



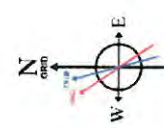
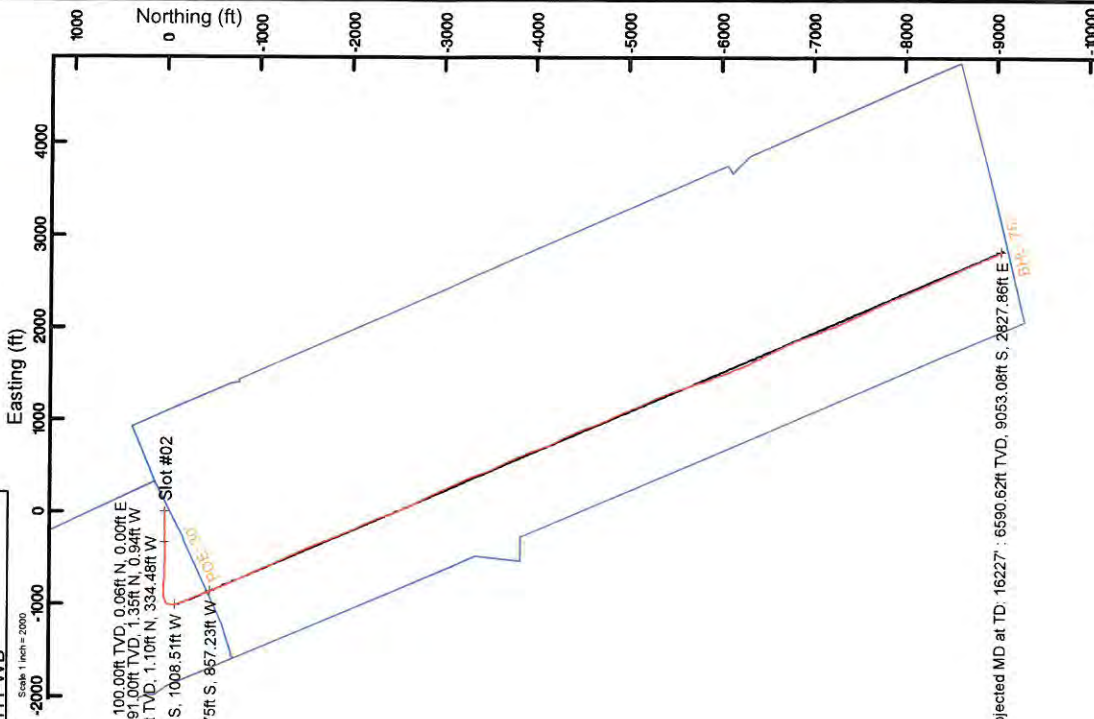
ANTERO RESOURCES CORPORATION

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

Slot: Slot #02
 Well: Cool Unit 1H
 Wellbore: Cool Unit 1H PWB



API: 47-017-06833-0000
 BHI Job #: 109393691
 Rig: Patterson 342
 Duration: 09/13/2018-09/17/2018



Plot reference wellbore is Cool Unit 1H PWB Rev-A.0

True vertical depths are referenced to Patterson 342 (RKB)

Measured depths are referenced to Patterson 342 (RKB)

Patterson 342 (RKB) to Mean Sea Level: 1120 feet

Mean Sea Level to Ground level (At Slot: Slot #02): -1095 feet

Coordinates are in feet referenced to Slot

Gyrodata MS Gyro <17-1/2"> (100-517) : 0.09° Inc. 100.00ft MD, 100.00ft TVD, -0.05ft VS

Location Information

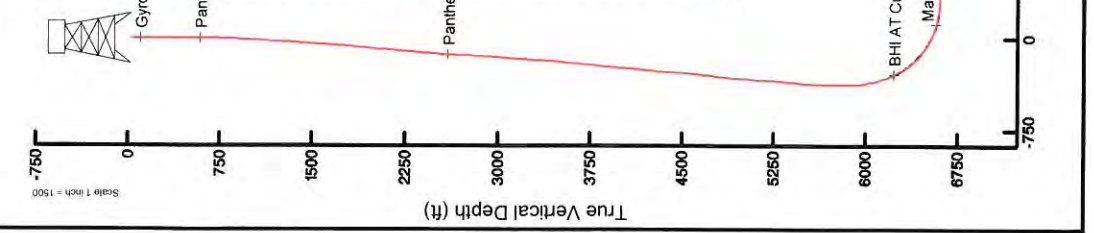
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Stanley Pad	1674498.608	14248185.594	39°14'12.550"N	80°52'46.680"W
Slot #02	0.00	1674498.608	39°14'12.550"N	80°52'46.680"W
Comment	Patterson 342 (RKB) to Ground level (At Slot: Slot #02)			
Mean Sea Level to Ground level (At Slot: Slot #02)	-1095ft			
Patterson 342 (RKB) to Mean Sea Level	1120ft			

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local E (ft)	Local N (ft)	DLS (1/100ft)	VS (ft)
Tie On	6314.00	22.400	171.130	6201.49	-1011.66	6.45	-306.73	
Proj. To Bottom	6374.00	27.000	165.200	6255.99	-126.14	-1006.25	8.70	-282.17
End of 3D Arc	6762.74	63.524	155.690	6525.29	-378.88	-908.66	9.53	-11.43
POE	6919.98	75.670	156.702	6580.00	-513.48	-849.33	7.75	135.66
Landing Pt.	7104.86	90.000	156.702	6603.00	-681.53	-776.97	7.75	318.82
BHL	16243.64	90.000	156.702	6603.00	-9075.14	2837.52	0.00	9457.40

Well Data

Well	Wellbore
Slot #02	Cool Unit 1H PWB
Slot #02	Cool Unit 1H PWB Rev-A.0



03/08/2019



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227'

Page 1 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot #02
Area	Doddridge Co., WV	Cool Unit 1H
Field	Doddridge	Cool Unit 1H AWB
Facility	Stanley Pad	

REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Delaset
Scale	0.999601	Report Generated	19/Sep/2018 at 11:45
Convergence at slot	0.08° East	Database/Source file	WA_MPL_EasternUS_Defn/Cool_Unit_1H_AWP_Proj_16227_.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	1674498.61	14248185.59	39°14'12.550"N	80°52'46.680"W
Facility Reference Pt			1674498.61	14248185.59	39°14'12.550"N	80°52'46.680"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	25.00ft
Horizontal Reference Pt	Slot	Patterson 342 (RKB) to Mean Sea Level	1120.00ft
Vertical Reference Pt	Patterson 342 (RKB)	Patterson 342 (RKB) to Ground Level at Slot (Slot #02)	25.00ft
MD Reference Pt	Patterson 342 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	156.70°



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227

Page 2 of 11



03/08/2019

REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #02
Operator	ANTERO RESOURCES CORPORATION	Well	Cool Unit 1H
Area	Doddridge Co., WV	Wellbore	Cool Unit 1H AWB
Field	Doddridge		
Facility	Stanley Pad		

WELLPATH DATA (202 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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Comments
0.00	0.000	2.900	0.00	0.00	0.00	0.00	1674498.61	14248185.59	39°14'12.550"N	80°52'46.680"W	0.00	0.000	0.00	0.00	0.00	
25.00	0.000	2.900	25.00	0.00	0.00	0.00	1674498.61	14248185.59	39°14'12.550"N	80°52'46.680"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.090	2.900	100.00	-0.05	0.06	0.00	1674498.61	14248185.65	39°14'12.551"N	80°52'46.680"W	0.06	2.900	0.12	0.12	3.87	Syrodata MS Gyro <17-1/2"> (100'-517')
125.00	0.200	33.860	125.00	-0.09	0.11	0.03	1674498.64	14248185.71	39°14'12.551"N	80°52'46.680"W	0.12	13.856	0.53	0.44	123.84	
150.00	0.180	338.530	150.00	-0.16	0.19	0.04	1674498.65	14248185.78	39°14'12.552"N	80°52'46.680"W	0.19	11.525	0.71	-0.08	-221.32	
175.00	0.210	305.350	175.00	-0.24	0.25	-0.01	1674498.59	14248185.84	39°14'12.552"N	80°52'46.680"W	0.25	356.911	0.46	0.12	-132.72	
200.00	0.170	306.200	200.00	-0.31	0.30	-0.08	1674498.53	14248185.89	39°14'12.553"N	80°52'46.681"W	0.31	344.871	0.16	-0.16	3.40	
225.00	0.090	331.390	225.00	-0.36	0.34	-0.12	1674498.49	14248185.93	39°14'12.553"N	80°52'46.681"W	0.36	340.434	0.39	-0.32	100.76	
250.00	0.160	326.450	250.00	-0.41	0.38	-0.15	1674498.46	14248185.98	39°14'12.554"N	80°52'46.682"W	0.41	338.833	0.28	0.28	-19.76	
275.00	0.100	315.310	275.00	-0.47	0.43	-0.18	1674498.42	14248186.02	39°14'12.554"N	80°52'46.682"W	0.47	336.844	0.26	-0.24	-44.56	
300.00	0.200	308.200	300.00	-0.53	0.47	-0.23	1674498.38	14248186.07	39°14'12.555"N	80°52'46.683"W	0.53	333.691	0.41	0.40	-28.44	
325.00	0.220	295.320	325.00	-0.60	0.52	-0.31	1674498.30	14248186.11	39°14'12.555"N	80°52'46.684"W	0.60	329.086	0.20	0.08	-51.52	
350.00	0.180	338.960	350.00	-0.67	0.58	-0.37	1674498.24	14248186.17	39°14'12.556"N	80°52'46.685"W	0.68	327.415	0.61	-0.16	174.56	
375.00	0.150	294.770	375.00	-0.74	0.63	-0.41	1674498.20	14248186.22	39°14'12.556"N	80°52'46.685"W	0.75	326.666	0.51	-0.12	-176.76	
400.00	0.020	71.700	400.00	-0.76	0.64	-0.44	1674498.17	14248186.24	39°14'12.556"N	80°52'46.686"W	0.78	325.702	0.66	-0.52	547.72	
425.00	0.220	349.760	425.00	-0.81	0.69	-0.44	1674498.17	14248186.28	39°14'12.557"N	80°52'46.686"W	0.82	327.363	0.87	0.80	-327.76	
450.00	0.190	319.080	450.00	-0.90	0.77	-0.48	1674498.13	14248186.36	39°14'12.558"N	80°52'46.686"W	0.91	328.143	0.45	-0.12	-122.72	
475.00	0.180	320.910	475.00	-0.97	0.83	-0.53	1674498.08	14248186.42	39°14'12.558"N	80°52'46.687"W	0.99	327.475	0.05	-0.04	7.32	
500.00	0.300	328.000	500.00	-1.07	0.92	-0.59	1674498.02	14248186.51	39°14'12.559"N	80°52'46.687"W	1.09	327.271	0.49	0.48	28.36	
517.00	0.340	321.380	517.00	-1.17	0.99	-0.64	1674497.96	14248186.59	39°14'12.560"N	80°52'46.688"W	1.18	327.048	0.32	0.24	-38.94	
591.00	0.370	319.490	591.00	-1.61	1.35	-0.94	1674497.67	14248186.94	39°14'12.563"N	80°52'46.692"W	1.64	325.192	0.04	0.04	-2.55	Panther EM <12-1/4"> (517')(591'-2534')
681.00	0.550	257.280	680.99	-1.96	1.47	-1.55	1674497.06	14248187.07	39°14'12.565"N	80°52'46.700"W	2.14	313.600	0.56	0.20	-69.12	
771.00	1.890	279.100	770.97	-2.84	1.61	-3.43	1674495.18	14248187.21	39°14'12.566"N	80°52'46.724"W	3.79	295.155	1.55	1.49	24.24	
866.00	4.170	280.650	865.83	-5.61	2.50	-8.38	1674490.24	14248188.09	39°14'12.575"N	80°52'46.786"W	8.74	286.611	2.40	2.40	1.63	
961.00	6.690	277.900	960.40	-10.40	3.90	-17.25	1674481.36	14248188.49	39°14'12.589"N	80°52'46.899"W	17.69	282.731	2.67	2.65	-2.89	
1055.00	8.020	275.400	1053.62	-16.39	5.27	-29.20	1674469.42	14248190.86	39°14'12.602"N	80°52'47.051"W	29.68	280.224	1.45	1.41	-2.66	
1150.00	9.220	268.420	1147.55	-22.39	5.68	-43.41	1674455.21	14248191.27	39°14'12.607"N	80°52'47.232"W	43.78	277.456	1.67	1.26	-7.35	
1244.00	10.180	263.490	1240.21	-27.58	4.53	-59.19	1674439.44	14248190.12	39°14'12.596"N	80°52'47.432"W	59.37	274.378	1.35	1.02	-5.24	
1339.00	9.760	268.160	1333.77	-32.95	3.32	-75.58	1674423.06	14248188.91	39°14'12.584"N	80°52'47.641"W	75.66	272.516	0.96	-0.44	4.92	
1435.00	-10.250	271.950	1428.32	-39.57	3.35	-92.25	1674406.39	14248188.94	39°14'12.584"N	80°52'47.852"W	92.31	272.080	0.85	0.51	3.95	



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227
Page 3 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Doddridge Co., WV	Well	Cool Unit 1H
Field	Doddridge	Wellbore	Cool Unit 1H AWB
Facility	Stanley Pad		

WELLPATH DATA (202 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
1528.00	10.710	268.180	1519.77	-46.26	3.36	-109.16	1674389.49	14248188.95	39°14'12.585"N	80°52'48.067"W	109.21	271.762	0.89	0.49	-4.05	
1622.00	10.170	264.400	1612.21	-51.98	2.27	-126.15	1674372.51	14248187.86	39°14'12.574"N	80°52'48.233"W	126.17	271.031	0.93	-0.57	-4.02	
1717.00	10.010	269.980	1705.74	-57.80	1.45	-142.75	1674355.91	14248187.04	39°14'12.566"N	80°52'48.494"W	142.76	270.582	1.04	-0.17	5.87	
1811.00	11.360	274.970	1798.11	-65.41	2.25	-160.15	1674338.53	14248187.84	39°14'12.574"N	80°52'48.715"W	160.16	270.804	1.74	1.44	5.31	
1906.00	12.550	275.040	1891.05	-74.74	3.97	-179.75	1674318.93	14248189.56	39°14'12.592"N	80°52'48.964"W	179.79	271.264	1.25	1.25	0.07	
2000.00	13.200	269.040	1982.69	-83.67	4.98	-200.65	1674298.03	14248190.28	39°14'12.599"N	80°52'49.230"W	200.71	271.337	1.58	0.69	-6.38	
2095.00	13.820	263.780	2075.07	-91.13	3.27	-222.78	1674275.92	14248188.86	39°14'12.585"N	80°52'49.511"W	222.80	270.841	1.45	0.65	-5.54	
2189.00	13.510	267.590	2166.41	-98.34	1.59	-244.91	1674253.79	14248187.19	39°14'12.569"N	80°52'49.793"W	244.92	270.373	1.01	-0.33	4.05	
2284.00	12.440	271.840	2258.98	-106.64	1.46	-266.23	1674232.49	14248187.05	39°14'12.568"N	80°52'50.063"W	266.23	270.313	1.51	-1.13	4.47	
2378.00	11.120	270.270	2351.00	-114.57	1.82	-285.41	1674213.31	14248187.42	39°14'12.572"N	80°52'50.307"W	285.42	270.366	1.44	-1.40	-1.67	
2472.00	11.850	268.270	2443.12	-121.74	1.58	-304.12	1674194.61	14248187.17	39°14'12.570"N	80°52'50.545"W	304.13	270.297	0.88	0.78	-2.13	
2534.00	11.370	270.510	2503.85	-126.55	1.44	-316.60	1674182.14	14248187.03	39°14'12.568"N	80°52'50.704"W	316.60	270.260	1.06	-0.77	3.61	
2629.00	10.340	267.170	2597.15	-133.31	1.10	-334.48	1674164.26	14248186.69	39°14'12.565"N	80°52'50.931"W	334.48	270.188	1.27	-1.08	-3.52	Panther EM <8-3/4"> (2534)-(2629)-6314'
2724.00	9.040	260.080	2690.80	-138.02	-0.61	-350.35	1674148.40	14248184.99	39°14'12.549"N	80°52'51.133"W	350.35	269.901	1.86	-1.37	-7.46	
2818.00	10.940	271.510	2989.41	-141.78	-3.43	-366.41	1674132.35	14248182.17	39°14'12.521"N	80°52'51.337"W	366.42	269.464	2.02	2.02	-0.10	
2913.00	9.370	269.390	2876.88	-146.84	-5.08	-383.02	1674115.74	14248180.52	39°14'12.505"N	80°52'51.548"W	383.05	269.240	2.40	-1.65	9.89	
3007.00	10.940	271.510	2989.41	-153.53	-4.93	-399.59	1674099.18	14248180.67	39°14'12.507"N	80°52'51.758"W	399.62	269.294	1.72	1.67	2.26	
3102.00	12.810	266.690	3062.37	-160.91	-5.30	-419.12	1674079.66	14248180.30	39°14'12.503"N	80°52'52.007"W	419.15	269.276	2.23	1.97	-5.07	
3196.00	9.980	274.590	3154.51	-168.29	-5.25	-437.64	1674061.14	14248180.35	39°14'12.504"N	80°52'52.242"W	437.67	269.313	3.43	-3.01	8.40	
3290.00	7.920	273.640	3247.36	-175.03	-4.18	-452.23	1674046.56	14248181.41	39°14'12.515"N	80°52'52.427"W	452.25	269.470	2.20	-2.19	-1.01	
3384.00	9.700	264.000	3340.26	-180.32	-4.60	-466.57	1674032.23	14248181.00	39°14'12.511"N	80°52'52.610"W	466.59	269.435	2.45	1.89	-10.26	
3479.00	12.670	265.070	3433.44	-185.99	-6.33	-484.91	1674013.89	14248179.26	39°14'12.494"N	80°52'52.843"W	484.95	269.252	3.13	3.13	1.13	
3578.00	12.030	280.270	3530.18	-195.12	-5.43	-505.89	1673992.93	14248180.17	39°14'12.503"N	80°52'53.109"W	505.91	269.386	3.34	-0.65	15.35	
3672.00	10.340	273.700	3622.39	-204.37	-3.13	-523.95	1673974.87	14248182.46	39°14'12.526"N	80°52'53.339"W	523.95	269.657	2.25	-1.80	-6.99	
3767.00	10.840	276.490	3715.77	-212.67	-1.58	-541.33	1673957.49	14248184.01	39°14'12.541"N	80°52'53.560"W	541.33	269.832	0.75	0.53	2.87	
3861.00	12.460	275.220	3807.83	-221.89	0.33	-560.21	1673938.62	14248185.92	39°14'12.561"N	80°52'53.800"W	560.21	270.034	1.74	1.72	-1.29	
3956.00	12.120	272.030	3900.66	-231.05	1.61	-580.39	1673918.45	14248187.21	39°14'12.574"N	80°52'54.056"W	580.39	270.159	0.80	-0.36	-3.36	
4050.00	12.180	265.920	3992.56	-238.54	1.26	-600.14	1673898.71	14248186.85	39°14'12.570"N	80°52'54.307"W	600.14	270.120	1.37	0.06	-6.50	
4145.00	11.560	270.610	4085.53	-245.70	0.65	-619.66	1673879.20	14248186.24	39°14'12.564"N	80°52'54.555"W	619.66	270.060	1.21	-0.65	4.94	
4240.00	11.490	278.040	4178.62	-254.48	2.07	-638.54	1673860.32	14248187.66	39°14'12.579"N	80°52'54.795"W	638.55	270.186	1.56	-0.07	7.82	



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227

Page 4 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot #02
Area	Doddridge Co., WV	Cool Unit 1H
Field	Doddridge	Cool Unit 1H AWB
Facility	Stanley Pad	

WELLPATH DATA (202 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	°/100ft	°/100ft	°/100ft	
4334.00	12.530	276.070	4270.36	-264.35	4.46	-657.83	1673840.92	14248190.05	39°14'12.603"N	80°52'55.042"W	657.97	270.388	1.19	1.11	-2.10	
4427.00	12.260	265.430	4361.40	-272.47	4.74	-677.83	1673821.05	14248190.33	39°14'12.606"N	80°52'55.294"W	677.85	270.401	2.47	-0.29	-11.44	
4522.00	11.090	266.230	4454.44	-278.76	3.33	-697.00	1673801.88	14248188.93	39°14'12.592"N	80°52'55.538"W	697.01	270.274	1.24	-1.23	0.84	
4617.00	11.070	269.470	4547.67	-285.34	2.65	-715.24	1673783.65	14248188.24	39°14'12.585"N	80°52'55.770"W	715.25	270.212	0.66	-0.02	3.41	
4711.00	12.260	274.640	4639.73	-293.51	3.37	-734.21	1673764.69	14248188.97	39°14'12.593"N	80°52'56.011"W	734.22	270.263	1.68	1.27	5.50	
4805.00	13.170	280.020	4731.42	-304.07	6.04	-754.71	1673744.20	14248191.64	39°14'12.620"N	80°52'56.271"W	754.73	270.459	1.59	0.97	5.72	
4899.00	13.000	271.690	4822.99	-314.42	8.22	-775.82	1673723.10	14248193.81	39°14'12.641"N	80°52'56.540"W	775.87	270.607	2.01	-0.18	-8.86	
4993.00	11.560	270.030	4914.84	-322.62	8.54	-795.81	1673703.12	14248194.13	39°14'12.645"N	80°52'56.794"W	795.86	270.615	1.58	-1.53	-1.77	
5088.00	11.150	272.140	5007.98	-330.33	8.88	-814.51	1673684.43	14248194.47	39°14'12.648"N	80°52'57.031"W	814.56	270.625	0.61	-0.43	2.22	
5182.00	8.640	266.820	5192.75	-342.33	7.08	-849.03	1673664.92	14248192.67	39°14'12.631"N	80°52'57.264"W	832.83	270.574	1.58	0.19	-8.07	
5276.00	8.000	276.610	5286.75	-348.28	7.67	-862.69	1673646.26	14248193.26	39°14'12.637"N	80°52'57.470"W	849.06	270.478	2.89	-2.86	2.41	
5371.00	10.240	284.020	5379.56	-356.80	10.68	-877.27	1673621.69	14248196.27	39°14'12.667"N	80°52'57.829"W	877.33	270.697	2.55	2.38	5.76	
5465.00	12.480	272.170	5471.73	-366.24	13.09	-895.53	1673603.44	14248198.67	39°14'12.691"N	80°52'58.061"W	895.62	270.837	3.43	2.38	-12.61	
5559.00	12.820	253.740	5563.48	-371.89	10.55	-915.70	1673583.28	14248196.14	39°14'12.666"N	80°52'58.317"W	915.76	270.660	4.29	0.36	-19.61	
5748.00	12.600	251.280	5656.16	-374.01	4.27	-935.63	1673563.36	14248189.86	39°14'12.604"N	80°52'58.571"W	935.64	270.262	0.61	-0.23	-2.59	
5842.00	12.060	246.860	5747.99	-374.85	-2.88	-954.37	1673544.62	14248182.72	39°14'12.534"N	80°52'58.809"W	954.37	269.827	1.16	-0.57	-4.70	
5936.00	11.140	252.540	5840.07	-375.80	-9.46	-972.06	1673526.94	14248176.14	39°14'12.469"N	80°52'59.034"W	972.11	269.442	1.96	-0.98	6.04	
6031.00	14.280	228.160	5932.80	-373.01	-20.04	-989.56	1673509.44	14248165.56	39°14'12.365"N	80°52'59.257"W	989.77	268.840	6.47	3.31	-25.66	
6125.00	17.290	207.190	6023.32	-360.42	-40.22	-1004.60	1673494.41	14248145.39	39°14'12.165"N	80°52'59.448"W	1005.40	267.707	6.81	3.20	-22.31	
6220.00	19.330	185.870	6113.60	-337.69	-68.45	-1012.67	1673486.35	14248117.17	39°14'11.887"N	80°52'59.551"W	1014.98	266.133	7.33	2.15	-22.44	
6314.00	22.400	171.130	6201.49	-306.73	-101.66	-1011.49	1673487.52	14248083.98	39°14'11.658"N	80°52'59.537"W	1016.59	264.261	6.45	3.27	-15.68	
6349.00	26.320	165.440	6233.37	-292.59	-115.76	-1008.51	1673480.50	14248069.88	39°14'11.419"N	80°52'59.499"W	1015.14	263.452	13.04	11.20	-16.26	BHI AT Curve <8-1/2"> (6314)-(6349)-16203)
6379.00	27.650	164.020	6260.10	-279.11	-128.89	-1004.93	1673494.09	14248056.75	39°14'11.289"N	80°52'59.454"W	1013.16	262.691	4.93	4.43	-4.73	
6426.00	30.180	162.590	6301.24	-256.54	-150.65	-998.39	1673500.62	14248035.00	39°14'11.074"N	80°52'59.371"W	1009.69	261.419	5.58	5.38	-3.04	
6473.00	34.990	160.320	6340.83	-231.32	-174.63	-990.36	1673508.70	14248011.03	39°14'10.837"N	80°52'59.269"W	1005.59	259.999	10.56	10.23	-4.83	
6520.00	39.890	158.970	6378.14	-202.80	-201.40	-980.36	1673518.64	14247984.27	39°14'10.572"N	80°52'59.143"W	1000.83	258.391	10.57	10.43	-2.87	
6559.00†	44.180	158.222	6407.10	-176.71	-225.71	-970.82	1673528.17	14247959.98	39°14'10.332"N	80°52'59.022"W	996.71	256.912	11.07	11.00	-1.92	Middlesex: 6559' MD
6566.00	44.950	158.100	6412.09	-171.80	-230.27	-969.00	1673530.00	14247955.42	39°14'10.287"N	80°52'58.999"W	995.98	256.633	11.07	11.01	-1.74	
6613.00	49.530	157.390	6443.99	-137.30	-262.19	-955.92	1673543.07	14247923.51	39°14'09.971"N	80°52'58.833"W	991.23	254.662	9.81	9.74	-1.51	



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227

Page 5 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	Antero Resources Corporation	Slot	Slot #02
Area	Doddridge Co., WV	Well	Cool Unit 1H
Field	Doddridge	Wellbore	Cool Unit 1H AWB
Facility	Stanley Pad		

WELLPATH DATA (202 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	
6561.00	53.890	156.690	6473.73	-99.64	-296.87	-941.22	1673557.76	14247888.84	39°14'09.628"N	80°52'58.647"W	986.93	252.494	9.16	9.08	-1.46	
6708.00	58.330	156.650	6499.93	-60.63	-332.88	-925.78	1673573.20	14247853.04	39°14'09.274"N	80°52'58.451"W	983.74	250.234	9.45	9.45	-0.09	
6746.00†	62.017	156.332	6518.82	-27.67	-362.91	-912.63	1673586.35	14247822.83	39°14'08.975"N	80°52'58.284"W	982.14	248.315	9.73	9.70	-0.84	Burkett: 6746' MD
6755.00	62.890	156.260	6522.99	-19.69	-370.22	-909.42	1673589.55	14247815.53	39°14'08.903"N	80°52'58.244"W	981.89	247.849	9.73	9.70	-0.80	
6802.00	67.160	156.910	6542.83	22.90	-409.30	-892.50	1673606.47	14247776.45	39°14'08.516"N	80°52'58.029"W	981.88	245.364	9.17	9.09	1.38	
6820.00†	68.481	156.961	6549.62	39.57	-424.64	-885.97	1673613.00	14247761.12	39°14'08.364"N	80°52'57.947"W	982.47	244.392	7.34	7.34	0.27	Tully: 6820' MD
6849.00	70.610	157.040	6559.75	66.74	-449.65	-875.35	1673623.61	14247736.12	39°14'08.117"N	80°52'57.812"W	984.08	242.811	7.34	7.34	0.27	
6896.00	74.490	157.350	6573.85	111.57	-490.97	-857.98	1673640.98	14247694.82	39°14'07.708"N	80°52'57.592"W	988.52	240.220	8.28	8.26	0.66	
6898.00†	74.644	157.375	6574.38	113.49	-492.75	-857.23	1673641.72	14247693.04	39°14'07.691"N	80°52'57.583"W	988.77	240.109	7.79	7.70	1.23	Marcellus POE: 6898' MD
6943.00	78.110	157.920	6584.98	157.21	-533.20	-840.61	1673658.34	14247652.61	39°14'07.291"N	80°52'57.372"W	995.45	237.613	7.79	7.70	1.21	
6990.00	81.970	158.500	6593.10	203.48	-576.17	-823.43	1673675.51	14247609.65	39°14'06.866"N	80°52'57.154"W	1004.99	235.019	8.30	8.21	1.23	
7037.00	84.790	158.330	6598.52	250.14	-619.58	-806.25	1673692.68	14247566.26	39°14'06.437"N	80°52'56.937"W	1016.82	232.459	6.01	6.00	-0.36	
7084.00	87.940	157.290	6601.50	297.03	-663.01	-788.54	1673710.38	14247522.85	39°14'06.007"N	80°52'56.712"W	1030.23	229.943	7.06	6.70	-2.21	
7131.00	90.830	156.360	6602.00	344.02	-706.21	-770.05	1673728.87	14247479.67	39°14'05.580"N	80°52'56.478"W	1044.84	227.476	6.46	6.15	-1.98	
7225.00	90.590	153.670	6600.85	437.97	-791.39	-730.35	1673768.55	14247394.52	39°14'04.738"N	80°52'55.975"W	1076.90	222.703	2.87	-0.27	-2.86	
7320.00	90.650	155.470	6599.83	532.89	-877.18	-689.56	1673809.33	14247308.76	39°14'03.889"N	80°52'55.458"W	1115.77	218.171	1.90	0.07	1.89	
7415.00	91.420	156.240	6598.11	627.86	-963.85	-650.71	1673848.16	14247222.13	39°14'03.032"N	80°52'54.986"W	1162.94	214.024	1.15	0.81	0.81	
7510.00	91.420	157.250	6595.76	722.83	-1051.11	-613.21	1673885.64	14247134.91	39°14'02.169"N	80°52'54.491"W	1216.90	210.259	1.06	0.00	1.06	
7605.00	91.260	156.730	6593.54	817.81	-1138.53	-576.09	1673922.75	14247047.52	39°14'01.305"N	80°52'54.020"W	1275.98	206.839	0.57	-0.17	-0.55	
7699.00	91.570	153.930	6591.21	911.74	-1223.91	-536.87	1673961.96	14246962.17	39°14'00.460"N	80°52'53.523"W	1336.48	203.685	3.00	0.33	-2.98	
7792.00	91.290	154.910	6588.89	1004.64	-1307.77	-496.73	1674002.08	14246878.35	39°13'59.631"N	80°52'53.015"W	1398.93	200.798	1.10	-0.30	1.05	
7887.00	91.090	155.570	6586.93	1099.59	-1394.02	-456.95	1674041.84	14246792.14	39°13'58.778"N	80°52'52.511"W	1467.00	198.149	0.73	-0.22	0.69	
7981.00	90.310	155.610	6585.79	1193.56	-1479.61	-418.10	1674080.67	14246706.58	39°13'57.931"N	80°52'52.018"W	1537.55	195.779	0.82	-0.82	0.04	
8075.00	90.370	156.450	6585.23	1287.55	-1565.50	-379.92	1674118.84	14246620.72	39°13'57.082"N	80°52'51.534"W	1610.94	193.641	0.90	0.06	0.89	
8169.00	89.050	158.700	6585.71	1381.53	-1662.38	-344.06	1674154.69	14246533.88	39°13'56.223"N	80°52'51.080"W	1687.82	191.762	2.78	-1.40	2.39	
8263.00	88.740	159.480	6587.52	1475.43	-1740.17	-310.52	1674188.21	14246446.12	39°13'55.365"N	80°52'50.655"W	1767.66	190.117	0.89	-0.33	0.83	
8357.00	88.920	157.120	6589.44	1569.37	-1827.49	-275.77	1674222.95	14246358.84	39°13'54.491"N	80°52'50.215"W	1848.18	188.581	2.52	0.19	-2.51	
8452.00	88.860	155.750	6591.28	1664.35	-1914.55	-237.80	1674260.90	14246271.81	39°13'53.630"N	80°52'49.734"W	1929.26	187.080	1.44	-0.06	-1.44	
8547.00	89.140	156.950	6592.94	1759.33	-2001.55	-199.70	1674298.99	14246184.84	39°13'52.770"N	80°52'49.252"W	2011.49	185.698	1.30	0.29	1.26	
8641.00	88.950	155.300	6594.50	1853.31	-2087.49	-161.66	1674337.01	14246098.94	39°13'51.920"N	80°52'48.770"W	2093.74	184.428	1.77	-0.20	-1.76	



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227'

Page 6 of 11



03/08/2019

REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #02
ANTERO RESOURCES CORPORATION	Well	Cool Unit 1H
Doddridge Co., WV	Wellbore	Cool Unit 1H AWB
Doddridge		
Stanley Pad		

WELLPATH DATA (202 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
8735.00	88.800	156.580	6596.35	1947.28	-2173.31	-123.34	1674375.31	14246013.16	39°13'51.07"N	80°52'48.284"W	2176.81	183.248	1.37	-0.16	1.36	
8830.00	88.860	157.350	6598.29	2042.26	-2260.72	-86.18	1674412.46	14245925.78	39°13'50.207"N	80°52'47.813"W	2262.36	182.183	0.81	0.06	0.81	
8925.00	88.920	160.330	6600.13	2137.16	-2349.28	-51.90	1674446.73	14245837.25	39°13'49.331"N	80°52'47.379"W	2349.86	181.265	3.14	0.06	3.14	
9019.00	89.050	160.640	6601.80	2230.94	-2437.87	-20.50	1674478.12	14245748.70	39°13'48.455"N	80°52'46.982"W	2437.96	180.482	0.36	0.14	0.33	
9113.00	89.060	156.750	6602.85	2324.86	-2525.42	13.64	1674512.25	14245661.18	39°13'47.589"N	80°52'46.549"W	2525.46	179.690	4.19	0.65	-4.14	
9208.00	89.420	153.750	6603.62	2419.82	-2611.68	53.41	1674552.00	14245574.96	39°13'46.736"N	80°52'46.045"W	2612.23	178.828	3.17	-0.25	-3.16	
9302.00	90.310	154.190	6603.84	2513.71	-2696.15	94.66	1674593.23	14245490.53	39°13'45.901"N	80°52'45.523"W	2697.81	177.989	1.06	0.95	0.47	
9396.00	90.280	154.610	6603.35	2607.63	-2780.92	135.28	1674633.33	14245405.79	39°13'45.062"N	80°52'45.008"W	2784.21	177.215	0.45	-0.03	0.45	
9490.00	90.340	153.570	6602.85	2701.55	-2865.47	176.35	1674674.89	14245321.27	39°13'44.226"N	80°52'44.487"W	2870.89	176.478	1.11	0.06	-1.11	
9585.00	89.680	154.640	6602.82	2796.43	-2950.93	217.84	1674716.36	14245235.85	39°13'43.381"N	80°52'43.962"W	2958.96	175.778	1.32	-0.68	1.13	
9679.00	90.490	156.700	6602.67	2890.41	-3036.57	256.56	1674755.07	14245150.24	39°13'42.534"N	80°52'43.471"W	3047.39	175.171	2.35	0.85	2.19	
9773.00	89.750	154.120	6602.48	2984.38	-3122.04	295.67	1674794.16	14245064.80	39°13'41.688"N	80°52'42.975"W	3136.01	174.590	2.86	-0.79	-2.74	
9868.00	89.910	157.010	6602.76	3079.35	-3208.52	334.97	1674833.44	14244978.36	39°13'40.833"N	80°52'42.478"W	3225.96	174.040	3.05	0.17	3.04	
9962.00	89.140	158.950	6603.54	3173.32	-3295.66	370.21	1674868.67	14244891.26	39°13'39.971"N	80°52'42.031"W	3316.38	173.691	2.22	-0.82	2.06	
10057.00	90.030	161.220	6604.23	3268.14	-3384.97	402.56	1674901.01	14244801.98	39°13'39.088"N	80°52'41.622"W	3408.82	173.218	2.57	0.94	2.39	
10152.00	90.090	157.800	6604.13	3363.01	-3473.94	435.81	1674934.25	14244713.04	39°13'38.208"N	80°52'41.201"W	3501.17	172.849	3.60	0.06	-3.60	
10247.00	90.000	154.910	6604.05	3458.00	-3560.96	473.91	1674972.33	14244626.06	39°13'37.348"N	80°52'40.718"W	3592.36	172.419	3.04	-0.09	-3.04	
10341.00	90.030	154.790	6604.03	3551.95	-3646.05	513.86	1675012.26	14244541.01	39°13'36.506"N	80°52'40.212"W	3682.08	171.978	0.13	0.03	-0.13	
10435.00	90.000	155.270	6604.00	3645.91	-3731.26	553.54	1675051.93	14244455.83	39°13'35.664"N	80°52'39.709"W	3772.10	171.562	0.51	-0.03	0.51	
10530.00	90.090	155.070	6603.93	3740.88	-3817.48	593.43	1675091.80	14244369.65	39°13'34.811"N	80°52'39.204"W	3863.33	171.164	0.23	0.09	-0.21	
10625.00	90.250	158.960	6603.65	3835.86	-3904.92	630.52	1675128.88	14244282.24	39°13'33.946"N	80°52'38.734"W	3955.50	170.828	4.10	0.17	4.09	
10719.00	90.180	161.330	6603.29	3929.68	-3993.32	662.45	1675160.79	14244193.87	39°13'33.072"N	80°52'38.330"W	4047.90	170.581	2.52	-0.07	2.52	
10813.00	90.650	160.390	6602.61	4023.43	-4082.12	693.27	1675191.60	14244105.11	39°13'32.194"N	80°52'37.940"W	4140.57	170.361	1.12	0.50	-1.00	
10908.00	91.750	154.830	6600.62	4118.36	-4169.91	729.43	1675227.75	14244017.36	39°13'31.326"N	80°52'37.482"W	4233.23	170.078	5.96	1.16	-5.85	
11003.00	90.180	152.270	6599.02	4213.19	-4254.94	771.73	1675270.03	14243932.36	39°13'30.485"N	80°52'36.946"W	4324.36	169.720	3.16	-1.65	-2.69	
11098.00	90.060	154.050	6598.82	4308.01	-4339.70	814.62	1675312.91	14243847.63	39°13'29.646"N	80°52'36.402"W	4415.50	169.368	1.88	-0.13	1.87	
11192.00	90.180	155.750	6598.63	4401.96	-4424.82	854.50	1675352.76	14243762.54	39°13'28.804"N	80°52'35.897"W	4506.58	169.070	1.81	0.13	1.81	
11287.00	90.060	157.360	6598.43	4496.95	-4511.98	892.29	1675390.54	14243675.42	39°13'27.943"N	80°52'35.418"W	4598.36	168.813	1.70	-0.13	1.69	
11381.00	90.030	160.010	6598.35	4590.89	-4599.54	926.46	1675424.70	14243587.90	39°13'27.077"N	80°52'34.985"W	4691.92	168.612	2.82	-0.03	2.82	
11476.00	90.120	159.230	6598.23	4686.76	-4688.59	959.54	1675457.77	14243498.88	39°13'26.196"N	80°52'34.567"W	4785.77	168.434	0.83	0.09	-0.82	



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227

Page 7 of 11



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #02
Operator	ANTERO RESOURCES CORPORATION	Well	Cool Unit 1H
Area	Doddridge Co., WV	Wellbore	Cool Unit 1H AWB
Field	Doddridge		
Facility	Stanley Pad		

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)	Buidl Rate (°/100ft)	Turn Rate (°/100ft)	Comments
11571.00	90.370	155.730	6597.82	4780.74	-4776.33	995.92	1675494.13	14243411.17	39°13'25.328"N	80°52'34.106"W	4879.06	168.222	3.69	0.26	-3.68	
11665.00	90.090	154.320	6597.44	4874.70	-4861.54	1035.61	1675533.80	14243326.00	39°13'24.486"N	80°52'33.603"W	4970.62	167.975	1.53	-0.30	-1.50	
11759.00	90.120	155.450	6597.27	4968.65	-4946.65	1075.51	1675573.68	14243240.92	39°13'23.644"N	80°52'33.098"W	5062.22	167.794	1.20	0.03	1.20	
11854.00	90.150	157.660	6597.05	5063.64	-5033.80	1113.30	1675611.46	14243153.81	39°13'22.782"N	80°52'32.819"W	5155.45	167.529	2.33	0.03	2.33	
11948.00	90.180	158.460	6596.78	5157.61	-5121.00	1148.42	1675646.57	14243066.55	39°13'21.920"N	80°52'32.174"W	5248.19	167.360	0.85	0.03	0.85	
12043.00	90.980	154.150	6595.82	5252.58	-5207.96	1186.59	1675684.72	14242979.72	39°13'21.060"N	80°52'31.691"W	5341.43	167.165	4.61	0.84	-4.54	
12137.00	90.120	154.510	6594.91	5346.50	-5292.68	1227.30	1675725.42	14242895.04	39°13'20.222"N	80°52'31.175"W	5433.11	166.945	0.99	-0.91	0.38	
12232.00	90.090	158.080	6594.74	5441.48	-5379.65	1265.49	1675763.59	14242808.10	39°13'19.362"N	80°52'30.691"W	5526.49	166.763	3.76	-0.03	3.76	
12326.00	90.220	159.420	6594.48	5535.42	-5467.26	1299.56	1675797.85	14242720.53	39°13'18.495"N	80°52'29.455"W	5619.59	166.629	1.43	0.14	1.43	
12421.00	90.180	160.480	6594.15	5630.26	-5556.50	1332.13	1675830.20	14242631.32	39°13'17.613"N	80°52'29.848"W	5713.95	166.518	1.12	-0.04	1.12	
12515.00	90.090	161.030	6593.93	5724.03	-5645.24	1363.11	1675861.17	14242542.61	39°13'16.735"N	80°52'29.455"W	5807.48	166.425	0.59	-0.10	0.59	
12609.00	90.150	162.740	6593.73	5817.84	-5734.58	1392.34	1675890.39	14242453.31	39°13'15.852"N	80°52'29.086"W	5901.19	166.353	1.82	0.06	1.82	
12704.00	89.230	161.000	6594.25	5912.24	-5824.86	1421.90	1675919.94	14242363.07	39°13'14.969"N	80°52'28.712"W	5995.90	166.282	2.07	-0.97	-1.83	
12798.00	89.780	158.960	6595.06	6006.08	-5913.17	1454.07	1675952.10	14242274.79	39°13'14.086"N	80°52'28.304"W	6089.33	166.185	2.25	0.59	-2.17	
12893.00	88.650	158.820	6596.36	6101.00	-6001.78	1488.29	1675986.30	14242186.21	39°13'13.209"N	80°52'27.871"W	6183.56	166.073	1.20	-1.19	-0.15	
12987.00	90.150	158.650	6597.35	6194.93	-6089.38	1522.38	1676020.37	14242098.66	39°13'12.343"N	80°52'27.440"W	6276.79	165.963	1.61	1.60	-0.18	
13082.00	89.970	158.490	6597.25	6289.88	-6177.81	1557.09	1676055.07	14242010.26	39°13'11.469"N	80°52'27.000"W	6371.01	165.854	0.25	-0.19	-0.17	
13176.00	90.090	156.700	6597.20	6383.87	-6264.71	1592.81	1676090.88	14241923.40	39°13'10.609"N	80°52'26.546"W	6464.05	165.734	1.91	0.13	-1.90	
13271.00	90.000	153.010	6597.12	6478.80	-6350.69	1633.27	1676131.23	14241837.45	39°13'09.759"N	80°52'26.035"W	6557.35	165.577	3.89	-0.09	-3.88	
13365.00	90.180	153.310	6596.98	6572.82	-6434.56	1675.71	1676173.85	14241753.61	39°13'08.929"N	80°52'25.497"W	6649.18	165.403	0.37	0.19	0.32	
13460.00	90.080	153.860	6596.78	6667.48	-6519.65	1717.97	1676215.89	14241668.56	39°13'08.088"N	80°52'24.962"W	6742.20	165.238	0.59	-0.13	0.58	
13554.00	90.180	154.460	6596.58	6761.39	-6604.25	1758.95	1676256.85	14241583.99	39°13'07.251"N	80°52'24.443"W	6834.47	165.086	0.65	0.13	0.64	
13648.00	89.630	153.580	6596.74	6855.29	-6688.75	1800.11	1676298.00	14241499.52	39°13'06.415"N	80°52'23.921"W	6926.74	164.937	1.09	-0.59	-0.93	
13743.00	89.970	156.700	6597.07	6950.24	-6774.94	1840.04	1676337.91	14241413.37	39°13'05.563"N	80°52'23.416"W	7020.37	164.805	3.29	0.36	3.27	
13837.00	89.540	159.510	6597.47	7044.20	-6862.15	1875.09	1676372.95	14241328.19	39°13'04.700"N	80°52'22.972"W	7113.72	164.717	3.02	-0.46	2.99	
13919.00	90.220	160.560	6597.64	7126.06	-6939.22	1903.09	1676400.93	14241249.15	39°13'03.938"N	80°52'22.617"W	7195.45	164.664	1.53	0.83	1.28	
14013.00	90.090	158.610	6597.39	7219.93	-7027.31	1935.87	1676433.71	14241161.10	39°13'03.067"N	80°52'22.202"W	7289.08	164.598	2.08	-0.14	-2.07	
14108.00	90.180	158.890	6597.16	7314.87	-7115.85	1970.31	1676468.12	14241072.59	39°13'02.192"N	80°52'21.767"W	7383.59	164.523	0.31	0.09	0.29	
14203.00	90.250	158.420	6596.81	7409.82	-7204.33	2004.88	1676502.89	14240984.15	39°13'01.317"N	80°52'21.329"W	7478.10	164.449	0.50	0.07	-0.49	
14298.00	90.030	156.590	6596.57	7504.80	-7292.10	2041.23	1676539.02	14240896.41	39°13'00.449"N	80°52'20.869"W	7572.41	164.362	1.94	-0.23	-1.93	



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227'

Page 8 of 11



03/08/2019

REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Doddridge Co., WV	Well	Cool Unit 1H
Field	Doddridge	Wellbore	Cool Unit 1H AWB
Facility	Stanley Pad		

WELLPATH DATA (202 stations)

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude (°)	Longitude (°)	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
14392.00	90.150	155.560	6596.43	7598.80	-7378.02	2079.35	1676577.12	14240810.53	39°12'59.599"N	80°52'20.386"W	7665.44	164.261	1.10	0.13	-1.10	
14486.00	90.250	156.320	6596.10	7692.79	-7463.86	2117.67	1676615.43	14240724.73	39°12'58.750"N	80°52'19.900"W	7756.46	164.160	0.82	0.11	0.81	
14580.00	90.310	155.230	6595.64	7786.77	-7549.58	2156.24	1676653.99	14240639.04	39°12'57.902"N	80°52'19.412"W	7851.46	164.060	1.16	0.06	-1.16	
14675.00	90.120	154.210	6595.28	7881.71	-7635.48	2196.81	1676694.54	14240553.18	39°12'57.053"N	80°52'18.898"W	7945.22	163.949	1.09	-0.20	-1.07	
14770.00	90.280	154.150	6594.95	7976.62	-7720.99	2238.19	1676735.90	14240467.70	39°12'56.207"N	80°52'18.374"W	8038.85	163.834	0.18	0.17	-0.06	
14864.00	90.220	155.980	6594.54	8070.58	-7806.22	2277.81	1676775.51	14240382.50	39°12'55.364"N	80°52'17.872"W	8131.76	163.733	1.95	-0.06	1.95	
14958.00	90.180	158.030	6594.21	8164.57	-7892.75	2314.53	1676812.21	14240296.01	39°12'54.508"N	80°52'17.407"W	8225.12	163.656	2.18	-0.04	2.18	
15052.00	90.220	157.570	6593.88	8258.55	-7979.78	2350.05	1676847.72	14240209.01	39°12'53.647"N	80°52'16.957"W	8318.63	163.580	0.49	0.04	-0.49	
15145.00	90.120	156.860	6593.61	8351.55	-8065.52	2386.07	1676883.72	14240123.30	39°12'52.799"N	80°52'16.501"W	8411.06	163.520	0.77	-0.11	-0.76	
15240.00	90.120	156.950	6593.41	8446.55	-8152.91	2423.33	1676920.97	14240035.95	39°12'51.935"N	80°52'16.029"W	8505.44	163.446	0.09	0.00	0.09	
15335.00	90.370	156.560	6593.00	8541.55	-8240.20	2460.82	1676958.44	14239948.70	39°12'51.072"N	80°52'15.555"W	8599.80	163.372	0.49	0.26	-0.41	
15429.00	90.090	158.130	6592.63	8635.54	-8326.30	2498.54	1676996.14	14239862.63	39°12'50.220"N	80°52'15.077"W	8693.10	163.297	0.55	-0.30	-0.46	
15524.00	90.220	155.360	6592.37	8730.53	-8412.91	2537.56	1677035.15	14239776.05	39°12'49.364"N	80°52'14.583"W	8787.28	163.215	0.82	0.14	-0.81	
15618.00	90.250	155.580	6591.98	8824.51	-8498.43	2576.59	1677074.16	14239690.57	39°12'48.518"N	80°52'14.089"W	8880.43	163.134	0.24	0.03	0.23	
15712.00	90.180	154.800	6591.63	8918.47	-8583.75	2616.03	1677113.59	14239605.28	39°12'47.674"N	80°52'13.589"W	8973.54	163.051	0.83	-0.07	-0.83	
15806.00	90.250	155.390	6591.28	9012.43	-8669.01	2655.62	1677153.16	14239520.06	39°12'46.831"N	80°52'13.088"W	9066.64	162.968	0.63	0.07	0.63	
15901.00	90.090	156.510	6591.00	9107.42	-8755.76	2694.33	1677191.86	14239433.34	39°12'45.973"N	80°52'12.597"W	9160.93	162.886	1.19	-0.17	1.18	
15995.00	90.150	156.730	6590.80	9201.42	-8842.04	2731.63	1677229.15	14239347.10	39°12'45.120"N	80°52'12.125"W	9254.38	162.832	0.24	0.06	0.23	
16089.00	89.820	156.560	6590.82	9295.42	-8928.34	2768.90	1677266.40	14239260.83	39°12'44.266"N	80°52'11.653"W	9347.83	162.770	0.39	-0.35	-0.18	
16183.00	90.220	159.740	6590.79	9389.38	-9013.63	2808.40	1677305.88	14239175.58	39°12'43.423"N	80°52'11.153"W	9441.00	162.694	3.03	0.43	-3.00	
16203.00	90.220	153.740	6590.71	9409.35	-9031.56	2817.24	1677314.72	14239157.65	39°12'43.245"N	80°52'11.041"W	9460.76	162.676	0.00	0.00	0.00	
16227.00	90.220	153.740	6590.62	9433.32	-9053.08	2827.86	1677325.34	14239136.14	39°12'43.032"N	80°52'10.906"W	9484.47	162.653	0.00	0.00	0.00	Projected MD at TD: 16227'



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227'

Page 9 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #02
ANTERO RESOURCES CORPORATION	Well	Cool Unit 1H
Area	Wellbore	Cool Unit 1H AWP
Field		
Facility		

String/Diameter	Cool Unit 1H AWP		Ref Wellbore: Cool Unit 1H AWP Proj: 16227'		End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]					
20in Conductor	25.00	105.00	80.00	25.00	105.00	0.00	0.00	0.07	0.00
17.5in Open Hole	105.00	561.80	456.80	105.00	561.80	0.07	0.00	1.21	-0.82
13.375in Casing Surface	25.00	561.80	536.80	25.00	561.80	0.00	0.00	1.21	-0.82
12.25in Open Hole	561.80	2599.40	2037.60	561.80	2568.04	1.21	-0.82	1.31	-329.09
9.625in Casing Intermediate	25.00	2599.40	2574.40	25.00	2568.04	0.00	0.00	1.31	-329.09
8.75in Open Hole	2599.40	6374.00	3774.60	2568.04	6255.67	1.31	-329.09	-126.67	-1005.56
8.5in Open Hole	6374.00	16227.00	9853.00	6255.67	6590.62	-126.67	-1005.56	-9053.08	2827.86
5.5in Casing Production	25.00	16227.00	16202.00	25.00	6590.62	0.00	0.00	-9053.08	2827.86

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Cool Unit 1H POE Rev-1	6580.00	-513.48	-849.33	1673649.62	14247672.32	39°14'07.486"N	80°52'57.483"W	point
Cool Unit 1H BHL Rev-1	6603.00	-9075.14	2837.52	1677334.99	14239114.09	39°12'42.814"N	80°52'10.784"W	point
Cool Unit 1H BHL Rev-2	6603.00	-681.53	-776.97	1673721.95	14247504.34	39°14'05.824"N	80°52'56.566"W	point
Cool Unit 1H LP Rev-2	6603.00	-681.53	-776.97	1673721.95	14247504.34	39°14'05.824"N	80°52'56.566"W	point

03/08/2019



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227'
Page 10 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION		Slot #02
Area	Doddridge Co., WV	Slot	Cool Unit 1H
Field	Doddridge	Well	Cool Unit 1H AWB
Facility	Stanley Pad	Wellbore	Cool Unit 1H AWB

WELLPATH COMPOSITION - Ref Wellbore: Cool Unit 1H AWB Ref Wellpath: Cool Unit 1H AWP Proj: 16227'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	517.00	Gyrodata standard - Single-shot	01 Gyrodata SS Gyro <17-1/2">(100-517)	Cool Unit 1H AWB
517.00	2534.00	ISCWSA MWD, Rev. 4 (Standard)	02 Panther EM <12-1/4">(517)(591-2534)	Cool Unit 1H AWB
2534.00	6314.00	ISCWSA MWD, Rev. 4 (Standard)	03 Panther EM <8-3/4">(2534)(2629-6314)	Cool Unit 1H AWB
6314.00	16203.00	BHI AutoTrak Curve (Short)	04 BH AT Curve <8-1/2">(6314)(6349-16203)	Cool Unit 1H AWB
16203.00	16227.00	Blind Drilling (std)	Projection to bit	Cool Unit 1H AWB



Actual Wellpath Report

Cool Unit 1H AWP Proj: 16227'
Page 11 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #02
ANTERO RESOURCES CORPORATION	Well	Cool Unit 1H
Area: Doddridge Co., WV	Wellbore	Cool Unit 1H AWB
Field: Doddridge		
Facility: Stanley Pad		

COMMENTS

Wellpath general comments
 API: 47-017-06833-0000
 BHI Job #: 109393691
 Rig: Patterson 342
 Duration: 09/13/2018-09/17/2018
 Gyrodatta MS Gyro <17-1/2"> (100'-517')
 Panther EM <12-1/4"> (517')(591-2534')
 Panther EM <8-3/4"> (2534')(2629'-6314')
 BHI AT Curve <8-1/2"> (6314')(6349'-16203')
 Middlesex: 6559' MD
 Burkett: 6746' MD
 Tully: 6820' MD
 Marcellus POE: 6898' MD
 Projected MD at TD: 16227'