.84	
15748.00	89.650	154.880	6603.50	9110.01	-7639.28	5370.21	1700713.64	14275777.92	39°18'44.896"N	80°47'12.556"W	9337.97	144.894	1.01	0.39	-0.94	
15843.00	89.780	155.330	6603.81	9204.92	-7725.46	5410.20	1700753.61	14275691.78	39°18'44.044"N	80°47'12.050"W	9431.48	144.996	0.48	-0.07	0.47	
15938.00	89.660	153.990	6604.27	9299.80	-7811.31	5450.85	1700794.25	14275605.96	39°18'43.194"N	80°47'11.535"W	9525.15	145.092	1.42	-0.13	-1.41	
16033.00	89.750	154.180	6604.76	9394.62	-7896.76	5492.37	1700835.75	14275520.55	39°18'42.349"N	80°47'11.009"W	9618.99	145.181	0.22	0.09	0.20	
16128.00	89.600	151.230	6605.30	9489.26	-7981.17	5535.93	1700879.30	14275436.17	39°18'41.514"N	80°47'10.458"W	9713.17	145.254	3.11	-0.16	-3.11	
16223.00	89.780	156.540	6605.81	9584.03	-8066.44	5577.73	1700921.08	14275350.93	39°18'40.670"N	80°47'09.928"W	9807.07	145.337	5.59	0.19	5.59	
16318.00	90.060	164.280	6605.95	9678.84	-8155.87	5609.56	1700952.89	14275261.54	39°18'39.785"N	80°47'09.526"W	9898.76	145.480	8.15	0.29	8.15	
16414.00	90.650	165.200	6605.35	9774.09	-8248.48	5634.83	1700978.15	14275168.96	39°18'38.869"N	80°47'09.208"W	9989.43	145.662	1.14	0.61	0.96	
16507.00	90.430	160.820	6604.47	9866.65	-8337.40	5661.99	1701005.31	14275080.08	39°18'37.990"N	80°47'08.865"W	10078.21	145.819	4.72	-0.24	-4.71	
16602.00	90.120	157.570	6604.02	9961.59	-8426.19	5695.73	1701039.03	14274991.32	39°18'37.111"N	80°47'08.438"W	10170.65	145.943	3.44	-0.33	-3.42	
16698.00	90.310	154.580	6603.66	10057.55	-8513.93	5734.68	1701077.94	14274903.62	39°18'36.243"N	80°47'07.945"W	10265.15	146.037	3.12	0.20	-3.11	
16793.00	90.280	157.050	6603.17	10152.50	-8600.59	5773.58	1701116.84	14274817.00	39°18'35.386"N	80°47'07.453"W	10358.78	146.127	2.60	-0.03	2.60	
16888.00	90.340	156.250	6602.65	10247.48	-8687.80	5811.23	1701154.48	14274729.82	39°18'34.523"N	80°47'06.977"W	10452.19	146.222	0.84	0.06	-0.84	
16984.00	90.580	159.280	6601.88	10343.47	-8776.65	5847.55	1701190.79	14274641.00	39°18'33.644"N	80°47'06.517"W	10546.25	146.326	3.17	0.25	3.16	
17078.00	90.520	160.910	6600.98	10437.37	-8865.03	5879.55	1701222.78	14274552.66	39°18'32.770"N	80°47'06.113"W	10637.57	146.446	1.74	-0.06	1.73	
17172.00	90.370	158.080	6600.25	10531.30	-8953.06	5912.47	1701255.69	14274464.66	39°18'31.899"N	80°47'05.697"W	10729.15	146.560	3.01	-0.16	-3.01	
17268.00	90.400	156.580	6599.61	10627.30	-9041.64	5949.47	1701292.67	14274376.12	39°18'31.023"N	80°47'05.229"W	10823.47	146.655	1.56	0.03	-1.56	
17363.00	90.090	155.770	6599.20	10722.27	-9128.54	5987.85	1701331.03	14274289.25	39°18'30.163"N	80°47'04.743"W	10917.17	146.737	0.91	-0.33	-0.85	
17457.00	90.310	155.700	6598.87	10816.22	-9214.24	6026.48	1701369.64	14274203.59	39°18'29.315"N	80°47'04.254"W	11010.02	146.814	0.25	0.23	-0.07	
17552.00	90.340	155.580	6598.33	10911.16	-9300.78	6065.66	1701408.81	14274117.09	39°18'28.459"N	80°47'03.758"W	11103.91	146.889	0.13	0.03	-0.13	
17646.00	90.180	155.590	6597.91	11005.10	-9386.37	6104.51	1701447.65	14274031.53	39°18'27.612"N	80°47'03.267"W	11196.83	146.962	0.17	-0.17	0.01	

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Warrior Unit 1H AWP Proj: 19135
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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Addie Pad
Slot	Slot #04
Well	Warrior Unit 1H
Wellbore	Warrior Unit 1H AWB

WELLPATH DATA (226 stations)																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
(m)	(°)	(°)	(m)	(m)	(m)	(m)	(m)	(m)	(°)	(°)	(m)	(°)	(m)	(m)	(°)	
17741.00	90.340	155.080	6597.47	11100.03	-9472.70	6144.16	1701487.28	14273945.23	39°18'26.757"N	80°47'02.765"W	11290.83	147.032	0.56	0.17	-0.54	
17836.00	90.280	155.350	6596.96	11194.95	-9558.95	6183.98	1701527.09	14273859.02	39°18'25.904"N	80°47'02.261"W	11384.87	147.100	0.29	-0.06	0.28	
17931.00	90.310	158.290	6596.47	11289.93	-9646.27	6221.37	1701564.46	14273771.73	39°18'25.040"N	80°47'01.788"W	11478.50	147.180	3.09	0.03	3.09	
18026.00	90.280	157.650	6595.98	11384.92	-9734.33	6257.00	1701600.08	14273683.70	39°18'24.169"N	80°47'01.337"W	11571.84	147.268	0.67	-0.03	-0.67	
18120.00	90.340	157.850	6595.47	11478.92	-9821.33	6292.60	1701635.66	14273596.74	39°18'23.308"N	80°47'00.887"W	11664.28	147.352	0.22	0.06	0.21	
18216.00	90.180	160.750	6595.04	11574.87	-9911.13	6326.53	1701669.58	14273506.98	39°18'22.420"N	80°47'00.458"W	11758.20	147.449	3.03	-0.17	3.02	
18310.00	90.460	164.430	6594.51	11668.49	-10000.80	6354.65	1701697.68	14273417.34	39°18'21.533"N	80°47'00.103"W	11848.95	147.568	3.93	0.30	3.91	
18405.00	90.340	165.410	6593.85	11762.71	-10092.53	6379.36	1701722.39	14273325.65	39°18'20.626"N	80°46'59.792"W	11939.66	147.704	1.04	-0.13	1.03	
18500.00	91.110	162.760	6592.65	11857.08	-10183.87	6405.41	1701748.42	14273234.35	39°18'19.722"N	80°46'59.463"W	12030.81	147.831	2.90	-2.79	-2.79	
18595.00	90.430	159.020	6591.37	11951.90	-10273.61	6436.50	1701779.51	14273144.64	39°18'18.835"N	80°46'59.070"W	12123.35	147.933	4.00	-0.72	-3.94	
18689.00	90.650	154.070	6590.48	12045.85	-10359.81	6473.90	1701816.89	14273058.47	39°18'17.982"N	80°46'58.597"W	12216.26	147.999	5.27	0.23	-5.27	
18784.00	90.740	152.690	6589.33	12140.58	-10444.73	6516.46	1701859.44	14272973.59	39°18'17.141"N	80°46'58.058"W	12310.84	148.040	1.46	0.09	-1.45	
18879.00	90.280	151.420	6588.49	12235.14	-10528.65	6560.98	1701903.94	14272889.70	39°18'16.311"N	80°46'57.494"W	12405.60	148.071	1.42	-0.48	-1.34	
18974.00	90.150	152.500	6588.13	12329.68	-10612.50	6605.64	1701948.58	14272805.89	39°18'15.481"N	80°46'56.929"W	12500.38	148.100	1.15	-0.14	1.14	
19069.00	90.340	154.550	6587.72	12424.43	-10697.53	6647.99	1701990.91	14272720.89	39°18'14.640"N	80°46'56.393"W	12594.96	148.141	2.17	0.20	2.16	
19135.00	90.340	154.550	6587.33	12490.34	-10757.13	6676.35	1702019.26	14272661.32	39°18'14.050"N	80°46'56.034"W	12660.54	148.174	0.00	0.00	0.00	Projected MD at TD: 19135'

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Actual Wellpath Report

Warrior Unit 1H AWP Proj: 19135'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addle Pad		

HOLE & CASING SECTIONS - Ref Wellbore: Warrior Unit 1H AWB Ref Wellpath: Warrior Unit 1H AWP Proj: 19135'

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	24.50	104.50	80.00	24.50	104.50	0.00	0.00	0.09	0.04
17.5in Open Hole	104.50	498.50	394.00	104.50	498.50	0.09	0.04	0.88	0.50
13.375in Casing Surface	24.50	498.50	474.00	24.50	498.50	0.00	0.00	0.88	0.50
12.25in Open Hole	498.50	2616.50	2118.00	498.50	2575.49	0.88	0.50	150.33	332.04
9.625in Casing Intermediate	24.50	2616.50	2592.00	24.50	2575.49	0.00	0.00	150.33	332.04
8.75in Open Hole	2616.50	6871.50	4255.00	2575.49	6361.42	150.33	332.04	511.73	1991.41
8.5in Open Hole	6871.50	19135.00	12263.50	6361.42	6587.33	511.73	1991.41	-10757.13	6676.35
5.5in Casing Production	24.50	19135.00	19110.50	24.50	6587.33	0.00	0.00	-10757.13	6676.35

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Warrior Unit 1H POE - Rev-1	6463.00	342.26	2086.60	1697431.34	14283756.28	39°20'03.858"N	80°47'54.105"W	point
Warrior Unit 1H BHL - Rev-1	6504.00	-10787.48	6678.30	1702021.21	14272630.98	39°18'13.750"N	80°46'56.010"W	point
Warrior Unit 1H LP Rev-1	6504.00	145.50	2167.77	1697512.48	14283559.60	39°20'01.911"N	80°47'53.078"W	point

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Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addie Pad		

WELLPATH COMPOSITION - Ref Wellbore: Warrior Unit 1H AWB Ref Wellpath: Warrior Unit 1H AWP Proj: 19135'				
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	480.50	Gyrodatta standard - Drop gyro or Multi-shot	01 Gyrodatta MS Gyro <17-1/2">(100'-471')	Warrior Unit 1H AWB
480.50	741.50	Gyrodatta standard - Drop gyro or Multi-shot	02 Gyrodatta MS Gyro <12-1/4">(471')(528'-732')	Warrior Unit 1H AWB
741.50	2533.50	ISCWSA MWD, Rev. 4 (Standard)	03 WFT EM <12-1/4">(732')(822'-2524')	Warrior Unit 1H AWB
2533.50	6797.50	ISCWSA MWD, Rev. 4 (Standard)	04 WFT EM <8-3/4">(2524')(2689'-6788')	Warrior Unit 1H AWB
6797.50	19069.00	BHI AutoTrak Curve (Short)	05 BH AT Curve <8-1/2">(6797.50')(6845'-19069')	Warrior Unit 1H AWB
19069.00	19135.00	Blind Drilling (std)	Projection to bit	Warrior Unit 1H AWB

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Warrior Unit 1H AWP Proj: 19135'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Warrior Unit 1H
Field	Doddridge	Wellbore	Warrior Unit 1H AWB
Facility	Addie Pad		

COMMENTS
<p>Wellpath general comments API: 47-017-06828-0000 BHI Job #: 8837613 Rig: Frontier 22 Duration: 10/30/2017-11/02/2017 Gyrodata MS Gyro <17-1/2"> (100'-471') Gyrodata MS Gyro <12-1/4"> (471')(528'-732') WFT EM <12-1/4"> (732')(822'-2524') WFT EM <8-3/4"> (2524')(2689'-6788') BHI AT Curve <8-1/2"> (6797.5')(6845'-19069') Middlesex: 6704' MD Burkett: 6921' MD Tully: 6985' MD Hamilton: 7083' MD Marcellus POE: 7101' MD Projected MD at TD: 19135'</p>

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