



**Actual Wellpath Report**  
 Pierson Unit 4H AWP Proj: '15898'  
 Page 1 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Tyler County, WV	Well	Pierson Unit 4H
Field	Tyler	Wellbore	Pierson Unit 4H AWP
Facility	Dawson Pad		

REPORT SETUP INFORMATION			
Projection System	MAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Mccrethb
Scale	0.999601	Report Generated	5/8/2018 at 1:05:31 PM
Convergence at slot	0.08° East	Database/Source file	WA_MPL_EASTERNUUS_Defn/Pierson_Unit_4H_AWP_Proj_15898.xml

WELLPATH LOCATION							
	Local coordinates			Grid coordinates		Geographic coordinates	
	North(ft)	East(ft)	Easting[US ft]	Northing[US ft]	Latitude	Longitude	
Slot Location	0.00	0.00	1676049.73	14300592.52	39°22'50.710"N	80°52'26.030"W	
Facility Reference Pt			1676049.73	14300592.52	39°22'50.710"N	80°52'26.030"W	
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W	

WELLPATH DATUM			
Calculation method	Minimum curvature		Patterson 342 (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot		Patterson 342 (RKB) to Mean Sea Level
Vertical Reference Pt	Patterson 342 (RKB)		Patterson 342 (RKB) to Ground Level at Slot (Slot #04)
MD Reference Pt	Patterson 342 (RKB)		Section Origin
Field Vertical Reference	Mean Sea Level		Section Azimuth

RECEIVED  
 Office of Oil and Gas  
 25 2018  
 WV Department of  
 Environmental Protection



# Actual Wellpath Report

Pierson Unit 4H AWP Proj: 15898\*

Page 2 of 10

8102 5 2 13J  
Sag plan I/O of well  
DVAI/CEER



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Tyler County, WV	Well	Pierson Unit 4H
Field	Tyler	Wellbore	Pierson Unit 4H AWB
Facility	Dawson Pad		

WELLPATH DATA (192 stations) † = Interpolated/extrapolated station																
MD	Inclination	Azimuth	TVD	Vert Secl	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
ft	°	°	ft	ft	ft	ft	ft	ft	ft	ft	ft	°	ft/100ft	ft/100ft	ft/100ft	
0.00†	0.000	150.800	0.00	0.00	0.00	0.00	1676049.73	14300592.52	39°22'50.710"N	80°52'26.030"W	0.00	0.000	0.00	0.00	0.00	
25.00	0.000	150.800	25.00	0.00	0.00	0.00	1676049.73	14300592.52	39°22'50.710"N	80°52'26.030"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.360	150.800	100.00	-0.23	-0.21	0.11	1676049.84	14300592.31	39°22'50.708"N	80°52'26.029"W	0.24	150.800	0.48	0.48	201.07	Gyrodata MS Gyro <17.12°>(100°-549°)
200.00	0.360	169.610	200.00	-0.85	-0.79	0.32	1676050.05	14300591.73	39°22'50.702"N	80°52'26.026"W	0.85	157.618	0.12	0.00	18.81	
300.00	0.360	192.200	300.00	-1.43	-1.40	0.32	1676050.04	14300591.11	39°22'50.696"N	80°52'26.026"W	1.44	167.358	0.14	0.00	22.59	
400.00	0.050	233.390	399.99	-1.71	-1.74	0.21	1676049.94	14300590.78	39°22'50.693"N	80°52'26.027"W	1.75	172.990	0.32	-0.31	41.19	
500.00	0.220	184.140	499.99	-1.90	-1.96	0.16	1676049.89	14300590.56	39°22'50.691"N	80°52'26.028"W	1.96	175.182	0.19	0.17	49.25	
549.00	0.140	182.480	548.99	-2.04	-2.11	0.16	1676049.88	14300590.41	39°22'50.688"N	80°52'26.028"W	2.11	175.785	0.16	-0.16	-3.39	
631.00	0.190	199.250	630.99	-2.23	-2.34	0.11	1676049.83	14300590.18	39°22'50.687"N	80°52'26.029"W	2.34	177.396	0.08	0.06	20.45	Gyrodata MS Gyro <12.14°>(549°)(631°-721°)
721.00	0.180	201.370	720.99	-2.46	-2.61	0.01	1676049.73	14300589.91	39°22'50.684"N	80°52'26.030"W	2.61	179.877	0.01	-0.01	2.36	
783.00	0.410	177.120	782.99	-2.74	-2.92	-0.02	1676049.71	14300589.60	39°22'50.681"N	80°52'26.030"W	2.92	180.368	0.41	0.37	-39.11	Directional ONE NWD <12.14°>(721°)(783°-2522°)
873.00	0.570	156.900	872.99	-3.50	-3.66	0.17	1676049.90	14300588.86	39°22'50.674"N	80°52'26.028"W	3.66	177.290	0.26	0.18	-22.47	
964.00	0.720	151.620	963.98	-4.51	-4.58	0.62	1676050.35	14300587.94	39°22'50.665"N	80°52'26.022"W	4.62	172.253	0.18	0.16	-5.80	
1054.00	0.780	120.870	1053.98	-5.55	-5.39	1.42	1676051.14	14300587.13	39°22'50.657"N	80°52'26.012"W	5.57	165.263	0.45	0.07	-34.17	
1149.00	0.210	51.910	1148.97	-5.99	-5.61	2.11	1676051.84	14300586.91	39°22'50.655"N	80°52'26.003"W	5.99	159.401	0.77	-0.60	-72.59	
1243.00	0.150	34.880	1242.97	-5.87	-5.40	2.31	1676052.04	14300587.12	39°22'50.657"N	80°52'26.001"W	5.88	156.811	0.08	-0.06	-18.12	
1337.00	0.380	19.720	1336.97	-5.56	-5.01	2.49	1676052.22	14300587.51	39°22'50.660"N	80°52'25.998"W	5.59	153.567	0.25	0.24	-16.13	
1431.00	0.700	347.430	1430.97	-4.75	-4.16	2.47	1676052.20	14300588.36	39°22'50.669"N	80°52'25.999"W	4.83	149.268	0.46	0.34	-34.35	
1526.00	0.510	338.330	1525.96	-3.75	-3.20	2.19	1676051.92	14300589.32	39°22'50.678"N	80°52'26.002"W	3.87	145.605	0.22	-0.20	-9.58	
1620.00	0.340	285.190	1619.96	-3.17	-2.73	1.76	1676051.49	14300589.78	39°22'50.683"N	80°52'26.008"W	3.25	147.167	0.44	-0.18	-56.53	
1714.00	0.680	248.200	1713.96	-3.03	-2.87	0.98	1676050.70	14300589.65	39°22'50.682"N	80°52'26.018"W	3.03	161.182	0.49	0.36	-39.35	
1808.00	1.290	219.000	1807.94	-3.60	-3.90	-0.21	1676049.52	14300588.62	39°22'50.671"N	80°52'26.033"W	3.90	183.027	0.82	0.65	-31.06	
1903.00	0.740	238.490	1902.93	-4.27	-5.05	-1.40	1676048.33	14300587.47	39°22'50.660"N	80°52'26.048"W	5.24	195.518	0.68	-0.58	20.52	
1997.00	0.750	305.710	1996.92	-3.89	-5.01	-2.42	1676047.31	14300587.51	39°22'50.661"N	80°52'26.061"W	5.56	205.733	0.88	0.01	71.51	
2091.00	1.000	315.510	2090.91	-2.64	-4.06	-3.49	1676046.24	14300588.46	39°22'50.670"N	80°52'26.075"W	5.36	220.684	0.31	0.27	10.43	
2185.00	0.810	319.180	2184.90	-1.27	-2.98	-4.50	1676045.23	14300589.54	39°22'50.681"N	80°52'26.087"W	5.40	236.539	0.21	-0.20	3.90	
2280.00	0.740	324.690	2279.89	-1.07	-1.97	-5.30	1676044.43	14300590.55	39°22'50.691"N	80°52'26.097"W	5.65	249.624	0.11	-0.07	5.80	
2374.00	0.680	323.310	2373.88	-1.07	-1.02	-5.98	1676043.75	14300591.49	39°22'50.700"N	80°52'26.106"W	6.07	260.279	0.07	-0.06	-1.47	
2468.00	0.750	296.670	2467.88	2.05	-0.30	-6.86	1676042.87	14300592.22	39°22'50.707"N	80°52'26.117"W	6.87	267.488	0.36	0.07	-28.34	
2522.00	0.640	302.050	2521.87	2.54	0.02	-7.43	1676042.30	14300592.53	39°22'50.710"N	80°52'26.125"W	7.43	270.135	0.24	-0.20	9.96	



**Actual Wellpath Report**  
Pierson Unit 4H AWP Proj: 15898'  
Page 3 of 10

WV Department of  
Environmental Protection



**REFERENCE WELLPATH IDENTIFICATION**

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Tyler County, WV	Well	Pierson Unit 4H
Field	Tyler	Wellbore	Pierson Unit 4H AWB
Facility	Dawson Pad		

**WELLPATH DATA (192 stations)**

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	D/S	Build Rate	Turn Rate	Comments
ft	°	°	ft	ft	ft	ft	US-ft	US-ft	°	°	ft	°	ft/100ft	ft/100ft	ft/100ft	
2659.00	0.480	323.760	2658.86	3.70	0.89	-8.42	1676041.31	14300593.40	39°22'50.719"N	80°52'26.137"W	8.47	276.008	0.19	-0.12	15.85	Directional ONE MWD -8.3/4°(2522)(2659--6434)
2757.00	2.440	216.610	2756.84	2.94	-0.46	-9.91	1676039.82	14300592.06	39°22'50.706"N	80°52'26.156"W	9.92	267.358	2.68	2.00	-109.34	
2851.00	5.260	209.170	2850.61	-0.99	-5.83	-13.20	1676036.53	14300586.69	39°22'50.653"N	80°52'26.198"W	14.43	246.188	3.04	3.00	-7.91	
2945.00	6.960	203.620	2944.08	-7.95	-14.81	-17.59	1676032.15	14300577.72	39°22'50.564"N	80°52'26.254"W	22.99	229.902	1.91	1.81	-5.90	
3040.00	8.230	200.460	3038.24	-17.31	-26.45	-22.27	1676027.47	14300566.08	39°22'50.449"N	80°52'26.314"W	34.58	220.092	1.41	1.34	-3.33	
3134.00	9.260	197.880	3131.15	-28.42	-39.95	-26.94	1676022.80	14300552.58	39°22'50.315"N	80°52'26.374"W	48.19	213.994	1.17	1.10	-2.74	
3228.00	8.930	195.670	3223.97	-40.34	-54.18	-31.24	1676018.50	14300538.36	39°22'50.175"N	80°52'26.429"W	62.54	209.966	0.51	-0.35	-2.35	
3323.00	10.520	205.080	3317.61	-52.48	-69.13	-36.90	1676012.84	14300523.41	39°22'50.027"N	80°52'26.501"W	78.37	208.094	2.36	1.67	9.91	
3417.00	13.090	209.730	3409.61	-65.46	-86.15	-45.82	1676003.92	14300506.40	39°22'49.859"N	80°52'26.615"W	97.58	208.007	2.91	2.73	4.95	
3512.00	11.940	207.080	3502.35	-79.14	-104.24	-55.63	1675994.12	14300488.32	39°22'49.517"N	80°52'26.740"W	118.16	208.087	1.35	-1.21	-2.79	
3607.00	11.290	212.650	3595.41	-91.51	-120.82	-65.12	1675984.63	14300471.74	39°22'49.517"N	80°52'26.861"W	137.26	208.324	1.36	-0.68	5.86	
3701.00	13.070	217.690	3687.29	-102.82	-136.98	-76.59	1675973.17	14300455.59	39°22'49.357"N	80°52'27.008"W	156.94	209.209	2.20	1.89	5.36	
3795.00	13.700	213.680	3778.74	-115.14	-154.66	-89.26	1675960.51	14300437.92	39°22'49.183"N	80°52'27.169"W	178.57	209.990	1.19	0.67	-4.27	
3889.00	13.520	208.120	3870.11	-129.11	-173.61	-100.61	1675949.16	14300418.97	39°22'48.995"N	80°52'27.314"W	200.66	210.093	1.40	-0.19	-5.91	
3984.00	11.860	210.550	3962.78	-142.76	-191.82	-110.81	1675938.97	14300400.78	39°22'48.816"N	80°52'27.445"W	221.52	210.014	1.84	-1.75	2.56	
4078.00	11.830	214.340	4054.74	-154.56	-208.09	-121.15	1675928.62	14300384.51	39°22'48.655"N	80°52'27.577"W	240.79	210.208	0.83	-0.03	4.03	
4173.00	12.230	210.280	4147.70	-166.70	-224.82	-131.72	1675918.06	14300367.79	39°22'48.490"N	80°52'27.711"W	260.57	210.365	0.98	0.42	-4.27	
4267.00	11.840	210.550	4239.63	-179.23	-241.72	-141.64	1675908.14	14300350.89	39°22'48.323"N	80°52'27.838"W	280.17	210.369	0.42	-0.41	0.28	
4362.00	12.420	213.620	4332.51	-191.52	-258.62	-152.25	1675897.54	14300334.00	39°22'48.156"N	80°52'27.974"W	300.11	210.485	0.91	0.61	3.23	
4456.00	12.380	208.550	4424.32	-204.22	-275.89	-162.66	1675887.13	14300316.73	39°22'47.985"N	80°52'28.106"W	320.28	210.523	1.16	-0.04	-5.38	
4550.00	13.060	212.160	4516.02	-217.45	-293.74	-173.13	1675876.66	14300298.90	39°22'47.809"N	80°52'28.240"W	340.96	210.516	1.11	0.72	3.84	
4644.00	13.960	215.710	4607.42	-230.40	-311.94	-185.41	1675864.40	14300280.71	39°22'47.630"N	80°52'28.397"W	362.88	210.726	1.30	0.96	3.78	
4738.00	14.050	211.260	4698.62	-243.97	-330.90	-197.94	1675851.86	14300261.75	39°22'47.442"N	80°52'28.557"W	385.58	210.888	1.15	0.10	-4.73	
4833.00	12.370	209.340	4791.11	-257.86	-349.63	-208.92	1675840.90	14300243.03	39°22'47.257"N	80°52'28.697"W	407.29	210.860	1.83	-1.77	-2.02	
4927.00	11.620	214.290	4883.06	-269.98	-366.22	-219.18	1675830.63	14300226.44	39°22'47.093"N	80°52'28.828"W	426.80	210.900	1.35	-0.80	5.27	
5022.00	13.300	211.300	4975.82	-282.44	-383.47	-230.25	1675819.57	14300209.20	39°22'46.923"N	80°52'28.969"W	447.28	210.982	1.89	1.77	-3.15	
5116.00	12.460	204.640	5067.46	-296.45	-401.92	-248.10	1675809.73	14300190.75	39°22'46.741"N	80°52'29.095"W	468.18	210.853	1.81	-0.88	-7.08	
5210.00	12.060	206.480	5159.31	-310.47	-419.93	-268.10	1675801.12	14300172.75	39°22'46.563"N	80°52'29.205"W	488.05	210.636	0.59	-0.43	1.96	
5304.00	12.890	212.570	5251.10	-323.64	-437.56	-288.73	1675791.10	14300155.13	39°22'46.389"N	80°52'29.333"W	508.33	210.596	1.65	0.88	6.48	
5398.00	13.030	208.780	5342.70	-337.04	-455.88	-289.47	1675780.36	14300137.02	39°22'46.210"N	80°52'29.470"W	529.40	210.598	0.92	0.15	-4.03	



**Actual Wellpath Report**  
Pierson Unit 4H AWP Proj: 15898'  
Page 4 of 10

WV Department of  
Environmental Protection



REFERENCE WELLPATH IDENTIFICATION									
Operator	ANTERO RESOURCES CORPORATION								
Area	Tyler County, WV								
Field	Tyler								
Facility	Dawson Pad								
								Slot #04	
								Pierson Unit 4H	
								Pierson Unit 4H AWP	

WELLPATH DATA (192 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	ft	ft	ft	ft	ft	°	ft/100ft	ft/100ft	ft/100ft	
5493.00	10.570	211.530	5435.69	-349.55	-472.50	-279.19	1675770.65	14300120.21	39°22'46.044"N	80°52'29.594"W	548.82	210.578	2.66	-2.59	2.89	
5587.00	9.780	211.110	5528.21	-359.96	-486.68	-287.82	1675762.02	14300106.03	39°22'45.904"N	80°52'29.704"W	565.42	210.600	0.84	-0.84	-0.45	
5634.00	10.150	217.230	5574.50	-364.72	-493.40	-292.39	1675757.46	14300099.32	39°22'45.837"N	80°52'29.762"W	573.53	210.651	2.39	0.79	13.02	
5681.00	11.700	214.530	5620.65	-369.75	-500.62	-297.60	1675752.25	14300092.10	39°22'45.766"N	80°52'29.829"W	582.40	210.729	3.30	3.47	-5.74	
5728.00	11.850	224.470	5666.66	-374.61	-507.99	-303.68	1675746.17	14300084.73	39°22'45.693"N	80°52'29.906"W	591.84	210.871	4.32	0.32	21.15	
5775.00	11.440	246.930	5712.72	-376.97	-513.27	-311.35	1675738.50	14300079.46	39°22'45.641"N	80°52'30.004"W	600.32	211.241	9.62	-0.87	47.79	
5822.00	11.510	273.940	5758.81	-375.33	-514.77	-320.32	1675729.53	14300077.95	39°22'45.627"N	80°52'30.118"W	606.30	211.893	11.33	0.15	57.47	
5869.00	11.440	301.360	5804.91	-369.80	-512.02	-328.99	1675720.87	14300080.70	39°22'45.654"N	80°52'30.229"W	608.60	212.722	11.50	-0.15	58.34	
5916.00	11.480	326.170	5851.00	-361.63	-505.71	-335.58	1675714.29	14300087.01	39°22'45.716"N	80°52'30.312"W	606.92	213.567	10.41	0.09	52.79	
5963.00	13.560	332.400	5896.88	-351.63	-496.94	-340.73	1675709.13	14300095.78	39°22'45.803"N	80°52'30.378"W	602.53	214.437	5.27	4.43	13.26	
6010.00	17.160	331.620	5942.20	-339.31	-485.95	-346.58	1675703.28	14300106.76	39°22'45.912"N	80°52'30.452"W	596.88	215.497	7.67	7.66	-1.66	
6058.00	20.880	328.470	5987.57	-323.92	-472.42	-354.43	1675695.44	14300120.28	39°22'46.046"N	80°52'30.552"W	590.60	216.878	8.04	7.75	-6.56	
6105.00	23.540	327.600	6031.08	-306.55	-457.36	-363.84	1675686.04	14300135.34	39°22'46.195"N	80°52'30.622"W	584.43	218.503	5.70	5.66	-1.85	
6152.00	26.300	326.760	6073.70	-287.26	-440.72	-374.58	1675675.30	14300151.97	39°22'46.359"N	80°52'30.808"W	578.40	220.362	5.92	5.87	-1.79	
6199.00	29.350	326.860	6115.26	-265.91	-422.36	-386.58	1675666.30	14300170.32	39°22'46.541"N	80°52'30.961"W	572.57	222.467	6.49	6.49	0.21	
6218.00†	30.508	326.227	6131.73	-256.70	-414.46	-391.81	1675658.07	14300178.23	39°22'46.619"N	80°52'31.027"W	570.34	223.391	6.32	6.10	-3.33	Scamore @ 6218MD / 6132TVD
6246.00	32.220	325.370	6155.63	-242.58	-402.40	-400.00	1675649.88	14300190.27	39°22'46.738"N	80°52'31.131"W	567.39	224.829	6.32	6.11	-3.06	
6293.00	34.990	324.660	6194.77	-217.47	-381.10	-414.92	1675634.97	14300211.57	39°22'46.949"N	80°52'31.321"W	563.38	227.433	5.95	5.89	-1.51	
6340.00	37.170	325.310	6232.76	-190.76	-358.43	-430.80	1675619.10	14300234.23	39°22'47.173"N	80°52'31.523"W	560.41	230.239	4.71	4.64	1.38	
6387.00	40.980	327.860	6269.24	-161.96	-333.69	-447.08	1675602.82	14300258.96	39°22'47.418"N	80°52'31.729"W	557.89	233.263	8.80	8.11	5.43	
6415.00†	43.149	329.893	6290.03	-143.57	-317.63	-456.77	1675593.14	14300275.01	39°22'47.577"N	80°52'31.853"W	556.36	235.186	9.15	7.75	7.26	Middlesex @ 6415MD / 6290TVD
6434.00	44.640	331.180	6303.72	-130.58	-306.16	-463.25	1675586.66	14300286.48	39°22'47.690"N	80°52'31.935"W	555.28	236.539	9.15	7.85	6.78	
6486.00	49.940	333.110	6338.98	-92.75	-272.38	-481.07	1675568.85	14300320.24	39°22'48.024"N	80°52'32.161"W	552.83	240.481	10.55	10.19	3.71	BH ATC <8.5'>(6434)(6486-15875)
6538.00	55.400	334.320	6370.50	-51.68	-235.32	-499.36	1675550.57	14300357.29	39°22'48.391"N	80°52'32.393"W	552.03	244.768	10.66	10.50	2.33	
6583.00	58.320	334.960	6395.10	-14.18	-201.27	-515.50	1675534.44	14300391.32	39°22'48.728"N	80°52'32.598"W	553.40	248.672	6.59	6.49	1.40	
6601.00†	60.144	335.687	6404.31	1.23	-187.22	-521.95	1675527.98	14300428.71	39°22'48.867"N	80°52'32.680"W	554.52	250.267	10.73	10.13	4.09	Burket @ 6601MD / 6404TVD
6630.00	63.090	336.820	6418.09	26.69	-163.87	-532.22	1675517.72	14300468.28	39°22'49.098"N	80°52'32.811"W	556.88	252.887	10.73	10.16	3.91	
6677.00	67.550	339.140	6437.71	69.35	-124.29	-548.22	1675501.73	14300468.28	39°22'49.489"N	80°52'33.014"W	562.13	257.226	10.50	9.49	4.94	
6680.00†	67.847	339.246	6438.85	72.12	-121.69	-549.20	1675500.75	14300470.88	39°22'49.515"N	80°52'33.026"W	562.52	257.506	10.42	9.90	3.53	Tully @ 6680MD / 6439TVD
6724.00	72.210	340.750	6453.88	113.47	-82.84	-563.34	1675486.62	14300509.71	39°22'49.899"N	80°52'33.206"W	569.39	261.634	10.42	9.92	3.42	



**Actual Wellpath Report**  
Pierson Unit 4H AWP Proj: 15898\*  
Page 5 of 10

WV Department of  
Environmental Protection



REFERENCE WELLPATH IDENTIFICATION									
Operator	ANTERO RESOURCES CORPORATION								
Area	Tyler County, WV								
Field	Tyler								
Facility	Dawson Pad								

WELLPATH DATA (192 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	ft	ft	ft	ft	ft	ft	ft/100ft	ft/100ft	ft/100ft	
6771.00	76.430	343.400	6466.58	158.68	-39.80	-577.25	1675472.71	14300552.74	39°22'50.325"N	80°52'33.382"W	578.62	266.056	10.49	8.98	5.64	
6779.00†	76.999	343.944	6468.42	166.45	-32.32	-579.44	1675470.52	14300560.21	39°22'50.398"N	80°52'33.410"W	580.34	266.807	9.71	7.12	6.79	POE Marcellus @ 6779MMD / 6468TVD
6818.00	79.790	346.560	6476.26	204.49	4.61	-589.16	1675460.81	14300597.13	39°22'50.764"N	80°52'33.533"W	589.17	270.449	9.71	7.16	6.71	
6865.00	83.870	348.840	6482.94	250.59	50.06	-589.06	1675450.91	14300642.55	39°22'51.213"N	80°52'33.658"W	601.15	274.777	9.92	8.68	4.85	
6913.00	86.640	348.080	6486.91	297.92	96.92	-608.63	1675441.34	14300689.40	39°22'51.676"N	80°52'33.779"W	616.30	279.048	5.98	5.77	-1.58	
6960.00	89.880	345.790	6488.34	344.56	142.67	-619.25	1675430.73	14300735.13	39°22'52.129"N	80°52'33.914"W	635.47	282.974	8.44	6.89	-4.87	
7007.00	90.000	342.000	6488.39	391.45	187.62	-632.28	1675417.70	14300780.26	39°22'52.575"N	80°52'34.079"W	659.59	286.544	8.07	8.06	-8.06	
7102.00	90.000	339.280	6488.39	486.44	277.44	-663.77	1675386.22	14300869.85	39°22'53.461"N	80°52'34.478"W	719.42	292.684	2.86	0.00	-2.86	
7196.00	90.090	337.070	6488.31	580.38	364.70	-688.72	1675361.29	14300957.07	39°22'54.324"N	80°52'34.922"W	788.17	297.562	2.35	0.10	-2.35	
7290.00	90.030	336.060	6488.22	674.19	450.34	-736.10	1675313.92	14301043.28	39°22'55.177"N	80°52'35.396"W	863.25	301.492	1.08	-0.06	-1.07	
7383.00	89.940	335.670	6488.24	766.93	535.81	-774.13	1675275.91	14301128.12	39°22'56.016"N	80°52'35.879"W	941.47	304.689	0.43	-0.10	-0.42	
7478.00	89.970	333.840	6488.32	861.51	621.74	-814.64	1675235.41	14301214.00	39°22'56.866"N	80°52'36.394"W	1024.79	307.351	1.93	0.03	-1.93	
7572.00	90.090	336.870	6488.27	955.17	707.16	-853.84	1675196.23	14301299.40	39°22'57.711"N	80°52'36.891"W	1108.65	309.632	3.23	0.13	3.22	
7667.00	90.370	338.870	6487.88	1050.09	795.16	-889.62	1675160.46	14301387.36	39°22'58.581"N	80°52'37.346"W	1193.19	311.791	2.13	0.29	2.11	
7761.00	90.370	339.610	6487.28	1144.08	883.05	-922.94	1675127.16	14301475.22	39°22'59.450"N	80°52'37.768"W	1277.34	313.735	0.79	0.00	0.79	
7855.00	90.340	343.040	6486.70	1238.04	972.09	-963.03	1675097.08	14301564.22	39°23'00.331"N	80°52'38.150"W	1361.33	315.567	3.65	-0.03	3.65	
7949.00	90.400	342.560	6486.09	1331.94	1061.88	-980.83	1675069.29	14301653.98	39°23'01.219"N	80°52'38.502"W	1445.55	317.272	0.51	0.06	-0.51	
8043.00	90.660	337.920	6485.20	1425.91	1150.32	-1012.60	1675037.54	14301742.38	39°23'02.093"N	80°52'38.906"W	1532.51	318.643	4.94	0.30	-4.94	
8137.00	89.510	336.920	6485.05	1519.80	1237.11	-1048.69	1675001.46	14301829.13	39°23'02.951"N	80°52'39.364"W	1621.79	319.712	1.64	-1.24	-1.06	
8232.00	90.280	342.820	6485.22	1614.76	1326.37	-1081.37	1674968.79	14301918.26	39°23'03.833"N	80°52'39.778"W	1711.24	320.808	6.26	0.81	6.21	
8325.00	90.060	343.950	6484.94	1707.60	1415.38	-1107.96	1674942.21	14302007.33	39°23'04.714"N	80°52'40.115"W	1797.47	321.946	1.24	-0.24	1.22	
8420.00	90.310	340.100	6484.64	1802.53	1505.73	-1137.27	1674912.91	14302097.64	39°23'05.607"N	80°52'40.487"W	1886.96	322.936	4.06	0.26	-4.05	
8514.00	89.170	340.630	6485.06	1896.53	1594.26	-1168.86	1674881.34	14302186.14	39°23'06.483"N	80°52'40.888"W	1976.84	323.752	1.34	-1.21	0.56	
8608.00	90.060	344.380	6485.70	1990.43	1683.89	-1197.11	1674853.10	14302275.74	39°23'07.369"N	80°52'41.246"W	2066.05	324.590	4.10	0.95	3.99	
8702.00	90.430	344.560	6485.29	2084.16	1774.46	-1222.28	1674827.94	14302366.27	39°23'08.265"N	80°52'41.565"W	2154.69	325.440	0.44	0.38	0.19	
8796.00	89.860	340.610	6485.04	2178.06	1864.13	-1250.41	1674799.88	14302455.94	39°23'09.151"N	80°52'41.922"W	2244.66	326.147	4.24	-0.59	-4.20	
8891.00	90.030	341.210	6485.11	2273.05	1953.91	-1281.48	1674768.77	14302545.64	39°23'10.039"N	80°52'42.316"W	2336.65	326.741	0.65	0.16	0.63	
8985.00	90.150	341.320	6484.97	2367.03	2042.93	-1311.67	1674738.59	14302634.63	39°23'10.919"N	80°52'42.699"W	2427.76	327.297	0.17	0.13	0.12	
9079.00	89.970	337.790	6484.87	2461.01	2130.99	-1344.50	1674705.77	14302722.66	39°23'11.790"N	80°52'43.116"W	2519.68	327.751	3.76	-0.19	-3.76	
9174.00	89.910	337.720	6484.97	2555.93	2218.92	-1380.46	1674669.82	14302810.55	39°23'12.660"N	80°52'43.572"W	2613.29	328.113	0.10	-0.06	-0.07	



**Actual Wellpath Report**  
Pierson Unit 4H AWP Proj: 15898\*

Page 6 of 10

WV Department of  
Environmental Protection



**REFERENCE WELLPATH IDENTIFICATION**

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Tyler County, WV	Well	Pierson Unit 4H
Field	Tyler	Wellbore	Pierson Unit 4H AWB
Facility	Dawson Pad		

**WELLPATH DATA (192 stations)**

MD ID	Inclination ID	Azimuth ID	TVD ID	Vert Sect ID	North ID	East ID	Grid East ID	Grid North ID	Latitude	Longitude	Closure Dist ID	Closure Dir ID	DLS ID	Build Rate ID	Turn Rate ID	Comments
9268.00	90.710	336.120	6484.46	2649.77	2305.39	-1417.31	1674632.99	14302896.99	39°23'13.515"N	80°52'44.040"W	2706.22	328.418	1.90	0.85	-1.70	
9362.00	91.290	336.950	6482.82	2743.57	2391.61	-1454.73	1674595.58	14302983.17	39°23'14.367"N	80°52'44.515"W	2789.29	328.689	1.08	0.62	0.88	
9456.00	90.460	337.970	6481.38	2837.46	2478.41	-1490.76	1674559.56	14303069.94	39°23'15.226"N	80°52'44.973"W	2892.21	328.973	1.40	-0.88	1.09	
9550.00	90.740	335.800	6480.40	2931.29	2564.86	-1527.66	1674522.68	14303156.38	39°23'16.081"N	80°52'45.441"W	2985.34	329.221	2.33	0.30	-2.31	
9645.00	90.650	337.050	6479.25	3026.09	2651.92	-1565.65	1674484.71	14303243.38	39°23'16.942"N	80°52'45.923"W	3079.60	329.443	1.32	-0.09	1.32	
9740.00	90.030	340.470	6478.68	3121.04	2740.45	-1600.06	1674450.31	14303331.87	39°23'17.817"N	80°52'46.360"W	3173.37	329.721	3.66	-0.65	3.60	
9834.00	90.090	341.850	6478.58	3215.02	2829.41	-1630.41	1674419.97	14303420.80	39°23'18.697"N	80°52'46.745"W	3265.55	330.048	1.47	0.06	1.47	
9929.00	90.030	342.070	6478.48	3309.98	2919.74	-1659.83	1674390.56	14303511.09	39°23'19.580"N	80°52'47.118"W	3358.56	330.382	0.24	-0.06	0.23	
10023.00	89.570	342.970	6478.81	3403.89	3009.40	-1688.07	1674362.34	14303600.71	39°23'20.476"N	80°52'47.477"W	3450.52	330.711	1.08	-0.49	0.96	
10118.00	89.420	340.670	6479.65	3498.84	3099.65	-1717.71	1674332.71	14303690.92	39°23'21.369"N	80°52'47.853"W	3543.77	331.006	2.43	-0.16	-2.42	
10212.00	88.680	341.500	6481.21	3592.82	3188.56	-1748.17	1674302.26	14303779.80	39°23'22.248"N	80°52'48.239"W	3636.35	331.266	1.18	-0.79	0.88	
10306.00	89.140	344.790	6483.00	3686.66	3278.49	-1775.42	1674275.02	14303869.70	39°23'23.137"N	80°52'48.585"W	3728.35	331.563	3.53	0.49	3.50	
10400.00	89.480	346.750	6484.13	3780.19	3369.60	-1798.52	1674251.93	14303960.76	39°23'24.038"N	80°52'48.877"W	3819.54	331.909	2.12	0.36	2.09	
10495.00	89.750	343.160	6484.77	3874.84	3461.32	-1823.18	1674227.28	14304052.45	39°23'24.945"N	80°52'49.190"W	3912.13	332.223	3.79	0.28	-3.78	
10589.00	89.420	340.260	6485.45	3968.79	3560.56	-1852.67	1674197.80	14304141.66	39°23'25.827"N	80°52'49.564"W	4004.86	332.445	3.10	-0.35	-3.09	
10684.00	90.030	341.180	6485.90	4063.78	3640.23	-1884.04	1674166.44	14304231.29	39°23'26.714"N	80°52'49.962"W	4098.89	332.636	1.16	0.64	0.97	
10778.00	90.000	339.660	6485.88	4157.78	3728.79	-1915.54	1674134.95	14304319.82	39°23'27.589"N	80°52'50.362"W	4192.04	332.810	1.62	-0.03	-1.62	
10873.00	90.400	338.890	6485.55	4252.77	3817.65	-1949.16	1674101.35	14304408.63	39°23'28.468"N	80°52'50.788"W	4286.45	332.953	0.91	0.42	-0.81	
10967.00	90.400	338.580	6484.89	4346.74	3905.24	-1983.25	1674067.27	14304496.20	39°23'29.334"N	80°52'51.221"W	4379.98	333.077	0.33	0.00	-0.33	
11062.00	90.370	338.750	6484.25	4441.64	3993.11	-2019.35	1674031.19	14304584.03	39°23'30.203"N	80°52'51.679"W	4474.67	333.174	1.93	-0.03	-1.93	
11157.00	90.400	336.050	6483.62	4536.44	4080.16	-2057.38	1673993.17	14304671.04	39°23'31.064"N	80°52'52.162"W	4569.52	333.241	0.74	0.03	-0.74	
11251.00	90.430	335.980	6482.93	4630.19	4166.04	-2095.59	1673954.98	14304756.89	39°23'31.913"N	80°52'52.648"W	4663.41	333.297	0.08	0.03	-0.07	
11346.00	90.370	334.590	6482.27	4724.84	4252.34	-2135.31	1673915.27	14304843.15	39°23'32.767"N	80°52'53.152"W	4758.35	333.368	1.46	-0.06	-1.46	
11440.00	90.280	335.290	6481.74	4818.46	4337.49	-2175.12	1673875.47	14304928.27	39°23'33.609"N	80°52'53.658"W	4852.31	333.368	0.75	-0.10	0.74	
11534.00	90.220	338.690	6481.33	4912.30	4423.99	-2211.86	1673838.75	14305014.74	39°23'34.464"N	80°52'54.124"W	4946.11	333.436	3.62	-0.06	3.62	
11629.00	90.370	341.320	6480.84	5007.29	4513.26	-2244.34	1673806.28	14305103.97	39°23'35.334"N	80°52'54.536"W	5040.49	333.560	2.77	0.16	2.77	
11723.00	90.430	343.540	6480.18	5101.21	4602.86	-2272.72	1673777.92	14305193.54	39°23'36.233"N	80°52'54.896"W	5133.38	333.722	2.36	0.06	2.36	
11817.00	90.520	344.820	6479.40	5194.97	4693.30	-2298.34	1673752.31	14305283.94	39°23'37.127"N	80°52'55.221"W	5225.84	333.909	1.37	0.10	1.36	
11912.00	90.310	344.410	6478.71	5289.67	4784.89	-2323.54	1673727.11	14305375.49	39°23'38.033"N	80°52'55.541"W	5319.22	334.099	0.48	-0.22	-0.43	
12006.00	90.490	344.320	6478.06	5383.42	4875.41	-2348.88	1673701.79	14305465.98	39°23'38.928"N	80°52'55.862"W	5411.73	334.276	0.21	0.19	-0.10	



# Actual Wellpath Report

Pierson Unit 4H AWP Proj: 15898'

RECEIVED  
Office of Oil and Gas  
OCT 25 2018  
WV Department of  
Environmental Protection



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #04
Area	Tyler County, WV		Well	Pierson Unit 4H
Field	Tyler		Wellbore	Pierson Unit 4H AWB
Facility	Dawson Pad			

## WELLPATH DATA (192 stations)

MD ft	Inclination ft	Azimuth ft	TVD ft	Vert Sect ft	North ft	East ft	Grid East US ft	Grid North US ft	Latitude	Longitude	Closure Dist ft	Closure Dir ft	DLS ft/100ft	Build Rate ft/100ft	Turn Rate ft/100ft	Comments
12101.00	90.310	344.040	6477.40	5478.18	4966.81	-2374.78	1673675.90	14305557.34	39°23'39.831"N	80°52'56.190"W	5505.34	334.446	0.35	-0.19	-0.29	
12195.00	90.400	343.400	6476.81	5571.99	5057.04	-2401.13	16736649.56	14305647.53	39°23'40.724"N	80°52'56.524"W	5598.13	334.601	0.69	0.10	-0.68	
12290.00	90.400	343.160	6476.15	5666.85	5148.02	-2428.46	16736622.24	14305738.48	39°23'41.623"N	80°52'56.871"W	5692.06	334.746	0.25	0.00	-0.25	
12384.00	90.370	340.570	6475.52	5760.80	5237.34	-2457.71	1673593.00	14305827.76	39°23'42.506"N	80°52'57.242"W	5785.33	334.861	2.76	-0.03	-2.76	
12478.00	90.370	337.890	6474.91	5854.77	5325.22	-2491.04	1673559.68	14305915.61	39°23'43.375"N	80°52'57.665"W	5879.06	334.931	2.85	0.00	-2.85	
12572.00	90.400	337.000	6474.28	5948.67	5412.03	-2527.10	1673523.64	14306002.38	39°23'44.234"N	80°52'58.123"W	5972.96	334.970	0.95	0.03	-0.95	
12666.00	90.310	336.290	6473.70	6042.49	5498.33	-2564.36	1673486.40	14306088.64	39°23'45.087"N	80°52'58.596"W	6066.92	334.996	0.76	-0.10	-0.76	
12761.00	90.400	335.250	6473.11	6137.21	5584.96	-2603.35	1673447.42	14306175.24	39°23'45.944"N	80°52'59.092"W	6161.91	335.008	1.10	0.09	-1.09	
12855.00	90.250	335.870	6472.57	6230.91	5670.53	-2642.24	1673408.55	14306260.78	39°23'46.790"N	80°52'59.585"W	6255.90	335.016	0.68	-0.16	0.66	
12949.00	90.520	337.170	6471.94	6324.72	5756.74	-2679.69	1673371.11	14306346.95	39°23'47.643"N	80°53'00.061"W	6349.87	335.039	1.41	0.29	1.38	
13043.00	90.370	336.340	6471.21	6418.55	5843.11	-2716.78	1673334.03	14306433.29	39°23'48.497"N	80°53'00.532"W	6443.82	335.064	0.90	-0.16	-0.88	
13138.00	90.400	338.680	6470.57	6513.44	5930.88	-2753.12	1673297.71	14306521.02	39°23'49.365"N	80°53'00.994"W	6538.73	335.099	2.46	0.03	2.46	
13232.00	90.310	342.420	6469.99	6607.42	6019.49	-2784.41	1673266.43	14306609.60	39°23'50.241"N	80°53'01.391"W	6632.29	335.176	3.98	-0.10	3.98	
13326.00	90.400	344.270	6469.41	6701.26	6109.55	-2811.35	1673239.50	14306699.62	39°23'51.131"N	80°53'01.732"W	6725.34	335.290	1.97	0.10	1.97	
13421.00	90.370	343.050	6468.77	6796.08	6200.70	-2838.08	1673212.78	14306790.74	39°23'52.033"N	80°53'02.071"W	6819.34	335.406	1.28	-0.03	-1.28	
13515.00	90.310	340.200	6468.21	6890.04	6289.90	-2867.71	1673183.17	14306879.90	39°23'52.915"N	80°53'02.447"W	6912.79	335.491	1.73	-0.06	-1.73	
13610.00	90.220	338.560	6467.77	6985.03	6378.81	-2901.16	1673149.73	14306968.77	39°23'53.794"N	80°53'02.872"W	7007.57	335.543	1.73	-0.09	-1.73	
13704.00	90.370	338.640	6467.29	7078.99	6466.33	-2935.46	1673115.44	14307056.26	39°23'54.659"N	80°53'03.308"W	7101.43	335.584	0.18	0.16	0.09	
13799.00	90.180	338.170	6466.83	7173.95	6554.66	-2970.42	1673080.49	14307144.55	39°23'55.533"N	80°53'03.751"W	7196.32	335.621	0.53	-0.20	-0.49	
13893.00	90.340	337.460	6466.41	7267.87	6641.70	-3005.92	1673045.01	14307231.56	39°23'56.393"N	80°53'04.202"W	7290.25	335.649	0.77	0.17	-0.76	
13988.00	90.430	339.670	6465.77	7362.82	6730.12	-3040.63	1673010.31	14307319.94	39°23'57.268"N	80°53'04.643"W	7385.12	335.687	2.33	0.09	2.33	
14083.00	90.400	342.760	6465.08	7457.79	6820.05	-3071.22	1672979.74	14307409.83	39°23'58.157"N	80°53'05.031"W	7479.67	335.757	3.25	-0.03	3.25	
14177.00	90.340	342.920	6464.47	7551.69	6909.86	-3098.95	1672952.02	14307499.61	39°23'59.045"N	80°53'05.383"W	7572.96	335.845	0.18	-0.06	0.17	
14271.00	90.310	343.260	6463.94	7645.56	6999.79	-3126.29	1672924.69	14307589.51	39°23'59.934"N	80°53'05.730"W	7666.21	335.933	0.36	-0.03	0.36	
14365.00	90.460	343.150	6463.31	7739.42	7089.78	-3153.45	1672897.54	14307679.46	39°24'00.824"N	80°53'06.074"W	7759.47	336.021	0.20	0.16	-0.12	
14460.00	90.430	343.240	6462.57	7834.29	7180.72	-3180.92	1672870.08	14307770.36	39°24'01.723"N	80°53'06.423"W	7853.73	336.108	0.10	-0.03	0.09	
14554.00	90.460	343.480	6461.84	7928.13	7270.78	-3207.84	1672843.18	14307860.39	39°24'02.613"N	80°53'06.764"W	7946.98	336.193	0.26	0.03	0.26	
14649.00	90.400	341.470	6461.13	8023.05	7361.37	-3236.44	1672814.58	14307950.94	39°24'03.509"N	80°53'07.127"W	8041.41	336.267	2.12	-0.06	-2.12	
14743.00	90.520	338.850	6460.37	8117.04	7449.78	-3268.34	1672782.70	14308039.31	39°24'04.383"N	80°53'07.552"W	8135.18	336.312	2.79	0.13	-2.79	
14837.00	90.460	338.210	6459.57	8211.00	7537.25	-3302.74	1672748.31	14308126.75	39°24'05.248"N	80°53'07.969"W	8229.11	336.337	0.68	-0.06	-0.68	



**Actual Wellpath Report**  
Pierson Unit 4H AWP Proj: 15898'  
Page 8 of 10

WV Department of  
Environmental Protection



REFERENCE WELLPATH IDENTIFICATION				Slot	Slot #04
Operator	ANTERO RESOURCES CORPORATION			Well	Pierson Unit 4H
Area	Tyler County, WV			Wellbore	Pierson Unit 4H AWB
Field	Tyler				
Facility	Dawson Pad				

WELLPATH DATA (192 stations)																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Built Rate	Turn Rate	Comments
ft	°	°	ft	ft	ft	ft	ft	ft	°	°	ft	°	ft/100ft	ft/100ft	ft/100ft	
14931.00	90.430	337.100	6458.84	8304.90	7624.19	-3338.48	1672712.59	14308213.65	39°24'06.108"N	80°53'08.423"W	8323.08	336.352	1.18	-0.03	-1.18	
15026.00	90.460	337.860	6458.10	8399.80	7711.94	-3374.86	1672676.22	14308301.37	39°24'06.976"N	80°53'08.885"W	8418.06	336.365	0.80	0.03	0.80	
15121.00	90.340	340.240	6457.44	8494.77	7800.65	-3408.83	1672642.26	14308390.05	39°24'07.853"N	80°53'09.316"W	8512.95	336.395	2.51	-0.13	2.51	
15216.00	90.460	339.960	6456.77	8589.77	7889.98	-3441.16	1672609.94	14308479.33	39°24'08.736"N	80°53'09.726"W	8607.75	336.436	0.32	0.13	-0.28	
15311.00	90.580	341.550	6455.91	8684.76	7979.66	-3472.47	1672578.64	14308568.98	39°24'09.623"N	80°53'10.124"W	8702.48	336.483	1.68	0.13	1.67	
15406.00	90.580	343.000	6454.95	8779.68	8070.15	-3501.39	1672549.74	14308659.43	39°24'10.518"N	80°53'10.491"W	8796.99	336.545	1.53	0.00	1.53	
15501.00	90.490	343.050	6454.06	8874.56	8161.00	-3529.13	1672522.01	14308750.25	39°24'11.416"N	80°53'10.843"W	8891.38	336.615	0.11	-0.09	0.06	
15596.00	90.430	338.760	6453.25	8969.52	8250.75	-3560.20	1672490.96	14308839.96	39°24'12.303"N	80°53'11.237"W	8986.10	336.660	4.52	0.00	-4.52	
15690.00	90.490	339.680	6452.50	9063.51	8338.63	-3593.55	1672457.62	14308927.81	39°24'13.172"N	80°53'11.660"W	9080.00	336.686	0.98	-0.06	0.98	
15784.00	90.490	341.300	6451.74	9157.50	8427.23	-3624.94	1672426.24	14309016.37	39°24'14.048"N	80°53'12.059"W	9173.79	336.725	1.72	0.06	1.72	
15875.00	90.490	340.320	6450.96	9248.49	8513.17	-3654.85	1672396.34	14309102.28	39°24'14.898"N	80°53'12.439"W	9264.55	336.765	1.08	0.00	-1.08	
15898.00	90.490	340.320	6450.77	9271.49	8534.82	-3662.59	1672388.60	14309123.92	39°24'15.112"N	80°53'12.537"W	9287.51	336.774	0.00	0.00	0.00	Projected MD @ TD: 15898'WD / 6451'TVD

HOLE & CASING SECTIONS - Ref Wellbore: Pierson Unit 4H AWB Ref Wellpath: Pierson Unit 4H AWP Proj: 15898'													
String/Diameter	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	Start E/W	End N/S	End E/W				
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)				
20in Conductor	25.00	105.00	80.00	25.00	105.00	0.00	0.00	-0.23	0.13				
17.5in Open Hole	105.00	583.20	478.20	105.00	583.19	-0.23	0.13	-2.20	0.14				
13.375in Casing Surface	25.00	583.20	558.20	25.00	583.19	0.00	0.00	-2.20	0.14				
12.25in Open Hole	583.20	2573.90	1990.70	583.19	2573.77	-2.20	0.14	-7.88	-7.88				
9.625in Casing Production	25.00	2573.90	2548.90	25.00	2573.77	0.00	0.00	0.33	-7.88				





**Actual Wellpath Report**  
Pierson Unit 4H AWP Proj: 15898'

WV Department of  
Environmental Protection



OCT 25 2018

Page 9 of 10

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Tyler County, WV	Well	Pierson Unit 4H
Field	Tyler	Wellbore	Pierson Unit 4H AWB
Facility	Dawson Pad		

TARGETS								
Name	TVD ft	North ft	East ft	Grid East US ft	Grid North US ft	Latitude	Longitude	Shape
Pierson Unit 4H POE Rev-3	6470.00	-25.43	-586.92	1675463.04	14300567.10	39°22'50.467"N	80°52'33.505"W	point
Pierson Unit 4H BHL Rev-3	6489.00	8542.72	-3675.82	1672375.38	14309131.82	39°24'15.190"N	80°53'12.705"W	point
Pierson Unit 4H LP Rev-3	6489.00	123.68	-636.09	1675413.89	14300716.15	39°22'51.941"N	80°52'34.128"W	point

WELLPATH COMPOSITION - Ref Wellbore: Pierson Unit 4H AWB				Ref Wellpath: Pierson Unit 4H AWP Proj: 15898'			
Start MID ft	End MID ft	Positional Uncertainty Model	Log Name/Comment	Wellbore			
25.00	549.00	Gyrodala standard - Drop gyro or Multi-shot	01 Gyrodala MS Gyro <1-7-1/2">(100-849)	Pierson Unit 4H AWB			
549.00	721.00	Gyrodala standard - Drop gyro or Multi-shot	02 Gyrodala MS Gyro <1-2-1/4">(549)(631-721)	Pierson Unit 4H AWB			
721.00	2522.00	ISCWSA MWD, Rev. 4 (Standard)	03 Directional ONE MWD <1-2-1/4">(721)(783-2522)	Pierson Unit 4H AWB			
2522.00	6434.00	ISCWSA MWD, Rev. 4 (Standard)	04 Directional ONE MWD <8-3/4">(2522)(2859-6434)	Pierson Unit 4H AWB			
6434.00	15875.00	BH AutoTrak Curve (Short)	05 BH ATC <8.5">(6434)(6486-15875)	Pierson Unit 4H AWB			
15875.00	15898.00	Blind Drilling (std)	Projection to bit	Pierson Unit 4H AWB			



**Actual Wellpath Report**  
Pierson Unit 4H AWP Proj: 15898'

WV Department of  
Environmental Protection



Page 10 of 10

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Tyler County, WV	Well	Pierson Unit 4H
Field	Tyler	Wellbore	Pierson Unit 4H AWB
Facility	Dawson Pad		

COMMENTS	
<p><b>Wellpath general comments</b>                      API: 47095024160000                      BH Job #: 89372228                      Rig: Pierson 342                      Duration: 12/27/17 - 12/29/17                      Gyrodatta MS Gyro &lt;17-1/2"&gt;&lt;100-549)&gt;                      Gyrodatta MS Gyro &lt;12-1/4"&gt;(549)(631'-721')                      Directional ONE MWD &lt;12-1/4"&gt;(721')(783'-2522')                      Directional ONE MWD &lt;8-3/4"&gt;(2522')(2659'-6434')                      Sycamore @ 6218'MD / 6132'TVD                      Middlesex @ 6415'MD / 6290'TVD                      BH ATC &lt;8.5"&gt;(6434')(6486'-15875')                      Burket @ 6601'MD / 6404'TVD                      Tully @ 6680'MD / 6439'TVD                      POE Marcellus @ 6779'MD / 6468'TVD                      Projected MD @ TD: 15898'MD / 6451'TVD</p>	