



# ANTERO RESOURCES CORPORATION

Location: Tyler County, WV  
 Field: Tyler  
 Facility: Elk Fork Pad

Slot: Slot #05  
 Well: Yough Unit 1H  
 Wellbore: Yough Unit 1H PWB

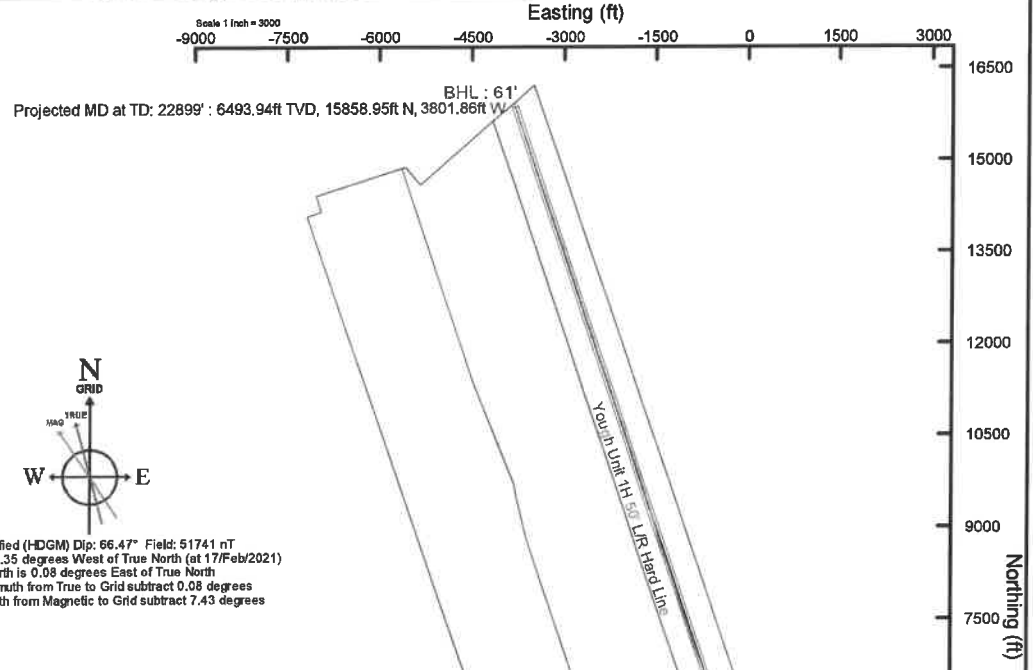
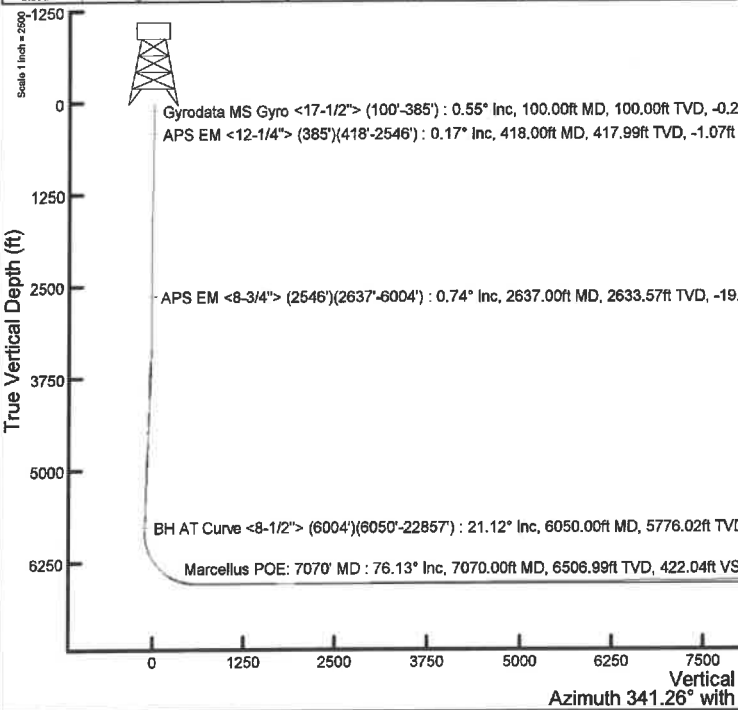


Plot reference wellpath is Yough Unit 1H PWP Rev-B.0	Grid System: NAD27 / UTMZone 17 North, US feet
True vertical depths are referenced to H&P 317 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 317 (RKB)	Scale: True distance
H&P 317 (RKB) to Mean Sea Level: 1151.5 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot #05): -1126 feet	Depths are in feet
Offset wellpath MDs are referenced to each plot's default MD datum	Created by: edusanyar on 2021-02-23; Database: IVA_MPL_EASTERNUS_Defn

Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Elk Fork Pad	1676885.038	14359018.492	39°32'28.3780"N	80°52'14.3200"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
Slot #05	2.67	29.82	1676914.950	14359021.160	80°52'13.9380"W
Comment: Yough Unit 1H					
H&P 317 (RKB) to Ground level (At Slot: Slot #05): 25.5ft					
Mean Sea Level to Ground level (At Slot: Slot #05): -1126ft					
H&P 317 (RKB) to Mean Sea Level: 1151.5ft					

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (*/100ft)	VS (ft)
Tie On	2546.00	0.470	317.050	2542.58	5.77	80.90	0.46	-20.53
Proj to Bottom	2623.00	0.470	317.050	2619.57	6.23	80.47	0.00	-19.95
KOP 1	2703.00	0.470	317.050	2699.57	6.71	80.03	0.00	-19.35
End of 3D Arc	3575.30	25.944	75.226	3542.61	58.90	265.32	3.00	-29.47
Curve KOP	6114.71	25.944	75.226	5826.10	342.20	1339.56	0.00	-105.31
Build/Avoid NGZ	6574.88	35.000	0.000	6236.66	505.50	1440.39	8.00	16.94
POE	7041.08	72.014	334.086	6511.00	854.35	1336.92	9.00	378.89
Landing Pt.	7265.90	90.000	334.086	6546.00	1053.26	1242.27	8.00	698.32
On AZI	7624.37	90.000	341.255	6546.00	1384.64	1106.17	2.00	955.85
BHL	72914.37	90.000	341.255	6546.00	15863.66	-3807.27	0.00	16245.85

Well Data				
Slot	Well	Wellbore	Wellpath	
Slot #05	Yough Unit 1H	Yough Unit 1H AWP	Yough Unit 1H AWP Proj: 22899'	
Slot #05	Yough Unit 1H	Yough Unit 1H PWB	Yough Unit 1H PWP Rev-B.0	



User specified (HDGM) Dip: 66.47° Field: 51741 nT  
 Magnetic North is 7.35 degrees West of True North (at 17/Feb/2021)  
 Grid North is 0.08 degree East of True North  
 To correct azimuth from True to Grid subtract 0.08 degrees  
 To correct azimuth from Magnetic to Grid subtract 7.43 degrees

API: 47-095-02723-0000  
 BH Job #: 110728645-B  
 Rig: H&P 317  
 Duration: 2/19/2021-2/23/2021

Marcellus POE: 7070' MD : 6506.99ft TVD, 904.21ft N, 1351.62ft E  
 BH AT Curve <8-1/2"> (6004')(6050'-22857') : 5776.02ft TVD, 331.68ft N, 1299.48ft E  
 APS EM <8-3/4"> (2546')(2637'-6004') : 2633.57ft TVD, 6.58ft N, 80.41ft E  
 APS EM <12-1/4"> (385')(418'-2546') : 417.99ft TVD, 1.68ft S, 1.62ft W  
 Gyrodatta MS Gyro <17-1/2"> (100'-385') : 100.00ft TVD, 0.29ft S, 0.27ft W  
 Slot #05

Projected MD at TD: 22899' : 69.72° Inc, 22899.00ft MD, 6493.94ft TVD, 16239.64ft VS

Vertical Section (ft)  
 Azimuth 341.26° with reference 0.00 N, 0.00 E



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999602	Report Generated	23/Feb/2021 at 22:27
Convergence at slot	0.08° 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	2.67	29.92	1676914.95	14359021.16	39°32'28.4040"N	80°52'13.9380"W
Facility Reference Pt			1676885.04	14359018.49	39°32'28.3780"N	80°52'14.3200"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 317 (RKB) to Facility Vertical Datum	1151.50ft
Horizontal Reference Pt	Slot	H&P 317 (RKB) to Mean Sea Level	1151.50ft
Vertical Reference Pt	H&P 317 (RKB)	H&P 317 (RKB) to Ground Level at Slot (Slot #05)	25.50ft
MD Reference Pt	H&P 317 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	341.26°



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

WELLPATH DATA (267 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†	0.000	217.020	0.00	0.00	0.00	0.00	1676914.95	14359021.16	39°32'28.4040"N	80°52'13.9380"W	0.00	0.000	0.00	0.00	0.00		
25.50	0.000	217.020	25.50	0.00	0.00	0.00	1676914.95	14359021.16	39°32'28.4040"N	80°52'13.9380"W	0.00	0.000	0.00	0.00	0.00		
100.00	0.550	217.020	100.00	-0.20	-0.29	-0.22	1676914.73	14359020.87	39°32'28.4011"N	80°52'13.9408"W	0.36	217.020	0.74	0.74	0.00	Gyrodata MS Gyro <17-1/2"> (100'-385')	
200.00	0.330	224.300	200.00	-0.60	-0.87	-0.71	1676914.24	14359020.29	39°32'28.3953"N	80°52'13.9470"W	1.12	218.881	0.23	-0.22	7.28		
300.00	0.330	226.410	299.99	-0.85	-1.28	-1.12	1676913.84	14359019.88	39°32'28.3913"N	80°52'13.9523"W	1.70	221.073	0.01	0.00	2.11		
385.00	0.350	238.130	384.99	-1.02	-1.59	-1.51	1676913.44	14359019.58	39°32'28.3883"N	80°52'13.9573"W	2.19	223.661	0.08	0.02	13.79		
418.00	0.170	208.560	417.99	-1.07	-1.68	-1.62	1676913.33	14359019.48	39°32'28.3874"N	80°52'13.9587"W	2.34	223.965	0.66	-0.55	-89.61	APS EM <12-1/4"> (385')(418'-2546')	
508.00	1.150	105.400	507.99	-1.67	-2.04	-0.81	1676914.14	14359019.12	39°32'28.3838"N	80°52'13.9484"W	2.20	201.789	1.33	1.09	-114.62		
598.00	2.710	87.100	597.93	-2.76	-2.17	2.18	1676917.13	14359018.99	39°32'28.3825"N	80°52'13.9102"W	3.08	134.868	1.84	1.73	-20.33		
689.00	4.470	82.290	688.75	-4.02	-1.59	7.84	1676922.79	14359019.57	39°32'28.3882"N	80°52'13.8379"W	8.00	101.432	1.96	1.93	-5.29		
778.00	5.200	79.740	777.43	-5.28	-0.40	15.25	1676930.19	14359020.76	39°32'28.3998"N	80°52'13.7434"W	15.25	91.512	0.85	0.82	-2.87		
868.00	5.600	79.550	867.03	-6.52	1.12	23.58	1676938.52	14359022.28	39°32'28.4147"N	80°52'13.6370"W	23.61	87.280	0.44	0.44	-0.21		
959.00	5.660	79.710	957.60	-7.81	2.73	32.36	1676947.30	14359023.89	39°32'28.4304"N	80°52'13.5249"W	32.48	85.183	0.07	0.07	0.18		
1049.00	5.540	77.670	1047.17	-8.95	4.45	40.97	1676955.91	14359025.61	39°32'28.4473"N	80°52'13.4149"W	41.21	83.805	0.26	-0.13	-2.27		
1143.00	5.990	77.340	1140.69	-9.98	6.49	50.19	1676965.12	14359027.65	39°32'28.4674"N	80°52'13.2972"W	50.61	82.631	0.48	0.48	-0.35		
1236.00	4.600	71.820	1233.29	-10.53	8.72	58.47	1676973.40	14359029.88	39°32'28.4893"N	80°52'13.1915"W	59.12	81.519	1.59	-1.49	-5.94		
1330.00	3.380	102.730	1327.07	-12.01	9.28	64.76	1676979.68	14359030.44	39°32'28.4948"N	80°52'13.1113"W	65.42	81.841	2.58	-1.30	32.88		
1423.00	2.580	122.030	1419.95	-15.06	7.57	69.20	1676984.13	14359028.73	39°32'28.4778"N	80°52'13.0545"W	69.62	83.757	1.37	-0.86	20.75		
1517.00	3.250	108.850	1513.83	-18.33	5.59	73.52	1676988.44	14359026.74	39°32'28.4581"N	80°52'12.9995"W	73.73	85.654	1.00	0.71	-14.02		
1610.00	2.760	113.520	1606.70	-21.44	3.84	78.07	1676992.99	14359025.00	39°32'28.4408"N	80°52'12.9415"W	78.16	87.183	0.59	-0.53	5.02		
1704.00	1.960	98.780	1700.62	-23.71	2.69	81.73	1676996.65	14359023.85	39°32'28.4294"N	80°52'12.8947"W	81.78	88.113	1.06	-0.85	-15.68		
1798.00	0.330	54.120	1794.60	-24.37	2.61	83.54	1676998.46	14359023.77	39°32'28.4285"N	80°52'12.8716"W	83.58	88.213	1.85	-1.73	-47.51		
1891.00	0.360	289.670	1887.60	-24.11	2.86	83.48	1676998.40	14359024.02	39°32'28.4310"N	80°52'12.8724"W	83.53	88.037	0.66	0.03	-133.82		
1985.00	0.260	313.700	1981.60	-23.74	3.11	83.05	1676997.97	14359024.27	39°32'28.4335"N	80°52'12.8779"W	83.11	87.856	0.17	-0.11	25.56		
2078.00	0.560	76.780	2074.60	-23.59	3.36	83.34	1676998.28	14359024.52	39°32'28.4360"N	80°52'12.8742"W	83.41	87.692	0.79	0.32	132.34		
2171.00	0.450	312.700	2167.59	-23.32	3.71	83.51	1676998.43	14359024.87	39°32'28.4394"N	80°52'12.8719"W	83.60	87.456	0.96	-0.12	-133.42		
2265.00	0.540	314.410	2261.59	-22.60	4.27	82.93	1676997.84	14359025.43	39°32'28.4450"N	80°52'12.8794"W	83.03	87.052	0.10	0.10	1.82		
2359.00	0.340	334.820	2355.59	-21.93	4.83	82.49	1676997.41	14359025.99	39°32'28.4505"N	80°52'12.8850"W	82.63	86.647	0.27	-0.21	21.71		
2452.00	0.780	288.510	2448.58	-21.27	5.28	81.77	1676996.69	14359026.44	39°32'28.4550"N	80°52'12.8941"W	81.94	86.303	0.64	0.47	-49.80		
2546.00	0.470	317.050	2542.58	-20.53	5.77	80.90	1676995.82	14359026.93	39°32'28.4598"N	80°52'12.9052"W	81.11	85.922	0.46	-0.33	30.36		



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

WELLPATH DATA (267 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]	
2637.00	0.740	335.530	2633.57	-19.60	6.58	80.41	1676995.32	14359027.73	39°32'28.4678"N	80°52'12.9116"W	80.67	85.324	0.36	0.30	20.31	APS EM <8-3/4' > (2546')(2637'-6004')
2725.00	2.790	73.710	2721.54	-19.13	7.69	82.23	1676997.14	14359028.85	39°32'28.4788"N	80°52'12.8883"W	82.59	84.654	3.39	2.33	111.57	
2814.00	7.400	82.990	2810.16	-20.39	9.00	90.00	1677004.91	14359030.16	39°32'28.4916"N	80°52'12.7891"W	90.45	84.288	5.25	5.18	10.43	
2902.00	8.090	78.570	2897.36	-22.33	10.92	101.69	1677016.60	14359032.08	39°32'28.5104"N	80°52'12.6398"W	102.28	83.870	1.04	0.78	-5.02	
2991.00	9.180	71.540	2985.35	-23.16	14.41	114.57	1677029.47	14359035.56	39°32'28.5447"N	80°52'12.4754"W	115.47	82.831	1.70	1.22	-7.90	
3079.00	11.600	69.370	3071.90	-22.90	19.75	129.51	1677044.40	14359040.90	39°32'28.5973"N	80°52'12.2846"W	131.00	81.329	2.79	2.75	-2.47	
3167.00	13.220	70.840	3157.84	-22.54	26.17	147.29	1677062.18	14359047.32	39°32'28.6605"N	80°52'12.0574"W	149.60	79.925	1.88	1.84	1.67	
3256.00	14.430	76.330	3244.27	-23.44	32.13	167.88	1677082.56	14359053.28	39°32'28.7191"N	80°52'11.7971"W	170.73	79.152	2.00	1.36	6.17	
3344.00	16.240	77.500	3329.13	-25.75	37.39	190.35	1677105.23	14359058.53	39°32'28.7708"N	80°52'11.5076"W	193.99	78.888	2.09	2.06	1.33	
3433.00	19.000	78.220	3413.95	-28.86	43.04	216.69	1677131.55	14359064.18	39°32'28.8262"N	80°52'11.1713"W	220.92	78.766	3.11	3.10	0.81	
3526.00	22.790	82.040	3500.82	-34.06	48.63	249.36	1677164.21	14359069.77	39°32'28.8810"N	80°52'10.7542"W	254.06	78.965	4.33	4.08	4.11	
3614.00	26.230	82.620	3580.88	-41.08	53.49	285.54	1677200.37	14359074.63	39°32'28.9285"N	80°52'10.2923"W	290.50	79.390	3.92	3.91	0.66	
3703.00	28.560	81.770	3659.89	-48.84	59.06	326.10	1677240.92	14359080.20	39°32'28.9830"N	80°52'9.7744"W	331.41	79.735	2.65	2.62	-0.96	
3792.00	26.900	77.090	3738.68	-54.77	66.60	366.79	1677281.59	14359087.74	39°32'29.0570"N	80°52'9.2549"W	372.79	79.708	3.08	-1.87	-5.26	
3880.00	24.620	72.110	3817.94	-57.06	76.69	403.65	1677318.44	14359097.82	39°32'29.1561"N	80°52'8.7843"W	410.87	79.243	3.57	-2.59	-5.66	
3968.00	23.980	69.130	3898.14	-56.67	88.69	437.80	1677352.58	14359109.81	39°32'29.2742"N	80°52'8.3481"W	446.70	78.548	1.57	-0.73	-3.39	
4057.00	24.300	65.290	3979.36	-54.09	102.79	471.34	1677386.10	14359123.91	39°32'29.4131"N	80°52'7.9198"W	482.42	77.698	1.80	0.36	-4.31	
4146.00	24.440	65.530	4060.43	-50.35	118.07	504.73	1677419.48	14359139.18	39°32'29.5636"N	80°52'7.4932"W	518.36	76.834	0.19	0.16	0.27	
4234.00	24.570	67.070	4140.51	-47.19	132.74	538.15	1677452.89	14359153.84	39°32'29.7081"N	80°52'7.0664"W	554.28	76.144	0.74	0.15	1.75	
4323.00	24.660	70.550	4221.43	-45.61	146.13	572.70	1677487.42	14359167.23	39°32'29.8400"N	80°52'6.6251"W	591.05	75.686	1.63	0.10	3.91	
4411.00	26.140	76.050	4300.93	-47.00	156.92	608.83	1677523.54	14359178.01	39°32'29.9461"N	80°52'6.1637"W	628.73	75.547	3.16	1.68	6.25	
4500.00	26.850	79.050	4380.58	-51.37	165.46	647.60	1677562.29	14359186.56	39°32'30.0300"N	80°52'5.6688"W	668.40	75.667	1.70	0.80	3.37	
4588.00	25.890	79.790	4459.43	-56.91	172.64	686.02	1677600.69	14359193.73	39°32'30.1004"N	80°52'5.1783"W	707.41	75.874	1.15	-1.09	0.84	
4677.00	25.690	77.940	4539.56	-62.04	180.12	724.00	1677638.66	14359201.21	39°32'30.1737"N	80°52'4.6932"W	746.07	76.030	0.93	-0.22	-2.08	
4765.00	24.900	79.220	4619.12	-66.82	187.57	760.86	1677675.50	14359208.65	39°32'30.2468"N	80°52'4.2227"W	783.64	76.151	1.09	-0.90	1.45	
4853.00	25.770	80.340	4698.66	-72.40	194.24	797.92	1677712.55	14359215.33	39°32'30.3122"N	80°52'3.7495"W	821.22	76.318	1.13	0.99	1.27	
4942.00	27.840	80.990	4778.09	-78.97	200.74	837.52	1677752.13	14359221.82	39°32'30.3759"N	80°52'3.2439"W	861.24	76.521	2.35	2.33	0.73	
5030.00	28.530	77.850	4855.66	-84.86	208.39	878.36	1677792.96	14359229.46	39°32'30.4509"N	80°52'2.7225"W	902.74	76.654	1.86	0.78	-3.57	
5119.00	26.790	72.310	4934.50	-87.66	218.96	918.26	1677832.84	14359240.03	39°32'30.5547"N	80°52'2.2130"W	944.00	76.588	3.49	-1.96	-6.22	
5207.00	25.710	72.210	5013.43	-88.34	230.82	955.33	1677869.89	14359251.88	39°32'30.6714"N	80°52'1.7396"W	982.81	76.417	1.23	-1.23	-0.11	



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELL PATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

WELLPATH DATA (267 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)	
5296.00	25.290	74.850	5093.76	-89.85	241.68	992.06	1677906.61	14359262.75	39°32'30.7783"N	80°52'1.2705"W	1021.07	76.308	1.36	-0.47	2.97	
5384.00	25.070	76.150	5173.40	-92.62	251.06	1028.30	1677942.84	14359272.12	39°32'30.8704"N	80°52'0.8077"W	1058.51	76.280	0.68	-0.25	1.48	
5473.00	25.610	74.330	5253.83	-95.26	260.77	1065.13	1677979.66	14359281.82	39°32'30.9658"N	80°52'0.3374"W	1096.59	76.243	1.06	0.61	-2.04	
5561.00	26.590	72.370	5332.86	-96.66	271.87	1102.22	1678016.72	14359292.92	39°32'31.0750"N	80°51'59.8639"W	1135.25	76.144	1.48	1.11	-2.23	
5650.00	26.740	71.910	5412.40	-97.27	284.12	1140.23	1678054.72	14359305.17	39°32'31.1955"N	80°51'59.3784"W	1175.10	76.008	0.29	0.17	-0.52	
5738.00	25.900	73.950	5491.27	-98.40	295.58	1177.52	1678092.00	14359316.62	39°32'31.3082"N	80°51'58.9022"W	1214.05	75.909	1.40	-0.95	2.32	
5827.00	25.070	75.110	5571.61	-100.57	305.80	1214.43	1678128.89	14359326.84	39°32'31.4087"N	80°51'58.4309"W	1252.33	75.866	1.09	-0.93	1.30	
5915.00	24.470	75.900	5651.52	-103.30	315.03	1250.12	1678164.57	14359336.06	39°32'31.4994"N	80°51'57.9751"W	1289.20	75.856	0.78	-0.68	0.90	
6004.00	22.150	70.500	5733.26	-104.57	325.12	1283.82	1678198.26	14359346.15	39°32'31.5987"N	80°51'57.5448"W	1324.35	75.789	3.54	-2.61	-6.07	
6050.00	21.120	64.600	5776.02	-103.49	331.58	1299.48	1678213.91	14359352.60	39°32'31.6622"N	80°51'57.3447"W	1341.12	75.686	5.23	-2.24	-12.83	BH AT Curve <8-1/2'> (6004')(6050'-22857')
6139.00	21.400	65.680	5858.96	-100.06	345.14	1328.76	1678243.18	14359366.16	39°32'31.7958"N	80°51'56.9707"W	1372.86	75.439	0.54	0.31	1.21	
6227.00	22.230	50.130	5940.73	-92.49	362.44	1356.19	1678270.60	14359383.45	39°32'31.9664"N	80°51'56.6203"W	1403.79	75.038	6.62	0.94	-17.67	
6316.00	24.590	36.300	6022.46	-75.79	388.18	1380.10	1678294.50	14359409.18	39°32'32.2204"N	80°51'56.3146"W	1433.65	74.290	6.70	2.65	-15.54	
6404.00	28.910	29.550	6101.04	-51.13	421.46	1401.44	1678315.83	14359442.45	39°32'32.5491"N	80°51'56.0415"W	1463.45	73.262	5.99	4.91	-7.67	
6493.00	32.010	15.190	6177.85	-17.19	463.01	1418.26	1678332.64	14359483.98	39°32'32.9594"N	80°51'55.8251"W	1491.93	71.920	8.87	3.48	-16.13	
6576.00†	38.019	6.306	6245.84	24.28	509.71	1426.85	1678341.23	14359530.67	39°32'33.4209"N	80°51'55.7156"W	1515.16	70.342	9.48	7.24	-10.70	Sycamore: 6576' MD
6581.00	38.400	5.850	6249.77	27.09	512.79	1427.17	1678341.55	14359533.74	39°32'33.4513"N	80°51'55.7114"W	1516.50	70.236	9.48	7.61	-9.13	
6670.00	44.160	359.910	6316.65	81.67	571.36	1429.95	1678344.32	14359592.29	39°32'34.0301"N	80°51'55.6749"W	1539.87	68.220	7.82	6.47	-6.67	
6722.00†	48.039	357.113	6352.71	117.44	608.80	1428.94	1678343.32	14359629.72	39°32'34.4002"N	80°51'55.6870"W	1553.23	66.924	8.40	7.46	-5.38	Middlesex: 6722' MD
6758.00	50.760	355.370	6376.13	143.85	636.07	1427.14	1678341.52	14359656.98	39°32'34.6697"N	80°51'55.7094"W	1562.47	65.978	8.40	7.56	-4.84	
6846.00	60.040	350.460	6426.07	214.71	707.82	1418.05	1678332.43	14359728.69	39°32'35.3789"N	80°51'55.8241"W	1584.89	63.474	11.50	10.55	-5.58	
6875.00†	62.358	347.890	6440.04	239.88	732.77	1413.27	1678327.66	14359753.64	39°32'35.6256"N	80°51'55.8846"W	1591.95	62.594	11.14	7.99	-8.86	Burkett: 6875' MD
6914.00†	65.545	344.601	6457.17	274.77	766.79	1404.93	1678319.32	14359787.64	39°32'35.9620"N	80°51'55.9904"W	1600.56	61.375	11.14	8.17	-8.43	Tully: 6914' MD
6935.00	67.290	342.900	6465.57	294.00	785.27	1399.54	1678313.93	14359806.11	39°32'36.1447"N	80°51'56.0588"W	1604.80	60.704	11.14	8.31	-8.10	
6979.00	70.710	339.070	6481.34	335.06	824.08	1386.15	1678300.55	14359844.91	39°32'36.5285"N	80°51'56.2291"W	1612.61	59.268	11.24	7.77	-8.70	
7023.00	73.750	336.560	6494.77	376.88	862.87	1370.33	1678284.73	14359883.68	39°32'36.9121"N	80°51'56.4303"W	1619.36	57.802	8.79	6.91	-5.70	
7070.00†	76.126	334.759	6506.99	422.04	904.21	1351.62	1678266.03	14359925.01	39°32'37.3210"N	80°51'56.6683"W	1626.18	56.218	6.26	5.06	-3.83	Marcellus POE: 7070' MD
7112.00	78.260	333.180	6516.30	462.66	941.01	1333.64	1678248.06	14359981.79	39°32'37.6849"N	80°51'56.8971"W	1632.21	54.793	6.26	5.08	-3.76	
7200.00	82.220	333.810	6531.21	548.57	1018.61	1294.95	1678209.38	14360039.36	39°32'38.4524"N	80°51'57.3895"W	1647.56	51.811	4.55	4.50	0.72	
7289.00	89.850	334.500	6537.36	636.61	1098.45	1256.28	1678170.72	14360119.17	39°32'39.2421"N	80°51'57.8817"W	1668.78	48.834	8.61	8.57	0.78	



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

WELLPATH DATA (267 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
7377.00	90.550	333.380	6537.05	723.89	1177.51	1217.62	1678132.08	14360198.19	39°32'40.0240"N	80°51'58.3736"W	1693.85	45.959	1.50	0.80	-1.27	
7466.00	90.740	336.340	6536.05	812.32	1258.06	1179.81	1678094.29	14360278.72	39°32'40.8207"N	80°51'58.8547"W	1724.73	43.162	3.33	0.21	3.33	
7554.00	90.000	336.130	6535.48	899.98	1338.60	1144.35	1678058.84	14360359.22	39°32'41.6171"N	80°51'59.3058"W	1761.07	40.527	0.87	-0.84	-0.24	
7643.00	90.180	339.570	6535.34	988.81	1421.02	1110.80	1678025.31	14360441.61	39°32'42.4322"N	80°51'59.7325"W	1803.65	38.015	3.87	0.20	3.87	
7731.00	90.310	341.200	6534.97	1076.80	1503.91	1081.26	1677995.78	14360524.46	39°32'43.2519"N	80°52'0.1080"W	1852.26	35.715	1.86	0.15	1.86	
7820.00	90.490	342.310	6534.35	1165.79	1588.43	1053.40	1677967.93	14360608.95	39°32'44.0876"N	80°52'0.4621"W	1905.98	33.551	1.26	0.20	1.25	
7908.00	89.780	341.150	6534.14	1253.78	1671.99	1025.81	1677940.35	14360692.48	39°32'44.9139"N	80°52'0.8127"W	1961.59	31.530	1.55	-0.81	-1.32	
7997.00	90.890	343.040	6533.62	1342.77	1756.67	998.45	1677913.00	14360777.13	39°32'45.7512"N	80°52'1.1603"W	2020.60	29.613	2.46	1.25	2.12	
8085.00	89.850	339.070	6533.05	1430.75	1839.89	969.89	1677884.45	14360860.31	39°32'46.5741"N	80°52'1.5234"W	2079.87	27.796	4.66	-1.18	-4.51	
8174.00	88.310	337.830	6534.48	1519.62	1922.65	937.20	1677851.78	14360943.04	39°32'47.3925"N	80°52'1.9391"W	2138.91	25.987	2.22	-1.73	-1.39	
8262.00	88.710	340.950	6536.77	1607.54	2004.98	906.24	1677820.83	14361025.34	39°32'48.2067"N	80°52'2.3327"W	2200.28	24.323	3.57	0.45	3.55	
8351.00	88.710	342.860	6538.77	1696.50	2089.55	878.61	1677793.21	14361109.88	39°32'49.0429"N	80°52'2.6839"W	2266.76	22.806	2.15	0.00	2.15	
8439.00	89.910	341.420	6539.83	1784.48	2173.30	851.62	1677766.23	14361193.59	39°32'49.8710"N	80°52'3.0268"W	2334.20	21.398	2.13	1.36	-1.64	
8528.00	89.380	339.530	6540.38	1873.47	2257.18	821.88	1677736.50	14361277.43	39°32'50.7004"N	80°52'3.4049"W	2402.15	20.007	2.21	-0.60	-2.12	
8616.00	92.430	343.060	6538.99	1961.43	2340.50	793.87	1677708.30	14361360.72	39°32'51.5243"N	80°52'3.7635"W	2471.40	18.732	5.30	3.47	4.01	
8705.00	91.790	341.280	6535.72	2050.36	2425.16	766.44	1677681.08	14361445.35	39°32'52.3615"N	80°52'4.1095"W	2543.39	17.538	2.12	-0.72	-2.00	
8793.00	90.150	341.970	6534.23	2138.34	2508.66	738.70	1677653.35	14361528.81	39°32'53.1871"N	80°52'4.4620"W	2615.16	16.408	2.02	-1.86	0.78	
8882.00	90.120	341.590	6534.02	2227.34	2593.20	710.87	1677625.54	14361613.32	39°32'54.0230"N	80°52'4.8157"W	2688.87	15.330	0.43	-0.03	-0.43	
8970.00	89.140	342.280	6534.58	2315.33	2676.85	683.59	1677598.26	14361696.94	39°32'54.8502"N	80°52'5.1624"W	2762.76	14.325	1.36	-1.11	0.78	
9059.00	91.140	343.300	6534.37	2404.29	2761.86	657.25	1677571.94	14361781.92	39°32'55.6908"N	80°52'5.4970"W	2838.99	13.386	2.52	2.25	1.15	
9147.00	89.140	340.690	6534.15	2492.27	2845.54	630.06	1677544.75	14361865.56	39°32'56.5182"N	80°52'5.8426"W	2914.46	12.485	3.74	-2.27	-2.97	
9236.00	91.380	342.820	6533.75	2581.25	2930.06	602.20	1677516.91	14361950.04	39°32'57.3539"N	80°52'6.1967"W	2991.30	11.614	3.47	2.52	2.39	
9324.00	91.260	341.140	6531.72	2669.22	3013.72	574.98	1677489.70	14362033.67	39°32'58.1811"N	80°52'6.5426"W	3068.08	10.802	1.91	-0.14	-1.91	
9413.00	89.170	337.570	6531.39	2758.15	3096.98	543.61	1677458.34	14362116.90	39°32'59.0045"N	80°52'6.9415"W	3144.33	9.956	4.65	-2.35	-4.01	
9501.00	90.550	340.840	6531.60	2846.08	3179.24	512.37	1677427.12	14362199.12	39°32'59.8179"N	80°52'7.3387"W	3220.26	9.155	4.03	1.57	3.72	
9589.00	89.970	340.220	6531.20	2934.07	3262.20	483.04	1677397.80	14362282.06	39°33'0.6383"N	80°52'7.7116"W	3297.77	8.423	0.96	-0.66	-0.70	
9678.00	90.740	343.210	6530.65	3023.06	3346.70	455.12	1677369.89	14362366.52	39°33'1.4737"N	80°52'8.0665"W	3377.50	7.744	3.47	0.87	3.36	
9766.00	90.890	343.110	6529.40	3111.00	3430.91	429.63	1677344.41	14362450.70	39°33'2.3065"N	80°52'8.3903"W	3457.71	7.138	0.20	0.17	-0.11	
9855.00	89.660	341.370	6528.97	3199.98	3515.67	402.48	1677317.27	14362535.42	39°33'3.1445"N	80°52'8.7353"W	3538.63	6.531	2.39	-1.38	-1.96	
9943.00	90.490	341.860	6528.86	3287.98	3599.17	374.73	1677289.53	14362618.89	39°33'3.9702"N	80°52'9.0681"W	3618.63	5.944	1.10	0.94	0.56	



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

WELLPATH DATA (267 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]	
10032.00	90.710	344.010	6527.92	3376.93	3684.25	348.62	1677263.43	14362703.93	39°33'4.8114"N	80°52'9.4199"W	3700.70	5.405	2.43	0.25	2.42	
10120.00	90.120	341.620	6527.29	3464.89	3768.31	322.62	1677237.44	14362787.96	39°33'5.6426"N	80°52'9.7502"W	3782.09	4.893	2.80	-0.67	-2.72	
10209.00	91.290	342.120	6526.19	3553.87	3852.88	294.93	1677209.76	14362872.50	39°33'6.4788"N	80°52'10.1021"W	3864.15	4.377	1.43	1.31	0.56	
10297.00	89.230	341.510	6525.79	3641.86	3936.48	267.46	1677182.31	14362956.06	39°33'7.3054"N	80°52'10.4512"W	3945.56	3.887	2.44	-2.34	-0.69	
10386.00	90.090	341.590	6526.32	3730.86	4020.90	239.30	1677154.15	14363040.45	39°33'8.1402"N	80°52'10.8092"W	4028.02	3.406	0.97	0.97	0.09	
10474.00	90.180	342.120	6526.11	3818.85	4104.53	211.89	1677126.76	14363124.04	39°33'8.9671"N	80°52'11.1575"W	4109.99	2.955	0.81	0.10	0.60	
10562.00	89.850	340.790	6526.09	3906.85	4187.96	183.91	1677098.78	14363207.44	39°33'9.7920"N	80°52'11.5133"W	4191.99	2.514	1.56	-0.38	-1.51	
10651.00	90.180	340.760	6526.07	3995.85	4271.99	154.60	1677069.49	14363291.44	39°33'10.6230"N	80°52'11.8858"W	4274.79	2.073	0.37	0.37	-0.03	
10739.00	90.090	341.850	6525.86	4083.85	4355.35	126.39	1677041.29	14363374.76	39°33'11.4472"N	80°52'12.2444"W	4357.18	1.662	1.24	-0.10	1.24	
10828.00	89.850	340.930	6525.91	4172.85	4439.69	97.99	1677012.90	14363459.07	39°33'12.2812"N	80°52'12.6054"W	4440.77	1.264	1.07	-0.27	-1.03	
10916.00	90.340	340.980	6525.76	4260.84	4522.88	69.28	1676984.20	14363542.22	39°33'13.1038"N	80°52'12.9705"W	4523.41	0.878	0.56	0.56	0.06	
11005.00	90.370	343.080	6525.21	4349.83	4607.53	41.82	1676956.75	14363626.84	39°33'13.9408"N	80°52'13.3195"W	4607.72	0.520	2.36	0.03	2.36	
11093.00	90.950	343.490	6524.19	4437.77	4691.80	16.51	1676931.46	14363711.08	39°33'14.7741"N	80°52'13.6410"W	4691.83	0.202	0.81	0.66	0.47	
11182.00	90.550	342.930	6523.03	4526.71	4777.00	-9.19	1676905.76	14363796.25	39°33'15.6165"N	80°52'13.9676"W	4777.01	359.890	0.77	-0.45	-0.63	
11270.00	90.280	340.410	6522.39	4614.70	4860.53	-36.87	1676878.10	14363879.74	39°33'16.4424"N	80°52'14.3194"W	4860.67	359.565	2.88	-0.31	-2.86	
11358.00	90.890	341.120	6521.49	4702.69	4943.61	-65.86	1676849.12	14363962.79	39°33'17.2639"N	80°52'14.6880"W	4944.05	359.237	1.06	0.69	0.81	
11447.00	90.310	339.680	6520.56	4791.67	5027.45	-95.71	1676819.28	14364046.59	39°33'18.0929"N	80°52'15.0675"W	5028.36	358.909	1.74	-0.65	-1.62	
11535.00	90.740	340.670	6519.76	4879.65	5110.23	-125.55	1676789.45	14364129.34	39°33'18.9115"N	80°52'15.4470"W	5111.77	358.593	1.23	0.49	1.13	
11623.00	90.030	337.600	6519.16	4967.58	5192.44	-156.89	1676758.12	14364211.52	39°33'19.7245"N	80°52'15.8456"W	5194.81	358.269	3.58	-0.81	-3.49	
11712.00	90.090	337.720	6519.07	5056.40	5274.76	-190.72	1676724.31	14364293.81	39°33'20.5385"N	80°52'16.2760"W	5278.21	357.929	0.15	0.07	0.13	
11800.00	89.720	339.040	6519.22	5144.29	5356.57	-223.14	1676691.90	14364375.58	39°33'21.3475"N	80°52'16.6884"W	5361.21	357.615	1.56	-0.42	1.50	
11889.00	90.400	340.520	6519.12	5233.25	5440.08	-253.90	1676661.15	14364459.06	39°33'22.1733"N	80°52'17.0796"W	5446.00	357.328	1.83	0.76	1.66	
11977.00	90.800	341.810	6518.20	5321.25	5523.36	-282.31	1676632.75	14364542.31	39°33'22.9968"N	80°52'17.4408"W	5530.57	357.074	1.53	0.45	1.47	
12066.00	89.510	338.780	6517.96	5410.22	5607.14	-312.31	1676602.76	14364626.05	39°33'23.8252"N	80°52'17.8223"W	5615.83	356.812	3.70	-1.45	-3.40	
12154.00	90.340	340.320	6518.08	5498.18	5689.59	-343.06	1676572.03	14364708.47	39°33'24.6405"N	80°52'18.2134"W	5699.92	356.549	1.99	0.94	1.75	
12242.00	89.600	339.050	6518.12	5586.14	5772.11	-373.61	1676541.49	14364790.96	39°33'25.4566"N	80°52'18.6019"W	5784.19	356.297	1.67	-0.84	-1.44	
12331.00	89.970	338.930	6518.46	5675.07	5855.20	-405.52	1676509.59	14364874.01	39°33'26.2781"N	80°52'19.0078"W	5869.22	356.038	0.44	0.42	-0.13	
12419.00	90.090	338.430	6518.41	5762.98	5937.17	-437.51	1676477.61	14364955.96	39°33'27.0888"N	80°52'19.4148"W	5953.27	355.785	0.58	0.14	-0.57	
12508.00	90.280	341.030	6518.12	5851.94	6020.65	-468.34	1676446.79	14365039.40	39°33'27.9143"N	80°52'19.8069"W	6038.84	355.552	2.93	0.21	2.92	
12596.00	90.650	340.660	6517.41	5939.94	6103.78	-497.22	1676417.93	14365122.49	39°33'28.7362"N	80°52'20.1740"W	6124.00	355.343	0.59	0.42	-0.42	



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

WELLPATH DATA (267 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
12685.00	89.660	338.670	6517.17	6028.90	6187.23	-528.14	1676387.02	14365205.91	39°33'29.5614"N	80°52'20.5674"W	6209.73	355.121	2.50	-1.11	-2.24	
12773.00	90.340	340.200	6517.17	6116.85	6269.62	-559.06	1676356.12	14365288.27	39°33'30.3761"N	80°52'20.9605"W	6294.49	354.904	1.90	0.77	1.74	
12861.00	90.280	339.990	6516.69	6204.83	6352.36	-589.02	1676326.17	14365370.97	39°33'31.1943"N	80°52'21.3415"W	6379.61	354.702	0.25	-0.07	-0.24	
12950.00	89.110	339.610	6517.17	6293.80	6435.88	-619.75	1676295.45	14365454.46	39°33'32.0202"N	80°52'21.7324"W	6465.65	354.500	1.38	-1.31	-0.43	
13038.00	91.970	340.640	6516.34	6381.77	6518.63	-649.66	1676265.55	14365537.17	39°33'32.8384"N	80°52'22.1128"W	6550.92	354.309	3.45	3.25	1.17	
13127.00	93.730	344.300	6511.91	6470.62	6603.37	-676.43	1676238.79	14365621.88	39°33'33.6763"N	80°52'22.4531"W	6637.92	354.151	4.56	1.98	4.11	
13215.00	91.750	340.000	6507.70	6558.48	6687.01	-703.37	1676211.86	14365705.49	39°33'34.5034"N	80°52'22.7955"W	6723.90	353.995	5.37	-2.25	-4.89	
13304.00	90.580	340.120	6505.89	6647.44	6770.66	-733.71	1676181.53	14365789.11	39°33'35.3305"N	80°52'23.1814"W	6810.30	353.815	1.32	-1.31	0.13	
13392.00	90.090	337.920	6505.38	6735.37	6852.82	-765.22	1676150.04	14365871.23	39°33'36.1429"N	80°52'23.5822"W	6895.41	353.628	2.56	-0.56	-2.50	
13481.00	89.720	338.240	6505.52	6824.23	6935.38	-798.44	1676116.83	14365953.77	39°33'36.9594"N	80°52'24.0049"W	6981.19	353.433	0.55	-0.42	0.36	
13569.00	89.910	340.900	6505.81	6912.18	7017.84	-829.16	1676086.13	14366036.19	39°33'37.7748"N	80°52'24.3956"W	7066.65	353.262	3.03	0.22	3.02	
13657.00	89.320	339.650	6506.40	7000.17	7100.67	-858.86	1676056.44	14366118.99	39°33'38.5938"N	80°52'24.7733"W	7152.42	353.103	1.57	-0.67	-1.42	
13746.00	89.660	340.130	6507.19	7089.14	7184.24	-889.46	1676025.85	14366202.53	39°33'39.4202"N	80°52'25.1625"W	7239.09	352.942	0.66	0.38	0.54	
13834.00	89.750	340.100	6507.65	7177.12	7266.99	-919.39	1675995.93	14366285.24	39°33'40.2385"N	80°52'25.5432"W	7324.92	352.790	0.11	0.10	-0.03	
13923.00	90.030	340.520	6507.82	7266.11	7350.79	-949.37	1675965.96	14366369.01	39°33'41.0671"N	80°52'25.9245"W	7411.84	352.641	0.57	0.31	0.47	
14011.00	89.820	342.000	6507.93	7354.10	7434.12	-977.64	1675937.70	14366452.31	39°33'41.8911"N	80°52'26.2840"W	7498.13	352.508	1.70	-0.24	1.68	
14099.00	89.600	342.470	6508.38	7442.09	7517.93	-1004.49	1675910.86	14366536.07	39°33'42.7197"N	80°52'26.6253"W	7584.74	352.390	0.59	-0.25	0.53	
14188.00	91.080	341.610	6507.85	7531.08	7602.58	-1031.94	1675883.43	14366620.70	39°33'43.5567"N	80°52'26.9742"W	7672.30	352.270	1.92	1.66	-0.97	
14276.00	90.560	338.430	6506.57	7619.03	7685.27	-1062.00	1675853.38	14366703.35	39°33'44.3743"N	80°52'27.3566"W	7758.30	352.132	3.66	-0.57	-3.61	
14365.00	91.170	339.820	6505.21	7707.96	7768.41	-1093.71	1675821.68	14366786.46	39°33'45.1965"N	80°52'27.7599"W	7845.03	351.986	1.70	0.66	1.56	
14453.00	90.830	340.090	6503.68	7795.92	7851.07	-1123.86	1675791.54	14366869.09	39°33'46.0139"N	80°52'28.1435"W	7931.10	351.854	0.49	-0.39	0.31	
14542.00	90.280	339.040	6502.82	7884.88	7934.46	-1154.94	1675760.48	14366952.45	39°33'46.8385"N	80°52'28.5388"W	8018.08	351.718	1.33	-0.62	-1.18	
14630.00	89.910	338.330	6502.67	7972.79	8016.44	-1186.92	1675728.50	14367034.39	39°33'47.6492"N	80°52'28.9457"W	8103.84	351.578	0.91	-0.42	-0.81	
14719.00	90.550	341.400	6502.31	8061.75	8099.99	-1217.56	1675697.88	14367117.91	39°33'48.4753"N	80°52'29.3354"W	8190.99	351.452	3.52	0.72	3.45	
14807.00	90.550	338.890	6501.47	8149.72	8182.75	-1247.44	1675668.01	14367200.83	39°33'49.2937"N	80°52'29.7155"W	8277.29	351.332	2.85	0.00	-2.85	
14896.00	90.890	341.540	6500.35	8238.69	8266.48	-1277.56	1675637.90	14367284.33	39°33'50.1216"N	80°52'30.0986"W	8364.62	351.215	3.00	0.38	2.98	
14984.00	90.370	342.150	6499.38	8326.68	8350.10	-1304.98	1675610.49	14367367.91	39°33'50.9484"N	80°52'30.4472"W	8451.45	351.117	0.91	-0.59	0.69	
15073.00	90.580	344.350	6498.64	8415.62	8435.31	-1330.63	1675584.66	14367453.09	39°33'51.7909"N	80°52'30.7732"W	8539.62	351.036	2.48	0.24	2.47	
15161.00	90.650	345.090	6497.70	8503.45	8520.20	-1353.82	1675561.68	14367537.94	39°33'52.6302"N	80°52'31.0678"W	8627.08	350.971	0.84	0.08	0.84	
15249.00	91.570	344.370	6496.00	8591.28	8605.07	-1376.99	1675538.51	14367622.79	39°33'53.4693"N	80°52'31.3621"W	8714.55	350.909	1.33	1.05	-0.82	





# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Yough Unit 1H
Field	Tyler		API	47-095-02723-0000
Facility	Elk Fork Pad		Wellbore	Yough Unit 1H AWB
Slot	Slot #05			

WELLPATH DATA (267 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]	
15338.00	90.180	343.670	6494.64	8680.16	8690.62	-1401.49	1675514.02	14367708.30	39°33'54.3152"N	80°52'31.6734"W	8802.90	350.839	1.75	-1.56	-0.79	
15426.00	90.250	343.970	6494.31	8768.07	8775.13	-1426.01	1675489.51	14367792.78	39°33'55.1508"N	80°52'31.9850"W	8890.25	350.770	0.35	0.08	0.34	
15515.00	90.430	344.350	6493.78	8856.95	8860.75	-1450.30	1675465.23	14367878.36	39°33'55.9973"N	80°52'32.2937"W	8978.66	350.704	0.47	0.20	0.43	
15603.00	90.740	345.350	6492.88	8944.78	8945.69	-1473.30	1675442.24	14367963.27	39°33'56.8370"N	80°52'32.5859"W	9066.20	350.648	1.19	0.35	1.14	
15692.00	90.280	344.290	6492.09	9033.60	9031.58	-1496.60	1675418.95	14368049.12	39°33'57.6862"N	80°52'32.8819"W	9154.74	350.591	1.30	-0.52	-1.19	
15780.00	90.150	344.480	6491.76	9121.47	9116.33	-1520.29	1675395.27	14368133.84	39°33'58.5242"N	80°52'33.1829"W	9242.23	350.532	0.26	-0.15	0.22	
15869.00	90.180	344.300	6491.50	9210.33	9202.05	-1544.24	1675371.33	14368219.52	39°33'59.3717"N	80°52'33.4871"W	9330.72	350.474	0.21	0.03	-0.20	
15957.00	90.090	343.690	6491.29	9298.23	9286.63	-1568.50	1675347.08	14368304.08	39°34'0.2080"N	80°52'33.7955"W	9418.16	350.413	0.70	-0.10	-0.69	
16045.00	90.890	343.520	6490.54	9386.16	9371.05	-1593.34	1675322.25	14368388.46	39°34'1.0427"N	80°52'34.1111"W	9505.54	350.350	0.93	0.91	-0.19	
16134.00	90.340	341.760	6489.59	9475.12	9455.99	-1619.89	1675295.71	14368473.36	39°34'1.8825"N	80°52'34.4487"W	9593.74	350.279	2.07	-0.62	-1.98	
16222.00	90.520	343.150	6488.92	9563.10	9539.89	-1646.42	1675269.19	14368557.23	39°34'2.7121"N	80°52'34.7859"W	9680.92	350.208	1.59	0.20	1.58	
16311.00	89.940	341.590	6488.57	9652.08	9624.71	-1673.37	1675242.25	14368642.01	39°34'3.5507"N	80°52'35.1286"W	9769.09	350.137	1.87	-0.65	-1.75	
16399.00	90.460	341.460	6488.26	9740.08	9708.17	-1701.26	1675214.37	14368725.44	39°34'4.3760"N	80°52'35.4833"W	9856.11	350.060	0.61	0.59	-0.15	
16488.00	90.000	341.480	6487.90	9829.07	9792.56	-1729.54	1675186.10	14368809.80	39°34'5.2103"N	80°52'35.8429"W	9944.12	349.984	0.52	-0.52	0.02	
16576.00	89.970	340.780	6487.93	9917.07	9875.83	-1758.00	1675157.65	14368893.03	39°34'6.0337"N	80°52'36.2049"W	10031.08	349.906	0.80	-0.03	-0.80	
16665.00	90.000	340.930	6487.95	10006.07	9959.90	-1787.19	1675128.48	14368977.08	39°34'6.8650"N	80°52'36.5762"W	10118.98	349.827	0.17	0.03	0.17	
16753.00	90.120	340.960	6487.86	10094.07	10043.08	-1815.92	1675099.76	14369060.22	39°34'7.6875"N	80°52'36.9416"W	10205.93	349.751	0.14	0.14	0.03	
16841.00	90.220	341.510	6487.60	10182.07	10126.40	-1844.23	1675071.46	14369143.51	39°34'8.5114"N	80°52'37.3016"W	10292.97	349.678	0.64	0.11	0.63	
16930.00	90.250	340.830	6487.23	10271.07	10210.64	-1872.95	1675042.75	14369227.71	39°34'9.3443"N	80°52'37.6669"W	10381.00	349.606	0.76	0.03	-0.76	
17019.00	90.000	341.030	6487.04	10360.07	10294.76	-1902.03	1675013.68	14369311.79	39°34'10.1760"N	80°52'38.0368"W	10468.99	349.532	0.36	-0.28	0.22	
17107.00	90.280	340.670	6486.82	10448.06	10377.89	-1930.90	1674984.82	14369394.89	39°34'10.9980"N	80°52'38.4039"W	10555.99	349.460	0.52	0.32	-0.41	
17196.00	90.280	341.200	6486.39	10537.06	10462.00	-1959.97	1674955.76	14369478.97	39°34'11.8297"N	80°52'38.7737"W	10644.01	349.389	0.60	0.00	0.60	
17284.00	89.850	340.950	6486.29	10625.06	10545.24	-1988.51	1674927.24	14369562.18	39°34'12.6528"N	80°52'39.1367"W	10731.09	349.321	0.57	-0.49	-0.28	
17373.00	90.400	341.210	6486.09	10714.06	10629.44	-2017.37	1674898.39	14369646.34	39°34'13.4853"N	80°52'39.5037"W	10819.18	349.254	0.68	0.62	0.29	
17461.00	90.030	339.980	6485.76	10802.05	10712.43	-2046.61	1674869.16	14369729.30	39°34'14.3060"N	80°52'39.8756"W	10906.18	349.184	1.46	-0.42	-1.40	
17549.00	90.460	341.270	6485.39	10890.04	10795.45	-2075.80	1674839.98	14369812.28	39°34'15.1268"N	80°52'40.2470"W	10993.21	349.116	1.55	0.49	1.47	
17638.00	89.540	340.850	6485.39	10979.04	10879.63	-2104.69	1674811.11	14369896.43	39°34'15.9592"N	80°52'40.6144"W	11081.34	349.051	1.14	-1.03	-0.47	
17726.00	90.120	340.760	6485.65	11067.04	10962.74	-2133.62	1674782.19	14369979.51	39°34'16.7809"N	80°52'40.9824"W	11168.43	348.987	0.67	0.66	-0.10	
17815.00	90.460	341.850	6485.20	11156.03	11047.04	-2162.14	1674753.67	14370063.77	39°34'17.6145"N	80°52'41.3452"W	11256.64	348.926	1.28	0.38	1.22	
17903.00	90.120	341.090	6484.75	11244.03	11130.47	-2190.11	1674725.72	14370147.18	39°34'18.4395"N	80°52'41.7009"W	11343.90	348.868	0.95	-0.39	-0.86	



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

WELLPATH DATA (267 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)	
17992.00	89.970	341.150	6484.68	11333.03	11214.68	-2218.91	1674696.93	14370231.35	39°34'19.2721"N	80°52'42.0672"W	11432.09	348.808	0.18	-0.17	0.07	
18080.00	90.250	341.510	6484.51	11421.03	11298.05	-2247.08	1674668.77	14370314.69	39°34'20.0965"N	80°52'42.4255"W	11519.35	348.751	0.52	0.32	0.41	
18169.00	90.000	341.210	6484.32	11510.03	11382.38	-2275.53	1674640.34	14370398.99	39°34'20.9303"N	80°52'42.7873"W	11607.61	348.695	0.44	-0.28	-0.34	
18257.00	89.780	340.800	6484.49	11598.03	11465.59	-2304.17	1674611.70	14370482.16	39°34'21.7531"N	80°52'43.1517"W	11694.83	348.637	0.53	-0.25	-0.47	
18346.00	89.940	341.870	6484.71	11687.03	11549.91	-2332.65	1674583.23	14370566.44	39°34'22.5868"N	80°52'43.5139"W	11783.11	348.582	1.22	0.18	1.20	
18434.00	90.830	340.820	6484.11	11775.02	11633.28	-2360.80	1674555.10	14370649.78	39°34'23.4111"N	80°52'43.8719"W	11870.41	348.528	1.56	1.01	-1.19	
18523.00	90.490	341.390	6483.09	11864.02	11717.48	-2389.62	1674526.29	14370733.95	39°34'24.2437"N	80°52'44.2385"W	11958.66	348.473	0.75	-0.38	0.64	
18611.00	90.860	341.260	6482.05	11952.01	11800.84	-2417.79	1674498.13	14370817.28	39°34'25.0679"N	80°52'44.5969"W	12045.98	348.421	0.45	0.42	-0.15	
18700.00	90.890	340.860	6480.69	12041.00	11885.01	-2446.68	1674469.25	14370901.41	39°34'25.9002"N	80°52'44.9643"W	12134.24	348.367	0.45	0.03	-0.45	
18788.00	91.050	341.640	6479.20	12128.98	11968.33	-2474.96	1674440.98	14370984.70	39°34'26.7240"N	80°52'45.3241"W	12221.55	348.316	0.90	0.18	0.89	
18877.00	91.170	341.860	6477.48	12217.96	12052.84	-2502.83	1674413.13	14371069.17	39°34'27.5596"N	80°52'45.6785"W	12309.96	348.269	0.28	0.13	0.25	
18965.00	91.020	342.150	6475.80	12305.94	12136.52	-2530.01	1674385.96	14371152.82	39°34'28.3870"N	80°52'46.0241"W	12397.42	348.225	0.37	-0.17	0.33	
19054.00	91.140	341.560	6474.12	12394.92	12221.08	-2557.72	1674358.26	14371237.34	39°34'29.2230"N	80°52'46.3766"W	12485.86	348.179	0.68	0.13	-0.66	
19142.00	90.490	341.600	6472.87	12482.91	12304.56	-2585.52	1674330.46	14371320.79	39°34'30.0485"N	80°52'46.7302"W	12573.27	348.133	0.74	-0.74	0.05	
19231.00	90.620	341.530	6472.01	12571.90	12388.99	-2613.67	1674302.33	14371405.19	39°34'30.8833"N	80°52'47.0882"W	12661.68	348.087	0.17	0.15	-0.08	
19319.00	90.860	341.000	6470.87	12659.90	12472.32	-2641.93	1674274.08	14371488.48	39°34'31.7072"N	80°52'47.4477"W	12749.06	348.040	0.66	0.27	-0.60	
19408.00	90.520	340.790	6469.80	12748.89	12556.41	-2671.05	1674244.96	14371572.54	39°34'32.5387"N	80°52'47.8182"W	12837.37	347.991	0.45	-0.38	-0.24	
19496.00	91.140	341.180	6468.52	12836.88	12639.60	-2699.72	1674216.31	14371655.70	39°34'33.3613"N	80°52'48.1829"W	12924.70	347.943	0.83	0.70	0.44	
19585.00	90.680	341.420	6467.11	12925.87	12723.89	-2728.25	1674187.79	14371739.95	39°34'34.1947"N	80°52'48.5458"W	13013.10	347.898	0.58	-0.52	0.27	
19673.00	90.920	341.900	6465.88	13013.85	12807.41	-2755.94	1674160.11	14371823.44	39°34'35.0205"N	80°52'48.8980"W	13100.57	347.856	0.61	0.27	0.55	
19762.00	89.660	341.800	6465.43	13102.85	12891.98	-2783.66	1674132.40	14371907.98	39°34'35.8567"N	80°52'49.2506"W	13189.08	347.816	1.42	-1.42	-0.11	
19850.00	89.660	341.330	6465.95	13190.84	12975.46	-2811.49	1674104.58	14371991.43	39°34'36.6822"N	80°52'49.6046"W	13276.56	347.774	0.53	0.00	-0.53	
19939.00	89.630	340.880	6466.50	13279.84	13059.66	-2840.31	1674075.77	14372075.59	39°34'37.5147"N	80°52'49.9712"W	13364.96	347.730	0.51	-0.03	-0.51	
20027.00	89.480	341.060	6467.19	13367.84	13142.85	-2869.01	1674047.09	14372158.75	39°34'38.3373"N	80°52'50.3362"W	13452.35	347.686	0.27	-0.17	0.20	
20116.00	89.540	341.440	6467.95	13456.83	13227.13	-2897.61	1674018.50	14372242.99	39°34'39.1705"N	80°52'50.7001"W	13540.79	347.644	0.43	0.07	0.43	
20204.00	89.660	341.260	6468.56	13544.83	13310.50	-2925.75	1673990.37	14372326.33	39°34'39.9949"N	80°52'51.0581"W	13628.26	347.603	0.25	0.14	-0.20	
20293.00	89.820	341.360	6468.97	13633.83	13394.81	-2954.27	1673961.86	14372410.60	39°34'40.8285"N	80°52'51.4209"W	13716.73	347.562	0.21	0.18	0.11	
20381.00	89.880	341.000	6469.20	13721.83	13478.10	-2982.66	1673933.48	14372493.87	39°34'41.6521"N	80°52'51.7820"W	13804.19	347.522	0.41	0.07	-0.41	
20470.00	89.780	341.150	6469.46	13810.83	13562.29	-3011.53	1673904.63	14372578.02	39°34'42.4845"N	80°52'52.1493"W	13892.63	347.481	0.20	-0.11	0.17	
20558.00	89.600	340.960	6469.94	13898.83	13645.52	-3040.10	1673876.07	14372661.22	39°34'43.3075"N	80°52'52.5127"W	13980.08	347.440	0.30	-0.20	-0.22	



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

## WELLPATH DATA (267 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
20547.00	89.350	341.100	6470.75	13987.82	13729.69	-3069.03	1673847.15	14372745.35	39°34'44.1397"N	80°52'52.8808"W	14068.52	347.400	0.32	-0.28	0.16	
20735.00	89.630	340.750	6471.54	14075.82	13812.85	-3097.78	1673818.41	14372828.48	39°34'44.9620"N	80°52'53.2467"W	14155.96	347.360	0.51	0.32	-0.40	
20823.00	89.510	340.680	6472.20	14163.81	13895.91	-3126.85	1673789.36	14372911.51	39°34'45.7833"N	80°52'53.6164"W	14243.37	347.319	0.16	-0.14	-0.08	
20912.00	89.780	341.210	6472.75	14252.81	13980.03	-3155.90	1673760.31	14372995.59	39°34'46.6150"N	80°52'53.9861"W	14331.82	347.279	0.67	0.30	0.60	
21000.00	88.710	341.370	6473.91	14340.80	14063.37	-3184.13	1673732.10	14373078.90	39°34'47.4391"N	80°52'54.3452"W	14419.33	347.243	1.23	-1.22	0.18	
21089.00	88.920	340.970	6475.75	14429.78	14147.59	-3212.85	1673703.39	14373163.09	39°34'48.2718"N	80°52'54.7105"W	14507.82	347.205	0.51	0.24	-0.45	
21177.00	89.450	341.360	6477.00	14517.77	14230.87	-3241.25	1673674.99	14373246.33	39°34'49.0952"N	80°52'55.0719"W	14595.32	347.169	0.75	0.60	0.44	
21255.00	89.450	341.340	6477.84	14605.77	14314.25	-3269.39	1673646.87	14373329.67	39°34'49.9196"N	80°52'55.4299"W	14682.87	347.134	0.02	0.00	-0.02	
21354.00	89.050	340.280	6479.01	14694.75	14398.29	-3298.65	1673617.63	14373413.69	39°34'50.7506"N	80°52'55.8021"W	14771.32	347.096	1.27	-0.45	-1.19	
21442.00	89.420	340.780	6480.18	14782.74	14481.25	-3327.99	1673588.29	14373496.61	39°34'51.5709"N	80°52'56.1755"W	14858.74	347.057	0.69	0.42	0.55	
21531.00	89.320	340.700	6481.16	14871.73	14565.26	-3357.36	1673558.94	14373580.58	39°34'52.4015"N	80°52'56.5492"W	14947.19	347.020	0.13	-0.11	-0.07	
21619.00	89.510	341.040	6482.06	14959.72	14648.39	-3386.20	1673530.11	14373663.69	39°34'53.2236"N	80°52'56.9161"W	15034.69	346.984	0.44	0.22	0.39	
21708.00	89.480	341.360	6482.85	15048.72	14732.64	-3414.88	1673501.44	14373747.90	39°34'54.0566"N	80°52'57.2810"W	15123.23	346.950	0.36	-0.03	0.36	
21796.00	89.600	341.280	6483.55	15136.72	14816.00	-3443.06	1673473.27	14373831.23	39°34'54.8808"N	80°52'57.6396"W	15210.80	346.917	0.16	0.14	-0.09	
21884.00	89.230	341.100	6484.45	15224.71	14899.30	-3471.43	1673444.91	14373914.49	39°34'55.7044"N	80°52'58.0005"W	15298.36	346.884	0.47	-0.42	-0.20	
21973.00	89.110	340.800	6485.74	15313.70	14983.41	-3500.48	1673415.87	14373998.57	39°34'56.5361"N	80°52'58.3701"W	15386.88	346.850	0.36	-0.13	-0.34	
22061.00	89.450	340.800	6486.85	15401.69	15066.51	-3529.42	1673386.95	14374081.64	39°34'57.3578"N	80°52'58.7383"W	15474.38	346.816	0.39	0.39	0.00	
22150.00	89.540	341.670	6487.63	15490.69	15150.78	-3558.05	1673358.33	14374165.87	39°34'58.1910"N	80°52'59.1026"W	15562.96	346.784	0.98	0.10	0.98	
22238.00	89.420	340.920	6488.43	15578.68	15234.13	-3586.27	1673330.12	14374249.19	39°34'59.0151"N	80°52'59.4616"W	15650.56	346.753	0.86	-0.14	-0.85	
22327.00	89.260	340.710	6489.45	15667.67	15318.18	-3615.51	1673300.89	14374333.20	39°34'59.8482"N	80°52'59.8337"W	15739.07	346.720	0.30	-0.18	-0.24	
22415.00	89.170	340.870	6490.66	15755.66	15401.27	-3644.46	1673271.95	14374416.26	39°35'0.6677"N	80°53'0.2021"W	15826.60	346.687	0.21	-0.10	0.18	
22503.00	89.540	341.010	6491.65	15843.65	15484.44	-3673.20	1673243.22	14374499.40	39°35'1.4901"N	80°53'0.5677"W	15914.15	346.655	0.45	0.42	0.16	
22592.00	89.910	341.420	6492.08	15932.65	15568.70	-3701.86	1673214.58	14374583.62	39°35'2.3232"N	80°53'0.9324"W	16002.75	346.625	0.62	0.42	0.46	
22680.00	89.570	340.980	6492.48	16020.65	15652.00	-3730.22	1673186.23	14374666.89	39°35'3.1469"N	80°53'1.2932"W	16090.36	346.595	0.63	-0.39	-0.50	
22769.00	89.540	340.900	6493.17	16109.65	15736.12	-3759.28	1673157.18	14374750.98	39°35'3.9786"N	80°53'1.6630"W	16178.93	346.564	0.10	-0.03	-0.09	
22857.00	89.720	340.870	6493.74	16197.64	15819.27	-3788.09	1673128.37	14374834.09	39°35'4.8007"N	80°53'2.0297"W	16266.49	346.533	0.21	0.20	-0.03	
22899.00†	89.720	340.870	6493.94	16239.64	15858.95	-3801.86	1673114.61	14374873.76	39°35'5.1931"N	80°53'2.2048"W	16308.29	346.519	0.00	0.00	0.00	Projected MD at TD: 22899'



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

HOLE & CASING SECTIONS - Ref Wellbore: Yough Unit 1H AWB    Ref Wellpath: Yough Unit 1H AWP Proj: 22899'										
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	25.50	105.50	80.00	25.50	105.50	0.00	0.00	-0.33	-0.25	
17.5in Open Hole	105.50	413.00	307.50	105.50	412.99	-0.33	-0.25	-1.67	-1.61	
13.375in Casing Surface	25.50	392.00	366.50	25.50	391.99	0.00	0.00	-1.61	-1.55	
12.25in Open Hole	413.00	2623.00	2210.00	412.99	2619.57	-1.67	-1.61	6.42	80.48	
9.625in Casing Intermediate	25.50	2600.00	2574.50	25.50	2596.57	0.00	0.00	6.18	80.60	
8.75in Open Hole	2623.00	6075.00	3452.00	2619.57	5799.34	6.42	80.48	335.42	1307.65	
8.5in Open Hole	6075.00	22899.00	16824.00	5799.34	6493.94	335.42	1307.65	15858.95	-3801.86	
5.5in Casing Production	25.50	22899.00	22873.50	25.50	6493.94	0.00	0.00	15858.95	-3801.86	



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Yough Unit 1H POE Rev-1	6497.00	712.31	1334.32	1678248.74	14359733.18	39°32'35.4245"N	80°51'56.8928"W	point
Yough Unit 1H POE Rev-2	6511.00	854.35	1338.92	1678253.34	14359875.16	39°32'36.8283"N	80°51'56.8313"W	point
Yough Unit 1H AZI Rev-1	6546.00	1384.64	1106.17	1678020.68	14360405.24	39°32'42.0727"N	80°51'59.7923"W	point
Yough Unit 1H BHL Rev-2	6546.00	15863.66	-3807.27	1673109.20	14374878.47	39°35'5.2398"N	80°53'2.2739"W	point
Yough Unit 1H LP Rev-2	6546.00	1053.26	1242.27	1678156.73	14360074.00	39°32'38.7957"N	80°51'58.0613"W	point
Yough Unit 1H 50' L/R Hard Line	7000.00	8287.98	-1236.48	1675678.97	14367305.82	39°33'50.3335"N	80°52'29.5736"W	rectangle

2D Rectangle 16000 x 100.

## WELLPATH COMPOSITION - Ref Wellbore: Yough Unit 1H AWB Ref Wellpath: Yough Unit 1H AWP Proj: 22899'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
25.50	385.00	Gyrodata 2015 - GC+WIR+DPIPE	01 Gyrodata MS Gyro <17-1/2"> (100'-385')	Yough Unit 1H AWB	03/Jan/2021
385.00	2546.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02 APS EM <12-1/4"> (385')(418'-2546')	Yough Unit 1H AWB	03/Jan/2021
2546.00	6004.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03 APS EM <8-3/4"> (2546')(2637'-6004')	Yough Unit 1H AWB	16/Feb/2021
6004.00	22899.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04 BH AT Curve <8-1/2"> (6004')(6050'-22857')	Yough Unit 1H AWB	16/Feb/2021



# Actual Wellpath Report

Yough Unit 1H AWP Proj: 22899'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Yough Unit 1H
Field	Tyler	API	47-095-02723-0000
Facility	Elk Fork Pad	Wellbore	Yough Unit 1H AWB
Slot	Slot #05		

## COMMENTS

### Wellpath general comments

API: 47-095-02723-0000

BH Job #: 110728645-B

Rig: H&P 317

Duration: 2/19/2021-2/23/2021

Gyrodata MS Gyro <17-1/2"> (100'-385')

APS EM <12-1/4"> (385')(418'-2546')

APS EM <8-3/4"> (2546')(2637'-6004')

BH AT Curve <8-1/2"> (6004')(6050'-22857')

Sycamore: 6576' MD

Middlesex: 6722' MD

Burkett: 6875' MD

Tully: 6914' MD

Marcellus POE: 7070' MD

Projected MD at TD: 22899'