

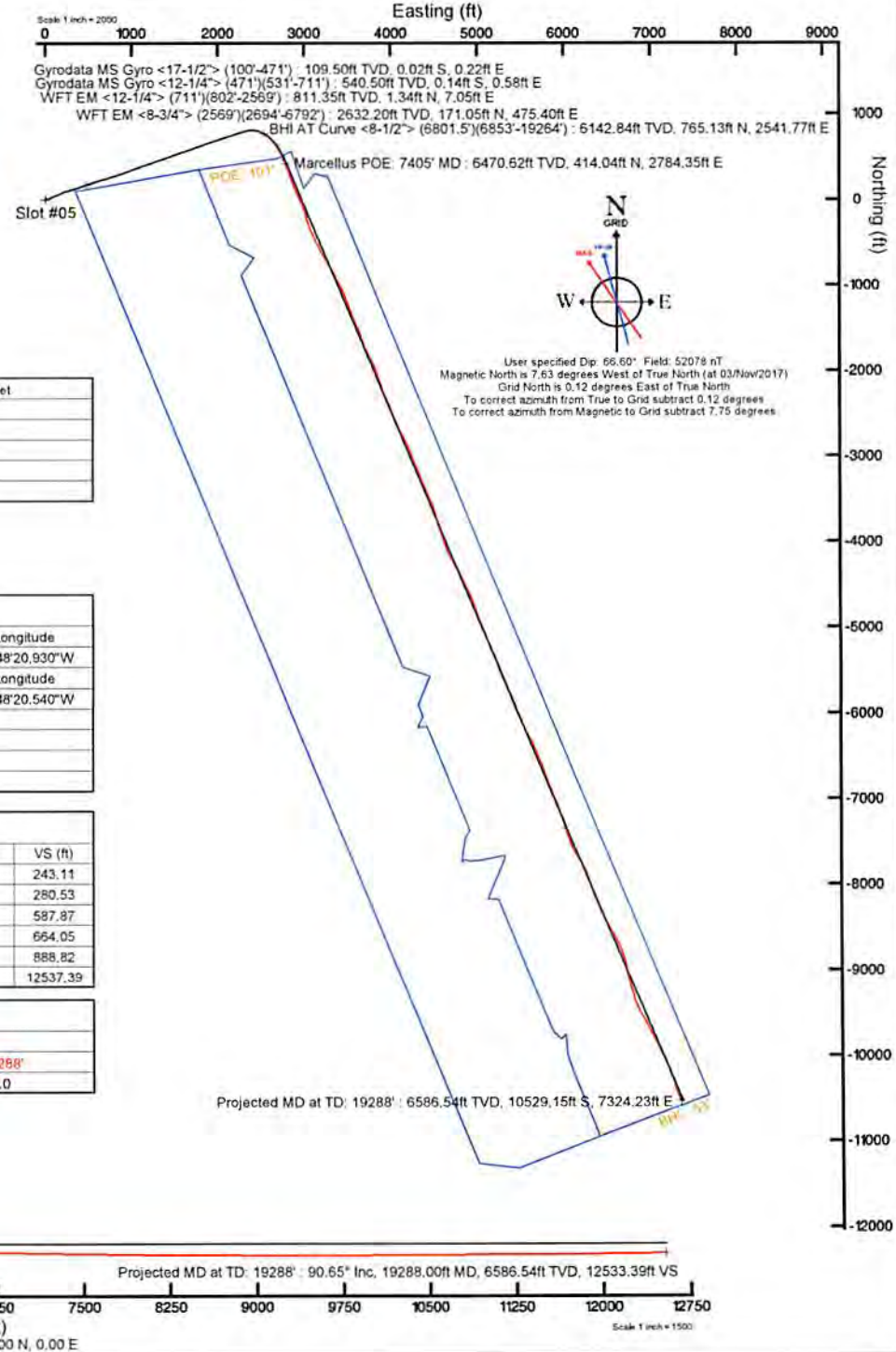
ANTERO RESOURCES CORPORATION

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

Slot: Slot #05
 Well: Warrior Unit 2H
 Wellbore: Warrior Unit 2H PWB



API: 47-017-06808-0000
 BHI Job #: 8850551
 Rig: Frontier 22
 Duration: 11/06/2017-11/09/2017



Plot reference wellpath is Warrior Unit 2H PWP Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to Frontier 22 (RKB)	North Reference: Grid north
Measured depths are referenced to Frontier 22 (RKB)	Scale: True distance
Frontier 22 (RKB) to Mean Sea Level: 914.5 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot: Slot #05): -890 feet	Created by: delaset on 2018-01-11
Coordinates are in feet referenced to Slot	Database: WA_MPL_EasternUS_Defn

Gyrodatta MS Gyro <17-1/2> (100°-471') : 0.30° Inc, 109.50ft MD, 109.50ft TVD, 0.10ft VS
 Gyrodatta MS Gyro <12-1/4> (471°)(531'-711') : 0.19° Inc, 540.50ft MD, 540.50ft TVD, 0.35ft VS
 WFT EM <12-1/4> (711°)(802'-2569') : 3.92° Inc, 811.50ft MD, 811.35ft TVD, 1.47ft VS

Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Addie Pad	1695325.147	14263415.126	39°20'00.530"N	80°48'20.930"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
Slot #05	-0.95	30.65	1695355.782	14263414.181	80°48'20.540"W
Comment: Warrior Unit 2H					
Frontier 22 (RKB) to Mud line (At Slot: Slot #05)					24.5ft
Mean Sea Level to Mud line (At Slot: Slot #05)					-890ft
Frontier 22 (RKB) to Mean Sea Level					914.5ft

WFT EM <8-3/4> (2569°)(2694'-6792') : 14.11° Inc, 2703.50ft MD, 2632.20ft TVD, 24.43ft VS

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	6801.50	39.720	116.070	6103.02	760.81	2513.14	9.38	243.11
Proj. To Bottom	6876.50	39.080	122.700	6161.00	757.50	2554.58	5.67	280.53
End of 3D Arc	7301.77	62.727	153.497	6431.08	508.96	2757.42	7.80	587.87
POE	7385.26	69.325	157.436	6465.00	439.59	2789.01	9.00	654.05
Landing Pt.	7614.98	90.000	157.436	6506.00	232.03	2875.26	9.00	888.82
BHL	19263.54	90.000	157.436	6506.00	-10524.83	7345.06	0.00	12537.39

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #05	Warrior Unit 2H	Warrior Unit 2H AWB	Warrior Unit 2H AWP Proj. 19288'
Slot #05	Warrior Unit 2H	Warrior Unit 2H PWB	Warrior Unit 2H PWP Rev-A.0

BHI AT Curve <8-1/2> (6801.5°)(6853'-19264') : 39.02° Inc, 6853.00ft MD, 6142.84ft TVD, 268.57ft VS
 Marcellus POE: 7405' MD : 71.54° Inc, 7405.00ft MD, 6470.62ft TVD, 685.86ft VS

Vertical Section (ft)
 Azimuth 157.44° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500 ft

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Actual Wellpath Report

Warrior Unit 2H AWP Proj: 19288'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Warrior Unit 2H
Field	Doddridge	Wellbore	Warrior Unit 2H 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	11/Jan/2018 at 09:34
Convergence at slot	0.12" East	Database/Source file	WA_MPL_EasternUS_Defn/Warrior_Unit_2H_AWP_Proj_19288_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.95	30.65	1695355.78	14283414.18	39°20'00.520"N	80°48'20.540"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 #05)	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	157.44°



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Warrior Unit 2H AWP Proj: 19288'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #05
Area	Doddridge Co., WV		Well	Warrior Unit 2H
Field	Doddridge		Wellbore	Warrior Unit 2H AWB
Facility	Addie Pad			

WELLPATH DATA (228 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	0.00	94.410	0.00	0.00	0.00	0.00	1695355.78	14283414.18	39°20'00.520"N	80°48'20.540"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.000	94.410	24.50	0.00	0.00	0.00	1695355.78	14283414.18	39°20'00.520"N	80°48'20.540"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.300	94.410	109.50	0.10	-0.02	0.22	1695356.00	14283414.16	39°20'00.520"N	80°48'20.537"W	0.22	94.410	0.35	0.35	111.07	Gyrodata MS Gyro <17-1/2"> (100'-471')
209.50	0.190	115.370	209.50	0.34	-0.11	0.63	1695356.41	14283414.07	39°20'00.519"N	80°48'20.532"W	0.64	99.712	0.14	-0.11	20.96	
309.50	0.050	247.310	309.50	0.47	-0.20	0.74	1695356.52	14283413.98	39°20'00.518"N	80°48'20.531"W	0.77	104.803	0.23	-0.14	131.94	
409.50	0.050	319.750	409.50	0.42	-0.18	0.67	1695356.46	14283414.00	39°20'00.518"N	80°48'20.531"W	0.70	104.931	0.06	0.00	72.44	
480.50	0.020	88.350	480.50	0.40	-0.16	0.67	1695356.45	14283414.03	39°20'00.518"N	80°48'20.532"W	0.68	103.154	0.09	-0.04	181.13	
540.50	0.190	276.850	540.50	0.35	-0.14	0.58	1695356.36	14283414.04	39°20'00.519"N	80°48'20.533"W	0.60	103.947	0.35	0.28	-285.83	Gyrodata MS Gyro <12-1/4"> (471')(531'-711')
630.50	0.290	70.180	630.50	0.29	-0.05	0.64	1695356.43	14283414.13	39°20'00.520"N	80°48'20.532"W	0.65	94.306	0.52	0.11	170.37	
720.50	2.040	80.000	720.48	0.65	0.31	2.44	1695358.22	14283414.49	39°20'00.523"N	80°48'20.509"W	2.46	82.819	1.95	1.94	10.91	
811.50	3.920	76.000	811.35	1.47	1.34	7.05	1695362.83	14283415.52	39°20'00.533"N	80°48'20.450"W	7.18	79.231	2.08	2.07	-4.40	WFT EM <12-1/4"> (711')(802'-2569')
906.50	6.170	71.530	905.98	2.31	3.74	15.04	1695370.82	14283417.92	39°20'00.557"N	80°48'20.348"W	15.50	76.024	2.40	2.37	-4.71	
1001.50	9.020	70.570	1000.13	3.08	7.84	26.91	1695382.68	14283422.02	39°20'00.597"N	80°48'20.197"W	28.03	73.759	3.00	3.00	-1.01	
1095.50	11.070	69.470	1092.69	3.81	13.46	42.31	1695398.08	14283427.63	39°20'00.652"N	80°48'20.001"W	44.40	72.359	2.19	2.18	-1.17	
1212.50	14.160	63.970	1206.85	3.34	23.68	65.70	1695421.45	14283437.85	39°20'00.753"N	80°48'19.703"W	69.83	70.180	2.83	2.64	-4.70	
1307.50	15.800	66.870	1298.62	2.51	33.86	88.03	1695443.78	14283448.03	39°20'00.853"N	80°48'19.419"W	94.32	68.963	1.90	1.73	3.05	
1402.50	17.370	69.370	1389.67	2.86	43.94	113.20	1695468.94	14283458.10	39°20'00.952"N	80°48'19.098"W	121.43	68.787	1.81	1.65	2.63	
1496.50	18.080	67.460	1479.21	3.33	54.47	139.81	1695495.53	14283468.63	39°20'01.055"N	80°48'18.759"W	150.04	68.713	0.98	0.76	-2.03	
1590.50	18.660	64.280	1568.42	2.51	66.59	166.83	1695522.54	14283480.74	39°20'01.175"N	80°48'18.415"W	179.63	68.240	1.23	0.62	-3.38	
1685.50	18.300	63.970	1658.52	0.77	79.73	193.92	1695549.62	14283493.88	39°20'01.304"N	80°48'18.070"W	209.67	67.650	0.39	-0.38	-0.33	
1779.50	17.040	71.350	1748.09	0.81	90.61	220.24	1695575.93	14283504.76	39°20'01.411"N	80°48'17.735"W	238.15	67.636	2.73	-1.34	7.85	
1874.50	17.360	75.710	1838.85	3.80	98.56	247.16	1695602.84	14283512.70	39°20'01.489"N	80°48'17.392"W	266.09	68.259	1.40	0.34	4.59	
1968.50	18.430	76.750	1928.30	8.22	105.43	275.21	1695630.89	14283519.57	39°20'01.556"N	80°48'17.035"W	294.72	69.039	1.19	1.14	1.11	
2063.50	17.430	74.240	2018.69	12.34	112.74	303.52	1695659.19	14283526.87	39°20'01.628"N	80°48'16.674"W	323.79	69.624	1.33	-1.05	-2.64	
2158.50	17.390	71.580	2109.34	15.05	121.09	330.69	1695688.34	14283535.22	39°20'01.710"N	80°48'16.328"W	352.16	69.889	0.84	-0.04	-2.80	
2253.50	18.350	71.070	2199.75	17.02	130.42	358.30	1695713.94	14283544.55	39°20'01.801"N	80°48'15.977"W	381.30	69.998	1.02	1.01	-0.54	
2347.50	17.540	71.860	2289.18	19.05	139.63	385.76	1695741.39	14283553.76	39°20'01.892"N	80°48'15.627"W	410.25	70.101	0.90	-0.86	0.84	
2442.50	16.110	73.490	2380.11	21.54	147.84	412.00	1695767.62	14283561.96	39°20'01.972"N	80°48'15.293"W	437.72	70.261	1.58	-1.51	1.72	
2536.50	15.200	70.920	2470.62	23.66	155.57	436.15	1695791.76	14283569.69	39°20'02.048"N	80°48'14.985"W	463.07	70.369	1.22	-0.97	-2.73	
2578.50	14.900	69.800	2511.18	24.22	159.24	446.42	1695802.03	14283573.35	39°20'02.084"N	80°48'14.854"W	473.97	70.369	0.99	-0.71	-2.67	

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Actual Wellpath Report

Warrior Unit 2H AWP Proj: 19288'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Warrior Unit 2H
Field	Doddridge	Wellbore	Warrior Unit 2H AWB
Facility	Addie Pad		

WELLPATH DATA (228 stations)

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
2703.50	14.110	65.740	2632.20	24.43	171.05	475.40	1695830.99	14283585.16	39°20'02.200"N	80°48'14.485"W	505.23	70.211	1.03	-0.63	-3.25	WFT EM <8-3/4"> (2569')(2694'-6792')
2798.50	15.480	69.800	2724.05	24.61	180.18	497.86	1695853.44	14283594.29	39°20'02.290"N	80°48'14.199"W	529.46	70.104	1.81	1.44	4.27	
2892.50	17.290	75.750	2814.24	27.14	187.95	523.17	1695878.74	14283602.06	39°20'02.367"N	80°48'13.877"W	555.91	70.239	2.62	1.93	6.33	
2989.50	19.490	73.200	2906.28	30.85	196.18	552.64	1695908.20	14283610.28	39°20'02.447"N	80°48'13.501"W	586.43	70.456	2.41	2.27	-2.63	
3083.50	21.680	70.350	2994.27	33.31	206.55	584.01	1695939.55	14283620.65	39°20'02.549"N	80°48'13.102"W	619.46	70.522	2.56	2.33	-3.03	
3178.50	24.380	72.070	3081.69	35.78	218.49	619.19	1695974.73	14283632.59	39°20'02.666"N	80°48'12.654"W	656.61	70.564	2.93	2.84	1.81	
3273.50	28.460	73.990	3166.76	39.95	230.78	659.62	1696015.14	14283644.87	39°20'02.787"N	80°48'12.139"W	698.83	70.717	4.39	4.29	2.02	
3367.50	31.790	73.620	3248.05	45.17	243.94	704.92	1696060.42	14283658.02	39°20'02.916"N	80°48'11.562"W	745.94	70.912	3.55	3.54	-0.39	
3462.50	34.400	72.400	3327.63	50.18	259.11	754.52	1696110.00	14283673.19	39°20'03.065"N	80°48'10.931"W	797.77	71.047	2.84	2.75	-1.28	
3556.50	35.590	72.330	3404.63	54.81	275.45	805.89	1696161.35	14283689.52	39°20'03.225"N	80°48'10.276"W	851.67	71.130	1.27	1.27	-0.07	
3650.50	35.370	71.710	3481.18	59.17	292.29	857.79	1696213.23	14283706.35	39°20'03.390"N	80°48'09.615"W	906.22	71.184	0.45	-0.23	-0.66	
3745.50	35.340	70.570	3558.66	62.72	310.06	909.80	1696265.22	14283724.11	39°20'03.565"N	80°48'08.953"W	961.19	71.181	0.70	-0.03	-1.20	
3839.50	35.250	68.930	3635.38	64.91	328.85	960.76	1696316.15	14283742.90	39°20'03.750"N	80°48'08.304"W	1015.48	71.105	1.01	-0.10	-1.74	
3934.50	34.370	69.020	3713.38	66.36	348.31	1011.38	1696366.75	14283762.35	39°20'03.941"N	80°48'07.659"W	1069.67	70.997	0.93	-0.93	0.09	
4028.50	34.720	71.060	3790.81	68.78	366.50	1061.47	1696416.83	14283780.53	39°20'04.120"N	80°48'07.021"W	1122.96	70.952	1.29	0.37	2.17	
4122.50	34.530	70.540	3869.16	71.91	384.06	1111.91	1696467.25	14283798.09	39°20'04.292"N	80°48'06.379"W	1176.37	70.945	0.37	-0.20	-0.55	
4217.50	34.180	71.960	3946.59	75.47	401.30	1162.67	1696517.99	14283815.32	39°20'04.461"N	80°48'05.732"W	1229.98	70.958	0.92	-0.37	1.49	
4311.50	33.710	71.570	4024.57	79.43	417.72	1212.53	1696567.82	14283831.74	39°20'04.623"N	80°48'05.097"W	1282.46	70.991	0.55	-0.50	-0.41	
4406.50	33.120	69.760	4103.87	82.38	435.03	1261.89	1696617.17	14283849.04	39°20'04.793"N	80°48'04.469"W	1334.77	70.978	1.22	-0.62	-1.91	
4501.50	33.170	71.410	4183.42	85.23	452.30	1310.87	1696666.13	14283866.30	39°20'04.962"N	80°48'03.845"W	1386.71	70.964	0.95	0.05	1.74	
4595.50	32.830	71.240	4262.25	88.70	468.69	1359.37	1696714.61	14283882.69	39°20'05.123"N	80°48'03.227"W	1437.91	70.977	0.37	-0.36	-0.18	
4689.50	32.290	69.600	4341.48	91.33	485.64	1407.04	1696762.26	14283899.63	39°20'05.290"N	80°48'02.620"W	1488.49	70.958	1.10	-0.57	-1.74	
4784.50	33.900	69.560	4421.06	93.27	503.74	1455.65	1696810.85	14283917.72	39°20'05.467"N	80°48'02.001"W	1540.34	70.911	1.69	1.69	-0.04	
4879.50	32.560	72.300	4500.53	96.42	520.76	1504.83	1696860.01	14283934.74	39°20'05.635"N	80°48'01.374"W	1592.39	70.911	2.12	-1.41	2.88	
4973.50	32.160	71.810	4579.93	100.47	536.26	1552.70	1696907.86	14283950.23	39°20'05.787"N	80°48'00.765"W	1642.69	70.946	0.51	-0.43	-0.52	
5068.50	31.280	70.000	4660.74	103.49	552.59	1599.89	1696955.04	14283966.55	39°20'05.947"N	80°48'00.164"W	1692.64	70.945	1.36	-0.93	-1.91	
5162.50	32.270	70.050	4740.65	105.73	569.50	1646.41	1697001.54	14283983.45	39°20'06.113"N	80°47'59.571"W	1742.13	70.919	1.05	1.05	0.05	
5257.50	32.960	71.370	4820.67	108.65	586.41	1694.74	1697049.85	14284000.36	39°20'06.279"N	80°47'58.955"W	1793.33	70.914	1.04	0.73	1.39	
5351.50	32.870	70.780	4899.58	111.89	602.98	1743.06	1697098.15	14284016.92	39°20'06.442"N	80°47'58.340"W	1844.41	70.918	0.35	-0.10	-0.63	
5446.50	31.870	68.920	4979.82	114.04	620.48	1790.81	1697145.87	14284034.42	39°20'06.614"N	80°47'57.732"W	1895.25	70.890	1.49	-1.05	-1.96	

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Actual Wellpath Report

Warrior Unit 2H AWP Proj.: 19288



Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Warrior Unit 2H
Field	Doddridge	Wellbore	Warrior Unit 2H AWB
Facility	Addie Pad		

WELLPATH DATA (228 stations) † = interpolated/extrapolated station										
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Gnd East	Gnd North	Latitude	Longitude
ft	°	°	ft	ft	ft	ft	ft	ft	N	W
5541.50	69.180	5060.22	175.46	638.58	1838.07	1697193.12	14284052.50	39°20'06.792"N	80°47'57.130"W	1945.84
5635.50	32.690	72.540	5139.42	118.49	655.17	1885.90	1697240.93	39°20'06.955"N	80°47'56.521"W	1966.46
5730.50	33.580	73.390	5218.97	123.49	670.38	1935.55	1697290.56	39°20'07.104"N	80°47'55.888"W	2048.36
5824.50	33.240	72.080	5297.44	128.27	685.74	1984.97	1697339.96	39°20'07.255"N	80°47'55.259"W	2100.09
5919.50	32.150	70.430	5377.38	131.70	702.22	2033.57	1697388.54	39°20'07.416"N	80°47'54.640"W	2151.40
6013.50	32.060	70.440	5457.01	134.31	718.95	2080.64	1697435.59	39°20'07.581"N	80°47'54.041"W	2201.35
6107.50	32.140	72.490	5536.64	137.81	734.82	2128.00	1697482.93	39°20'07.737"W	80°47'53.437"W	2251.30
6202.50	32.570	74.220	5616.89	143.06	749.38	2176.70	1697531.62	39°20'07.879"N	80°47'52.817"W	2302.09
6296.50	33.690	72.790	5695.61	148.47	763.98	2225.96	1697580.85	39°20'08.023"N	80°47'52.190"W	2353.41
6391.50	32.710	71.080	5775.11	152.56	780.10	2275.41	1697630.28	39°20'08.181"N	80°47'51.560"W	2405.42
6484.50	32.510	71.540	5828.17	154.85	790.98	2307.57	1697662.43	39°20'08.288"N	80°47'51.150"W	2439.37
6486.50	33.450	73.860	5855.02	156.45	796.15	2324.20	1697679.05	39°20'08.338"N	80°47'50.939"W	2456.78
6517.50	34.480	77.420	5880.73	158.93	800.44	2340.97	1697695.82	39°20'08.380"N	80°47'50.725"W	2474.04
6549.50	36.010	81.340	5906.87	162.76	803.83	2359.12	1697713.96	39°20'08.414"N	80°47'50.494"W	2492.30
6580.50	36.560	85.860	5931.86	167.87	805.87	2377.33	1697732.17	39°20'08.433"N	80°47'50.262"W	2510.21
6612.50	37.650	89.490	5957.39	174.55	806.64	2396.61	1697751.44	39°20'08.441"N	80°47'50.017"W	2528.72
6643.50	38.700	93.760	5981.76	182.40	806.09	2415.76	1697770.58	39°20'08.435"N	80°47'49.773"W	2546.70
6675.50	39.480	97.490	6006.60	191.93	804.11	2435.83	1697790.64	39°20'08.415"N	80°47'49.518"W	2565.12
6708.50	39.920	101.800	6030.46	202.48	800.79	2455.34	1697810.14	39°20'08.381"N	80°47'49.269"W	2582.63
6738.50	40.380	106.720	6054.92	214.84	795.71	2475.32	1697830.12	39°20'08.331"N	80°47'49.015"W	2600.07
6769.50	40.460	111.560	6078.53	228.20	789.12	2494.30	1697849.09	39°20'08.265"N	80°47'48.774"W	2616.15
6801.50	39.220	116.070	6103.02	243.11	780.81	2513.14	1697867.92	39°20'08.183"N	80°47'48.534"W	2631.65
6853.00	39.020	121.410	6142.84	268.57	765.13	2541.77	1697896.54	39°20'08.027"N	80°47'48.171"W	2654.43
6929.00	41.170	128.710	6201.01	309.88	737.00	2581.74	1697936.49	39°20'07.748"N	80°47'47.663"W	2684.87
6976.00	43.220	133.530	6235.84	338.17	716.23	2605.48	1697960.23	39°20'07.542"N	80°47'47.361"W	2702.14
7008.00	44.797	136.830	6258.86	358.74	700.46	2621.14	1697975.88	39°20'07.386"N	80°47'47.162"W	2713.12
7024.00	45.620	138.410	6270.13	369.43	692.07	2628.80	1697983.53	39°20'07.303"N	80°47'47.065"W	2718.37
7071.00	48.380	142.690	6302.19	402.31	665.53	2650.60	1698005.33	39°20'07.040"N	80°47'46.788"W	2732.88
7119.00	51.310	146.120	6333.14	438.04	635.69	2671.93	1698026.65	39°20'06.745"N	80°47'46.518"W	2746.51
7169.00	54.150	148.420	6361.60	474.85	604.23	2692.14	1698046.84	39°20'06.433"W	80°47'46.261"W	2759.11

Build Rate	Turn Rate	Comments
f/100ft	f/100ft	
0.67	0.27	
0.19	3.57	
0.94	0.89	
-0.36	-1.39	
1.48	-1.74	
0.10	-0.10	
70.938	0.01	
1.16	0.09	
1.07	1.82	
1.05	1.45	
71.003	1.07	
2302.09	2302.09	
71.057	2353.41	
1.45	2405.42	
71.076	2439.37	
1.43	2456.78	
71.091	2474.04	
1.23	2492.30	
71.123	2510.21	
1.274	2528.72	
8.80	2546.70	
1.274	2565.12	
8.80	2582.63	
71.937	2600.07	
8.99	2616.15	
71.937	2631.65	
8.99	2654.43	
72.740	2684.87	
9.38	2702.14	
14.12	2713.12	
-2.31	2718.37	
14.12	2732.88	
9.61	2746.51	
10.37	2759.11	
9.61	2774.00	
10.26	2788.88	
4.36	2803.76	
10.31	2818.64	
9.88	2833.52	
5.14	2848.40	
5.87	2863.28	
7.15	2878.16	
4.89	2893.04	

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Warrior Unit 2H AWP Proj.: 19288

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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Addle Pad
Slot	Slot #05
Warrior Unit 2H	Warrior Unit 2H
Warrior Unit 2H AWB	Warrior Unit 2H AWB

WELLPATH DATA (228 stations) † = interpolated/extrapolated station														
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Turn Rate
(m)	(°)	(°)	(m)	(m)	(m)	(m)	(US M)	(US M)	(°)	(°)	(m)	(°)	(°/100ft)	(°/100ft)
7214.00	57.160	150.540	6388.68	514.09	2712.25	1698066.95	14283984.04	39°20'06.095"N	80°47'46.006"W	2771.51	78.130	7.25	6.27	4.42
7224.00†	57.962	151.346	6394.05	522.48	562.71	1698071.04	14283976.67	39°20'06.022"N	80°47'45.955"W	2774.02	78.296	10.51	8.02	8.06
7261.00	60.970	154.210	6412.85	554.23	534.37	1698085.60	14283948.34	39°20'05.742"N	80°47'45.770"W	2782.70	78.929	10.51	8.13	7.74
7281.00†	62.433	155.093	6422.33	571.82	518.46	1698093.14	14283932.43	39°20'05.585"N	80°47'45.675"W	2787.09	79.279	8.28	7.31	4.41
7309.00	64.480	156.290	6434.84	596.86	495.63	1698103.44	14283909.61	39°20'05.358"N	80°47'45.544"W	2793.08	79.779	8.28	7.35	4.28
7356.00	68.120	158.380	6453.72	639.88	456.22	1698120.71	14283870.22	39°20'04.989"N	80°47'45.325"W	2803.40	80.634	7.73	6.96	0.19
7379.00†	69.720	156.506	6461.99	661.34	436.55	1698129.28	14283850.55	39°20'04.774"N	80°47'45.217"W	2808.74	81.059	6.98	6.96	0.55
7404.00	71.460	156.640	6470.30	684.91	414.91	1698138.65	14283828.93	39°20'04.560"N	80°47'45.098"W	2814.73	81.523	6.98	6.96	0.54
7405.00†	71.537	156.668	6470.62	685.86	414.04	1698139.03	14283828.06	39°20'04.552"N	80°47'45.093"W	2814.97	81.542	8.16	7.71	2.82
7451.00	75.080	157.940	6483.82	729.92	373.40	1698156.01	14283787.43	39°20'04.149"N	80°47'44.878"W	2826.12	82.408	8.16	7.72	2.76
7499.00	79.510	159.100	6494.38	776.72	329.83	1698173.14	14283743.88	39°20'03.719"N	80°47'44.661"W	2837.72	83.325	9.51	9.21	2.42
7593.00	85.200	160.690	6505.87	869.86	242.10	1698204.73	14283656.18	39°20'02.851"N	80°47'44.262"W	2860.35	85.145	3.45	3.43	0.45
7640.00	89.450	159.970	6508.06	916.74	197.90	1698220.53	14283612.00	39°20'02.414"N	80°47'44.062"W	2872.71	86.050	9.17	9.04	-1.53
7688.00	89.380	6508.55	964.71	152.97	2882.77	1698237.41	14283567.09	39°20'01.969"N	80°47'43.848"W	2886.83	86.962	2.38	-0.15	-2.37
7782.00	89.570	155.150	6509.42	1058.69	66.47	1698274.13	14283480.63	39°20'01.113"N	80°47'43.383"W	2920.27	88.696	3.92	0.20	-3.91
7877.00	89.140	155.130	6510.49	1153.60	-19.72	1698314.05	14283394.47	39°20'00.261"N	80°47'42.877"W	2959.51	90.382	0.45	-0.45	-0.02
7972.00	89.850	159.270	6511.32	1248.58	-107.27	1698350.84	14283306.95	39°19'59.394"N	80°47'42.412"W	2998.17	92.050	4.42	0.75	4.36
8067.00	89.380	166.360	6511.96	1343.10	-197.97	1698378.88	14283216.29	39°19'58.497"N	80°47'42.057"W	3030.77	93.745	7.48	-0.49	7.46
8161.00	89.450	160.210	6512.92	1436.56	-287.95	1698405.89	14283126.34	39°19'57.607"N	80°47'41.716"W	3064.88	95.391	6.54	0.07	-6.54
8256.00	89.780	156.430	6513.56	1531.53	-376.22	1698440.96	14283038.12	39°19'56.734"N	80°47'41.272"W	3109.25	96.950	3.99	0.35	-3.98
8352.00	89.050	154.830	6514.54	1627.47	-463.66	1698480.55	14282950.71	39°19'55.869"N	80°47'40.770"W	3160.22	98.437	1.83	-0.76	-1.67
8446.00	89.320	154.110	6515.88	1721.34	-548.47	1698521.05	14282865.93	39°19'55.030"N	80°47'40.257"W	3213.67	99.827	0.82	0.29	-0.77
8541.00	89.850	152.560	6516.57	1816.09	-633.36	1698563.66	14282781.08	39°19'54.190"N	80°47'39.717"W	3271.06	101.164	1.72	0.56	-1.63
8636.00	89.450	148.730	6517.15	1910.40	-716.14	1698610.20	14282698.32	39°19'53.371"N	80°47'39.127"W	3333.55	102.405	4.05	-0.42	-4.03
8731.00	88.950	149.810	6518.47	2004.43	-797.79	1698658.72	14282616.71	39°19'52.563"N	80°47'38.512"W	3399.20	103.574	1.26	-0.53	1.14
8826.00	89.540	153.790	6519.73	2098.94	-881.49	1698703.58	14282533.04	39°19'51.734"N	80°47'37.943"W	3463.20	104.746	4.23	0.62	4.19
8921.00	89.940	153.110	6520.16	2193.71	-966.47	1698746.03	14282448.09	39°19'50.893"N	80°47'37.405"W	3526.61	105.905	0.83	0.42	-0.72
9016.00	89.480	153.080	6520.64	2288.43	-1051.19	1698789.00	14282363.41	39°19'50.055"N	80°47'36.861"W	3591.85	107.017	0.49	-0.48	-0.03
9111.00	88.520	157.300	6522.30	2383.32	-1137.39	1698828.83	14282277.25	39°19'49.202"N	80°47'36.356"W	3655.86	108.126	4.55	-1.01	4.44

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Actual Wellpath Report

Warrior Unit 2H AWP Proj: 19288'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Warrior Unit 2H
Field	Doddridge	Wellbore	Warrior Unit 2H AWB
Facility	Addie Pad		

WELLPATH DATA (228 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
9206.00	89.600	160.820	6523.86	2478.25	-1226.09	3508.38	1698862.76	14282188.58	39°19'48.325"N	80°47'35.927"W	3716.45	109.263	3.88	1.14	3.71	
9300.00	90.000	161.410	6524.18	2572.05	-1315.02	3538.80	1698893.17	14282099.68	39°19'47.445"N	80°47'35.542"W	3775.23	110.385	0.76	0.43	0.63	
9395.00	89.480	157.480	6524.61	2666.98	-1403.96	3572.15	1698926.51	14282010.78	39°19'46.565"N	80°47'35.120"W	3838.14	111.456	4.17	-0.55	-4.14	
9490.00	89.050	155.950	6525.83	2761.96	-1491.21	3609.70	1698964.04	14281923.57	39°19'45.702"N	80°47'34.645"W	3905.59	112.446	1.67	-0.45	-1.61	
9585.00	89.260	159.960	6527.24	2856.93	-1579.24	3645.34	1698999.67	14281835.57	39°19'44.831"N	80°47'34.194"W	3972.72	113.423	4.23	0.22	4.22	
9680.00	89.690	160.200	6528.11	2951.82	-1668.55	3677.71	1699032.02	14281746.30	39°19'43.948"N	80°47'33.785"W	4038.51	114.403	0.52	0.45	0.25	
9776.00	89.910	156.900	6528.44	3047.79	-1757.89	3712.81	1699067.11	14281656.99	39°19'43.064"N	80°47'33.341"W	4107.93	115.336	3.45	0.23	-3.44	
9871.00	89.660	151.170	6528.80	3142.58	-1843.26	3754.39	1699108.67	14281571.65	39°19'42.219"N	80°47'32.814"W	4182.47	116.149	6.04	-0.26	-6.03	
9965.00	89.290	154.480	6529.66	3236.26	-1926.87	3797.31	1699151.58	14281488.08	39°19'41.392"N	80°47'32.270"W	4258.21	116.905	3.54	-0.39	3.52	
10060.00	89.290	160.880	6530.84	3331.20	-2014.70	3833.37	1699187.62	14281400.28	39°19'40.523"N	80°47'31.814"W	4330.55	117.725	6.74	0.00	6.74	
10155.00	89.260	164.470	6532.04	3425.79	-2105.37	3861.65	1699215.89	14281309.65	39°19'39.626"N	80°47'31.457"W	4398.28	118.599	3.78	-0.03	3.78	
10250.00	89.750	160.480	6532.86	3520.40	-2195.94	3890.25	1699244.48	14281219.12	39°19'38.731"N	80°47'31.095"W	4467.23	119.444	4.23	0.52	-4.20	
10345.00	89.020	156.150	6533.88	3615.36	-2284.19	3925.34	1699279.56	14281130.90	39°19'37.858"N	80°47'30.651"W	4541.56	120.195	4.62	-0.77	-4.56	
10440.00	88.770	153.970	6535.71	3710.25	-2370.31	3965.39	1699319.59	14281044.82	39°19'37.006"N	80°47'30.144"W	4619.81	120.869	2.31	-0.26	-2.29	
10535.00	88.920	159.010	6537.63	3805.19	-2457.37	4003.27	1699357.45	14280957.79	39°19'36.144"N	80°47'29.665"W	4697.32	121.543	5.31	0.16	5.31	
10629.00	89.570	160.850	6538.87	3899.09	-2545.65	4035.52	1699389.69	14280869.54	39°19'35.271"N	80°47'29.257"W	4771.35	122.244	2.08	0.69	1.96	
10725.00	89.080	154.920	6540.00	3995.03	-2634.55	4071.64	1699425.80	14280780.69	39°19'34.391"N	80°47'28.800"W	4849.65	122.905	6.20	-0.51	-6.18	
10820.00	89.080	152.160	6541.53	4089.79	-2719.57	4113.96	1699468.10	14280695.69	39°19'33.550"N	80°47'28.264"W	4931.61	123.467	2.90	0.00	-2.91	
10914.00	88.830	153.800	6543.24	4183.49	-2803.30	4156.66	1699510.78	14280612.00	39°19'32.722"N	80°47'27.723"W	5013.61	123.966	1.76	-0.27	1.74	
11009.00	88.310	154.500	6545.61	4278.30	-2888.76	4198.06	1699552.17	14280526.57	39°19'31.876"N	80°47'27.199"W	5095.95	124.533	0.92	-0.55	0.74	
11103.00	89.570	160.880	6547.35	4372.23	-2975.67	4233.72	1699587.82	14280439.70	39°19'31.016"N	80°47'26.748"W	5174.84	125.101	6.92	1.34	6.79	
11198.00	90.120	160.510	6547.61	4467.08	-3065.32	4265.13	1699619.21	14280350.08	39°19'30.129"N	80°47'26.351"W	5252.38	125.705	0.70	0.58	-0.39	
11293.00	88.800	155.180	6548.50	4562.04	-3153.27	4300.94	1699655.01	14280262.16	39°19'29.259"N	80°47'25.898"W	5333.03	126.247	5.78	-1.39	-5.61	
11388.00	88.580	157.750	6550.68	4656.99	-3240.34	4338.86	1699692.91	14280175.13	39°19'28.398"N	80°47'25.418"W	5415.30	126.753	2.71	-0.23	2.71	
11483.00	89.690	160.180	6552.11	4751.94	-3328.99	4372.95	1699726.99	14280086.52	39°19'27.521"N	80°47'24.986"W	5495.90	127.281	2.81	1.17	2.56	
11578.00	89.350	155.270	6552.91	4846.90	-3416.87	4408.95	1699762.97	14279998.67	39°19'26.652"N	80°47'24.531"W	5577.98	127.775	5.18	-0.36	-5.17	
11673.00	88.860	156.510	6554.39	4941.86	-3503.57	4447.75	1699801.76	14279912.01	39°19'25.794"N	80°47'24.040"W	5661.93	128.228	1.40	-0.52	1.31	
11768.00	88.980	159.630	6556.18	5036.82	-3591.67	4483.22	1699837.21	14279823.94	39°19'24.922"N	80°47'23.591"W	5744.51	128.699	3.29	0.13	3.28	
11863.00	89.170	162.610	6557.72	5131.60	-3681.54	4513.95	1699867.94	14279734.11	39°19'24.033"N	80°47'23.203"W	5824.90	129.200	3.14	0.20	3.14	
11959.00	89.970	164.300	6558.44	5227.07	-3773.56	4541.29	1699895.26	14279642.13	39°19'23.123"N	80°47'22.857"W	5904.49	129.725	1.95	0.83	1.76	



Actual Wellpath Report

Warrior Unit 2H AWP Proj: 19288'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #05
Area	Doddridge Co., WV		Well	Warrior Unit 2H
Field	Doddridge		Wellbore	Warrior Unit 2H AWB
Facility	Addie Pad			

WELLPATH DATA (228 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
12054.00	89.480	162.120	6558.89	5321.58	-3864.50	4568.73	1699922.69	14279551.22	39°19'22.224"N	80°47'22.511"W	5983.95	130.227	2.35	-0.52	-2.29	
12148.00	89.660	161.730	6559.60	5415.29	-3953.86	4597.89	1699951.84	14279461.90	39°19'21.340"N	80°47'22.143"W	6064.13	130.693	0.46	0.19	-0.41	
12243.00	89.720	160.400	6560.11	5510.09	-4043.71	4628.72	1699982.66	14279372.08	39°19'20.451"N	80°47'21.753"W	6146.27	131.141	1.40	0.06	-1.40	
12338.00	90.180	154.770	6560.20	5605.05	-4131.50	4664.93	1700018.85	14279284.33	39°19'19.582"N	80°47'21.295"W	6231.44	131.530	5.95	0.48	-5.93	
12432.00	89.200	149.670	6560.70	5698.63	-4214.64	4708.72	1700062.63	14279201.22	39°19'18.760"N	80°47'20.740"W	6319.43	131.831	5.52	-1.04	-5.43	
12527.00	88.740	149.450	6562.41	5792.72	-4296.53	4756.85	1700110.73	14279119.36	39°19'17.949"N	80°47'20.130"W	6409.97	132.089	0.54	-0.48	-0.23	
12622.00	88.980	154.780	6564.30	5887.26	-4380.45	4801.25	1700155.12	14279035.47	39°19'17.119"N	80°47'19.568"W	6499.26	132.376	5.62	0.25	5.61	
12718.00	88.890	155.040	6566.09	5983.15	-4467.38	4841.95	1700195.81	14278948.58	39°19'16.259"N	80°47'19.052"W	6588.02	132.696	0.29	-0.09	0.27	
12813.00	89.080	153.390	6567.77	6077.98	-4552.90	4883.27	1700237.11	14278863.09	39°19'15.412"N	80°47'18.529"W	6676.47	132.995	1.75	0.20	-1.74	
12908.00	89.050	158.400	6569.32	6172.90	-4639.58	4922.05	1700275.87	14278776.45	39°19'14.555"N	80°47'18.036"W	6764.04	133.308	5.27	-0.03	5.27	
13003.00	89.080	160.620	6570.87	6267.82	-4728.55	4955.30	1700309.11	14278687.51	39°19'13.675"N	80°47'17.618"W	6849.39	133.659	2.34	0.03	2.34	
13096.00	89.020	161.820	6572.41	6360.60	-4816.59	4985.23	1700339.03	14278599.51	39°19'12.804"N	80°47'17.240"W	6931.96	134.014	1.29	-0.06	1.29	
13191.00	88.980	158.480	6574.07	6455.47	-4905.92	5017.48	1700371.27	14278510.22	39°19'11.920"N	80°47'16.832"W	7017.35	134.356	3.52	-0.04	-3.52	
13286.00	89.020	157.880	6575.73	6550.45	-4994.10	5052.79	1700406.56	14278422.07	39°19'11.048"N	80°47'16.385"W	7104.34	134.665	0.63	0.04	-0.63	
13382.00	89.080	159.930	6577.32	6646.40	-5083.65	5087.33	1700441.09	14278332.56	39°19'10.162"N	80°47'15.948"W	7191.97	134.979	2.14	0.06	2.14	
13477.00	88.980	157.450	6578.93	6741.35	-5172.13	5121.85	1700475.59	14278244.11	39°19'09.287"N	80°47'15.512"W	7279.03	135.280	2.61	-0.11	-2.61	
13572.00	88.770	156.450	6580.80	6836.33	-5259.53	5159.04	1700512.76	14278156.75	39°19'08.422"N	80°47'15.041"W	7367.38	135.553	1.08	-0.22	-1.05	
13666.00	89.260	158.230	6582.41	6930.31	-5346.26	5195.25	1700548.98	14278070.06	39°19'07.564"N	80°47'14.583"W	7454.73	135.821	1.96	0.52	1.89	
13761.00	88.460	160.530	6584.30	7025.23	-5435.15	5228.69	1700582.39	14277981.20	39°19'06.685"N	80°47'14.160"W	7541.89	136.109	2.56	-0.84	2.42	
13856.00	89.820	160.010	6585.73	7120.10	-5524.56	5260.76	1700614.44	14277891.83	39°19'05.800"N	80°47'13.755"W	7628.65	136.401	1.53	1.43	-0.55	
13951.00	89.320	156.200	6586.44	7215.07	-5612.68	5296.18	1700649.85	14277803.73	39°19'04.928"N	80°47'13.307"W	7716.98	136.662	4.04	-0.53	-4.01	
14046.00	88.800	154.120	6588.00	7309.98	-5698.88	5336.08	1700689.73	14277717.57	39°19'04.076"N	80°47'12.802"W	7807.11	136.883	2.26	-0.55	-2.19	
14141.00	88.860	158.910	6589.94	7404.92	-5785.97	5373.92	1700727.56	14277630.52	39°19'03.214"N	80°47'12.323"W	7896.61	137.115	5.04	0.06	5.04	
14237.00	89.420	160.950	6591.38	7500.81	-5876.12	5406.86	1700760.48	14277540.40	39°19'02.322"N	80°47'11.907"W	7985.17	137.382	2.20	0.58	2.12	
14331.00	89.600	154.640	6592.19	7594.76	-5963.10	5442.36	1700795.97	14277453.45	39°19'01.462"N	80°47'11.458"W	8073.28	137.614	6.72	0.18	-6.71	
14426.00	89.170	153.820	6593.21	7689.61	-6048.65	5483.66	1700837.26	14277367.94	39°19'00.615"N	80°47'10.935"W	8164.35	137.805	0.97	-0.45	-0.86	
14521.00	89.260	155.580	6594.51	7784.48	-6134.52	5524.25	1700877.83	14277282.10	39°18'59.765"N	80°47'10.421"W	8255.29	137.996	1.85	0.09	1.85	
14616.00	89.170	151.990	6595.81	7879.27	-6219.73	5566.21	1700919.77	14277196.93	39°18'58.922"N	80°47'09.890"W	8346.72	138.174	3.78	-0.09	-3.78	
14710.00	88.740	152.890	6597.53	7972.89	-6303.05	5609.69	1700963.24	14277113.64	39°18'58.098"N	80°47'09.339"W	8437.84	138.331	1.06	-0.46	0.96	
14806.00	89.200	156.690	6599.25	8068.78	-6389.88	5650.57	1701004.10	14277026.85	39°18'57.239"N	80°47'08.821"W	8529.91	138.514	3.99	0.48	3.96	

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Actual Wellpath Report

Warrior Unit 2H AWP Proj: 19288'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Warrior Unit 2H
Field	Doddridge	Wellbore	Warrior Unit 2H AWB
Facility	Addie Pad		

WELLPATH DATA (228 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
14901.00	89.600	157.640	6600.25	8163.75	-6477.42	5687.43	1701040.95	14276939.34	39°18'56.372"N	80°47'08.355"W	8619.97	138.716	1.08	0.42	1.00	
14997.00	89.780	157.800	6600.77	8259.75	-6566.26	5723.83	1701077.33	14276850.54	39°18'55.494"N	80°47'07.895"W	8710.80	138.921	0.25	0.19	0.17	
15092.00	89.660	160.440	6601.23	8354.70	-6655.01	5757.69	1701111.17	14276761.82	39°18'54.616"N	80°47'07.466"W	8800.00	139.135	2.78	-0.13	2.78	
15187.00	89.780	159.700	6601.69	8449.59	-6744.32	5790.07	1701143.54	14276672.55	39°18'53.732"N	80°47'07.057"W	8888.80	139.354	0.79	0.13	-0.78	
15282.00	89.780	159.080	6602.06	8544.54	-6833.24	5823.51	1701176.97	14276583.67	39°18'52.853"N	80°47'06.634"W	8978.10	139.561	0.65	0.00	-0.65	
15377.00	89.940	159.010	6602.29	8639.50	-6921.95	5857.48	1701210.93	14276494.99	39°18'51.975"N	80°47'06.205"W	9067.72	139.761	0.18	0.17	-0.07	
15472.00	89.690	156.000	6602.60	8734.49	-7009.71	5893.83	1701247.26	14276407.26	39°18'51.107"N	80°47'05.745"W	9158.24	139.943	3.18	-0.26	-3.17	
15567.00	89.660	158.740	6603.14	8829.48	-7097.39	5930.38	1701283.79	14276319.62	39°18'50.239"N	80°47'05.283"W	9248.91	140.119	2.88	-0.03	2.88	
15661.00	89.880	161.730	6603.51	8923.35	-7185.84	5962.16	1701315.56	14276231.20	39°18'49.364"N	80°47'04.861"W	9337.22	140.317	3.19	0.23	3.18	
15756.00	89.720	162.020	6603.85	9018.07	-7276.13	5991.71	1701345.11	14276140.95	39°18'48.471"N	80°47'04.508"W	9426.64	140.529	0.35	-0.17	0.31	
15851.00	89.940	162.960	6604.13	9112.70	-7366.72	6020.30	1701373.68	14276050.39	39°18'47.575"N	80°47'04.147"W	9513.81	140.743	1.02	0.23	0.99	
15946.00	89.750	161.280	6604.39	9207.38	-7457.13	6049.46	1701402.83	14275960.02	39°18'46.681"N	80°47'03.778"W	9602.33	140.950	1.78	-0.20	-1.77	
16040.00	89.690	157.590	6604.84	9301.30	-7545.12	6082.47	1701435.83	14275872.06	39°18'45.810"N	80°47'03.361"W	9691.51	141.126	3.93	-0.06	-3.93	
16135.00	89.820	149.460	6605.25	9396.00	-7630.09	6124.79	1701478.13	14275787.13	39°18'44.970"N	80°47'02.825"W	9784.24	141.245	8.56	0.14	-8.56	
16230.00	89.970	146.340	6605.43	9489.68	-7710.56	6175.27	1701528.59	14275706.70	39°18'44.173"N	80°47'02.186"W	9878.59	141.309	3.29	0.16	-3.28	
16325.00	90.090	152.470	6605.38	9583.70	-7792.29	6223.60	1701576.90	14275624.99	39°18'43.364"N	80°47'01.573"W	9972.61	141.386	6.45	0.13	6.45	
16420.00	90.030	163.000	6605.28	9678.56	-7880.09	6259.54	1701612.83	14275537.24	39°18'42.496"N	80°47'01.119"W	10063.68	141.538	11.08	-0.06	11.08	
16515.00	90.120	162.310	6605.15	9773.17	-7970.76	6287.86	1701641.14	14275446.59	39°18'41.599"N	80°47'00.761"W	10152.35	141.731	0.73	0.09	-0.73	
16610.00	90.650	160.540	6604.51	9867.93	-8060.81	6318.12	1701671.38	14275356.58	39°18'40.708"N	80°47'00.379"W	10241.84	141.910	1.94	0.56	-1.86	
16704.00	90.580	158.490	6603.50	9961.86	-8148.86	6351.01	1701704.26	14275268.57	39°18'39.837"N	80°46'59.963"W	10331.47	142.068	2.18	-0.07	-2.18	
16799.00	90.580	156.640	6602.54	10056.85	-8236.66	6387.27	1701740.50	14275180.81	39°18'38.968"N	80°46'59.504"W	10423.04	142.208	1.95	0.00	-1.95	
16894.00	90.520	154.900	6601.63	10151.80	-8323.28	6426.25	1701779.47	14275094.22	39°18'38.111"N	80°46'59.011"W	10515.40	142.329	1.83	-0.06	-1.83	
16989.00	90.460	154.310	6600.82	10246.68	-8409.10	6466.99	1701820.19	14275008.43	39°18'37.262"N	80°46'58.495"W	10608.25	142.438	0.62	-0.06	-0.62	
17084.00	90.580	149.890	6599.96	10341.25	-8493.03	6511.43	1701864.62	14274924.53	39°18'36.431"N	80°46'57.933"W	10701.88	142.523	4.65	0.13	-4.65	
17179.00	90.000	150.790	6599.47	10435.51	-8575.58	6558.44	1701911.61	14274842.02	39°18'35.614"N	80°46'57.337"W	10796.01	142.592	1.13	-0.61	0.95	
17274.00	90.340	151.910	6599.19	10529.98	-8658.95	6603.99	1701957.14	14274758.68	39°18'34.789"N	80°46'56.760"W	10889.91	142.668	1.23	0.36	1.18	
17369.00	90.000	157.670	6598.91	10624.83	-8744.86	6644.43	1701997.57	14274672.80	39°18'33.939"N	80°46'56.248"W	10982.77	142.772	6.07	-0.36	6.06	
17464.00	90.340	163.580	6598.63	10719.64	-8834.44	6675.94	1702029.06	14274583.26	39°18'33.053"N	80°46'55.850"W	11073.19	142.923	6.23	0.36	6.22	
17558.00	90.150	169.270	6598.23	10812.45	-8925.78	6697.99	1702051.10	14274491.96	39°18'32.150"N	80°46'55.572"W	11159.42	143.115	6.06	-0.20	6.05	
17653.00	90.460	171.200	6597.72	10905.09	-9019.40	6714.10	1702067.21	14274398.38	39°18'31.224"N	80°46'55.370"W	11244.05	143.336	2.06	0.33	2.03	



Actual Wellpath Report

Warrior Unit 2H AWP Proj: 19288

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Addie Pad
Slot	Slot #05
Well	Warrior Unit 2H
Wellbore	Warrior Unit 2H AWB

WELLPATH DATA (228 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Buidl Rate	Turn Rate	Comments
ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
17748.00	90.220	163.520	6597.16	10998.60	-9112.02	6734.87	1702087.97	14274305.79	39°18'30.308"N	80°46'55.109"W	11330.82	143.531	8.09	-0.25	-8.08	
17838.00	90.220	163.590	6596.79	11093.05	-9203.14	6761.77	1702114.86	14274214.71	39°18'29.407"N	80°46'54.770"W	11420.12	143.694	0.07	0.00	0.07	
17938.00	90.220	164.520	6596.43	11187.42	-9294.48	6787.87	1702140.94	14274123.41	39°18'28.504"N	80°46'54.440"W	11509.23	143.859	0.98	0.00	0.98	
18032.00	90.340	160.170	6595.97	11281.05	-9384.03	6816.37	1702169.43	14274033.89	39°18'27.618"N	80°46'54.081"W	11598.40	144.006	4.63	0.13	-4.63	
18127.00	90.060	151.230	6595.63	11375.91	-9470.52	6856.42	1702208.47	14273947.43	39°18'26.762"N	80°46'53.586"W	11691.35	144.100	9.42	-0.29	-9.41	
18223.00	90.180	152.730	6595.43	11471.47	-9555.27	6900.52	1702253.55	14273862.72	39°18'25.923"N	80°46'53.015"W	11786.45	144.164	1.57	0.12	1.56	
18317.00	90.250	153.610	6595.08	11565.21	-9639.15	6942.94	1702295.96	14273778.87	39°18'25.093"N	80°46'52.478"W	11879.30	144.235	0.94	0.07	0.94	
18412.00	90.150	151.410	6594.75	11659.85	-9723.42	6986.79	1702339.79	14273694.64	39°18'24.259"N	80°46'51.923"W	11973.31	144.301	2.32	-0.11	-2.32	
18507.00	90.280	154.030	6594.39	11754.52	-9807.84	7030.33	1702383.31	14273610.25	39°18'23.424"N	80°46'51.372"W	12067.28	144.367	2.76	0.14	2.76	
18602.00	90.340	152.340	6593.88	11849.25	-9892.62	7073.18	1702426.15	14273525.50	39°18'22.585"N	80°46'50.829"W	12161.16	144.435	1.78	0.06	-1.78	
18697.00	90.250	153.680	6593.39	11943.97	-9977.27	7116.30	1702469.24	14273440.88	39°18'21.747"N	80°46'50.283"W	12255.11	144.502	1.41	-0.09	1.41	
18792.00	90.520	155.860	6592.75	12038.86	-10063.20	7156.79	1702509.72	14273354.99	39°18'20.897"N	80°46'49.771"W	12348.59	144.580	2.31	0.28	2.29	
18887.00	90.430	158.600	6591.96	12133.84	-10150.79	7193.55	1702546.47	14273267.44	39°18'20.031"N	80°46'49.306"W	12441.29	144.676	2.89	-0.09	2.88	
18982.00	90.370	160.840	6591.30	12228.76	-10239.89	7226.48	1702579.38	14273178.37	39°18'19.149"N	80°46'48.890"W	12533.05	144.789	2.36	-0.06	2.36	
19077.00	91.200	166.970	6590.00	12323.20	-10330.89	7253.60	1702606.49	14273087.40	39°18'18.249"N	80°46'48.548"W	12623.08	144.926	5.47	0.87	5.40	
19172.00	91.020	162.280	6588.16	12417.52	-10422.24	7279.57	1702632.45	14272996.10	39°18'17.346"N	80°46'48.220"W	12712.80	145.067	3.89	-0.19	-3.88	
19264.00	90.650	154.080	6586.81	12509.43	-10507.56	7313.74	1702666.60	14272910.80	39°18'16.501"N	80°46'47.788"W	12802.33	145.160	8.92	-0.40	-8.91	
19288.00	90.650	154.080	6586.54	12533.39	-10529.15	7324.23	1702677.09	14272889.23	39°18'16.288"N	80°46'47.655"W	12826.04	145.177	0.00	0.00	0.00	Projected MD at TD: 19288'



Actual Wellpath Report

Warrior Unit 2H AWP Proj: 19288'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Warrior Unit 2H
Field	Doddridge	Wellbore	Warrior Unit 2H AWB
Facility	Addie Pad		

HOLE & CASING SECTIONS - Ref Wellbore: Warrior Unit 2H AWB Ref Wellpath: Warrior Unit 2H AWP Proj: 19288'

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	-0.02	0.20
17.5in Open Hole	104.50	501.90	397.40	104.50	501.90	-0.02	0.20	-0.15	0.66
13.375in Casing Surface	24.50	501.90	477.40	24.50	501.90	0.00	0.00	-0.15	0.66
12.25in Open Hole	501.90	2661.50	2159.60	501.90	2591.49	-0.15	0.66	166.92	465.93
9.625in Casing Intermediate	24.50	2661.50	2637.00	24.50	2591.49	0.00	0.00	166.92	465.93
8.75in Open Hole	2661.50	6876.50	4215.00	2591.49	6161.02	166.92	465.93	757.11	2554.32
8.5in Open Hole	6876.50	19288.00	12411.50	6161.02	6586.54	757.11	2554.32	-10529.15	7324.23
5.5in Casing Production	24.50	19288.00	19263.50	24.50	6586.54	0.00	0.00	-10529.15	7324.23

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Warrior Unit 2H POE - Rev-1	6465.00	439.59	2789.01	1698143.68	14283853.60	39°20'04.804"N	80°47'45.033"W	point
Warrior Unit 2H BHL - Rev-1	6506.00	-10524.83	7345.07	1702697.92	14272893.55	39°18'16.330"N	80°46'47.390"W	point
Warrior Unit 2H LP - Rev-1	6506.00	232.03	2875.26	1698229.89	14283646.12	39°20'02.751"N	80°47'43.942"W	point

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Actual Wellpath Report

Warrior Unit 2H AWP Proj: 19288'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Warrior Unit 2H
Field	Doddridge	Wellbore	Warrior Unit 2H AWB
Facility	Addie Pad		

WELLPATH COMPOSITION - Ref Wellbore: Warrior Unit 2H AWB Ref Wellpath: Warrior Unit 2H AWP Proj: 19288'				
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 2H AWB
480.50	720.50	Gyrodatta standard - Drop gyro or Multi-shot	02 Gyrodatta MS Gyro <12-1/4">(471')(531'-711')	Warrior Unit 2H AWB
720.50	2578.50	ISCWSA MWD, Rev. 4 (Standard)	03 WFT EM <12-1/4">(711')(802'-2569')	Warrior Unit 2H AWB
2578.50	6801.50	ISCWSA MWD, Rev. 4 (Standard)	04 WFT EM <8-3/4">(2569')(2694'-6792')	Warrior Unit 2H AWB
6801.50	19264.00	BHI AutoTrak Curve (Short)	05 BH AT Curve <8-1/2">(6801.50')(6853'-19264')	Warrior Unit 2H AWB
19264.00	19288.00	Blind Drilling (std)	Projection to bit	Warrior Unit 2H AWB



Actual Wellpath Report

Warrior Unit 2H AWP Proj: 19288'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Warrior Unit 2H
Field	Doddridge	Wellbore	Warrior Unit 2H AWP
Facility	Addie Pad		

COMMENTS

Wellpath general comments

API: 47-017-06808-0000

BHI Job #: 8850551

Rig: Frontier 22

Duration: 11/06/2017-11/09/2017

Gyrodata MS Gyro <17-1/2"> (100'-471')

Gyrodata MS Gyro <12-1/4"> (471')(531'-711')

WFT EM <12-1/4"> (711')(802'-2569')

WFT EM <8-3/4"> (2569')(2694'-6792')

BHI AT Curve <8-1/2"> (6801.5')(6853'-19264')

Middlesex: 7008' MD

Burkett: 7224' MD

Tully: 7281' MD

Hamilton: 7379' MD

Marcellus POE: 7405' MD

Projected MD at TD: 19288'

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