





# Actual Wellpath Report

Goldsmith Unit 1H AWP Proj: 15789'

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02/08/2019

## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Goldsmith Unit 1H
Field	Doddridge	Wellbore	Goldsmith Unit 1H AWB
Facility	Middle Pad		

## REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect@ 5.1
North Reference	Grid	User	Delaset
Scale	0.999603	Report Generated	14/Sep/2018 at 11:35
Convergence at slot	0.12" East	Database/Source file	WA_MPL_EasternUS_Defn/Goldsmith_Unit_1H_AWP_Proj_15789_.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Northing[US ft]	Latitude	Longitude	Longitude
Slot Location	-14.08	37.75	14279403.61	39°19'20.870"N	80°48'23.540"W	
Facility Reference Pt			1695090.99	39°19'21.010"N	80°48'24.020"W	
Field Reference Pt			0.00	0°00'00.000"	85°29'19.301"W	

## WELLPATH DATUM

Calculation method	Minimum curvature	Frontier 32 (RKB) to Facility Vertical Datum	875.00ft
Horizontal Reference Pt	Slot	Frontier 32 (RKB) to Mean Sea Level	875.00ft
Vertical Reference Pt	Frontier 32 (RKB)	Frontier 32 (RKB) to Ground Level at Slot (Slot #05)	32.00ft
MD Reference Pt	Frontier 32 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	336.40°



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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Goldsmith Unit 1H
Field	Doddridge	Wellbore	Goldsmith Unit 1H AWB
Facility	Middle Pad		

WELLPATH DATA (197 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
0.00	0.00	233.810	0.00	0.00	0.00	0.00	1695128.73	14279403.61	39°19'20.870"N	80°48'23.540"W	0.00	0.000	0.00	0.00	0.00	
32.00	0.00	233.810	32.00	0.00	0.00	0.00	1695128.73	14279403.61	39°19'20.870"N	80°48'23.540"W	0.00	0.000	0.00	0.00	0.00	
117.00	0.280	233.810	117.00	-0.05	-0.12	-0.17	1695128.58	14279403.49	39°19'20.869"N	80°48'23.542"W	0.21	233.810	0.33	0.33	-148.46	Gyrodatta MS Gyro <17-1/2"> (100'-503')
217.00	0.170	254.810	217.00	-0.08	-0.31	-0.51	1695128.22	14279403.30	39°19'20.867"N	80°48'23.546"W	0.59	238.954	0.14	-0.11	21.00	
317.00	0.280	220.740	317.00	-0.16	-0.54	-0.82	1695127.91	14279403.07	39°19'20.865"N	80°48'23.550"W	0.98	236.691	0.18	0.12	-34.97	
417.00	0.330	249.390	417.00	-0.26	-0.83	-1.25	1695127.48	14279402.78	39°19'20.862"N	80°48'23.556"W	1.50	238.453	0.16	0.04	28.65	
517.00	0.370	266.170	517.00	-0.14	-0.95	-1.84	1695126.89	14279402.68	39°19'20.861"N	80°48'23.563"W	2.07	242.667	0.11	0.04	16.78	
520.00	0.400	280.410	519.99	-0.13	-0.95	-1.86	1695126.87	14279402.66	39°19'20.861"N	80°48'23.564"W	2.09	242.660	1.63	1.00	-192.00	
610.00	0.720	315.330	609.99	0.47	-0.61	-2.57	1695126.16	14279403.01	39°19'20.864"N	80°48'23.579"W	2.84	256.753	0.85	0.36	81.02	Gyrodatta MS Gyro <12-1/4"> (503')(593'-774')
699.00	0.330	205.390	698.99	0.83	-0.44	-3.07	1695125.66	14279403.17	39°19'20.866"N	80°48'23.579"W	3.10	261.872	1.00	-0.44	-123.53	
791.00	1.330	179.210	790.98	-0.33	-1.75	-3.17	1695125.56	14279401.87	39°19'20.853"N	80°48'23.580"W	3.62	241.171	1.13	1.09	-28.46	
851.00	2.420	190.540	850.98	-2.02	-3.69	-3.39	1695125.33	14279399.92	39°19'20.834"N	80°48'23.583"W	5.01	222.627	1.91	1.82	18.88	Directional ONE MWD <12-1/4"> (774')(834'-2536')
841.00	4.440	199.310	840.78	-6.14	-8.84	-4.88	1695123.84	14279384.77	39°19'20.785"N	80°48'23.603"W	10.11	208.958	2.31	2.24	9.74	
1029.00	4.750	198.810	1028.50	-11.33	-15.51	-7.18	1695121.54	14279388.11	39°19'20.717"N	80°48'23.632"W	17.10	204.890	0.36	0.35	-0.57	
1118.00	4.710	192.660	1117.19	-17.00	-22.56	-9.18	1695119.55	14279381.06	39°19'20.647"N	80°48'23.657"W	24.36	202.135	0.58	-0.04	-7.02	
1206.00	3.610	198.790	1204.96	-21.93	-28.70	-10.90	1695117.83	14279374.93	39°19'20.587"N	80°48'23.679"W	30.70	200.802	1.38	-1.25	8.22	
1294.00	2.760	212.390	1292.83	-25.13	-33.09	-12.97	1695115.76	14279370.53	39°19'20.543"N	80°48'23.705"W	35.54	201.409	1.25	-0.97	14.32	
1382.00	2.380	213.320	1380.74	-27.31	-36.41	-15.11	1695113.62	14279367.22	39°19'20.510"N	80°48'23.733"W	39.42	202.544	0.43	-0.43	1.06	
1470.00	2.090	202.740	1468.67	-29.42	-39.41	-16.74	1695112.00	14279364.21	39°19'20.481"N	80°48'23.754"W	42.82	203.008	0.57	-0.33	-12.02	
1558.00	1.010	166.890	1556.64	-31.29	-41.65	-17.18	1695111.55	14279361.08	39°19'20.459"N	80°48'23.760"W	45.05	202.417	1.59	-1.23	-40.74	
1647.00	0.980	151.240	1645.63	-32.82	-43.08	-16.64	1695112.10	14279360.55	39°19'20.445"N	80°48'23.763"W	46.18	201.116	0.31	-0.03	-17.58	
1735.00	0.460	194.730	1733.62	-33.84	-44.08	-16.37	1695112.37	14279358.55	39°19'20.435"N	80°48'23.749"W	47.02	200.367	0.82	-0.59	49.42	
1823.00	0.740	248.340	1821.61	-34.09	-44.62	-16.99	1695111.75	14279358.97	39°19'20.429"N	80°48'23.757"W	47.75	200.840	0.69	0.32	62.06	
1911.00	0.810	270.660	1909.61	-33.81	-44.82	-18.14	1695110.59	14279356.81	39°19'20.428"N	80°48'23.778"W	48.71	203.537	0.23	0.10	13.81	
2000.00	0.900	282.950	1998.60	-33.13	-44.65	-19.45	1695109.28	14279356.97	39°19'20.429"N	80°48'23.789"W	48.71	203.537	0.23	0.10	13.81	
2088.00	0.810	276.600	2086.59	-32.41	-44.43	-20.74	1695107.89	14279359.20	39°19'20.431"N	80°48'23.805"W	49.03	205.027	0.15	-0.10	-7.22	
2176.00	0.850	280.460	2174.58	-31.73	-44.24	-22.00	1695106.73	14279359.39	39°19'20.433"N	80°48'23.821"W	49.41	206.444	0.08	0.05	4.39	
2264.00	0.990	270.160	2262.57	-31.06	-44.12	-23.40	1695105.33	14279359.51	39°19'20.434"N	80°48'23.839"W	49.94	207.846	0.25	0.16	-11.70	
2352.00	0.430	362.940	2350.56	-30.43	-43.79	-24.20	1695104.53	14279359.84	39°19'20.438"N	80°48'23.849"W	50.03	208.933	1.17	-0.64	94.07	
2441.00	1.170	43.630	2439.55	-29.76	-42.80	-23.62	1695105.12	14279360.63	39°19'20.447"N	80°48'23.842"W	48.88	208.893	1.08	0.83	58.96	



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Operator	ANTERO RESOURCES CORPORATION		
Area	Doddridge Co., Wv	Slot	Slot #05
Field	Doddridge	Well	Goldsmith Unit 1H
Facility	Middle Pad	Wellbore	Goldsmith Unit 1H AWB

WELLPATH DATA (197 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
IRI	PI	PI	IRI	IRI	IRI	IRI	IRI	IRI	IRI	IRI	IRI	IRI	IRI	IRI	IRI	IRI
2529.00	1.040	32.760	2527.54	-28.97	-41.48	22.57	1695106.17	14279362.15	39°19'20.461"N	80°48'23.828"W	47.22	208.550	0.28	-0.15	-12.35	
2533.00	0.890	32.150	2551.53	-28.75	-41.14	22.35	1695106.39	14279362.49	39°19'20.464"N	80°48'23.826"W	46.81	208.518	0.63	-0.63	-2.54	
2668.00	0.850	2.770	2666.52	-27.48	-39.53	-21.83	1695106.90	14279364.10	39°19'20.480"N	80°48'23.819"W	45.16	208.915	0.39	-0.03	-25.55	Directional ONE MWD <-8-3/4"> (2536)/(2651-8304)
2757.00	0.750	349.650	2755.51	-26.32	-38.29	-21.91	1695106.83	14279365.33	39°19'20.492"N	80°48'23.820"W	44.12	209.771	0.23	-0.11	-14.74	
2845.00	0.750	344.110	2843.50	-25.19	-37.17	-22.17	1695106.57	14279366.45	39°19'20.503"N	80°48'23.823"W	43.28	210.808	0.08	0.00	-6.30	
2933.00	0.590	345.420	2931.50	-24.17	-36.18	-22.44	1695106.30	14279367.44	39°19'20.519"N	80°48'23.827"W	42.37	211.808	0.18	-0.18	1.49	
3022.00	0.840	348.410	3020.49	-23.23	-35.25	-22.65	1695106.08	14279368.37	39°19'20.522"N	80°48'23.829"W	41.90	212.727	0.07	0.06	3.38	
3110.00	1.120	192.500	3108.49	-23.45	-35.61	-22.94	1695105.80	14279369.02	39°19'20.519"N	80°48'23.833"W	42.36	212.789	1.96	0.55	-177.17	
3198.00	3.310	188.200	3196.42	-26.30	-38.96	-23.49	1695105.25	14279364.86	39°19'20.485"N	80°48'23.840"W	45.50	211.082	2.49	2.49	-4.89	
3286.00	5.470	181.890	3284.15	-32.24	-45.67	-24.00	1695104.74	14279357.96	39°19'20.419"N	80°48'23.847"W	51.59	207.717	2.51	2.45	-7.08	
3375.00	5.500	179.900	3372.75	-39.98	-54.18	-24.14	1695104.60	14279349.46	39°19'20.335"N	80°48'23.849"W	59.31	204.013	0.23	0.03	-2.35	
3462.00	6.980	173.820	3459.23	-48.85	-63.60	-23.56	1695105.18	14279340.03	39°19'20.242"N	80°48'23.842"W	67.82	200.326	1.86	1.70	-6.99	
3551.00	5.970	170.130	3547.65	-58.51	-73.54	-22.18	1695106.55	14279330.10	39°19'20.144"N	80°48'23.824"W	76.81	196.787	1.23	-1.13	-4.15	
3639.00	8.410	171.410	3634.95	-69.17	-84.41	-20.44	1695108.30	14279319.23	39°19'20.036"N	80°48'23.802"W	86.85	193.611	2.78	2.77	1.45	
3727.00	9.340	176.580	3721.91	-82.12	-97.93	-19.05	1695109.69	14279305.72	39°19'19.902"N	80°48'23.785"W	99.77	191.008	1.43	1.10	5.85	
3816.00	7.990	169.790	3809.88	-94.94	-111.26	-17.51	1695111.22	14279292.39	39°19'18.771"N	80°48'23.766"W	112.63	188.946	1.94	-1.56	-7.61	
3904.00	8.200	177.040	3897.01	-106.77	-123.55	-16.11	1695112.63	14279280.11	39°19'19.649"N	80°48'23.748"W	124.59	187.427	1.18	0.24	8.24	
3992.00	8.240	170.000	3984.11	-118.63	-136.09	-15.20	1695113.53	14279267.57	39°19'19.525"N	80°48'23.731"W	136.34	186.373	0.38	0.05	-2.66	
4080.00	7.050	170.670	4071.32	-128.85	-147.70	-13.74	1695114.99	14279255.97	39°19'18.410"N	80°48'23.719"W	148.34	185.315	1.48	-1.35	-4.58	
4168.00	5.890	166.010	4158.75	-139.53	-157.41	-11.77	1695116.95	14279245.26	39°19'18.314"N	80°48'23.694"W	157.86	184.278	1.48	-1.32	-5.30	
4257.00	7.830	172.380	4247.12	-149.87	-167.85	-9.87	1695118.87	14279235.82	39°19'18.211"N	80°48'23.670"W	168.14	183.364	2.34	2.18	7.16	
4345.00	7.180	167.020	4334.37	-161.03	-179.16	-7.84	1695120.89	14279224.53	39°19'19.099"N	80°48'23.645"W	179.33	182.504	1.08	-0.74	-6.09	
4433.00	8.840	167.620	4421.51	-173.07	-191.12	-5.17	1695123.56	14279212.56	39°19'18.981"N	80°48'23.611"W	191.19	181.551	1.89	1.89	0.91	
4521.00	7.900	165.040	4508.57	-185.67	-203.58	-2.19	1695126.54	14279200.11	39°19'18.858"N	80°48'23.573"W	203.59	180.615	1.16	-1.07	-3.16	
4610.00	8.310	171.940	4596.68	-197.92	-213.85	0.28	1695129.02	14279187.84	39°19'18.737"N	80°48'23.542"W	215.85	179.922	1.19	0.46	7.75	
4698.00	8.420	172.880	4683.75	-210.22	-228.54	1.98	1695130.71	14279175.16	39°19'18.611"N	80°48'23.521"W	228.55	179.502	0.20	0.12	1.07	
4786.00	7.730	168.980	4770.87	-222.18	-240.75	3.91	1695132.64	14279162.96	39°19'18.490"N	80°48'23.497"W	240.78	179.068	1.00	-0.78	-4.43	
4875.00	7.280	179.460	4859.12	-233.21	-252.26	5.11	1695133.84	14279151.45	39°19'18.377"N	80°48'23.482"W	252.31	178.839	1.62	-0.51	11.78	
4963.00	6.950	177.300	4946.44	-243.31	-266.15	5.42	1695134.14	14279140.56	39°19'18.269"N	80°48'23.478"W	263.21	178.821	0.48	-0.37	-2.45	
5051.00	7.200	173.000	5033.77	-253.57	-273.95	6.34	1695135.05	14279129.77	39°19'18.162"N	80°48'23.467"W	274.02	178.675	0.67	0.28	-4.89	





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REFERENCE WELLPATH IDENTIFICATION		Slot #05
Operator	ANTERO RESOURCES CORPORATION	Goldsmith Unit 1H
Area	Doddridge Co., WV	Goldsmith Unit 1H AWB
Field	Doddridge	
Facility	Middle Pad	

WELLPATH DATA (197 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 (ft/100ft)	Comments
5140.00	5.320	174.320	5122.23	-262.84	-283.59	7.43	1695136.15	14279120.14	39°19'18.067"N	80°48'23.453"W	283.69	178.500	2.12	-2.11	1.48	
5228.00	5.290	172.270	5209.86	-270.63	-291.67	8.38	1695137.10	14279112.06	39°19'17.987"N	80°48'23.441"W	291.79	178.356	0.22	-0.03	-2.33	
5316.00	5.420	170.100	5297.47	-278.57	-299.78	9.64	1695138.36	14279103.95	39°19'17.907"N	80°48'23.426"W	299.94	178.159	0.27	0.15	-2.47	
5404.00	7.580	171.110	5384.90	-288.20	-309.60	11.25	1695139.97	14279094.14	39°19'17.810"N	80°48'23.405"W	309.80	177.920	2.44	2.43	1.16	
5493.00	9.230	168.980	5472.95	-300.84	-322.39	13.53	1695142.25	14279081.35	39°19'17.683"N	80°48'23.377"W	322.67	177.597	1.91	1.88	-2.51	
5581.00	10.110	167.500	5516.32	-308.07	-329.62	15.04	1695143.76	14279074.12	39°19'17.612"N	80°48'23.358"W	329.96	177.387	2.07	2.00	-3.14	
5670.00	8.350	169.520	5569.75	-314.97	-336.53	16.48	1695145.18	14279067.21	39°19'17.544"N	80°48'23.340"W	336.93	177.200	4.07	-4.00	4.59	
5669.00	5.340	204.570	5647.22	-323.44	-345.94	16.98	1695145.71	14279067.81	39°19'17.451"N	80°48'23.333"W	342.29	177.156	6.77	-5.93	27.18	
5713.00	5.940	235.220	5691.01	-325.25	-349.10	13.35	1695142.08	14279054.65	39°19'17.419"N	80°48'23.380"W	348.35	177.809	6.89	1.36	69.66	
5757.00	7.430	263.610	5734.72	-324.85	-350.71	8.66	1695137.38	14279053.04	39°19'17.403"N	80°48'23.439"W	350.82	179.586	8.13	3.39	64.52	
5801.00	8.830	261.210	5778.29	-322.06	-350.37	2.51	1695131.24	14279053.38	39°19'17.407"N	80°48'23.518"W	350.38	179.589	6.45	3.18	40.00	
5845.00	9.170	302.710	5821.76	-317.23	-347.82	-3.75	1695124.98	14279055.93	39°19'17.432"N	80°48'23.587"W	347.84	180.618	7.94	0.77	48.86	
5889.00	10.520	322.990	5865.12	-310.40	-342.72	-9.12	1695119.61	14279061.03	39°19'17.483"N	80°48'23.665"W	342.84	181.524	8.40	3.07	46.09	
5933.00	13.500	331.940	5908.16	-301.97	-334.97	-13.95	1695114.78	14279068.77	39°19'17.580"N	80°48'23.727"W	335.27	182.386	7.97	6.77	20.34	
5977.00	17.390	338.810	5950.56	-289.67	-324.40	-18.98	1695109.75	14279079.34	39°19'17.664"N	80°48'23.790"W	324.96	183.349	9.27	8.84	10.61	
6021.00	21.370	340.140	5992.06	-275.09	-310.82	-24.32	1695104.42	14279092.91	39°19'17.798"N	80°48'23.858"W	311.77	184.474	9.43	9.05	8.02	
6065.00	25.720	340.990	6032.39	-257.57	-294.25	-30.16	1695098.58	14279109.48	39°19'17.962"N	80°48'23.932"W	295.78	185.851	9.92	9.89	1.93	
6110.00	29.940	339.320	6072.18	-236.61	-274.50	-37.31	1695091.44	14279129.22	39°19'18.158"N	80°48'24.022"W	277.02	187.739	9.54	9.38	-3.71	
6154.00	32.510	335.200	6109.80	-213.81	-253.49	-46.14	1695082.60	14279150.22	39°19'18.368"N	80°48'24.134"W	257.66	190.317	7.59	5.84	-9.36	
6198.00	35.500	332.000	6146.28	-189.25	-231.47	-57.11	1695071.64	14279172.23	39°19'18.583"N	80°48'24.273"W	238.41	193.859	7.92	6.80	-7.27	
6242.00	38.270	331.830	6181.23	-162.82	-207.90	-69.68	1695059.07	14279195.79	39°19'18.817"N	80°48'24.432"W	219.27	198.529	8.57	8.66	-2.43	
6286.00	43.520	332.900	6214.23	-133.60	-182.13	-83.16	1695045.60	14279221.55	39°19'19.072"N	80°48'24.603"W	200.22	204.542	9.79	8.66	2.43	
6321.00	46.220	332.770	6239.04	-108.98	-160.16	-94.44	1695034.33	14279243.51	39°19'19.289"N	80°48'24.746"W	185.93	210.525	7.72	7.71	-0.37	
6352.00	50.440	331.930	6259.84	-85.87	-139.86	-105.18	1695023.58	14279264.01	39°19'19.492"N	80°48'24.882"W	174.84	216.985	13.76	13.61	-2.71	BH AT Curve <8-1/2"> (6321)-(6352)-15765'
6399.00	54.480	330.560	6288.27	-48.76	-107.00	-123.12	1695005.66	14279296.65	39°19'19.815"N	80°48'25.110"W	163.12	229.007	8.90	8.60	-2.91	
6411.00	55.260	330.150	6295.18	-39.00	-88.47	-127.97	1695000.80	14279305.18	39°19'19.899"N	80°48'25.171"W	161.47	232.423	7.98	6.50	-3.42	
6442.00†	57.450	329.823	6312.35	-13.39	-76.13	-140.86	1694987.90	14279327.51	39°19'20.121"N	80°48'25.335"W	160.13	241.615	7.12	7.06	-1.06	Burkett 6442 MD
6458.00	58.580	329.660	6320.83	0.12	-64.41	-147.72	1694963.07	14279339.23	39°19'20.237"N	80°48'25.421"W	161.15	246.443	7.12	7.07	-1.02	
6498.00†	62.147	329.815	6340.81	34.65	-34.36	-165.21	1694961.58	14279369.26	39°19'20.534"N	80°48'25.643"W	168.75	258.250	8.94	8.92	0.64	Tully 6498 MD



# Actual Wellpath Report

Goldsmith Unit 1H AWP Proj: '15789'

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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Middle Pad
Slot	Slot #05
Well	Goldsmith Unit 1H
Wellbore	Goldsmith Unit 1H AWB

WELLPATH DATA (197 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 (ft)	DLS (ft/100ft)	Bulld Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
6507.00	62.950	329.970	6344.75	42.59	-27.45	-169.21	1694959.58	14279376.17	39°19'20.802"N	80°48'25.694"W	171.42	260.785	8.94	8.92	0.61	
6554.00	67.090	329.890	6364.80	84.91	9.41	-190.55	1694938.25	14279413.02	39°19'20.967"N	80°48'25.964"W	190.79	272.827	8.81	8.81	-0.17	
6588.00†	70.256	330.161	6376.96	116.38	36.84	-206.38	1694922.43	14279440.44	39°19'21.238"N	80°48'26.165"W	209.64	280.122	9.34	9.31	0.80	Hamilton: 6588 MD
6602.00	71.560	330.270	6381.64	129.54	68.32	-212.95	1694915.87	14279451.91	39°19'21.352"N	80°48'26.248"W	218.36	282.785	9.34	9.31	0.78	
6614.00†	72.754	330.634	6385.22	140.90	58.26	-218.58	1694910.23	14279461.95	39°19'21.450"N	80°48'26.320"W	226.21	284.925	10.36	9.95	3.03	Marcellus POE: 6614 MD
6649.00	76.240	331.670	6394.67	174.48	87.80	-234.85	1694893.97	14279491.37	39°19'21.743"N	80°48'26.526"W	250.72	290.498	10.36	9.96	2.96	
6697.00	79.790	332.570	6404.54	221.29	129.30	-256.80	1694872.03	14279532.85	39°19'22.153"N	80°48'26.804"W	287.51	296.725	7.62	7.40	1.87	
6744.00	81.470	331.850	6412.19	267.54	170.32	-278.42	1694850.42	14279573.96	39°19'22.559"N	80°48'27.078"W	326.38	301.456	3.88	3.57	-1.53	
6792.00	83.460	331.100	6418.48	314.94	212.12	-301.14	1694827.71	14279615.65	39°19'22.973"N	80°48'27.366"W	368.35	305.161	4.43	4.15	-1.56	
6839.00	89.510	330.580	6421.36	361.61	263.07	-323.99	1694804.87	14279656.58	39°19'23.378"N	80°48'27.656"W	411.11	307.984	12.92	12.87	-1.11	
6888.00	90.120	333.000	6421.52	410.45	296.25	-347.15	1694781.72	14279699.74	39°19'23.805"N	80°48'27.949"W	456.37	310.476	5.09	1.24	4.94	
6963.00	89.940	331.870	6421.47	505.22	380.46	-391.11	1694737.77	14279783.92	39°19'24.639"N	80°48'28.506"W	545.84	314.209	1.20	-0.19	-1.19	
7078.00	89.690	334.600	6421.78	600.07	465.28	-433.89	1694685.01	14279868.70	39°19'25.478"N	80°48'29.048"W	636.19	316.999	2.89	-0.26	2.87	
7173.00	89.970	335.050	6422.06	695.03	551.25	-474.30	1694654.62	14279954.64	39°19'26.328"N	80°48'29.560"W	727.21	319.281	0.56	0.29	0.47	
7268.00	90.000	331.950	6422.09	789.90	636.26	-516.68	1694612.25	14280039.82	39°19'27.189"N	80°48'30.097"W	819.53	320.921	3.26	0.03	-3.26	
7363.00	89.540	334.860	6422.47	884.76	721.20	-559.21	1694589.74	14280124.62	39°19'28.010"N	80°48'30.636"W	912.60	322.210	3.10	-0.48	3.06	
7459.00	90.430	341.130	6422.49	980.67	810.16	-595.16	1694533.81	14280213.45	39°19'28.890"N	80°48'31.091"W	1005.27	323.698	6.60	0.93	6.53	
7554.00	90.560	343.100	6421.66	1075.19	900.56	-624.33	1694504.84	14280303.81	39°19'29.784"N	80°48'31.460"W	1095.81	325.268	2.08	0.16	2.07	
7649.00	90.620	339.210	6420.66	1169.84	990.45	-655.01	1694473.98	14280393.66	39°19'30.673"N	80°48'31.848"W	1187.44	326.522	4.09	0.04	-4.09	
7744.00	90.740	335.130	6419.63	1264.80	1077.98	-691.86	1694437.14	14280481.16	39°19'31.539"N	80°48'32.315"W	1280.90	327.307	4.30	0.13	-4.29	
7840.00	90.180	332.830	6418.76	1360.71	1164.24	-733.97	1694395.05	14280567.39	39°19'32.392"N	80°48'32.848"W	1376.28	327.771	2.47	-0.58	-2.40	
7935.00	90.090	330.070	6418.54	1455.35	1247.68	-779.37	1694349.67	14280650.79	39°19'33.218"N	80°48'33.424"W	1471.09	328.009	2.91	-0.09	-2.91	
8030.00	89.460	332.160	6418.92	1549.93	1330.85	-825.25	1694303.80	14280733.93	39°19'34.041"N	80°48'34.005"W	1565.96	328.197	2.30	-0.67	2.20	
8125.00	89.260	333.840	6419.89	1644.76	1415.49	-868.38	1694260.69	14280818.54	39°19'34.878"N	80°48'34.552"W	1660.63	328.472	1.78	-0.20	1.77	
8219.00	90.490	337.310	6420.19	1738.73	1501.06	-907.24	1694221.85	14280904.08	39°19'35.725"N	80°48'35.044"W	1753.93	328.851	3.92	1.31	3.69	
8315.00	90.520	336.560	6419.35	1834.72	1589.39	-944.85	1694184.25	14280992.36	39°19'36.599"N	80°48'35.520"W	1849.02	329.270	0.78	0.03	-0.78	
8410.00	90.460	333.030	6418.64	1929.67	1675.32	-985.30	1694143.82	14281078.27	39°19'37.449"N	80°48'36.033"W	1943.59	329.539	3.72	-0.06	-3.72	
8505.00	90.120	334.750	6418.05	2024.57	1760.62	-1027.11	1694102.03	14281163.53	39°19'38.293"N	80°48'36.562"W	2038.32	329.742	1.85	-0.36	1.81	
8600.00	90.060	335.410	6417.91	2119.55	1846.78	-1067.13	1694062.02	14281249.65	39°19'39.145"N	80°48'37.069"W	2132.92	329.979	0.70	-0.06	0.69	
8695.00	89.850	335.560	6417.98	2214.93	1933.21	-1106.56	1694022.61	14281336.05	39°19'40.000"N	80°48'37.589"W	2227.51	330.213	0.27	-0.22	0.15	



# Actual Wellpath Report

Goldsmith Unit 1H AWP Proj: 15789'  
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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WY
Field	Doddridge
Facility	Middle Pad
Slot	Slot #05
Well	Goldsmith Unit 1H
Wellbore	Goldsmith Unit 1H AWB

WELLPATH DATA (197 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
8780.00	88.490	337.650	6419.36	2309.62	2020.38	-1144.28	1693984.90	14281423.19	39°19'40.863"N	80°48'38.046"W	2321.92	330.474	2.63	-1.43	2.21	
8885.00	90.150	341.200	6420.48	2404.36	2109.30	-1177.66	1693951.54	14281512.07	39°19'41.742"N	80°48'38.469"W	2415.79	330.825	4.12	1.75	3.74	
8980.00	90.550	341.390	6419.90	2499.01	2189.28	-1208.12	1693921.08	14281602.01	39°19'42.632"N	80°48'38.854"W	2509.26	331.219	0.47	0.42	0.20	
9075.00	90.250	338.730	6419.24	2593.80	2289.57	-1240.52	1693888.70	14281691.27	39°19'43.515"N	80°48'39.264"W	2603.16	331.540	2.62	-0.32	-2.80	
9170.00	89.660	340.370	6419.31	2688.66	2377.58	-1273.71	1693855.52	14281780.25	39°19'44.398"N	80°48'39.684"W	2697.27	331.821	1.63	-0.62	1.73	
9265.00	89.750	344.990	6419.80	2783.06	2468.25	-1301.88	1693827.26	14281870.88	39°19'45.293"N	80°48'40.041"W	2790.60	332.189	4.86	0.09	4.86	
9360.00	90.370	345.320	6419.70	2876.95	2560.08	-1326.32	1693802.93	14281962.87	39°19'46.201"N	80°48'40.349"W	2883.25	332.612	0.74	0.65	0.35	
9455.00	89.800	332.890	6419.50	2971.66	2648.65	-1360.15	1693769.12	14282051.21	39°19'47.077"N	80°48'40.777"W	2977.48	332.818	13.10	-0.52	-13.09	
9550.00	89.600	330.370	6419.93	3066.32	2732.23	-1405.29	1693724.00	14282134.75	39°19'47.904"N	80°48'41.349"W	3072.45	332.782	2.66	-0.29	-2.64	
9645.00	89.510	336.980	6420.67	3161.16	2817.33	-1447.40	1693681.91	14282219.92	39°19'48.746"N	80°48'41.883"W	3167.38	332.808	6.96	-0.09	6.96	
9739.00	89.220	338.480	6420.89	3255.13	2904.31	-1483.02	1693646.30	14282306.77	39°19'49.606"N	80°48'42.334"W	3261.04	332.950	1.77	0.76	1.60	
9833.00	89.780	332.630	6420.89	3349.08	2989.85	-1521.90	1693607.43	14282392.27	39°19'50.452"N	80°48'42.826"W	3354.91	333.023	6.24	-0.47	-6.22	
9927.00	89.780	331.170	6421.25	3442.79	3072.77	-1566.17	1693563.18	14282475.15	39°19'51.273"N	80°48'43.387"W	3448.98	332.982	1.55	0.00	-1.55	
10021.00	89.750	330.070	6421.63	3536.30	3154.65	-1612.33	1693517.04	14282557.01	39°19'52.083"N	80°48'43.973"W	3542.80	332.929	1.23	-0.03	-1.23	
10115.00	89.660	329.950	6422.12	3629.71	3236.04	-1659.38	1693470.03	14282638.36	39°19'52.888"N	80°48'44.569"W	3636.88	332.852	0.12	-0.10	-0.06	
10209.00	89.480	331.870	6422.82	3723.27	3318.15	-1705.10	1693424.31	14282720.44	39°19'53.701"N	80°48'45.149"W	3730.92	332.803	1.99	-0.19	1.98	
10303.00	89.750	335.340	6423.46	3817.14	3402.32	-1746.92	1693382.50	14282804.57	39°19'54.534"N	80°48'45.679"W	3824.59	332.822	3.77	0.29	3.76	
10396.00	89.630	336.190	6423.96	3910.13	3487.12	-1785.10	1693344.34	14282889.34	39°19'55.373"N	80°48'46.162"W	3917.47	332.892	0.92	-0.13	0.91	
10490.00	89.260	335.780	6424.87	4004.12	3572.98	-1823.35	1693306.10	14282975.16	39°19'56.222"N	80°48'46.647"W	4011.33	332.984	0.59	-0.39	-0.44	
10584.00	89.260	337.380	6426.08	4098.11	3659.22	-1860.71	1693268.78	14283061.38	39°19'57.076"N	80°48'47.120"W	4105.14	333.047	1.70	0.00	1.70	
10677.00	90.030	342.870	6426.66	4190.88	3748.65	-1892.31	1693237.17	14283148.77	39°19'57.940"N	80°48'47.520"W	4197.41	333.203	5.96	0.83	5.90	
10771.00	90.680	345.510	6426.08	4284.00	3837.08	-1917.92	1693211.57	14283239.16	39°19'58.894"N	80°48'47.844"W	4289.71	333.442	2.89	0.69	2.81	
10865.00	89.940	342.100	6425.57	4377.20	3927.34	-1944.13	1693185.37	14283329.38	39°19'59.727"N	80°48'48.175"W	4382.20	333.663	3.71	-0.79	-3.63	
10959.00	89.820	336.150	6425.77	4471.05	4015.13	-1977.61	1693151.90	14283417.14	39°20'00.595"N	80°48'48.599"W	4475.74	333.778	6.33	-0.13	-6.33	
11053.00	90.090	333.080	6425.84	4564.98	4100.04	-2017.81	1693111.62	14283502.02	39°20'01.435"N	80°48'48.989"W	4569.71	333.795	3.28	0.29	-3.27	
11147.00	90.090	330.670	6425.69	4658.69	4182.94	-2062.21	1693067.33	14283584.86	39°20'02.255"N	80°48'48.671"W	4663.66	333.766	2.56	0.00	-2.56	
11242.00	90.090	329.120	6425.54	4753.08	4265.12	-2109.86	1693019.70	14283667.03	39°20'03.069"N	80°48'50.275"W	4758.44	333.679	1.63	0.00	-1.63	
11336.00	90.030	331.610	6425.44	4846.55	4346.82	-2156.34	1692973.25	14283748.69	39°20'03.877"N	80°48'50.964"W	4852.28	333.615	2.65	-0.06	2.65	
11429.00	89.970	329.130	6425.44	4939.03	4427.65	-2202.32	1692927.29	14283829.49	39°20'04.677"N	80°48'51.447"W	4945.13	333.554	2.67	-0.06	-2.67	
11523.00	90.120	332.630	6425.37	5032.57	4509.71	-2246.13	1692881.50	14283911.53	39°20'05.489"N	80°48'52.028"W	5039.01	333.503	3.62	0.16	3.62	





# Actual Wellpath Report

Goldsmith Unit 1H AWP Proj: 15789

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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #05
Operator	ANTERO RESOURCES CORPORATION		
Area	Doddridge Co., WV		
Field	Doddridge		
Facility	Middle Pad		
	Well	Goldsmith Unit 1H	
	Wellbore	Goldsmith Unit 1H AWB	

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
1167.00	89.880	336.020	6425.37	5126.49	4594.39	-2288.92	1692840.72	14283996.16	39°20'06.327"N	80°48'52.545"W	5132.98	333.518	3.72	-0.26	3.71	
1171.00	90.340	337.500	6425.19	5220.49	4680.76	-2326.01	1692803.65	14284082.50	39°20'07.181"N	80°48'53.015"W	5226.83	333.576	1.65	0.49	1.57	
11804.00	90.340	339.390	6424.64	5313.42	4767.24	-2360.18	1692769.48	14284168.95	39°20'08.037"N	80°48'53.448"W	5319.50	333.661	2.02	0.00	2.02	
11898.00	90.880	341.450	6423.80	5407.18	4855.80	-2391.89	1692737.99	14284257.47	39°20'08.912"N	80°48'53.846"W	5412.85	333.778	2.23	0.38	2.20	
11922.00	90.220	339.200	6423.06	5500.99	4944.30	-2423.33	1692706.36	14284345.94	39°20'09.788"N	80°48'54.247"W	5506.24	333.889	2.44	-0.49	-2.39	
12085.00	89.110	338.960	6423.61	5593.85	5031.17	-2456.54	1692673.17	14284432.77	39°20'10.647"N	80°48'54.667"W	5598.86	333.975	1.22	-1.19	-0.28	
12179.00	90.310	340.680	6424.08	5687.67	5119.39	-2488.98	1692640.76	14284520.96	39°20'11.520"N	80°48'55.077"W	5692.37	334.072	2.24	1.28	1.84	
12273.00	90.310	338.430	6423.57	5781.52	5207.47	-2521.78	1692607.95	14284609.00	39°20'12.391"N	80°48'55.493"W	5785.94	334.161	2.40	0.00	-2.40	
12366.00	90.310	336.580	6423.07	5874.50	5293.39	-2557.36	1692572.38	14284694.89	39°20'13.241"N	80°48'55.943"W	5878.78	334.214	1.99	0.00	-1.99	
12460.00	90.880	334.740	6422.82	5968.49	5379.03	-2596.10	1692533.86	14284780.49	39°20'14.088"N	80°48'56.434"W	5972.74	334.236	1.99	-0.33	-1.96	
12554.00	90.880	335.390	6422.91	6062.46	5464.26	-2635.73	1692494.05	14284865.70	39°20'14.931"N	80°48'56.938"W	6066.73	334.249	0.70	-0.13	0.69	
12648.00	90.550	337.360	6422.56	6156.45	5550.38	-2673.40	1692456.39	14284951.78	39°20'15.783"N	80°48'57.414"W	6160.66	334.282	2.21	0.71	2.10	
12741.00	90.400	336.450	6421.79	6249.45	5635.92	-2709.88	1692419.83	14285037.29	39°20'16.629"N	80°48'57.876"W	6253.56	334.321	0.99	-0.16	-0.98	
12835.00	90.120	334.160	6421.32	6343.42	5721.32	-2749.15	1692380.88	14285122.55	39°20'17.474"N	80°48'58.373"W	6347.54	334.335	2.45	-0.30	-2.44	
12928.00	89.940	337.830	6421.32	6436.40	5806.26	-2786.97	1692342.85	14285207.66	39°20'18.314"N	80°48'58.853"W	6440.49	334.359	3.95	-0.19	3.95	
13022.00	89.850	341.550	6421.49	6530.23	5894.40	-2819.60	1692310.26	14285295.66	39°20'19.186"N	80°48'59.265"W	6534.07	334.436	3.96	-0.10	3.96	
13115.00	90.180	344.520	6421.46	6622.60	5983.34	-2846.73	1692283.13	14285384.57	39°20'20.066"N	80°48'59.608"W	6626.03	334.556	3.21	0.35	3.19	
13209.00	90.520	343.230	6420.89	6715.60	6073.64	-2872.83	1692257.04	14285474.83	39°20'20.959"N	80°48'59.938"W	6718.80	334.686	1.42	0.36	-1.37	
13303.00	91.260	339.080	6419.43	6809.44	6162.57	-2903.19	1692226.70	14285563.73	39°20'21.838"N	80°49'00.322"W	6812.18	334.775	4.48	0.79	4.41	
13396.00	90.820	336.620	6417.90	6902.39	6248.69	-2838.24	1692191.68	14285649.81	39°20'22.690"N	80°49'00.766"W	6905.03	334.816	2.73	-0.69	-2.65	
13490.00	89.720	332.050	6417.62	6996.30	6333.39	-2978.94	1692150.97	14285734.48	39°20'23.528"N	80°49'01.262"W	6999.00	334.810	4.86	-0.96	-4.86	
13584.00	89.570	331.120	6418.21	7089.97	6416.07	-3023.67	1692106.26	14285817.12	39°20'24.348"N	80°49'01.849"W	7092.85	334.767	1.00	-0.16	-0.99	
13677.00	89.510	332.080	6418.95	7182.64	6497.87	-3067.90	1692062.05	14285898.89	39°20'25.169"N	80°49'02.410"W	7185.70	334.726	1.03	-0.06	1.03	
13771.00	89.690	335.790	6419.61	7276.53	6582.27	-3109.24	1692020.72	14285983.26	39°20'25.991"N	80°49'02.934"W	7279.68	334.716	3.89	0.19	3.88	
13865.00	89.820	342.630	6420.01	7370.38	6670.08	-3142.53	1691987.35	14286071.03	39°20'26.859"N	80°49'03.357"W	7373.34	334.772	7.34	0.14	7.34	
14052.00	90.030	334.910	6420.79	7566.82	6845.72	-3206.34	1691958.63	14286159.44	39°20'27.734"N	80°49'03.707"W	7465.80	334.882	1.36	-0.24	-1.34	
14146.00	89.750	329.930	6420.97	7650.56	6929.02	-3249.84	1691880.18	14286246.61	39°20'28.596"N	80°49'04.163"W	7559.40	334.903	6.90	0.46	6.88	
14240.00	89.880	327.440	6421.27	7743.71	7009.32	-3298.70	1691831.35	14286329.87	39°20'29.421"N	80°49'04.715"W	7653.28	334.873	5.31	-0.30	-5.30	
14333.00	89.020	330.210	6422.16	7835.88	7088.87	-3346.83	1691783.23	14286419.66	39°20'30.215"N	80°49'05.335"W	7746.74	334.798	2.65	0.14	-2.65	
									80°49'05.945"W	80°49'05.945"W	7839.22	334.727	3.12	-0.92	2.98	





# Actual Wellpath Report

Goldsmith Unit 1H AWP Proj: 15789'  
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02/08/2019

REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., Wv
Field	Doddridge
Facility	Middle Pad
Slot	Slot #05
Well	Goldsmith Unit 1H
Wellbore	Goldsmith Unit 1H AWB

WELLPATH DATA (197 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
14427.00	89.540	333.340	8423.34	7929.55	7171.68	-3381.28	1691739.80	142866572.43	39°20'31.822"N	80°49'06.509"W	7933.08	334.692	3.38	0.55	3.33	
14520.00	89.970	336.080	8423.74	8022.50	7255.76	-3431.00	1691699.09	142866568.48	39°20'32.854"N	80°49'07.012"W	8026.07	334.692	2.98	0.46	2.95	
14614.00	89.780	338.380	8423.95	8116.49	7342.43	-3467.38	1691662.73	142866743.11	39°20'33.511"N	80°49'07.473"W	8119.97	334.721	2.46	-0.20	2.45	
14708.00	89.970	341.770	8424.15	8210.28	7430.79	-3499.41	1691630.71	142866831.43	39°20'34.365"N	80°49'07.878"W	8213.55	334.783	3.61	0.20	3.61	
14802.00	89.750	342.200	8424.38	8303.83	7520.18	-3528.48	1691601.65	142866920.78	39°20'35.269"N	80°49'08.246"W	8306.82	334.864	0.51	-0.23	0.46	
14895.00	90.060	340.860	8424.54	8386.46	7608.38	-3557.94	1691572.20	14287008.96	39°20'36.141"N	80°49'08.619"W	8399.19	334.988	1.48	0.33	-1.44	
14989.00	89.820	339.780	8424.64	8480.24	7696.89	-3587.25	1691508.92	14287097.43	39°20'37.892"N	80°49'09.420"W	8482.78	334.997	1.18	-0.26	-1.15	
15083.00	90.250	340.860	8424.58	8584.02	7785.40	-3621.25	1691508.92	14287185.91	39°20'37.892"N	80°49'09.420"W	8586.38	335.055	1.24	0.46	1.15	
15177.00	90.060	338.560	8424.32	8677.85	7873.96	-3653.85	1691476.34	14287274.03	39°20'38.764"N	80°49'09.833"W	8680.07	335.106	2.46	-0.20	-2.45	
15271.00	90.090	338.310	8424.20	8771.79	7960.98	-3688.40	1691441.80	14287361.42	39°20'39.629"N	80°49'10.270"W	8773.81	335.141	0.27	0.03	-0.27	
15365.00	90.340	337.870	8423.85	8865.75	8048.19	-3723.47	1691408.74	14287448.59	39°20'40.491"N	80°49'10.715"W	8867.79	335.173	0.54	0.27	-0.47	
15460.00	90.620	334.420	8423.05	8960.73	8135.06	-3761.89	1691368.34	14287535.43	39°20'41.351"N	80°49'11.201"W	8962.75	335.183	3.64	0.29	-3.63	
15555.00	90.340	332.470	8422.26	9055.60	8220.03	-3804.35	1691325.89	14287620.36	39°20'42.191"N	80°49'11.740"W	9057.70	335.165	2.07	-0.29	-2.05	
15651.00	90.000	331.370	8421.97	9151.30	8304.73	-3849.54	1691280.72	14287705.03	39°20'43.029"N	80°49'12.313"W	9153.55	335.131	1.20	-0.35	-1.15	
15745.00	90.150	330.580	8421.85	9244.88	8388.92	-3895.15	1691235.13	14287787.19	39°20'43.843"N	80°49'12.891"W	9247.30	335.088	0.86	0.16	-0.84	
15765.00	89.880	329.930	8421.84	9284.77	8404.29	-3905.07	1691225.21	14287804.55	39°20'44.015"N	80°49'13.017"W	9287.23	335.078	3.52	-1.35	-3.25	
15789.00	89.880	329.930	8421.89	9288.61	8425.06	-3917.10	1691213.19	14287825.31	39°20'44.220"N	80°49'13.170"W	9291.14	335.065	0.00	0.00	0.00	Projected MD at TD: 15789'



# Actual Wellpath Report

Goldsmith Unit 1H AWP Proj: 15789'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Goldsmith Unit 1H
Field	Doddridge	Wellbore	Goldsmith Unit 1H AWB
Facility	Middle Pad		

## HOLE & CASING SECTIONS - Ref Wellbore: Goldsmith Unit 1H AWB Ref Wellpath: Goldsmith Unit 1H AWP Proj: 15789'

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	32.00	112.00	80.00	32.00	112.00	0.00	0.00	-0.11	-0.15
17.5in Open Hole	112.00	548.00	436.00	112.00	547.89	-0.11	-0.15	-0.94	-2.06
13.375in Casing Surface	32.00	548.00	516.00	32.00	547.99	0.00	0.00	-0.94	-2.06
12.25in Open Hole	548.00	2625.00	2077.00	547.99	2623.53	-0.94	-2.06	-40.15	-21.92
9.625in Casing Intermediate	32.00	2625.00	2593.00	32.00	2623.53	0.00	0.00	-40.15	-21.92
8.75in Open Hole	2625.00	6388.00	3763.00	2623.53	6281.81	-40.15	-21.92	-114.76	-118.77
8.5in Open Hole	6388.00	15789.00	9401.00	6281.81	6421.89	-114.76	-118.77	8425.06	-3917.10
5.5in Casing Production	32.00	15789.00	15757.00	32.00	6421.89	0.00	0.00	8425.06	-3917.10

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Goldsmith Unit 1H POE Rev-2	6375.00	33.14	-199.41	1694929.39	14279436.73	39°19'21.202"N	80°48'26.077"W	point
Goldsmith Unit 1H BHL Rev-2	6415.00	8382.60	-3897.40	1691232.88	14287782.87	39°20'43.800"N	80°49'12.920"W	point
Goldsmith Unit 1H LP Rev-1	6415.00	226.63	-312.48	1694816.37	14279630.15	39°19'23.117"N	80°48'27.510"W	point



# Actual Wellpath Report

Goldsmith Unit 1H AWP Proj: 15789'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Goldsmith Unit 1H
Field	Doddridge	Wellbore	Goldsmith Unit 1H AWB
Facility	Middle Pad		

WELLPATH COMPOSITION - Ref Wellbore: Goldsmith Unit 1H AWB Ref Wellpath: Goldsmith Unit 1H AWP Proj: 15789'			
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment
32.00	520.00	Gyrodata standard - Drop gyro or Multi-shot	01_Gyrodata MS Gyro <17-1/2"> (100-503)
520.00	791.00	Gyrodata standard - Drop gyro or Multi-shot	02_Gyrodata MS Gyro <12-1/4"> (503)(593-774)
791.00	2553.00	ISCWSA MWD, Rev. 4 (Standard)	03_Directional ONE MWD <12-1/4"> (774)(834-2536)
2553.00	6321.00	ISCWSA MWD, Rev. 4 (Standard)	04_Directional ONE MWD <8-3/4"> (2536)(2657-6304)
6321.00	15785.00	BHI Auto Trak Curve (Axial)	05_BH.A.T Curve <8-1/2"> (6321)(6352-15785)
15785.00	15788.00	Blind Drilling (std)	Projection to bit
			Wellbore
			Goldsmith Unit 1H AWB
			Goldsmith Unit 1H AWB
			Goldsmith Unit 1H AWB
			Goldsmith Unit 1H AWB
			Goldsmith Unit 1H AWB





# Actual Wellpath Report

Goldsmith Unit 1H AWP Proj: 15789'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Goldsmith Unit 1H
Field	Doddridge	Wellbore	Goldsmith Unit 1H AWB
Facility	Middle Pad		

COMMENTS
<p>Wellpath general comments</p> <p>API: 47-017-06820-0000</p> <p>BHI Job #: 9067098</p> <p>Rig: Frontier 32</p> <p>Duration: 03/19/2018-03/22/2018</p> <p>Gyrodatta MS Gyro &lt;17-1/2"&gt; (100'-503')</p> <p>Gyrodatta MS Gyro &lt;12-1/4"&gt; (503')(593'-774')</p> <p>Directional ONE MWD &lt;12-1/4"&gt; (774')(834'-2536')</p> <p>Directional ONE MWD &lt;8-3/4"&gt; (2536')(2651'-6304')</p> <p>BH AT Curve &lt;8-1/2"&gt; (6321')(6352'-15765')</p> <p>Burkett: 6442' MD</p> <p>Tully: 6498' MD</p> <p>Hamilton: 6588' MD</p> <p>Marcellus POE: 6614' MD</p> <p>Projected MD at TD: 15788'</p>