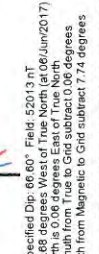
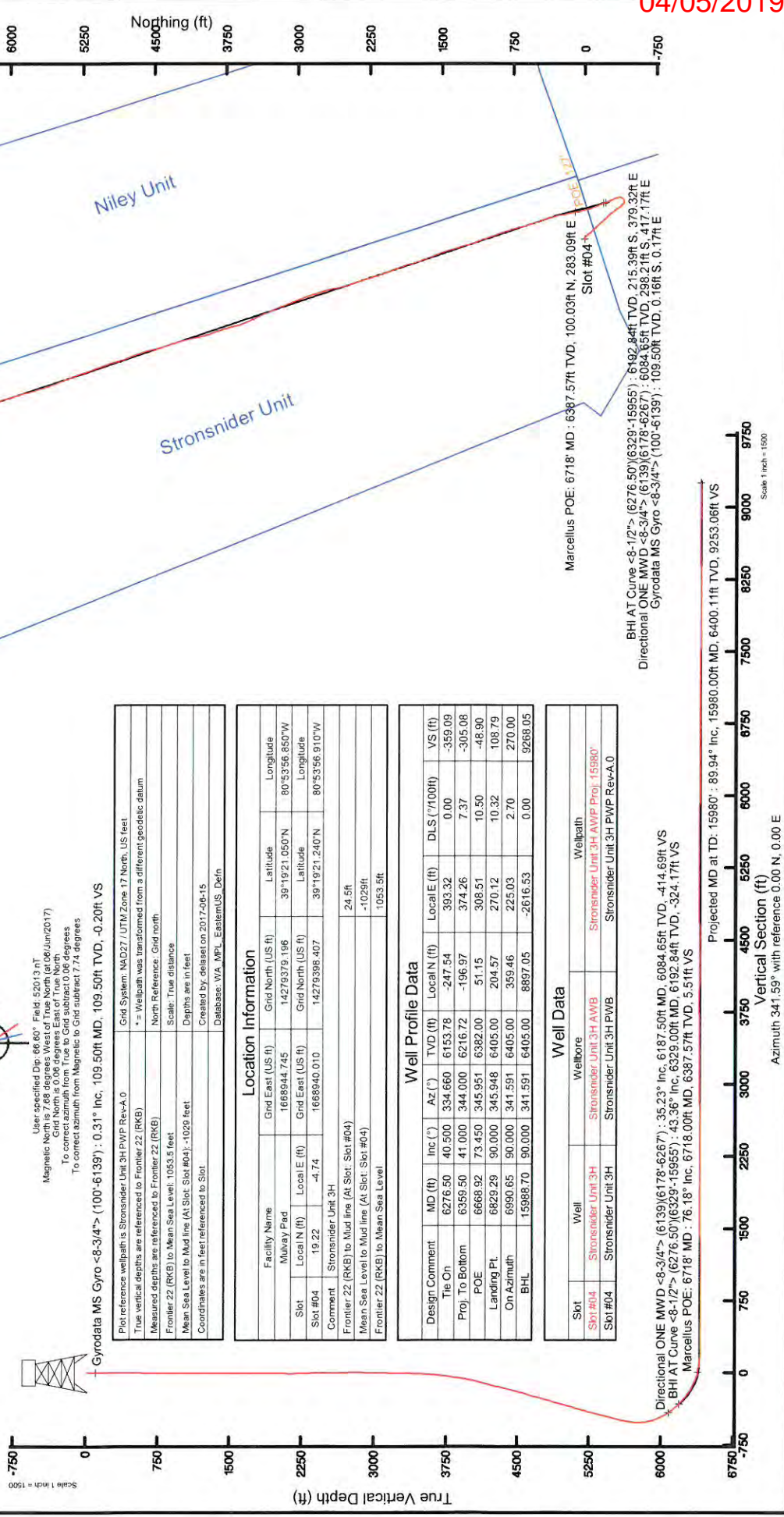


**ANTERO RESOURCES CORPORATION**  
 Location: Ritchie County, WV  
 Field: Ritchie  
 Facility: Mulvay Pad  
 Slot: Slot #04  
 Well: Stronsnider Unit 3H  
 Wellbore: Stronsnider Unit 3H PWB



API: 47-085-10203-0000  
 BHI Job #: 8599065  
 Rig: Frontier 22  
 Duration: 06/10/2017-06/12/2017



Plot reference wellpath is Stronsnider Unit 3H PWB Rev-A-0  
 \* = Wellpath was transformed from a different geoidetic datum

Grid System: NAD27 / UTM Zone 17 North, US feet
North Reference: Grid north
Scale: True distance
Depths are in feet
Created by: deland on 2017-06-15
Database: WA_MPL_EaslatmUS_Defn

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Mulvay Pad	168944.745	14279379.196	39°19'21.050"N	80°53'56.850"W
Slot #04	19.22	-4.74	39°19'21.240"N	80°53'56.910"W

Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (ft/100ft)	VS (ft)
Tie On	6276.50	40.500	334.660	6153.78	-247.54	393.32	0.00	-359.09
Proj. To Bottom	6359.50	41.000	344.000	6216.72	-196.97	374.26	7.37	-305.08
POE	6668.92	73.450	345.951	6382.00	51.15	308.51	10.50	-48.90
Landing Pt.	6829.29	90.000	345.948	6405.00	204.57	270.12	10.32	108.79
On Azimuth	6990.65	90.000	341.591	6405.00	359.46	225.03	2.70	270.00
BHL	15988.70	90.000	341.591	6405.00	8897.05	-2616.53	0.00	9268.05

Slot	Well	Wellbore	Wellpath
Slot #04	Stronsnider Unit 3H	Stronsnider Unit 3H AWB	Stronsnider Unit 3H AWB Proj. 15980°
Slot #04	Stronsnider Unit 3H	Stronsnider Unit 3H PWB	Stronsnider Unit 3H PWB Rev-A-0

Projected MD at TD: 15980° : 6400.11ft TVD, 9253.06ft VS  
 Azimuth 341.59° with reference 0.00 N, 0.00 E

Directional ONE MWD <-8-3/4"> (6139/6178-6267) : 35.23° Inc, 6187.50ft MD, 6084.65ft TVD, -414.69ft VS  
 BHI AT Curve <-8-1/2"> (6276.50/6329-15955) : 43.36° Inc, 6329.00ft MD, 6192.84ft TVD, -324.17ft VS  
 Marcellus POE: 6718' MD : 76.18° Inc, 6718.00ft MD, 6387.57ft TVD, 5.51ft VS

Projected MD at TD: 15980° : 6400.11ft TVD, 9253.06ft VS  
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 Marcellus POE: 6718' MD : 76.18° Inc, 6718.00ft MD, 6387.57ft TVD, 5.51ft VS



REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Ritchie County, WV
Field	Ritchie
Facility	Mulvay Pad
Slot	Slot #04
Well	Stroonsider Unit 3H
Wellbore	Stroonsider Unit 3H AWB

REPORT SETUP INFORMATION	
Projection System	NAD27 / UTM Zone 17 North, US feet
North Reference	Grid
Scale	0.999601
Convergence at slot	0.06° East
Software System	WellArchitect® 5.0
User	Delaset
Report Generated	15/Jun/2017 at 11:08
Database/Source file	WA_MPL_EasternUS_Defn/Stroonsider_Unit_3H_AWP_Proj_15980_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	19.22	-4.74	1668940.01	14279398.41	39°19'21.240"N	80°53'56.910"W
Facility Reference Pt			1668944.75	14279379.20	39°19'21.050"N	80°53'56.850"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM	
Calculation method	Minimum curvature
Horizontal Reference Pt	Slot
Vertical Reference Pt	Frontier 22 (RKB)
MD Reference Pt	Frontier 22 (RKB)
Field Vertical Reference	Mean Sea Level
	Frontier 22 (RKB) to Facility Vertical Datum
	Frontier 22 (RKB) to Mean Sea Level
	Frontier 22 (RKB) to Mud Line at Slot (Slot #04)
	Section Origin
	Section Azimuth
	24.50ft
	1053.50ft
	24.50ft
	N 0.00, E 0.00 ft
	341.59°





# Actual Wellpath Report

Stronsnider Unit 3H AWP Proj: 15980'  
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04/05/2019



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Stronsnider Unit 3H
Field	Ritchie	Wellbore	Stronsnider Unit 3H AWB
Facility	Mulvey Pad		

WELLPATH DATA (180 stations) + = interpolated/extrapolated station																
MD ft	Inclination °	Azimuth °	TVD ft	Vert Sect ft	North ft	East ft	Grid East ft	Grid North ft	Latitude	Longitude	Closure Dist ft	Closure Dir °	DLS ft/100ft	Build Rate ft/100ft	Turn Rate °/100ft	Comments
0.00H	0.000	133.680	0.00	0.00	0.00	0.00	1668940.01	14279398.41	39°19'21.240"N	80°53'56.910"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.000	133.680	24.50	0.00	0.00	0.00	1668940.01	14279398.41	39°19'21.240"N	80°53'56.910"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.310	133.680	109.50	-0.20	-0.16	0.17	1668940.18	14279398.25	39°19'21.238"N	80°53'56.908"W	0.23	133.680	0.36	0.36	157.27	Gyrodata MS Gyro <8-3/4"> (100'-6139')
209.50	0.210	112.920	209.50	-0.56	-0.42	0.53	1668940.54	14279397.99	39°19'21.236"N	80°53'56.903"W	0.67	128.157	0.14	-0.10	-20.76	
309.50	0.300	110.320	309.50	-0.85	-0.58	0.95	1668940.95	14279397.83	39°19'21.234"N	80°53'56.898"W	1.11	121.508	0.09	0.09	-2.60	
409.50	0.480	118.060	409.50	-1.32	-0.87	1.56	1668941.57	14279397.54	39°19'21.231"N	80°53'56.890"W	1.79	119.068	0.19	0.18	7.74	
509.50	0.490	119.600	509.49	-1.94	-1.28	2.30	1668942.31	14279397.13	39°19'21.227"N	80°53'56.881"W	2.63	118.994	0.02	0.01	1.54	
609.50	0.440	99.630	609.49	-2.43	-1.55	3.05	1668943.06	14279396.76	39°19'21.225"N	80°53'56.871"W	3.42	116.928	0.17	-0.05	-20.07	
709.50	0.580	94.040	709.48	-2.81	-1.65	3.94	1668943.94	14279396.76	39°19'21.224"N	80°53'56.860"W	4.27	112.740	0.15	0.14	-5.49	
809.50	0.710	91.910	809.48	-3.22	-1.71	5.06	1668945.07	14279396.70	39°19'21.223"N	80°53'56.848"W	5.34	108.631	0.13	0.13	-2.13	
909.50	0.360	59.360	909.47	-3.37	-1.57	5.95	1668945.96	14279396.84	39°19'21.224"N	80°53'56.834"W	6.15	104.750	0.45	-0.35	-32.55	
1009.50	0.360	43.300	1009.47	-3.15	-1.18	6.44	1668946.44	14279397.23	39°19'21.228"N	80°53'56.828"W	6.54	100.370	0.10	0.00	-16.06	
1109.50	0.300	36.240	1109.47	-2.85	-0.74	6.81	1668946.81	14279397.67	39°19'21.233"N	80°53'56.823"W	6.85	96.188	0.07	-0.06	-7.06	
1209.50	0.800	240.530	1209.47	-2.83	-0.87	6.35	1668946.36	14279397.54	39°19'21.231"N	80°53'56.829"W	6.41	97.800	1.08	0.50	-155.71	
1309.50	1.160	241.580	1309.45	-3.14	-1.70	4.85	1668944.86	14279396.71	39°19'21.223"N	80°53'56.848"W	5.14	109.252	0.36	0.36	1.05	
1409.50	1.490	248.020	1409.43	-3.40	-2.66	2.76	1668942.77	14279395.74	39°19'21.214"N	80°53'56.875"W	3.83	134.000	0.36	0.33	6.44	
1509.50	1.660	254.970	1509.39	-3.39	-3.53	0.15	1668940.16	14279394.88	39°19'21.205"N	80°53'56.908"W	3.53	177.502	0.26	0.17	6.95	
1609.50	0.510	276.560	1609.37	-3.12	-3.85	-1.69	1668938.32	14279394.56	39°19'21.202"N	80°53'56.932"W	4.20	203.661	1.20	-1.15	21.59	
1709.50	0.350	124.770	1709.37	-3.18	-3.97	-1.88	1668938.13	14279394.43	39°19'21.201"N	80°53'56.934"W	4.40	205.300	0.83	-0.16	-151.79	
1809.50	0.540	138.760	1809.36	-3.86	-4.50	-1.32	1668938.69	14279393.91	39°19'21.196"N	80°53'56.927"W	4.69	196.304	0.22	0.19	13.99	
1909.50	0.540	155.560	1909.36	-4.76	-5.29	-0.81	1668939.20	14279393.12	39°19'21.188"N	80°53'56.920"W	5.35	188.726	0.16	0.00	16.80	
2009.50	0.910	171.190	2009.35	-6.01	-6.50	-0.49	1668939.52	14279391.91	39°19'21.176"N	80°53'56.916"W	6.52	184.353	0.42	0.37	15.63	
2109.50	0.860	168.160	2109.34	-7.54	-8.02	-0.22	1668939.79	14279390.39	39°19'21.161"N	80°53'56.913"W	8.02	181.565	0.07	-0.05	-3.03	
2209.50	1.650	27.570	2209.33	-7.28	-7.48	0.60	1668940.61	14279390.93	39°19'21.166"N	80°53'56.902"W	7.50	175.402	2.38	0.79	-140.59	
2309.50	3.130	24.020	2309.24	-4.27	-3.71	2.38	1668942.39	14279394.70	39°19'21.203"N	80°53'56.880"W	4.40	147.309	1.49	1.48	-3.55	
2409.50	2.950	25.830	2409.10	-0.40	-1.11	4.62	1668944.62	14279399.52	39°19'21.251"N	80°53'56.851"W	4.75	76.469	0.20	-0.17	1.81	
2509.50	0.920	41.910	2509.04	1.84	4.03	6.28	1668946.28	14279402.44	39°19'21.280"N	80°53'56.830"W	7.46	57.281	2.09	-2.04	16.08	
2609.50	0.400	53.770	2609.03	2.35	4.84	7.09	1668947.10	14279403.24	39°19'21.288"N	80°53'56.820"W	8.59	55.718	0.53	-0.52	11.86	
2709.50	0.390	56.820	2709.03	2.54	5.23	7.66	1668947.67	14279403.63	39°19'21.292"N	80°53'56.812"W	9.28	55.686	0.02	-0.01	3.05	
2809.50	0.390	59.980	2809.02	2.70	5.59	8.24	1668948.25	14279403.99	39°19'21.295"N	80°53'56.805"W	9.95	55.871	0.02	0.00	3.16	





# Actual Wellpath Report

Stronsnider Unit 3H AWP Proj: 15980'  
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04/05/2019

REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Ritchie County, WV
Field	Ritchie
Facility	Mulvey Pad
Slot	Slot #04
Well	Stronsnider Unit 3H
Wellbore	Stronsnider Unit 3H AWB

WELLPATH DATA (180 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
2909.50	0.570	103.770	2909.02	2.50	5.64	9.02	1668949.02	14279404.04	39°19'21.296"N	80°53'56.795"W	10.64	57.991	0.40	0.18	43.79	
3009.50	1.570	142.980	3009.00	0.94	4.42	10.33	1668950.33	14279402.83	39°19'21.284"N	80°53'56.779"W	11.23	66.804	1.18	1.00	39.21	
3109.50	1.460	136.750	3108.97	-1.52	2.40	12.02	1668952.03	14279400.81	39°19'21.264"N	80°53'56.757"W	12.26	78.697	0.20	-0.11	-6.23	
3209.50	1.300	126.790	3208.94	-3.60	0.80	13.81	1668953.81	14279399.20	39°19'21.248"N	80°53'56.734"W	13.83	86.700	0.29	-0.16	-9.96	
3309.50	1.200	118.920	3308.92	-5.31	-0.39	15.63	1668955.63	14279398.02	39°19'21.236"N	80°53'56.711"W	15.64	91.428	0.20	-0.10	-7.87	
3409.50	2.270	126.840	3408.87	-7.70	-2.08	18.13	1668958.13	14279396.32	39°19'21.219"N	80°53'56.679"W	18.25	96.555	1.09	1.07	7.92	
3509.50	3.540	124.940	3508.74	-11.81	-5.04	22.25	1668962.25	14279393.37	39°19'21.192"N	80°53'56.627"W	22.81	102.763	1.27	1.27	-1.90	
3609.50	4.970	135.160	3608.46	-18.16	-9.88	27.83	1668967.83	14279388.53	39°19'21.140"N	80°53'56.556"W	29.53	109.542	1.61	1.43	10.22	
3709.50	7.070	140.260	3707.90	-27.78	-17.68	34.82	1668974.82	14279380.73	39°19'21.065"N	80°53'56.467"W	39.06	116.923	2.17	2.10	5.10	
3809.50	8.650	138.040	3806.96	-40.40	-28.01	43.79	1668983.78	14279370.41	39°19'20.963"N	80°53'56.353"W	51.98	122.606	1.61	1.58	-2.22	
3909.50	10.320	140.950	3905.59	-55.68	-40.56	54.46	1668994.45	14279357.87	39°19'20.839"N	80°53'56.218"W	67.90	126.677	1.74	1.67	2.91	
4009.50	12.430	139.510	4003.62	-74.04	-55.70	67.09	1669007.07	14279342.73	39°19'20.689"N	80°53'56.057"W	87.20	129.701	2.13	2.11	-1.44	
4109.50	14.350	136.260	4100.90	-95.21	-72.84	82.65	1669022.62	14279325.60	39°19'20.519"N	80°53'55.859"W	110.17	131.391	2.06	1.92	-3.25	
4209.50	15.760	138.950	4197.47	-118.95	-92.04	100.14	1669040.10	14279306.41	39°19'20.329"N	80°53'55.637"W	136.01	132.587	1.57	1.41	2.69	
4309.50	15.270	137.070	4293.82	-143.47	-111.92	118.02	1669057.99	14279286.53	39°19'20.133"N	80°53'55.410"W	162.65	133.480	0.70	-0.49	-1.88	
4409.50	14.350	135.190	4390.50	-166.55	-130.35	135.73	1669075.68	14279268.11	39°19'19.950"N	80°53'55.185"W	188.19	133.843	1.04	-0.92	-1.88	
4509.50	15.560	138.970	4487.11	-190.03	-149.26	153.27	1669093.21	14279249.20	39°19'19.763"N	80°53'54.962"W	213.94	134.242	1.55	1.21	3.78	
4609.50	18.050	139.940	4582.84	-216.81	-171.24	172.04	1669111.98	14279227.23	39°19'19.546"N	80°53'54.723"W	242.74	134.866	2.51	2.49	0.97	
4709.50	17.870	138.050	4677.96	-245.28	-194.51	192.27	1669132.20	14279203.97	39°19'19.315"N	80°53'54.466"W	273.50	135.332	0.61	-0.18	-1.89	
4809.50	16.740	135.950	4773.44	-272.33	-216.27	212.54	1669152.47	14279182.22	39°19'19.100"N	80°53'54.209"W	303.23	135.499	1.29	-1.13	-2.10	
4909.50	16.760	134.660	4869.19	-298.17	-236.76	232.81	1669172.73	14279161.74	39°19'18.897"N	80°53'53.951"W	332.05	135.482	0.37	0.02	-1.29	
5009.50	16.850	134.010	4964.92	-323.87	-256.96	253.49	1669193.40	14279141.55	39°19'18.697"N	80°53'53.688"W	360.95	135.390	0.21	0.09	-0.65	
5109.50	17.770	141.420	5060.41	-351.04	-278.97	273.43	1669213.33	14279119.55	39°19'18.480"N	80°53'53.435"W	390.62	135.574	2.39	0.92	7.41	
5209.50	17.680	144.790	5155.66	-379.90	-303.30	291.70	1669231.60	14279095.23	39°19'18.239"N	80°53'53.203"W	420.81	136.117	1.03	-0.09	3.37	
5309.50	15.320	144.470	5251.54	-407.07	-326.46	308.14	1669248.03	14279072.07	39°19'18.010"N	80°53'52.994"W	448.92	136.654	2.36	-2.36	-0.32	
5409.50	14.400	145.320	5348.19	-431.63	-347.44	322.89	1669262.77	14279051.11	39°19'17.802"N	80°53'52.806"W	474.31	137.097	0.95	-0.92	0.85	
5509.50	14.380	141.890	5445.06	-455.26	-367.44	337.63	1669277.51	14279031.12	39°19'17.605"N	80°53'52.619"W	499.00	137.421	0.85	-0.02	-3.43	
5609.50	15.320	138.470	5541.72	-479.10	-387.10	354.05	1669293.92	14279011.46	39°19'17.410"N	80°53'52.410"W	524.59	137.553	1.28	0.94	-3.42	
5709.50	14.560	128.410	5638.35	-501.78	-404.80	372.67	1669312.53	14278993.77	39°19'17.235"N	80°53'52.174"W	550.22	137.367	2.70	-0.76	-10.06	
5809.50	16.650	89.180	5734.92	-516.67	-412.43	396.91	1669336.76	14278966.15	39°19'17.159"N	80°53'51.865"W	572.39	136.098	10.55	2.09	-39.23	





# Actual Wellpath Report

Stroonsider Unit 3H AWP Proj: 15980'  
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04/05/2019

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Stroonsider Unit 3H
Field	Ritchie	Wellbore	Stroonsider Unit 3H AWB
Facility	Mulvay Pad		

WELLPATH DATA (180 stations) † = interpolated/extrapolated station																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (°/100ft)	Comments
5909.50	15.980	48.650	5831.20	-515.63	-403.10	421.64	1669361.49	14278995.47	39°19'17.251"N	80°53'51.551"W	583.33	133.712	11.19	-0.67	-40.59	
6009.50	21.070	6.900	5826.39	-493.91	-376.03	434.20	1669374.03	14279022.53	39°19'17.519"N	80°53'51.390"W	574.39	130.893	13.85	5.09	-41.75	
6109.50	27.320	344.800	6017.75	-454.63	-335.91	430.33	1669370.17	14279062.63	39°19'17.915"N	80°53'51.439"W	545.91	127.975	10.91	6.25	-22.10	
6148.50	30.460	341.280	6051.89	-435.80	-317.91	424.81	1669364.65	14279080.63	39°19'18.093"N	80°53'51.509"W	530.59	126.810	9.15	8.05	-9.03	
6187.50	35.230	336.640	6084.65	-414.69	-298.21	417.17	1669357.01	14279100.32	39°19'18.288"N	80°53'51.606"W	512.79	125.558	13.82	12.23	-11.90	Directional ONE MWD <-8-3/4"> (6139)(6178-6267')
6231.50	40.100	334.040	6119.47	-387.97	-273.79	405.92	1669345.77	14279124.73	39°19'18.529"N	80°53'51.749"W	489.63	123.999	11.71	11.14	-5.91	
6276.50	40.530	334.860	6153.78	-359.09	-247.54	393.32	1669333.17	14279150.96	39°19'18.789"N	80°53'51.909"W	464.74	122.185	1.21	0.82	1.38	
6329.00	43.360	338.190	6192.84	-324.17	-215.39	379.32	1669319.18	14279183.10	39°19'19.107"N	80°53'52.086"W	436.21	119.589	7.06	5.45	6.72	BHI AT Curve <-8-1/2"> (6276.50)(6329'-15955')
6355.00†	45.608	338.691	6211.39	-305.98	-198.45	372.63	1669312.49	14279200.04	39°19'19.274"N	80°53'52.171"W	422.18	118.038	8.75	8.64	1.93	Middlesex: 6355' MD
6386.00	48.290	339.240	6232.55	-283.35	-177.31	364.50	1669304.37	14279221.17	39°19'19.484"N	80°53'52.274"W	405.34	115.940	8.75	8.65	1.77	
6433.00	52.420	339.250	6262.53	-247.20	-143.47	351.68	1669291.55	14279254.99	39°19'19.818"N	80°53'52.437"W	379.82	112.194	8.79	8.79	0.02	
6480.00	54.520	337.830	6290.50	-209.49	-108.33	337.86	1669277.73	14279290.12	39°19'20.166"N	80°53'52.612"W	354.80	107.778	5.08	4.47	-3.02	
6527.00	59.870	340.550	6315.96	-170.04	-71.41	323.86	1669263.74	14279327.02	39°19'20.531"N	80°53'52.790"W	331.64	102.435	12.38	11.38	5.79	
6541.00†	60.982	341.803	6322.87	-157.86	-59.89	319.93	1669259.81	14279338.54	39°19'20.645"N	80°53'52.840"W	325.49	100.602	11.12	7.94	8.95	Burket: 6541' MD
6576.00	63.810	344.820	6339.09	-126.87	-30.18	311.04	1669250.92	14279368.24	39°19'20.938"N	80°53'52.953"W	312.50	95.543	11.12	8.08	8.62	
6621.00†	68.251	348.186	6357.37	-85.92	9.79	301.46	1669241.35	14279408.19	39°19'21.333"N	80°53'53.074"W	301.62	88.140	12.00	9.87	7.48	Tully: 6621' MD
6623.00	68.450	348.330	6358.11	-84.07	11.61	301.09	1669240.97	14279410.01	39°19'21.351"N	80°53'53.079"W	301.31	87.792	12.00	9.95	7.22	
6671.00	71.560	348.430	6374.52	-39.29	55.79	292.00	1669231.89	14279454.17	39°19'21.788"N	80°53'53.194"W	297.28	79.184	6.48	6.48	0.21	
6718.00	76.180	348.790	6387.57	5.51	100.03	283.09	1669222.99	14279498.40	39°19'22.226"N	80°53'53.306"W	300.24	70.538	9.86	9.83	0.77	Marcellus POE: 6718' MD
6765.00	80.480	348.790	6397.08	51.17	145.17	274.14	1669214.04	14279543.52	39°19'22.672"N	80°53'53.420"W	310.21	62.096	9.15	9.15	0.00	
6812.00	83.370	348.490	6403.68	97.34	190.79	264.98	1669204.88	14279589.12	39°19'23.123"N	80°53'53.536"W	326.52	54.245	6.18	6.15	-0.64	
6860.00	85.380	347.190	6408.38	144.82	237.48	254.92	1669194.82	14279635.80	39°19'23.584"N	80°53'53.663"W	348.40	47.027	4.98	4.19	-2.71	
6907.00	89.910	346.620	6410.32	191.57	283.21	244.28	1669184.19	14279681.50	39°19'24.036"N	80°53'53.798"W	374.01	40.779	9.71	9.64	-1.21	
6955.00	89.820	346.020	6410.43	239.41	329.85	232.93	1669172.84	14279728.12	39°19'24.498"N	80°53'53.941"W	403.80	35.228	1.26	-0.19	-1.25	
7047.00	90.030	342.280	6410.55	331.30	418.34	207.80	1669147.73	14279816.57	39°19'25.372"N	80°53'54.260"W	467.11	26.415	4.07	0.23	-4.07	
7142.00	89.940	339.980	6410.57	426.29	508.22	177.08	1669117.02	14279906.43	39°19'26.261"N	80°53'54.649"W	538.19	19.210	2.42	-0.09	-2.42	
7237.00	89.850	342.810	6410.75	521.28	598.25	146.78	1669086.73	14279996.42	39°19'27.151"N	80°53'55.034"W	615.99	13.785	2.98	-0.09	2.98	
7332.00	90.060	344.830	6410.82	616.20	689.48	120.30	1669060.27	14280087.61	39°19'28.053"N	80°53'55.369"W	699.90	9.898	2.14	0.22	2.13	
7428.00	90.180	342.800	6410.82	712.12	781.67	93.55	1669033.52	14280179.77	39°19'28.955"N	80°53'55.709"W	787.25	6.824	2.12	0.12	-2.11	
7522.00	89.750	341.220	6410.68	806.12	871.07	64.52	1669004.50	14280269.13	39°19'29.849"N	80°53'56.077"W	873.46	4.236	1.74	-0.46	-1.68	





# Actual Wellpath Report

Stroonsider Unit 3H AWP Proj: 15980'  
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04/05/2019

REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #04
Operator	ANTERO RESOURCES CORPORATION	Well	Stroonsider Unit 3H
Area	Ritchie County, WV	Wellbore	Stroonsider Unit 3H AWB
Field	Ritchie		
Facility	Mulvay Pad		

WELLPATH DATA (180 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
7617.00	89.940	340.470	6410.94	901.11	960.81	33.34	1668973.34	14280358.83	39°19'30.736"N	80°53'56.472"W	961.39	1.988	0.81	0.20	-0.79	
7712.00	90.280	339.850	6410.75	996.08	1050.17	1.10	1668941.11	14280448.16	39°19'31.620"N	80°53'56.881"W	1050.17	0.060	0.74	0.36	-0.65	
7806.00	90.250	340.110	6410.32	1090.04	1138.49	-31.08	1668908.94	14280536.44	39°19'32.493"N	80°53'57.289"W	1138.92	358.436	0.28	-0.03	0.28	
7901.00	90.150	342.610	6409.99	1185.03	1228.50	-61.44	1668878.59	14280626.42	39°19'33.383"N	80°53'57.674"W	1230.04	357.137	2.63	-0.11	2.63	
7996.00	90.310	344.290	6409.61	1279.98	1319.56	-88.50	1668851.55	14280717.44	39°19'34.283"N	80°53'58.017"W	1322.53	356.163	1.78	0.17	1.77	
8090.00	90.490	343.520	6408.95	1373.90	1409.87	-114.56	1668825.50	14280807.72	39°19'35.176"N	80°53'58.348"W	1414.52	355.355	0.84	0.19	-0.82	
8185.00	90.310	341.260	6408.29	1468.88	1500.41	-143.30	1668796.77	14280898.22	39°19'36.071"N	80°53'58.712"W	1507.24	354.545	2.39	-0.19	-2.38	
8280.00	90.400	337.870	6407.70	1563.80	1589.42	-176.46	1668763.62	14280988.97	39°19'36.951"N	80°53'59.133"W	1599.19	353.665	3.57	0.09	-3.57	
8375.00	90.340	340.480	6407.08	1658.71	1678.21	-210.23	1668729.86	14281075.94	39°19'37.829"N	80°53'59.561"W	1691.32	352.860	2.75	-0.06	2.75	
8470.00	90.400	342.440	6406.47	1753.70	1768.27	-240.43	1668699.67	14281165.97	39°19'38.720"N	80°53'59.945"W	1784.54	352.257	2.06	0.06	2.06	
8565.00	90.310	342.470	6405.88	1848.69	1858.85	-269.07	1668671.05	14281256.51	39°19'39.615"N	80°54'00.308"W	1878.22	351.764	0.10	-0.09	0.03	
8660.00	90.460	340.660	6405.24	1943.68	1948.97	-299.11	1668641.02	14281346.59	39°19'40.506"N	80°54'00.689"W	1971.79	351.275	1.91	0.16	-1.91	
8755.00	89.850	338.860	6404.99	2038.63	2038.10	-331.98	1668608.17	14281435.69	39°19'41.387"N	80°54'01.106"W	2064.96	350.749	2.00	-0.64	-1.89	
8850.00	89.970	340.470	6405.14	2133.57	2127.17	-364.99	1668575.17	14281524.73	39°19'42.268"N	80°54'01.524"W	2158.26	350.264	1.70	0.13	1.69	
8945.00	89.850	342.560	6405.28	2228.57	2217.27	-395.11	1668545.06	14281614.78	39°19'43.159"N	80°54'01.906"W	2252.19	349.896	2.20	-0.13	2.20	
9040.00	89.850	343.030	6405.53	2323.55	2308.01	-423.21	1668516.97	14281705.50	39°19'44.056"N	80°54'02.263"W	2346.49	349.609	0.49	0.00	0.49	
9135.00	89.880	341.570	6405.76	2418.54	2398.51	-452.09	1668488.10	14281795.96	39°19'44.951"N	80°54'02.629"W	2440.75	349.326	1.54	0.03	-1.54	
9228.00	90.340	342.790	6405.58	2511.53	2487.05	-480.55	1668459.65	14281884.46	39°19'45.826"N	80°54'02.990"W	2533.05	349.064	1.40	0.49	1.31	
9324.00	90.370	347.130	6404.98	2607.34	2579.74	-505.45	1668434.76	14281977.11	39°19'46.743"N	80°54'03.306"W	2628.79	348.914	4.52	0.03	4.52	
9419.00	90.490	345.680	6404.27	2701.93	2672.26	-526.98	1668413.24	14282069.60	39°19'47.657"N	80°54'03.578"W	2723.73	348.844	0.49	0.13	-0.47	
9514.00	90.370	343.850	6403.56	2796.72	2764.13	-551.14	1668389.09	14282161.43	39°19'48.566"N	80°54'03.854"W	2818.54	348.724	2.98	-0.13	-2.98	
9609.00	90.340	340.610	6402.97	2891.70	2854.58	-580.13	1668360.12	14282251.84	39°19'49.460"N	80°54'04.252"W	2912.93	348.512	3.41	-0.03	-3.41	
9704.00	90.400	338.950	6402.36	2986.65	2943.72	-612.96	1668327.30	14282340.95	39°19'50.341"N	80°54'04.669"W	3006.86	348.238	1.75	0.06	-1.75	
9798.00	90.310	337.090	6401.77	3080.46	3030.88	-648.14	1668292.13	14282428.08	39°19'51.203"N	80°54'05.115"W	3099.41	347.929	1.98	-0.10	-1.98	
9893.00	90.280	339.370	6401.28	3175.29	3119.10	-683.37	1668256.91	14282516.26	39°19'52.076"N	80°54'05.562"W	3193.09	347.642	2.40	-0.03	2.40	
9988.00	90.370	338.360	6400.74	3270.18	3207.71	-717.62	1668222.67	14282604.83	39°19'52.952"N	80°54'05.997"W	3287.00	347.390	1.07	0.09	-1.06	
10082.00	90.340	338.810	6400.16	3363.94	3294.60	-753.46	1668186.85	14282691.89	39°19'53.811"N	80°54'06.452"W	3379.66	347.118	1.65	-0.03	-1.65	
10177.00	90.250	335.590	6399.67	3458.52	3381.52	-791.80	1668148.53	14282778.57	39°19'54.670"N	80°54'06.939"W	3472.99	346.821	1.29	-0.09	-1.28	
10272.00	90.310	333.370	6399.21	3552.78	3467.25	-832.73	1668108.62	14282864.26	39°19'55.518"N	80°54'07.458"W	3565.84	346.495	2.34	0.06	-2.34	
10367.00	90.220	337.550	6398.77	3647.22	3553.65	-872.17	1668068.19	14282950.63	39°19'56.372"N	80°54'07.959"W	3659.11	346.210	4.40	-0.09	4.40	





# Actual Wellpath Report

Stronsnider Unit 3H AWP Proj: 15980'

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04/05/2019

REFERENCE WELLPATH IDENTIFICATION		Slot
Operator	ANTERO RESOURCES CORPORATION	Slot #04
Area	Ritchie County, WV	Stronsnider Unit 3H
Field	Ritchie	Well
Facility	Mulvey Pad	Wellbore
		Stronsnider Unit 3H AWB

WELLPATH DATA (180 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (JUS ft)	Grid North (JUS ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Comments
10461.00	90.060	346.860	6398.54	3741.11	3643.05	-900.87	1668039.50	14283039.99	39°19'57.256"N	80°54'08.323"W	3752.78	346.110	9.91	-0.17	9.90	
10556.00	90.120	344.370	6398.39	3835.87	3735.06	-924.47	1668015.91	14283131.97	39°19'58.166"N	80°54'08.622"W	3847.77	346.098	2.62	0.06	-2.62	
10650.00	89.970	339.810	6398.32	3929.84	3824.48	-953.37	1667987.02	14283221.36	39°19'59.050"N	80°54'08.989"W	3941.52	346.003	4.85	-0.16	-4.85	
10745.00	89.420	341.000	6398.82	4024.81	3913.98	-985.23	1667955.18	14283310.82	39°19'59.935"N	80°54'09.393"W	4036.08	345.871	1.38	0.00	1.25	
10840.00	87.440	347.690	6401.43	4119.61	4005.36	-1010.84	1667929.58	14283402.16	39°20'00.839"N	80°54'09.718"W	4130.95	345.836	7.34	-2.08	7.04	
10935.00	90.710	348.480	6402.96	4213.97	4098.29	-1030.45	1667909.98	14283495.05	39°20'01.757"N	80°54'09.966"W	4225.85	345.886	3.54	3.44	0.83	
11030.00	90.620	344.170	6401.86	4308.62	4190.57	-1052.90	1667887.52	14283587.30	39°20'02.670"N	80°54'10.250"W	4320.82	345.896	4.54	-0.09	-4.54	
11124.00	90.580	341.550	6400.87	4402.59	4280.38	-1080.60	1667859.84	14283677.07	39°20'03.558"N	80°54'10.602"W	4414.68	345.832	2.79	-0.04	-2.79	
11220.00	90.370	341.950	6400.08	4498.58	4371.55	-1110.66	1667829.79	14283768.20	39°20'04.459"N	80°54'10.983"W	4510.43	345.745	0.47	-0.22	0.42	
11315.00	90.580	343.840	6399.29	4593.55	4462.34	-1138.60	1667801.87	14283858.96	39°20'05.357"N	80°54'11.337"W	4605.31	345.686	2.00	0.22	1.99	
11410.00	90.620	346.160	6398.29	4688.37	4554.09	-1163.19	1667777.29	14283950.67	39°20'06.264"N	80°54'11.649"W	4700.29	345.672	2.44	0.04	2.44	
11504.00	89.970	341.840	6397.81	4782.26	4644.43	-1189.09	1667751.40	14284040.97	39°20'07.157"N	80°54'11.977"W	4794.23	345.639	4.65	-0.89	-4.60	
11599.00	89.970	337.960	6397.86	4877.20	4733.63	-1221.73	1667718.77	14284130.13	39°20'08.039"N	80°54'12.392"W	4888.75	345.528	4.08	0.00	-4.08	
11694.00	89.940	341.870	6397.94	4972.14	4822.83	-1254.35	1667686.16	14284219.30	39°20'08.921"N	80°54'12.805"W	4983.28	345.421	4.12	-0.03	4.12	
11789.00	89.970	344.210	6398.01	5067.11	4913.69	-1282.06	1667658.47	14284310.13	39°20'09.819"N	80°54'13.157"W	5078.19	345.377	2.46	0.03	2.46	
11883.00	90.000	340.250	6398.03	5161.08	5003.19	-1310.74	1667629.79	14284399.59	39°20'10.704"N	80°54'13.521"W	5172.04	345.320	4.21	0.03	-4.21	
11978.00	90.000	340.440	6398.03	5256.06	5092.65	-1342.69	1667597.85	14284489.02	39°20'11.588"N	80°54'13.928"W	5266.68	345.230	0.20	0.00	0.20	
12072.00	90.000	341.020	6398.03	5350.05	5181.39	-1373.72	1667566.84	14284577.72	39°20'12.466"N	80°54'14.320"W	5360.40	345.151	0.62	0.00	0.62	
12167.00	89.970	340.020	6398.06	5445.03	5270.95	-1405.40	1667535.18	14284667.24	39°20'13.351"N	80°54'14.722"W	5455.09	345.071	1.05	-0.03	-1.05	
12261.00	89.880	339.440	6398.18	5538.98	5359.13	-1437.96	1667502.62	14284755.38	39°20'14.223"N	80°54'15.135"W	5548.69	344.980	0.62	-0.10	-0.62	
12356.00	90.000	338.280	6398.28	5633.87	5447.73	-1472.22	1667468.38	14284843.95	39°20'15.099"N	80°54'15.570"W	5643.16	344.877	1.23	0.13	-1.22	
12451.00	89.970	339.310	6398.36	5728.76	5536.30	-1506.58	1667434.03	14284932.49	39°20'15.975"N	80°54'16.006"W	5737.63	344.777	1.09	-0.09	1.08	
12545.00	89.970	342.120	6398.45	5822.74	5625.01	-1537.63	1667403.00	14285021.17	39°20'16.852"N	80°54'16.400"W	5831.39	344.711	2.99	0.06	2.99	
12641.00	89.880	342.910	6398.58	5918.72	5716.58	-1566.47	1667374.17	14285112.69	39°20'17.757"N	80°54'16.766"W	5927.32	344.676	0.83	-0.09	0.82	
12736.00	90.000	344.130	6398.68	6013.67	5807.67	-1593.42	1667347.23	14285203.75	39°20'18.658"N	80°54'17.108"W	6022.30	344.658	1.29	0.13	1.28	
12831.00	89.940	343.620	6398.73	6108.59	5898.94	-1619.80	1667320.86	14285294.98	39°20'19.560"N	80°54'17.442"W	6117.29	344.645	0.54	-0.06	-0.54	
12926.00	89.970	342.280	6398.80	6203.56	5889.76	-1647.66	1667293.01	14285385.76	39°20'20.458"N	80°54'17.795"W	6212.24	344.620	1.41	0.03	-1.41	
13021.00	89.970	341.590	6398.85	6298.56	6080.08	-1677.12	1667263.57	14285476.04	39°20'21.351"N	80°54'18.169"W	6307.14	344.579	0.73	0.00	-0.73	
13116.00	89.970	341.470	6398.90	6393.56	6170.18	-1707.21	1667233.48	14285566.11	39°20'22.242"N	80°54'18.551"W	6402.01	344.534	0.13	0.00	-0.13	
13211.00	90.030	340.550	6398.90	6488.55	6260.01	-1738.13	1667202.58	14285655.91	39°20'23.130"N	80°54'18.943"W	6496.83	344.482	0.97	0.06	-0.97	





# Actual Wellpath Report

Stronsnider Unit 3H AWP Proj: 15980'

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REFERENCE WELLPATH IDENTIFICATION		Slot #04
Operator	ANTERO RESOURCES CORPORATION	Stronsnider Unit 3H
Area	Ritchie County, WV	Well
Field	Ritchie	Wellbore
Facility	Mulvay Pad	

WELLPATH DATA (180 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (F/100ft)	Build Rate (F/100ft)	Turn Rate (F/100ft)	Comments
13306.00	89.750	342.440	6399.09	6583.55	6350.09	-1786.28	1667172.44	14285745.95	39°20'24.021"N	80°54'19.326"W	6591.70	344.439	2.01	-0.29	1.99	
13401.00	89.780	343.270	6399.48	6678.52	6440.87	-1796.28	1667144.45	14285836.69	39°20'24.918"N	80°54'19.681"W	6686.66	344.417	0.87	0.03	0.87	
13496.00	89.880	343.910	6399.76	6773.47	6532.00	-1823.12	1667117.62	14285927.79	39°20'25.819"N	80°54'20.021"W	6781.65	344.405	0.68	0.11	0.67	
13591.00	89.750	343.770	6400.06	6868.39	6623.25	-1849.56	1667091.19	14286019.00	39°20'26.722"N	80°54'20.357"W	6876.65	344.397	0.20	-0.14	-0.15	
13685.00	90.030	344.870	6400.24	6962.28	6713.75	-1874.96	1667065.80	14286109.46	39°20'27.616"N	80°54'20.679"W	6970.64	344.396	1.21	0.30	1.17	
13780.00	89.600	345.790	6400.55	7057.08	6805.65	-1899.02	1667041.75	14286201.33	39°20'28.525"N	80°54'20.984"W	7065.63	344.409	1.07	-0.45	0.97	
13875.00	89.630	344.380	6401.19	7151.90	6897.44	-1923.47	1667017.31	14286293.08	39°20'29.432"N	80°54'21.294"W	7160.62	344.418	1.38	0.03	-1.48	
13969.00	89.720	341.240	6401.72	7245.86	6987.23	-1951.25	1666989.54	14286382.84	39°20'30.320"N	80°54'21.646"W	7254.57	344.397	3.34	0.10	-3.34	
14064.00	89.600	339.170	6402.29	7340.83	7076.61	-1983.42	1666957.39	14286472.18	39°20'31.204"N	80°54'22.054"W	7349.31	344.343	2.18	-0.13	-2.18	
14159.00	89.660	340.310	6402.90	7435.78	7165.73	-2016.32	1666924.50	14286561.26	39°20'32.085"N	80°54'22.427"W	7444.01	344.284	1.20	0.06	1.20	
14254.00	89.540	340.950	6403.56	7530.76	7255.35	-2047.82	1666893.01	14286650.85	39°20'32.971"N	80°54'22.872"W	7538.81	344.238	0.69	-0.13	0.67	
14348.00	89.600	340.170	6404.27	7624.74	7343.99	-2079.11	1666861.74	14286739.45	39°20'33.847"N	80°54'23.269"W	7632.62	344.193	0.83	0.06	-0.83	
14443.00	89.630	335.970	6404.91	7719.54	7432.09	-2114.58	1666826.28	14286827.52	39°20'34.719"N	80°54'23.719"W	7727.06	344.118	4.42	0.03	-4.42	
14538.00	89.510	333.760	6405.62	7813.88	7518.09	-2154.93	1666785.95	14286913.48	39°20'35.569"N	80°54'24.232"W	7820.83	344.006	2.33	-0.13	-2.33	
14633.00	89.510	337.650	6406.43	7908.35	7604.66	-2194.00	1666746.89	14287000.01	39°20'36.425"N	80°54'24.728"W	7914.82	343.907	4.09	0.00	4.09	
14728.00	90.220	345.780	6406.66	8003.27	7694.78	-2223.78	1666717.12	14287090.10	39°20'37.316"N	80°54'25.106"W	8009.67	343.881	8.59	0.75	8.56	
14822.00	90.460	346.350	6406.10	8096.99	7786.01	-2248.42	1666694.49	14287181.30	39°20'38.218"N	80°54'25.393"W	8103.61	343.906	0.66	0.26	0.61	
14918.00	90.480	345.220	6405.30	8192.72	7879.07	-2269.99	1666670.93	14287274.32	39°20'39.138"N	80°54'25.691"W	8198.55	343.928	1.18	0.03	-1.18	
15012.00	90.590	342.960	6404.43	8286.62	7969.46	-2295.76	1666645.17	14287364.67	39°20'40.032"N	80°54'26.018"W	8293.54	343.930	2.41	0.10	-2.40	
15108.00	90.430	339.470	6403.58	8382.60	8060.33	-2326.67	1666614.28	14287455.50	39°20'40.930"N	80°54'26.410"W	8389.41	343.899	3.64	-0.16	-3.64	
15203.00	90.340	335.750	6402.94	8477.35	8148.15	-2362.84	1666578.11	14287543.29	39°20'41.798"N	80°54'26.870"W	8483.83	343.829	3.92	-0.09	-3.92	
15298.00	90.340	334.710	6402.38	8571.77	8234.41	-2402.65	1666538.33	14287629.51	39°20'42.651"N	80°54'27.375"W	8577.77	343.734	1.09	0.00	-1.09	
15393.00	90.400	339.420	6401.76	8666.44	8321.87	-2439.66	1666501.33	14287716.94	39°20'43.516"N	80°54'27.845"W	8672.11	343.661	4.96	0.06	4.96	
15488.00	90.250	342.930	6401.22	8761.42	8411.77	-2470.30	1666470.70	14287806.81	39°20'44.405"N	80°54'28.234"W	8767.00	343.634	3.70	-0.16	3.69	
15583.00	90.370	343.160	6400.71	8856.39	8502.64	-2498.01	1666443.00	14287897.64	39°20'45.303"N	80°54'28.586"W	8862.00	343.628	0.27	0.13	0.24	
15678.00	90.310	345.040	6400.15	8951.29	8594.00	-2524.03	1666416.99	14287988.96	39°20'46.207"N	80°54'28.916"W	8956.99	343.633	1.98	-0.06	1.98	
15773.00	89.970	344.180	6399.91	9046.16	8685.59	-2549.24	1666391.79	14288080.52	39°20'47.112"N	80°54'29.235"W	9051.97	343.643	0.97	-0.36	-0.91	
15868.00	89.940	343.350	6399.99	9141.09	8776.80	-2575.80	1666365.24	14288171.69	39°20'48.014"N	80°54'29.572"W	9146.97	343.644	0.87	-0.03	-0.87	
15963.00	89.940	342.790	6400.08	9228.06	8860.03	-2601.14	1666339.91	14288264.89	39°20'48.837"N	80°54'29.894"W	9233.97	343.639	0.64	0.00	-0.64	
15980.00	89.940	342.790	6400.11	9253.06	8883.91	-2608.54	1666332.52	14288278.76	39°20'49.073"N	80°54'29.988"W	9258.96	343.636	0.00	0.00	0.00	Projected MD at TD: 15980'

HOLE & CASING SECTIONS - Ref Wellbore: Stronsnider Unit 3H AWP										Ref Wellpath: Stronsnider Unit 3H AWP Proj: 15980'									
String/Diameter	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start N/S (ft)	End N/S (ft)	Start E/W (ft)	End E/W (ft)	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start N/S (ft)	End N/S (ft)	Start E/W (ft)	End E/W (ft)	
20in Conductor	24.50	104.50	80.00	24.50	104.50	0.00	104.50	0.00	0.15	24.50	104.50	80.00	24.50	104.50	0.00	104.50	0.00	-0.14	
17.5in Open Hole	104.50	563.30	458.80	104.50	563.30	-0.14	563.29	0.15	2.70	104.50	563.29	458.79	104.50	563.29	0.00	563.29	0.00	-1.46	
13.375in Casing Surface	24.50	563.30	538.80	24.50	563.30	0.00	563.29	0.00	2.70	24.50	563.29	538.79	24.50	563.29	-1.46	563.29	2.70	4.65	
12.75in Open Hole	563.30	2574.80	2011.50	563.29	2574.80	0.00	2574.33	0.00	6.87	563.29	2574.33	2011.04	563.29	2574.33	0.00	2574.33	0.00	4.65	
9.625in Casing Intermediate	24.50	2574.80	2550.30	24.50	2574.80	0.00	2574.33	0.00	6.87	24.50	2574.33	2550.30	24.50	2574.33	4.65	2574.33	6.87	371.46	
8.75in Open Hole	2574.80	6359.50	3784.70	2574.33	6359.50	-195.44	6214.52	6.87	-195.44	2574.33	6214.52	3784.19	2574.33	6214.52	0.00	6214.52	371.46	-2608.54	
8.5in Open Hole	6359.50	15980.00	9620.50	6359.50	15980.00	0.00	6400.11	0.00	8883.91	6359.50	15980.00	9620.50	6400.11	15980.00	0.00	15980.00	0.00	8883.91	
5.5in Casing Production	24.50	15980.00	15955.50	24.50	15980.00	0.00	6400.11	0.00	8883.91	24.50	15980.00	15955.50	24.50	15980.00	0.00	15980.00	0.00	-2608.54	

04/05/2019



**TARGETS**

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Stronsneider Unit 3H POE - Rev-2	6382.00	51.15	308.51	1669248.40	14279449.54	39°19'21.742"N	80°53'52.984"W	point
Stronsneider Unit 3H BHL - Rev-2	6405.00	8897.05	-2616.53	1666324.53	14288291.89	39°20'49.203"N	80°54'30.089"W	point
Stronsneider Unit 3H LP - Rev-2	6405.00	204.58	270.12	1669210.02	14279602.90	39°19'23.259"N	80°53'53.470"W	point

**WELLPATH COMPOSITION - Ref Wellbore: Stronsneider Unit 3H AWB Ref Wellpath: Stronsneider Unit 3H AWP Proj: 15980'**

Start MID [ft]	End MID [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	6148.50	Gyrodata standard - Drop gyro or Multi-shot	05_Gyrodata MS Gyro <8-3/4"> (100-6139)	Stronsneider Unit 3H AWB
6148.50	6276.50	ISCWSA MWD, Rev. 4 (Standard)	04_Directional ONE MWD <8-3/4"> (6139)(6178-6267)	Stronsneider Unit 3H AWB
6276.50	15955.00	BHI AutoTrak Curve (Short)	06_BHI AT Curve <8-1/2">(6276.50)(6329-15955)	Stronsneider Unit 3H AWB
15955.00	15980.00	Blind Drilling (std)	Projection to bit	Stronsneider Unit 3H AWB





# Actual Wellpath Report

Stroonsider Unit 3H AWP Proj: 15980'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Stroonsider Unit 3H
Field	Ritchie	Wellbore	Stroonsider Unit 3H AWB
Facility	Mulvay Pad		

## COMMENTS

### Wellpath general comments

API: 47-085-10203-0000  
 BHI Job #: 8599065  
 Rig: Frontier 22  
 Duration: 06/10/2017-06/12/2017  
 Gyrodatta MS Gyro <8-3/4"> (100'-6139')  
 Directional ONE MWD <8-3/4"> (6139)(6178-6267')  
 BHI AT Curve <8-1/2"> (6276.50')(6329'-15955')  
 Middlesex: 6355' MD  
 Burket: 6541' MD  
 Tully: 6621' MD  
 Marcellus POE: 6718' MD  
 Projected MD at TD: 15980'