



ANTERO RESOURCES CORPORATION



Location: Wetzel County, WV
Field: Wetzel
Facility: Gadd Pad

Slot: Slot #07
Well: Busch Unit 3H
Wellbore: Busch Unit 3H PWB

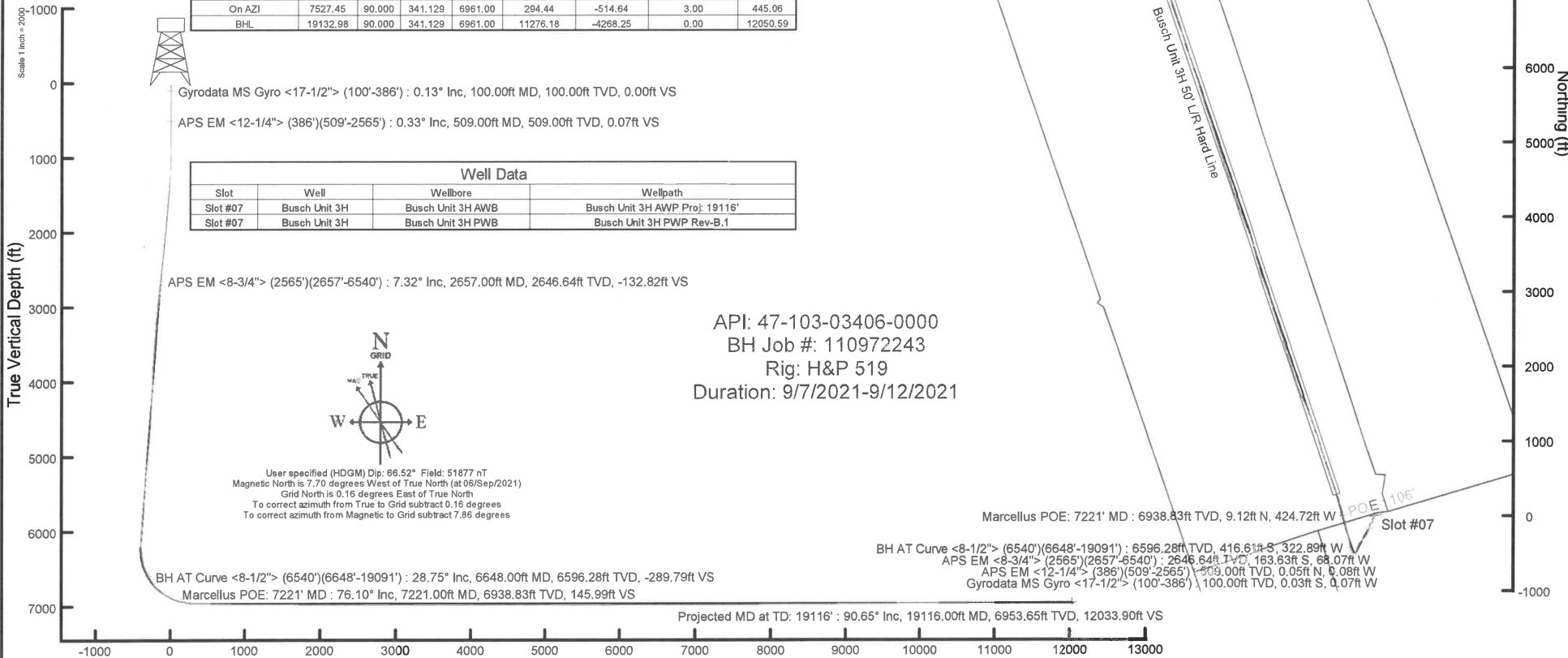
Easting (ft)

Pkt reference wellpath is Busch Unit 3H PWP Rev-B.1	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 519 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 519 (RKB)	Scale: True distance
H&P 519 (RKB) to Mean Sea Level 1254 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot #07): -1224 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: edasanyar on 2021-10-19; Database: WA_MPL_EASTERNUS_Defn

Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Gadd Pad	1709411.160	14362271.230	39°32'59.8700"N	80°45'18.8700"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
Slot #07	-16.22	-83.14	1709328.050	14362255.020	39°32'59.7120"N
Comment	Busch Unit 3H				
H&P 519 (RKB) to Ground level (At Slot: Slot #07)					30ft
Mean Sea Level to Ground level (At Slot: Slot #07)					-1224ft
H&P 519 (RKB) to Mean Sea Level					1254ft

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	2565.00	7.320	205.600	2555.38	-152.82	-63.59	0.84	-124.04
Proj. to Bottom	2647.00	7.320	205.600	2636.72	-162.24	-68.11	0.00	-131.49
Drill Out	2727.00	7.320	205.600	2716.06	-171.43	-72.51	0.00	-138.77
End of 3D Arc	2786.28	6.174	208.181	2774.93	-177.65	-75.65	2.00	-143.63
Curve KOP	6221.03	6.174	208.181	6189.77	-503.24	-250.09	0.00	-395.31
POE	7201.76	73.926	344.872	6933.00	-16.28	-426.42	8.00	122.51
Landing Pt.	7402.69	90.000	344.872	6961.00	175.15	-478.17	8.00	320.39
On AZI	7527.45	90.000	341.129	6961.00	294.44	-514.64	3.00	445.06
BHL	19132.98	90.000	341.129	6961.00	11276.18	-4268.25	0.00	12050.59

Scale 1 inch = 2000





Actual Wellpath Report

Busch Unit 3H AWP Proj: 19116'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Busch Unit 3H
Field	Wetzel	API	47-103-03406-0000
Facility	Gadd Pad	Wellbore	Busch Unit 3H AWB
Slot	Slot #07		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999605	Report Generated	19/Oct/2021 at 17:22
Convergence at slot	0.16° East	Database	WA_MPL_EASTERNUS_Defn

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-16.22	-83.14	1709328.05	14362255.02	39°32'59.7120"N	80°45'19.9320"W
Facility Reference Pt			1709411.16	14362271.23	39°32'59.8700"N	80°45'18.8700"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.3013"W

WELLPATH DATUM			
Calculation method	Minimum curvature	H&P 519 (RKB) to Facility Vertical Datum	1254.00ft
Horizontal Reference Pt	Slot	H&P 519 (RKB) to Mean Sea Level	1254.00ft
Vertical Reference Pt	H&P 519 (RKB)	H&P 519 (RKB) to Ground Level at Slot (Slot #07)	30.00ft
MD Reference Pt	H&P 519 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	341.13°



Actual Wellpath Report

Busch Unit 3H AWP Proj: 191116'
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REFERENCE WELLPATH IDENTIFICATION			
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Field	Wetzel	API	47-103-03406-0000
Facility	Gadd Pad	Wellbore	Busch Unit 3H AWB
Slot	Slot #07		

WELLPATH DATA (210 stations) † = interpolated, ‡ = extrapolated station																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[ft]	[°]	["/100ft]	["/100ft]	["/100ft]	
0.00	0.00	249.760	0.00	0.00	0.00	0.00	1709328.05	14362255.02	39°32'59.7120"N	80°45'19.9320"W	0.00	0.000	0.00	0.00	0.00	
30.00	0.00	249.760	30.00	0.00	0.00	0.00	1709328.05	14362255.02	39°32'59.7120"N	80°45'19.9320"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.130	249.760	100.00	0.00	-0.03	-0.07	1709327.98	14362254.99	39°32'59.7117"N	80°45'19.9329"W	0.08	249.760	0.19	0.19	0.19	Gyrodata MS Gyro <17-1/2"> (100'-386')
200.00	0.110	234.770	200.00	-0.03	-0.12	-0.26	1709327.79	14362254.90	39°32'59.7108"N	80°45'19.9353"W	0.29	244.791	0.04	-0.02	-14.99	
300.00	0.170	275.300	300.00	0.00	-0.16	-0.49	1709327.56	14362254.86	39°32'59.7104"N	80°45'19.9382"W	0.51	251.360	0.11	0.06	40.53	
386.00	0.120	67.280	386.00	0.06	-0.12	-0.53	1709327.52	14362254.90	39°32'59.7108"N	80°45'19.9387"W	0.54	257.519	0.33	-0.06	176.72	
509.00	0.330	70.520	509.00	0.07	0.05	-0.08	1709327.97	14362255.07	39°32'59.7125"N	80°45'19.9329"W	0.09	303.448	0.17	0.17	2.63	APS EM <12-1/4"> (386')(509'-2565')
599.00	0.440	68.780	599.00	0.09	0.26	0.49	1709328.54	14362255.28	39°32'59.7145"N	80°45'19.9257"W	0.56	61.839	0.12	0.12	-1.93	
689.00	0.300	77.330	688.99	0.08	0.44	1.04	1709329.09	14362255.46	39°32'59.7163"N	80°45'19.9186"W	1.13	67.153	0.17	-0.16	9.50	
780.00	0.370	83.620	779.99	-0.01	0.52	1.57	1709329.62	14362255.54	39°32'59.7171"N	80°45'19.9119"W	1.65	71.507	0.09	0.08	6.91	
871.00	0.100	110.680	870.99	-0.12	0.53	1.93	1709329.98	14362255.55	39°32'59.7171"N	80°45'19.9073"W	2.00	74.706	0.31	-0.30	29.74	
961.00	0.170	148.520	960.99	-0.31	0.39	2.08	1709330.12	14362255.41	39°32'59.7157"N	80°45'19.9054"W	2.11	79.443	0.12	0.08	42.04	
1052.00	1.140	195.020	1051.98	-1.19	-0.60	1.91	1709329.96	14362254.42	39°32'59.7060"N	80°45'19.9076"W	2.00	107.497	1.13	1.07	51.10	
1146.00	3.060	198.890	1145.92	-3.95	-3.88	0.86	1709328.91	14362251.14	39°32'59.6736"N	80°45'19.9211"W	3.97	167.545	2.05	2.04	4.12	
1241.00	4.660	204.980	1240.70	-8.74	-9.78	-1.59	1709326.46	14362245.25	39°32'59.6154"N	80°45'19.9526"W	9.91	189.258	1.74	1.68	6.41	
1336.00	6.310	208.900	1335.26	-15.03	-17.85	-5.75	1709322.31	14362237.18	39°32'59.5357"N	80°45'20.0059"W	18.75	197.849	1.78	1.74	4.13	
1430.00	6.070	205.840	1428.71	-22.03	-26.84	-10.41	1709317.64	14362228.19	39°32'59.4470"N	80°45'20.0658"W	28.79	201.197	0.43	-0.26	-3.26	
1525.00	5.720	203.080	1523.21	-29.12	-35.72	-14.45	1709313.60	14362219.32	39°32'59.3593"N	80°45'20.1177"W	38.53	202.033	0.47	-0.37	-2.91	
1620.00	6.980	206.290	1617.63	-36.71	-45.25	-18.87	1709309.19	14362209.79	39°32'59.2653"N	80°45'20.1744"W	49.02	202.635	1.38	1.33	3.38	
1714.00	6.970	205.130	1710.93	-44.84	-55.53	-23.82	1709304.24	14362199.51	39°32'59.1638"N	80°45'20.2379"W	60.43	203.215	0.15	-0.01	-1.23	
1809.00	6.630	202.150	1805.26	-53.13	-65.83	-28.33	1709299.73	14362189.21	39°32'59.0621"N	80°45'20.2960"W	71.67	203.288	0.52	-0.36	-3.14	
1903.00	6.390	199.520	1898.66	-61.32	-75.79	-32.13	1709295.93	14362179.26	39°32'58.9638"N	80°45'20.3447"W	82.32	202.974	0.41	-0.26	-2.80	
1998.00	7.120	208.120	1993.00	-69.48	-85.96	-36.67	1709291.39	14362169.09	39°32'58.8634"N	80°45'20.4031"W	93.46	203.102	1.31	0.77	9.05	
2093.00	7.140	205.280	2087.27	-77.74	-96.49	-41.97	1709286.10	14362158.56	39°32'58.7594"N	80°45'20.4710"W	105.23	203.505	0.37	0.02	-2.99	
2187.00	7.350	203.140	2180.51	-86.39	-107.31	-46.82	1709281.24	14362147.76	39°32'58.6527"N	80°45'20.5334"W	117.08	203.575	0.36	0.22	-2.28	
2282.00	7.380	200.430	2274.73	-95.63	-118.61	-51.34	1709276.73	14362136.46	39°32'58.5411"N	80°45'20.5915"W	129.25	203.406	0.37	0.03	-2.85	
2376.00	7.380	196.610	2367.95	-105.22	-130.05	-55.17	1709272.90	14362125.02	39°32'58.4281"N	80°45'20.6408"W	141.27	202.989	0.52	0.00	-4.06	
2471.00	7.430	199.540	2462.16	-115.00	-141.69	-58.97	1709269.10	14362113.39	39°32'58.3132"N	80°45'20.6897"W	153.47	202.598	0.40	0.05	3.08	
2565.00	7.320	205.600	2555.38	-124.04	-152.82	-63.59	1709264.48	14362102.26	39°32'58.2033"N	80°45'20.7491"W	165.52	202.594	0.84	-0.12	6.45	
2657.00	7.320	199.390	2646.64	-132.82	-163.63	-68.07	1709260.01	14362091.45	39°32'58.0966"N	80°45'20.8066"W	177.23	202.588	0.86	0.00	-6.75	APS EM <8-3/4"> (2565')(2657'-6540')



Actual Wellpath Report

Busch Unit 3H AWP Proj: 19116'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Busch Unit 3H
Field	Wetzel	API	47-103-03406-0000
Facility	Gadd Pad	Wellbore	Busch Unit 3H AWP
Slot	Slot #07		

WELLPATH DATA (210 stations)																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]	
2751.00	7.510	201.560	2739.85	-142.20	-174.99	-72.32	1709255.76	14362080.10	39°32'57.9844"N	80°45'20.8612"W	189.35	202.453	0.36	0.20	2.31	
2846.00	7.680	198.620	2834.02	-151.96	-186.78	-76.63	1709251.45	14362068.31	39°32'57.8680"N	80°45'20.9166"W	201.89	202.305	0.45	0.18	-3.09	
2941.00	7.730	197.550	2928.16	-162.14	-198.89	-80.58	1709247.50	14362056.21	39°32'57.7484"N	80°45'20.9675"W	214.59	202.055	0.16	0.05	-1.13	
3036.00	7.690	194.570	3022.30	-172.59	-211.13	-84.10	1709243.98	14362043.97	39°32'57.6275"N	80°45'21.0129"W	227.27	201.720	0.42	-0.04	-3.14	
3130.00	6.030	193.070	3115.63	-182.02	-222.03	-86.80	1709241.28	14362033.08	39°32'57.5199"N	80°45'21.0478"W	238.40	201.353	1.78	-1.77	-1.60	
3227.00	5.900	192.830	3212.10	-190.59	-231.85	-89.06	1709239.02	14362023.26	39°32'57.4229"N	80°45'21.0769"W	248.37	201.013	0.14	-0.13	-0.25	
3322.00	5.890	212.890	3306.61	-197.76	-240.71	-92.79	1709235.29	14362014.41	39°32'57.3355"N	80°45'21.1249"W	257.98	201.082	2.16	-0.01	21.12	
3417.00	6.060	214.370	3401.09	-203.78	-248.94	-98.27	1709229.82	14362006.18	39°32'57.2542"N	80°45'21.1951"W	267.64	201.542	0.24	0.18	1.56	
3511.00	6.260	212.590	3494.55	-209.94	-257.36	-103.83	1709224.26	14361997.77	39°32'57.1712"N	80°45'21.2664"W	277.51	201.972	0.29	0.21	-1.89	
3606.00	5.700	211.230	3589.03	-216.19	-265.75	-109.07	1709219.02	14361989.37	39°32'57.0884"N	80°45'21.3335"W	287.26	202.314	0.61	-0.59	-1.43	
3700.00	5.390	201.670	3682.59	-222.54	-273.85	-113.12	1709214.97	14361981.28	39°32'57.0085"N	80°45'21.3855"W	296.29	202.444	1.04	-0.33	-10.17	
3795.00	5.380	198.500	3777.17	-229.47	-282.22	-116.18	1709211.92	14361972.91	39°32'56.9259"N	80°45'21.4249"W	305.20	202.375	0.31	-0.01	-3.34	
3890.00	5.080	219.160	3871.79	-235.24	-289.70	-120.25	1709207.85	14361965.43	39°32'56.8520"N	80°45'21.4771"W	313.67	202.542	2.00	-0.32	21.75	
3985.00	5.020	226.590	3966.42	-239.19	-295.82	-125.93	1709202.17	14361959.32	39°32'56.7917"N	80°45'21.5497"W	321.51	203.059	0.69	-0.06	7.82	
4079.00	4.640	227.810	4060.09	-242.41	-301.20	-131.73	1709196.37	14361953.94	39°32'56.7387"N	80°45'21.6240"W	328.75	203.622	0.42	-0.40	1.30	
4174.00	6.460	228.460	4154.64	-245.99	-307.33	-138.58	1709189.53	14361947.82	39°32'56.6783"N	80°45'21.7117"W	337.12	204.271	1.92	1.92	0.68	
4269.00	6.400	228.220	4249.04	-250.11	-314.40	-146.53	1709181.58	14361940.75	39°32'56.6086"N	80°45'21.8134"W	346.87	204.988	0.07	-0.06	-0.25	
4364.00	6.410	223.920	4343.45	-254.60	-321.75	-154.15	1709173.96	14361933.40	39°32'56.5362"N	80°45'21.9110"W	356.77	205.600	0.50	0.01	-4.53	
4458.00	5.420	218.620	4436.95	-259.38	-328.99	-160.56	1709167.55	14361926.16	39°32'56.4647"N	80°45'21.9931"W	366.08	206.015	1.20	-1.05	-5.64	
4553.00	6.260	222.780	4531.45	-264.25	-336.30	-166.88	1709161.23	14361918.85	39°32'56.3927"N	80°45'22.0740"W	375.43	206.392	0.99	0.88	4.38	
4648.00	5.810	211.240	4625.93	-269.80	-344.21	-172.89	1709155.22	14361910.94	39°32'56.3147"N	80°45'22.1510"W	385.20	206.670	1.36	-0.47	-12.15	
4742.00	7.890	224.030	4719.26	-275.79	-352.92	-179.85	1709148.27	14361902.24	39°32'56.2288"N	80°45'22.2401"W	396.10	207.003	2.73	2.21	13.61	
4837.00	8.750	218.400	4813.26	-282.66	-363.27	-188.87	1709139.26	14361891.89	39°32'56.1267"N	80°45'22.3556"W	409.44	207.470	1.25	0.91	-5.93	
4932.00	8.220	214.630	4907.22	-290.61	-374.52	-197.22	1709130.91	14361880.64	39°32'56.0157"N	80°45'22.4625"W	423.28	207.770	0.81	-0.56	-3.97	
5027.00	8.050	210.570	5001.26	-298.98	-385.84	-204.46	1709123.67	14361869.33	39°32'55.9041"N	80°45'22.5554"W	436.66	207.919	0.63	-0.18	-4.27	
5121.00	8.230	203.360	5094.32	-308.24	-397.68	-210.47	1709117.66	14361857.49	39°32'55.7872"N	80°45'22.6326"W	449.95	207.890	1.10	0.19	-7.67	
5215.00	8.610	197.610	5187.31	-318.88	-410.57	-215.27	1709112.87	14361844.62	39°32'55.6600"N	80°45'22.6942"W	463.58	207.669	0.98	0.40	-6.12	
5310.00	6.960	204.910	5281.43	-328.75	-422.57	-219.85	1709108.29	14361832.62	39°32'55.5415"N	80°45'22.7531"W	476.33	207.486	2.02	-1.74	7.68	
5405.00	6.960	203.780	5375.73	-337.14	-433.05	-224.59	1709103.55	14361822.14	39°32'55.4380"N	80°45'22.8140"W	487.83	207.412	0.14	0.00	-1.19	
5499.00	6.990	197.600	5469.04	-345.93	-443.72	-228.62	1709099.52	14361811.48	39°32'55.3327"N	80°45'22.8658"W	499.15	207.259	0.80	0.03	-6.57	



Actual Wellpath Report

Busch Unit 3H AWP Proj: 19116'

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Facility	Gadd Pad	Wellbore	Busch Unit 3H AWB
Slot	Slot #07		

WELLPATH DATA (210 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	
5594.00	5.770	206.320	5563.45	-353.94	-453.51	-232.48	1709095.66	14361801.69	39°32'55.2361"N	80°45'22.9155"W	509.63	207.141	1.64	-1.28	9.18		
5689.00	6.670	201.670	5657.89	-361.50	-462.92	-236.64	1709091.51	14361792.29	39°32'55.1432"N	80°45'22.9688"W	519.89	207.076	1.08	0.95	-4.89		
5783.00	4.560	198.130	5751.43	-368.64	-471.54	-239.82	1709088.33	14361783.67	39°32'55.0580"N	80°45'23.0097"W	529.02	206.957	2.27	-2.24	-3.77		
5878.00	4.650	194.160	5846.13	-374.88	-478.86	-241.93	1709086.21	14361776.35	39°32'54.9857"N	80°45'23.0370"W	536.51	206.804	0.35	0.09	-4.18		
5973.00	5.590	215.490	5940.76	-380.81	-486.37	-245.56	1709082.59	14361768.85	39°32'54.9117"N	80°45'23.0836"W	544.84	206.789	2.22	0.99	22.45		
6067.00	7.300	214.580	6034.16	-387.03	-495.01	-251.61	1709076.54	14361760.20	39°32'54.8264"N	80°45'23.1611"W	555.29	206.944	1.82	1.82	-0.97		
6162.00	6.570	235.980	6128.48	-392.05	-503.02	-259.54	1709068.61	14361752.20	39°32'54.7474"N	80°45'23.2626"W	566.03	207.292	2.81	-0.77	22.53		
6257.00	9.310	290.020	6222.68	-388.64	-503.43	-271.28	1709056.87	14361751.79	39°32'54.7437"N	80°45'23.4125"W	571.87	208.319	8.00	2.88	56.88		
6351.00	9.650	302.950	6315.41	-377.67	-496.54	-285.04	1709043.12	14361758.67	39°32'54.8121"N	80°45'23.5879"W	572.54	209.858	2.29	0.36	13.76		
6446.00	11.030	323.780	6408.89	-362.73	-484.88	-297.10	1709031.07	14361770.33	39°32'54.9278"N	80°45'23.7414"W	568.66	211.497	4.17	1.45	21.93		
6540.00	22.260	340.040	6498.85	-336.25	-460.80	-308.53	1709019.64	14361794.40	39°32'55.1660"N	80°45'23.8865"W	554.55	213.804	12.82	11.95	17.30		
6648.00	28.750	343.540	6596.28	-289.79	-416.61	-322.89	1709005.29	14361838.57	39°32'55.6031"N	80°45'24.0683"W	527.09	217.777	6.17	6.01	3.24	BH AT Curve <8-1/2"> (6540')(6648'-19091')	
6667.00†	30.026	344.856	6612.84	-280.48	-407.64	-325.42	1709002.75	14361847.54	39°32'55.6918"N	80°45'24.1003"W	521.61	218.601	7.53	6.72	6.92	Sycamore: 6667' MD	
6743.00	35.240	349.240	6676.83	-239.77	-367.71	-334.49	1708993.69	14361887.45	39°32'56.0867"N	80°45'24.2147"W	497.09	222.291	7.53	6.86	5.77		
6817.00†	41.682	349.337	6734.74	-194.23	-322.51	-343.04	1708985.14	14361932.64	39°32'56.5337"N	80°45'24.3223"W	470.84	226.767	8.71	8.71	0.13	Middlesex: 6817' MD	
6838.00	43.510	349.360	6750.20	-180.17	-308.54	-345.67	1708982.52	14361946.60	39°32'56.6718"N	80°45'24.3553"W	463.34	228.248	8.71	8.71	0.11		
6932.00	51.970	346.560	6813.36	-111.15	-240.60	-360.28	1708967.92	14362014.51	39°32'57.3437"N	80°45'24.5395"W	433.23	236.264	9.26	9.00	-2.98		
6966.00†	54.754	346.272	6833.65	-83.99	-214.09	-366.68	1708961.51	14362041.02	39°32'57.6059"N	80°45'24.6204"W	424.61	239.722	8.22	8.19	-0.85	Burkett: 6966' MD	
7021.00†	59.259	345.844	6863.59	-38.04	-169.33	-377.80	1708950.40	14362085.76	39°32'58.0486"N	80°45'24.7607"W	414.01	245.858	8.22	8.19	-0.78	Tully: 7021' MD	
7027.00	59.750	345.800	6866.64	-32.89	-164.32	-379.07	1708949.13	14362090.77	39°32'58.0981"N	80°45'24.7767"W	413.15	246.564	8.22	8.19	-0.74		
7122.00	68.020	345.550	6908.42	52.07	-81.74	-400.16	1708928.05	14362173.31	39°32'58.9148"N	80°45'25.0431"W	408.42	258.455	8.71	8.71	-0.26		
7216.00	75.760	344.290	6937.62	141.15	4.45	-423.41	1708904.81	14362259.47	39°32'59.7673"N	80°45'25.3369"W	423.43	270.602	8.33	8.23	-1.34		
7221.00†	76.100	344.357	6938.83	145.99	9.12	-424.72	1708903.50	14362264.14	39°32'59.8135"N	80°45'25.3535"W	424.82	271.230	6.92	6.80	1.34	Marcellus POE: 7221' MD	
7311.00	82.220	345.530	6955.75	234.15	94.44	-447.66	1708880.57	14362349.42	39°33'0.6573"N	80°45'25.6434"W	457.51	281.913	6.92	6.80	1.30		
7406.00	89.350	342.000	6962.73	328.72	185.33	-474.14	1708854.10	14362440.28	39°33'1.5563"N	80°45'25.9784"W	509.07	291.349	8.37	7.51	-3.72		
7501.00	89.050	341.630	6964.06	423.70	275.58	-503.78	1708824.47	14362530.49	39°33'2.4490"N	80°45'26.3537"W	574.23	298.679	0.50	-0.32	-0.39		
7595.00	88.460	341.710	6966.10	517.67	364.78	-533.34	1708794.92	14362619.66	39°33'3.3315"N	80°45'26.7279"W	646.16	304.371	0.63	-0.63	0.09		
7690.00	89.010	340.310	6968.20	612.65	454.59	-564.24	1708764.03	14362709.43	39°33'4.2199"N	80°45'27.1194"W	724.59	308.857	1.58	0.58	-1.47		
7784.00	88.520	337.850	6970.22	706.56	542.37	-597.80	1708730.49	14362797.17	39°33'5.0883"N	80°45'27.5447"W	807.17	312.217	2.67	-0.52	-2.62		
7879.00	88.490	339.610	6972.70	801.44	630.86	-632.25	1708696.05	14362885.63	39°33'5.9638"N	80°45'27.9814"W	893.15	314.937	1.85	-0.03	1.85		



Actual Wellpath Report

Busch Unit 3H AWP Proj: 19116'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Busch Unit 3H
Field	Wetzel	API	47-103-03406-0000
Facility	Gadd Pad	Wellbore	Busch Unit 3H AWB
Slot	Slot #07		

WELLPATH DATA (210 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
7973.00	89.820	342.120	6974.09	895.42	719.65	-663.05	1708665.28	14362974.38	39°33'6.8421"N	80°45'28.3717"W	978.54	317.344	3.02	1.41	2.67	
8068.00	89.200	342.730	6974.90	990.39	810.21	-691.74	1708636.59	14363064.91	39°33'7.7379"N	80°45'28.7347"W	1065.34	319.510	0.92	-0.65	0.64	
8162.00	90.090	341.050	6975.48	1084.37	899.55	-720.95	1708607.38	14363154.21	39°33'8.6217"N	80°45'29.1047"W	1152.81	321.289	2.02	0.95	-1.79	
8257.00	89.380	341.700	6975.92	1179.37	989.57	-751.29	1708577.05	14363244.20	39°33'9.5122"N	80°45'29.4889"W	1242.45	322.794	1.01	-0.75	0.68	
8352.00	89.420	341.100	6976.92	1274.36	1079.60	-781.59	1708546.77	14363334.19	39°33'10.4028"N	80°45'29.8726"W	1332.83	324.097	0.63	0.04	-0.63	
8447.00	89.750	341.910	6977.61	1369.36	1169.69	-811.73	1708516.64	14363424.25	39°33'11.2940"N	80°45'30.2543"W	1423.76	325.241	0.92	0.35	0.85	
8541.00	89.780	339.630	6977.99	1463.35	1258.44	-842.69	1708485.70	14363512.96	39°33'12.1719"N	80°45'30.6464"W	1514.53	326.193	2.43	0.03	-2.43	
8636.00	89.750	339.750	6978.38	1558.32	1347.53	-875.66	1708452.74	14363602.02	39°33'13.0533"N	80°45'31.0643"W	1607.06	326.983	0.13	-0.03	0.13	
8730.00	89.380	335.720	6979.10	1652.13	1434.51	-911.27	1708417.14	14363688.96	39°33'13.9138"N	80°45'31.5160"W	1699.48	327.574	4.31	-0.39	-4.29	
8825.00	89.290	332.610	6980.20	1746.41	1519.99	-952.66	1708375.77	14363774.41	39°33'14.7598"N	80°45'32.0415"W	1793.86	327.922	3.27	-0.09	-3.27	
8920.00	89.230	337.140	6981.43	1840.81	1605.98	-992.98	1708335.46	14363860.36	39°33'15.6107"N	80°45'32.5533"W	1888.17	328.271	4.77	-0.06	4.77	
9014.00	89.380	337.900	6982.57	1934.62	1692.83	-1028.92	1708299.54	14363947.18	39°33'16.4700"N	80°45'33.0091"W	1980.99	328.708	0.82	0.16	0.81	
9109.00	89.260	341.700	6983.69	2029.57	1781.96	-1061.72	1708266.76	14364036.27	39°33'17.3518"N	80°45'33.4248"W	2074.28	329.213	4.00	-0.13	4.00	
9204.00	89.350	343.050	6984.85	2124.54	1872.49	-1090.48	1708238.00	14364126.77	39°33'18.2473"N	80°45'33.7889"W	2166.88	329.785	1.42	0.09	1.42	
9298.00	90.120	343.050	6985.28	2218.48	1962.41	-1117.88	1708210.61	14364216.65	39°33'19.1367"N	80°45'34.1357"W	2258.47	330.332	0.82	0.82	0.00	
9393.00	89.010	341.100	6986.00	2313.46	2052.79	-1147.12	1708181.39	14364306.99	39°33'20.0307"N	80°45'34.5058"W	2351.56	330.803	2.36	-1.17	-2.05	
9488.00	90.650	343.970	6986.28	2408.42	2143.40	-1175.62	1708152.89	14364397.57	39°33'20.9269"N	80°45'34.8667"W	2444.63	331.256	3.48	1.73	3.02	
9582.00	89.720	343.160	6986.98	2502.33	2233.55	-1202.22	1708126.31	14364487.69	39°33'21.8187"N	80°45'35.2032"W	2536.55	331.708	1.31	-0.99	-0.86	
9677.00	89.420	341.740	6986.69	2597.30	2324.13	-1230.86	1708097.67	14364578.22	39°33'22.7146"N	80°45'35.5658"W	2629.94	332.094	1.53	-0.32	-1.49	
9771.00	90.120	342.550	6987.07	2691.29	2413.60	-1259.68	1708068.87	14364667.66	39°33'23.5996"N	80°45'35.9307"W	2722.54	332.439	1.14	0.74	0.86	
9866.00	90.090	342.040	6986.90	2786.27	2504.10	-1288.58	1708039.99	14364758.12	39°33'24.4948"N	80°45'36.2965"W	2816.19	332.770	0.54	-0.03	-0.54	
9960.00	90.120	341.940	6986.72	2880.26	2593.49	-1317.64	1708010.93	14364847.48	39°33'25.3791"N	80°45'36.6645"W	2909.01	333.067	0.11	0.03	-0.11	
10055.00	90.090	343.520	6986.55	2975.22	2684.20	-1345.84	1707982.74	14364938.16	39°33'26.2764"N	80°45'37.0214"W	3002.71	333.371	1.66	-0.03	1.66	
10150.00	90.000	341.460	6986.48	3070.18	2774.80	-1374.42	1707954.17	14365028.72	39°33'27.1725"N	80°45'37.3833"W	3096.54	333.650	2.17	-0.09	-2.17	
10244.00	90.120	341.230	6986.38	3164.18	2863.86	-1404.49	1707924.12	14365117.74	39°33'28.0535"N	80°45'37.7641"W	3189.71	333.876	0.28	0.13	-0.24	
10339.00	89.290	342.460	6986.87	3259.17	2954.13	-1434.09	1707894.53	14365207.97	39°33'28.9464"N	80°45'38.1390"W	3283.82	334.106	1.56	-0.87	1.29	
10433.00	90.030	341.030	6987.42	3353.16	3043.39	-1463.53	1707865.10	14365297.20	39°33'29.8294"N	80°45'38.5118"W	3377.00	334.318	1.71	0.79	-1.52	
10528.00	89.540	335.330	6987.78	3448.00	3131.55	-1498.83	1707829.82	14365385.32	39°33'30.7016"N	80°45'38.9595"W	3471.75	334.423	6.02	-0.52	-6.00	
10622.00	89.850	339.590	6988.28	3541.78	3218.34	-1534.85	1707793.81	14365472.09	39°33'31.5604"N	80°45'39.4165"W	3565.60	334.503	4.54	0.33	4.53	
10717.00	90.740	343.880	6987.79	3636.75	3308.54	-1564.62	1707764.05	14365562.24	39°33'32.4525"N	80°45'39.7935"W	3659.84	334.690	4.61	0.94	4.52	



Actual Wellpath Report

Busch Unit 3H AWP Proj: 19116'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Busch Unit 3H
Field	Wetzel	API	47-103-03406-0000
Facility	Gadd Pad	Wellbore	Busch Unit 3H AWB
Slot	Slot #07		

WELLPATH DATA (210 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
10812.00	89.420	342.920	6987.66	3731.67	3399.57	-1591.76	1707736.92	14365653.24	39°33'33.3530"N	80°45'40.1369"W	3753.77	334.910	1.72	-1.39	-1.01	
10906.00	90.710	343.630	6987.55	3825.60	3489.59	-1618.81	1707709.88	14365743.23	39°33'34.2434"N	80°45'40.4792"W	3846.79	335.114	1.57	1.37	0.76	
11001.00	89.940	344.320	6987.01	3920.48	3580.90	-1645.03	1707683.67	14365834.50	39°33'35.1465"N	80°45'40.8109"W	3940.68	335.326	1.09	-0.81	0.73	
11096.00	90.370	341.840	6986.76	4015.42	3671.78	-1672.68	1707656.03	14365925.34	39°33'36.0454"N	80°45'41.1608"W	4034.83	335.508	2.65	0.45	-2.61	
11191.00	91.050	336.000	6985.58	4110.30	3760.38	-1706.83	1707621.90	14366013.91	39°33'36.9219"N	80°45'41.5939"W	4129.61	335.587	6.19	0.72	-6.15	
11286.00	91.480	335.800	6983.48	4204.88	3847.07	-1745.61	1707583.13	14366100.57	39°33'37.7798"N	80°45'42.0861"W	4224.59	335.594	0.50	0.45	-0.21	
11380.00	89.970	340.120	6982.29	4298.71	3934.18	-1780.87	1707547.88	14366187.63	39°33'38.6415"N	80°45'42.5333"W	4318.48	335.645	4.87	-1.61	4.60	
11475.00	90.370	338.990	6982.01	4393.67	4023.19	-1814.06	1707514.71	14366276.61	39°33'39.5221"N	80°45'42.9540"W	4413.26	335.729	1.26	0.42	-1.19	
11570.00	89.570	339.910	6982.06	4488.63	4112.14	-1847.40	1707481.38	14366365.53	39°33'40.4022"N	80°45'43.3768"W	4508.06	335.808	1.28	-0.84	0.97	
11664.00	89.200	339.030	6983.07	4582.58	4200.17	-1880.37	1707448.43	14366453.52	39°33'41.2730"N	80°45'43.7947"W	4601.87	335.882	1.02	-0.39	-0.94	
11759.00	89.230	341.420	6984.37	4677.55	4289.55	-1912.50	1707416.31	14366542.87	39°33'42.1572"N	80°45'44.2020"W	4696.58	335.970	2.52	0.03	2.52	
11854.00	90.030	341.630	6984.98	4772.55	4379.65	-1942.61	1707386.21	14366632.93	39°33'43.0485"N	80°45'44.5833"W	4791.14	336.080	0.87	0.84	0.22	
11948.00	89.780	342.300	6985.14	4866.54	4469.03	-1971.71	1707357.12	14366722.28	39°33'43.9326"N	80°45'44.9519"W	4884.66	336.193	0.76	-0.27	0.71	
12043.00	89.570	341.710	6985.68	4961.52	4559.38	-2001.06	1707327.79	14366812.59	39°33'44.8263"N	80°45'45.3235"W	4979.18	336.304	0.66	-0.22	-0.62	
12138.00	89.480	341.710	6986.47	5056.51	4649.58	-2030.87	1707297.99	14366902.76	39°33'45.7186"N	80°45'45.7011"W	5073.76	336.405	0.09	-0.09	0.00	
12233.00	89.450	341.770	6987.35	5151.51	4739.79	-2060.63	1707268.23	14366992.93	39°33'46.6109"N	80°45'46.0782"W	5168.35	336.503	0.07	-0.03	0.06	
12327.00	90.250	342.490	6987.60	5245.49	4829.25	-2089.48	1707239.40	14367082.36	39°33'47.4959"N	80°45'46.4434"W	5261.90	336.603	1.14	0.85	0.77	
12421.00	89.690	342.590	6987.65	5339.46	4918.92	-2117.68	1707211.21	14367171.99	39°33'48.3828"N	80°45'46.8005"W	5355.41	336.707	0.61	-0.60	0.11	
12516.00	89.750	341.270	6988.11	5434.45	5009.23	-2147.15	1707181.75	14367262.27	39°33'49.2761"N	80°45'47.1737"W	5450.02	336.798	1.39	0.06	-1.39	
12611.00	90.340	342.580	6988.04	5529.44	5099.54	-2176.62	1707152.29	14367352.54	39°33'50.1695"N	80°45'47.5470"W	5544.64	336.886	1.51	0.62	1.38	
12705.00	90.150	341.710	6987.64	5623.42	5189.02	-2205.44	1707123.48	14367441.98	39°33'51.0545"N	80°45'47.9120"W	5638.25	336.973	0.95	-0.20	-0.93	
12800.00	90.090	341.510	6987.44	5718.42	5279.16	-2235.41	1707093.52	14367532.09	39°33'51.9462"N	80°45'48.2917"W	5732.94	337.050	0.22	-0.06	-0.21	
12895.00	90.250	341.300	6987.16	5813.41	5369.20	-2265.71	1707063.24	14367622.09	39°33'52.8369"N	80°45'48.6754"W	5827.67	337.121	0.28	0.17	-0.22	
12989.00	90.550	342.400	6986.50	5907.40	5458.52	-2294.99	1707033.97	14367711.38	39°33'53.7204"N	80°45'49.0463"W	5921.35	337.196	1.21	0.32	1.17	
13084.00	90.250	341.990	6985.84	6002.38	5548.97	-2324.04	1707004.94	14367801.79	39°33'54.6151"N	80°45'49.4142"W	6016.00	337.275	0.53	-0.32	-0.43	
13179.00	90.220	342.170	6985.45	6097.37	5639.36	-2353.27	1706975.72	14367892.14	39°33'55.5092"N	80°45'49.7844"W	6110.67	337.350	0.19	-0.03	0.19	
13273.00	90.180	342.670	6985.12	6191.35	5728.97	-2381.66	1706947.34	14367981.72	39°33'56.3955"N	80°45'50.1439"W	6204.30	337.426	0.53	-0.04	0.53	
13368.00	90.340	342.660	6984.69	6286.31	5819.65	-2409.96	1706919.04	14368072.37	39°33'57.2925"N	80°45'50.5023"W	6298.91	337.505	0.17	0.17	-0.01	
13463.00	89.820	342.010	6984.55	6381.29	5910.17	-2438.79	1706890.23	14368162.85	39°33'58.1879"N	80°45'50.8674"W	6393.58	337.577	0.88	-0.55	-0.68	
13557.00	89.690	341.310	6984.96	6475.28	5999.40	-2468.37	1706860.66	14368252.04	39°33'59.0705"N	80°45'51.2420"W	6487.34	337.636	0.76	-0.14	-0.74	



Actual Wellpath Report

Busch Unit 3H AWP Proj: 19116'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Busch Unit 3H
Field	Wetzel	API	47-103-03406-0000
Facility	Gadd Pad	Wellbore	Busch Unit 3H AWB
Slot	Slot #07		

WELLPATH DATA (210 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
13652.00	89.970	342.560	6985.24	6570.27	6089.71	-2497.83	1706831.22	14368342.32	39°33'59.9638"N	80°45'51.6152"W	6582.08	337.698	1.35	0.29	1.32	
13746.00	90.220	342.320	6985.08	6664.25	6179.33	-2526.19	1706802.87	14368431.90	39°34'0.8503"N	80°45'51.9743"W	6675.76	337.765	0.37	0.27	-0.26	
13841.00	90.430	342.180	6984.54	6759.23	6269.81	-2555.15	1706773.92	14368522.34	39°34'1.7452"N	80°45'52.3411"W	6770.47	337.828	0.27	0.22	-0.15	
13936.00	89.720	341.860	6984.42	6854.21	6360.17	-2584.47	1706744.60	14368612.67	39°34'2.6391"N	80°45'52.7125"W	6865.22	337.885	0.82	-0.75	-0.34	
14030.00	89.660	342.190	6984.93	6948.20	6449.58	-2613.48	1706715.61	14368702.04	39°34'3.5235"N	80°45'53.0799"W	6958.98	337.941	0.36	-0.06	0.35	
14125.00	89.780	340.400	6985.39	7043.20	6539.56	-2643.94	1706685.15	14368791.98	39°34'4.4135"N	80°45'53.4659"W	7053.81	337.986	1.89	0.13	-1.88	
14220.00	90.650	342.230	6985.04	7138.19	6629.54	-2674.38	1706654.73	14368881.93	39°34'5.3037"N	80°45'53.8515"W	7148.65	338.031	2.13	0.92	1.93	
14315.00	90.400	340.830	6984.17	7233.18	6719.64	-2704.47	1706624.65	14368972.00	39°34'6.1949"N	80°45'54.2328"W	7243.46	338.077	1.50	-0.26	-1.47	
14410.00	90.120	340.060	6983.73	7328.17	6809.16	-2736.27	1706592.87	14369061.48	39°34'7.0805"N	80°45'54.6358"W	7338.38	338.107	0.86	-0.29	-0.81	
14504.00	90.580	341.470	6983.16	7422.17	6897.91	-2767.24	1706561.91	14369150.20	39°34'7.9584"N	80°45'55.0283"W	7432.28	338.141	1.58	0.49	1.50	
14599.00	90.550	341.130	6982.22	7517.16	6987.89	-2797.69	1706531.47	14369240.14	39°34'8.8485"N	80°45'55.4142"W	7527.13	338.181	0.36	-0.03	-0.36	
14694.00	90.180	340.550	6981.62	7612.16	7077.63	-2828.87	1706500.30	14369329.84	39°34'9.7362"N	80°45'55.8094"W	7622.03	338.214	0.72	-0.39	-0.61	
14788.00	90.490	340.560	6981.07	7706.15	7166.26	-2860.16	1706469.02	14369418.44	39°34'10.6130"N	80°45'56.2060"W	7715.95	338.242	0.33	0.33	0.01	
14883.00	90.400	340.420	6980.33	7801.14	7255.81	-2891.89	1706437.31	14369507.95	39°34'11.4988"N	80°45'56.6082"W	7810.87	338.270	0.18	-0.09	-0.15	
14978.00	90.430	340.600	6979.64	7896.13	7345.36	-2923.58	1706405.62	14369597.47	39°34'12.3847"N	80°45'57.0099"W	7905.80	338.297	0.19	0.03	0.19	
15072.00	90.460	340.720	6978.91	7990.13	7434.05	-2954.71	1706374.51	14369686.12	39°34'13.2620"N	80°45'57.4045"W	7999.72	338.324	0.13	0.03	0.13	
15167.00	90.220	341.050	6978.35	8085.13	7523.81	-2985.82	1706343.41	14369775.85	39°34'14.1500"N	80°45'57.7987"W	8094.62	338.354	0.43	-0.25	0.35	
15262.00	90.370	340.770	6977.86	8180.12	7613.59	-3016.89	1706312.35	14369865.59	39°34'15.0380"N	80°45'58.1925"W	8189.53	338.384	0.33	0.16	-0.29	
15356.00	90.340	341.410	6977.28	8274.12	7702.51	-3047.36	1706281.90	14369954.48	39°34'15.9177"N	80°45'58.5785"W	8283.42	338.415	0.68	-0.03	0.68	
15451.00	90.370	340.850	6976.69	8369.12	7792.40	-3078.08	1706251.19	14370044.33	39°34'16.8069"N	80°45'58.9679"W	8378.31	338.445	0.59	0.03	-0.59	
15545.00	90.580	341.220	6975.91	8463.11	7881.30	-3108.63	1706220.66	14370133.19	39°34'17.6862"N	80°45'59.3551"W	8472.21	338.474	0.45	0.22	0.39	
15640.00	90.490	340.680	6975.02	8558.11	7971.09	-3139.63	1706189.66	14370222.95	39°34'18.5744"N	80°45'59.7480"W	8567.12	338.502	0.58	-0.09	-0.57	
15735.00	90.400	341.330	6974.28	8653.11	8060.91	-3170.55	1706158.75	14370312.74	39°34'19.4630"N	80°46'0.1399"W	8662.03	338.529	0.69	-0.09	0.68	
15829.00	90.060	340.280	6973.91	8747.10	8149.69	-3201.46	1706127.86	14370401.47	39°34'20.3411"N	80°46'0.5316"W	8755.95	338.554	1.17	-0.36	-1.12	
15924.00	90.310	340.980	6973.60	8842.10	8239.31	-3232.97	1706096.37	14370491.06	39°34'21.2277"N	80°46'0.9310"W	8850.89	338.576	0.78	0.26	0.74	
16019.00	90.180	340.800	6973.19	8937.10	8329.07	-3264.07	1706065.28	14370580.79	39°34'22.1156"N	80°46'1.3252"W	8945.81	338.600	0.23	-0.14	-0.19	
16114.00	90.000	340.750	6973.04	9032.09	8418.77	-3295.35	1706034.01	14370670.46	39°34'23.0030"N	80°46'1.7217"W	9040.75	338.623	0.20	-0.19	-0.05	
16209.00	90.060	340.240	6972.99	9127.09	8508.32	-3327.07	1706002.30	14370759.97	39°34'23.8888"N	80°46'2.1238"W	9135.70	338.643	0.54	0.06	-0.54	
16303.00	90.520	340.900	6972.52	9221.08	8596.97	-3358.34	1705971.04	14370848.58	39°34'24.7657"N	80°46'2.5202"W	9229.64	338.662	0.86	0.49	0.70	
16398.00	90.430	341.060	6971.73	9316.08	8686.78	-3389.30	1705940.10	14370938.35	39°34'25.6541"N	80°46'2.9125"W	9324.56	338.686	0.19	-0.09	0.17	



Actual Wellpath Report

Busch Unit 3H AWP Proj: 19116'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Busch Unit 3H
Field	Wetzel	API	47-103-03406-0000
Facility	Gadd Pad	Wellbore	Busch Unit 3H AWB
Slot	Slot #07		

WELLPATH DATA (210 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
16493.00	90.490	341.300	6970.97	9411.07	8776.70	-3419.94	1705909.46	14371028.23	39°34'26.5436"N	80°46'3.3009"W	9419.47	338.711	0.26	0.06	0.25	
16588.00	91.020	341.580	6969.72	9506.06	8866.75	-3450.18	1705879.24	14371118.25	39°34'27.4343"N	80°46'3.6841"W	9514.35	338.738	0.63	0.56	0.29	
16682.00	90.920	340.810	6968.13	9600.05	8955.71	-3480.47	1705848.96	14371207.18	39°34'28.3144"N	80°46'4.0680"W	9608.25	338.762	0.83	-0.11	-0.82	
16777.00	90.980	341.670	6966.55	9695.04	9045.65	-3511.02	1705818.42	14371297.09	39°34'29.2041"N	80°46'4.4552"W	9703.15	338.787	0.91	0.06	0.91	
16872.00	90.490	341.080	6965.33	9790.03	9135.67	-3541.36	1705788.09	14371387.07	39°34'30.0945"N	80°46'4.8396"W	9798.05	338.812	0.81	-0.52	-0.62	
16966.00	90.580	341.200	6964.45	9884.02	9224.62	-3571.74	1705757.72	14371475.98	39°34'30.9744"N	80°46'5.2247"W	9891.97	338.834	0.16	0.10	0.13	
17061.00	90.830	341.050	6963.29	9979.02	9314.51	-3602.48	1705727.00	14371565.83	39°34'31.8635"N	80°46'5.6142"W	9986.88	338.856	0.31	0.26	-0.16	
17156.00	90.830	341.230	6961.91	10074.01	9404.40	-3633.18	1705696.31	14371655.69	39°34'32.7527"N	80°46'6.0034"W	10081.80	338.877	0.19	0.00	0.19	
17250.00	90.580	341.310	6960.75	10168.00	9493.41	-3663.36	1705666.14	14371744.67	39°34'33.6332"N	80°46'6.3859"W	10175.71	338.899	0.28	-0.27	0.09	
17345.00	90.520	341.280	6959.84	10262.99	9583.39	-3693.83	1705635.69	14371834.61	39°34'34.5233"N	80°46'6.7720"W	10270.62	338.921	0.07	-0.06	-0.03	
17440.00	90.340	340.230	6959.13	10357.99	9673.08	-3725.14	1705604.39	14371924.26	39°34'35.4105"N	80°46'7.1689"W	10365.57	338.938	1.12	-0.19	-1.11	
17534.00	90.680	341.540	6958.29	10451.98	9761.89	-3755.92	1705573.62	14372013.04	39°34'36.2890"N	80°46'7.5591"W	10459.51	338.956	1.44	0.36	1.39	
17629.00	90.400	340.880	6957.40	10546.98	9851.82	-3786.52	1705543.03	14372102.93	39°34'37.1786"N	80°46'7.9469"W	10554.43	338.976	0.75	-0.29	-0.69	
17723.00	90.310	340.670	6956.81	10640.97	9940.58	-3817.47	1705512.10	14372191.65	39°34'38.0566"N	80°46'8.3393"W	10648.39	338.992	0.24	-0.10	-0.22	
17818.00	90.580	340.780	6956.08	10735.97	10030.25	-3848.83	1705480.75	14372281.29	39°34'38.9436"N	80°46'8.7368"W	10743.34	339.007	0.31	0.28	0.12	
17913.00	90.400	340.660	6955.26	10830.96	10119.92	-3880.19	1705449.39	14372370.92	39°34'39.8306"N	80°46'9.1345"W	10838.29	339.022	0.23	-0.19	-0.13	
18008.00	90.490	340.820	6954.52	10925.96	10209.60	-3911.53	1705418.07	14372460.57	39°34'40.7177"N	80°46'9.5317"W	10933.25	339.037	0.19	0.09	0.17	
18102.00	89.750	341.270	6954.33	11019.95	10298.50	-3942.06	1705387.55	14372549.43	39°34'41.5972"N	80°46'9.9187"W	11027.19	339.054	0.92	-0.79	0.48	
18197.00	89.880	341.230	6954.63	11114.95	10388.46	-3972.60	1705357.03	14372639.36	39°34'42.4870"N	80°46'10.3058"W	11122.12	339.073	0.14	0.14	-0.04	
18292.00	89.820	340.410	6954.88	11209.95	10478.18	-4003.81	1705325.83	14372729.05	39°34'43.3746"N	80°46'10.7014"W	11217.08	339.088	0.87	-0.06	-0.86	
18386.00	89.970	340.410	6955.06	11303.94	10566.74	-4035.33	1705294.32	14372817.57	39°34'44.2506"N	80°46'11.1010"W	11311.05	339.099	0.16	0.16	0.00	
18481.00	89.750	339.980	6955.29	11398.93	10656.12	-4067.51	1705262.15	14372906.92	39°34'45.1348"N	80°46'11.5092"W	11406.03	339.108	0.51	-0.23	-0.45	
18575.00	89.940	340.370	6955.54	11492.92	10744.55	-4099.39	1705230.28	14372995.31	39°34'46.0095"N	80°46'11.9134"W	11500.02	339.117	0.46	0.20	0.41	
18670.00	90.180	341.240	6955.44	11587.91	10834.27	-4130.63	1705199.06	14373084.99	39°34'46.8970"N	80°46'12.3094"W	11594.97	339.130	0.95	0.25	0.92	
18765.00	90.220	341.390	6955.11	11682.91	10924.26	-4161.06	1705168.64	14373174.95	39°34'47.7872"N	80°46'12.6952"W	11689.91	339.148	0.16	0.04	0.16	
18859.00	89.880	340.840	6955.03	11776.91	11013.20	-4191.49	1705138.22	14373263.85	39°34'48.6670"N	80°46'13.0808"W	11783.85	339.164	0.69	-0.36	-0.59	
18954.00	90.310	341.370	6954.87	11871.91	11103.08	-4222.25	1705107.47	14373353.70	39°34'49.5561"N	80°46'13.4708"W	11878.80	339.179	0.72	0.45	0.56	
19049.00	90.370	341.500	6954.31	11966.91	11193.13	-4252.50	1705077.24	14373443.72	39°34'50.4469"N	80°46'13.8541"W	11973.72	339.197	0.15	0.06	0.14	
19091.00	90.650	341.810	6953.93	12008.90	11233.00	-4265.72	1705064.03	14373483.56	39°34'50.8412"N	80°46'14.0217"W	12015.68	339.206	0.99	0.67	0.74	
19116.00	90.650	341.810	6953.65	12033.90	11256.75	-4273.52	1705056.23	14373507.30	39°34'51.0761"N	80°46'14.1206"W	12040.65	339.211	0.00	0.00	0.00	Projected MD at TD: 19116'

HOLE & CASING SECTIONS - Ref Wellbore: Busch Unit 3H AWB Ref Wellpath: Busch Unit 3H AWP Proj: 19116'									
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	30.00	130.00	100.00	30.00	130.00	0.00	0.00	-0.05	-0.14
17.5in Open Hole	130.00	491.00	361.00	130.00	491.00	-0.05	-0.14	0.02	-0.17
13.375in Casing Surface	30.00	471.00	441.00	30.00	471.00	0.00	0.00	-0.02	-0.26
12.25in Open Hole	491.00	2647.00	2156.00	491.00	2636.72	0.02	-0.17	-162.43	-67.64
9.625in Casing Intermediate	30.00	2617.00	2587.00	30.00	2606.96	0.00	0.00	-158.87	-66.27
8.75in Open Hole	2647.00	6605.00	3958.00	2636.72	6558.13	-162.43	-67.64	-435.57	-317.08
8.5in Open Hole	6605.00	19116.00	12511.00	6558.13	6953.65	-435.57	-317.08	11256.75	-4273.52
5.5in Casing Production	30.00	19096.00	19066.00	30.00	6953.88	0.00	0.00	11237.75	-4267.28



Actual Wellpath Report

Busch Unit 3H AWP Proj: 19116'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Busch Unit 3H
Field	Wetzel	API	47-103-03406-0000
Facility	Gadd Pad	Wellbore	Busch Unit 3H AWB
Slot	Slot #07		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Busch Unit 3H POE Rev-2	6935.00	-16.28	-426.42	1708901.80	14362238.75	39°32'59.5625"N	80°45'25.3761"W	point
Busch Unit 3H POE Plat	6936.00	-10.66	-410.26	1708917.95	14362244.36	39°32'59.6175"N	80°45'25.1697"W	point
Busch Unit 3H AZI Rev-2	6963.00	294.44	-514.64	1708813.62	14362549.34	39°33'2.6357"N	80°45'26.4916"W	point
Busch Unit 3H BHL Rev-2	6963.00	11276.18	-4268.25	1705061.49	14373526.73	39°34'51.2680"N	80°46'14.0527"W	point
Busch Unit 3H LP Rev-2	6963.00	175.15	-478.17	1708850.07	14362430.10	39°33'1.4558"N	80°45'26.0302"W	point
Busch Unit 3H 50' L/R Hard Line	7252.00	5782.25	-2390.40	1706938.60	14368034.97	39°33'56.9223"N	80°45'50.2537"W	rectangle
2D Rectangle 11612 x 100.								

WELLPATH COMPOSITION - Ref Wellbore: Busch Unit 3H AWB Ref Wellpath: Busch Unit 3H AWP Proj: 19116'						
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date	
30.00	386.00	Gyrodata 2015 - GC+WR+DPIPE	01 Gyrodata MS Gyro <17-1/2"> (100'-386')	Busch Unit 3H AWB	25/Jul/2021	
386.00	2565.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02 APS EM <12-1/4"> (386')(509'-2565')	Busch Unit 3H AWB	25/Jul/2021	
2565.00	6540.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03 APS EM <8-3/4"> (2565')(2657'-6540')	Busch Unit 3H AWB	03/Sep/2021	
6540.00	19116.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04 BH AT Curve <8-1/2"> (6540')(6648'-19091')	Busch Unit 3H AWB	03/Sep/2021	



Actual Wellpath Report

Busch Unit 3H AWP Proj: 19116'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Busch Unit 3H
Field	Wetzel	API	47-103-03406-0000
Facility	Gadd Pad	Wellbore	Busch Unit 3H AWB
Slot	Slot #07		

COMMENTS

Wellpath general comments

API: 47-103-03406-0000
BH Job #: 110972243
Rig: H&P 519
Duration: 9/7/2021-9/12/2021
Gyrodatta MS Gyro <17-1/2"> (100'-386')
APS EM <12-1/4"> (386')(509'-2565')
APS EM <8-3/4"> (2565')(2657'-6540')
BH AT Curve <8-1/2"> (6540')(6648'-19091')
Sycamore: 6667' MD
Middlesex: 6817' MD
Burkett: 6966' MD
Tully: 7021' MD
Marcellus POE: 7221' MD
Projected MD at TD: 19116'