



Actual Wellpath Report

Kilska Unit 2H AWP Proj: 22310'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #13
Area	Tyler County, WV	Well	Kilska Unit 2H
Field	Tyler	Wellbore	Kilska Unit 2H AWB
Facility	Dawson Pad		

REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet		
North Reference	Grid	Software System	WellArchitect® 5.1
Scale	0.999601	User	Delaset
Convergence at slot	0.08° East	Report Generated	8/19/2019 at 3:43:20 PM
		Database/Source file	WA_MPL_EasternUS_Defn/Kilska_Unit_2H_AWP_Proj_22310_.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Northing[US ft]	Latitude	Longitude	Longitude
Slot Location	-239.44	249.25	14300353.17	39°22'48.340"N	80°52'22.860"W	
Facility Reference Pt			1676049.73	39°22'50.710"N	80°52'26.030"W	
Field Reference Pt			0.00	0°00'00.000"	85°29'19.301"W	

WELLPATH DATUM

Calculation method	Minimum curvature	H&P 519 (RKB) to Facility Vertical Datum	1039.00ft
Horizontal Reference Pt	Slot	H&P 519 (RKB) to Mean Sea Level	1039.00ft
Vertical Reference Pt	H&P 519 (RKB)	H&P 519 (RKB) to Ground Level at Slot (Slot #13)	30.00ft
MD Reference Pt	H&P 519 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	161.63°



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Area	Tyler County, WV	Wellbore	Kiliska Unit 2H AWB
Field	Tyler		
Facility	Dawson Pad		

WELLPATH DATA (267 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	0.00	60.800	0.00	0.00	0.00	0.00	1676298.88	14300353.17	39°22'48.340"N	80°52'22.860"W	0.00	0.000	0.00	0.00	0.00	
30.00	0.000	60.800	30.00	0.00	0.00	0.00	1676298.88	14300353.17	39°22'48.340"N	80°52'22.860"W	0.00	0.000	0.00	0.00	0.00	
115.00	0.180	60.800	115.00	-0.03	0.07	0.12	1676299.00	14300353.24	39°22'48.341"N	80°52'22.859"W	0.13	60.800	0.21	0.21	71.53	Yradata MS Gyro <17-1/2">(100'-550')
140.00	0.180	64.940	140.00	-0.04	0.10	0.19	1676299.07	14300353.27	39°22'48.341"N	80°52'22.858"W	0.21	61.566	0.05	0.00	16.56	
165.00	0.250	40.950	165.00	-0.07	0.16	0.26	1676299.14	14300353.33	39°22'48.342"N	80°52'22.857"W	0.30	58.367	0.46	0.24	-95.96	
190.00	0.220	60.410	190.00	-0.11	0.22	0.34	1676299.22	14300353.39	39°22'48.342"N	80°52'22.856"W	0.40	56.289	0.34	-0.12	77.84	
215.00	0.270	70.820	215.00	-0.12	0.27	0.43	1676299.31	14300353.44	39°22'48.343"N	80°52'22.855"W	0.51	58.344	0.27	0.20	41.64	
240.00	0.210	67.600	240.00	-0.12	0.30	0.53	1676299.41	14300353.47	39°22'48.343"N	80°52'22.853"W	0.61	60.228	0.25	-0.24	-12.88	
265.00	0.170	64.960	265.00	-0.13	0.34	0.61	1676299.49	14300353.51	39°22'48.343"N	80°52'22.852"W	0.69	60.966	0.16	-0.16	-10.56	
290.00	0.220	56.560	290.00	-0.15	0.38	0.68	1676299.56	14300353.55	39°22'48.344"N	80°52'22.851"W	0.78	60.885	0.23	0.20	-33.60	
315.00	0.180	75.570	315.00	-0.15	0.42	0.76	1676299.64	14300353.58	39°22'48.344"N	80°52'22.850"W	0.86	61.305	0.31	-0.16	76.04	
340.00	0.240	80.010	340.00	-0.14	0.43	0.85	1676299.73	14300353.60	39°22'48.344"N	80°52'22.849"W	0.95	62.897	0.25	0.24	17.76	
365.00	0.210	75.950	365.00	-0.13	0.45	0.94	1676299.82	14300353.62	39°22'48.344"N	80°52'22.848"W	1.05	64.306	0.14	-0.12	-16.24	
390.00	0.300	83.930	390.00	-0.12	0.47	1.05	1676299.93	14300353.64	39°22'48.345"N	80°52'22.847"W	1.15	65.856	0.39	0.35	31.92	
415.00	0.310	61.390	415.00	-0.11	0.51	1.18	1676300.06	14300353.68	39°22'48.345"N	80°52'22.845"W	1.28	66.527	0.48	0.04	-90.16	
440.00	0.330	69.210	440.00	-0.13	0.57	1.30	1676300.18	14300353.74	39°22'48.346"N	80°52'22.843"W	1.42	66.419	0.19	0.08	31.28	
465.00	0.390	70.310	465.00	-0.13	0.62	1.45	1676300.33	14300353.79	39°22'48.346"N	80°52'22.842"W	1.58	66.756	0.24	0.24	4.40	
490.00	0.600	68.600	490.00	-0.14	0.70	1.65	1676300.53	14300353.87	39°22'48.347"N	80°52'22.839"W	1.80	67.058	0.84	0.84	-6.84	
515.00	0.610	82.360	514.99	-0.13	0.77	1.91	1676300.79	14300353.94	39°22'48.348"N	80°52'22.836"W	2.06	68.136	0.58	0.04	55.04	
540.00	0.450	92.110	539.99	-0.07	0.78	2.14	1676301.02	14300353.95	39°22'48.348"N	80°52'22.833"W	2.28	69.964	0.73	-0.64	39.00	
565.00	0.400	88.230	564.99	-0.01	0.78	2.32	1676301.20	14300353.95	39°22'48.348"N	80°52'22.830"W	2.45	71.469	0.23	-0.21	-15.52	
687.00	0.720	146.460	686.99	0.85	0.15	3.17	1676302.05	14300353.32	39°22'48.341"N	80°52'22.820"W	3.18	87.240	0.50	0.28	47.73	WFT EM <12-1/4">(550')(672'-2509')
769.00	0.480	163.890	768.98	1.70	-0.61	3.55	1676302.43	14300352.56	39°22'48.334"N	80°52'22.815"W	3.60	99.689	0.36	-0.23	21.26	
801.00	0.190	218.530	800.98	1.86	-0.78	3.56	1676302.43	14300352.39	39°22'48.332"N	80°52'22.815"W	3.64	102.321	1.25	-0.91	170.75	
895.00	0.730	300.960	894.98	1.49	-0.59	2.95	1676301.82	14300352.58	39°22'48.334"N	80°52'22.823"W	3.00	101.338	0.78	0.57	87.69	
993.00	0.840	295.610	992.97	0.52	0.04	1.76	1676300.64	14300353.21	39°22'48.340"N	80°52'22.838"W	1.76	88.667	0.13	0.11	-5.46	
1087.00	0.920	301.640	1086.96	-0.54	0.73	0.50	1676299.38	14300353.90	39°22'48.347"N	80°52'22.854"W	0.89	34.173	0.13	0.09	6.41	
1182.00	0.760	292.310	1181.95	-1.54	1.37	-0.73	1676298.15	14300354.54	39°22'48.354"N	80°52'22.869"W	1.56	331.908	0.22	-0.17	-9.82	
1277.00	0.900	270.920	1276.94	-2.19	1.63	-2.06	1676296.82	14300354.79	39°22'48.356"N	80°52'22.886"W	2.63	308.239	0.36	0.15	-22.52	
1372.00	1.490	261.050	1371.92	-2.64	1.44	-4.03	1676294.85	14300354.61	39°22'48.354"N	80°52'22.911"W	4.28	289.733	0.66	0.62	-10.39	



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Area	Tyler County, WV	Wellbore	Kiliska Unit 2H AWB
Field	Tyler		
Facility	Dawson Pad		

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
1467.00	1.370	251.463	1466.89	-2.84	0.89	-6.33	1676292.56	14300354.06	39°22'48.349"N	80°52'22.941"W	6.39	278.025	0.28	-0.13	-10.09	
1562.00	1.060	223.250	1561.87	-2.42	-0.11	-8.00	1676290.88	14300353.06	39°22'48.339"N	80°52'22.962"W	8.00	269.217	0.70	-0.33	-29.69	
1657.00	0.710	165.240	1656.86	-1.41	-1.32	-8.46	1676290.43	14300351.85	39°22'48.327"N	80°52'22.968"W	8.56	261.137	0.96	-0.37	-61.06	
1752.00	1.310	125.320	1751.84	0.05	-2.52	-7.42	1676291.46	14300350.66	39°22'48.315"N	80°52'22.955"W	7.83	251.271	0.94	0.63	-42.02	
1847.00	1.830	134.570	1846.81	2.27	-4.21	-5.45	1676293.43	14300348.96	39°22'48.298"N	80°52'22.930"W	6.89	232.345	0.61	0.55	9.74	
1942.00	1.430	135.220	1941.77	4.69	-6.11	-3.54	1676295.34	14300347.06	39°22'48.280"N	80°52'22.905"W	7.06	210.056	0.42	-0.42	0.68	
2036.00	1.180	112.360	2035.75	6.37	-7.31	-1.82	1676297.06	14300345.86	39°22'48.268"N	80°52'22.883"W	7.54	193.947	0.61	-0.27	-24.32	
2131.00	1.310	76.540	2130.73	7.10	-7.43	0.14	1676299.02	14300345.74	39°22'48.267"N	80°52'22.858"W	7.44	178.888	0.82	0.14	-37.71	
2227.00	1.430	59.530	2226.70	6.94	-6.57	2.24	1676301.12	14300346.60	39°22'48.275"N	80°52'22.832"W	6.94	161.146	0.44	0.12	-17.72	
2321.00	0.770	39.670	2320.68	6.36	-5.49	3.66	1676302.54	14300347.68	39°22'48.286"N	80°52'22.814"W	6.60	146.325	0.80	-0.70	-21.13	
2416.00	0.770	304.330	2415.67	5.52	-4.64	3.54	1676302.42	14300348.53	39°22'48.294"N	80°52'22.815"W	5.83	142.665	1.20	0.00	-100.36	
2524.00	1.450	296.290	2523.65	3.98	-3.62	1.71	1676300.59	14300349.55	39°22'48.304"N	80°52'22.838"W	4.01	154.690	0.64	0.63	-7.44	
2638.00	1.560	294.990	2637.61	1.90	-2.33	-0.99	1676297.89	14300350.84	39°22'48.317"N	80°52'22.873"W	2.53	202.929	0.10	0.10	-1.14	WFT EM <-3/4"> (2509') (2623'-6066')
2733.00	1.850	354.030	2732.58	-0.49	-0.26	-2.32	1676296.56	14300352.91	39°22'48.337"N	80°52'22.890"W	2.33	263.636	1.79	0.31	62.15	
2828.00	3.570	334.760	2827.47	-4.92	3.94	-3.74	1676295.14	14300357.11	39°22'48.379"N	80°52'22.908"W	5.43	316.524	2.02	1.81	-20.28	
2923.00	5.640	341.040	2922.16	-12.52	11.03	-6.52	1676292.37	14300364.20	39°22'48.449"N	80°52'22.943"W	12.81	329.434	2.24	2.18	6.61	
3021.00	5.430	336.480	3019.70	-21.96	19.84	-9.93	1676288.95	14300373.00	39°22'48.536"N	80°52'22.966"W	22.19	333.408	0.50	-0.21	-4.65	
3115.00	6.720	349.250	3113.18	-31.84	29.32	-12.73	1676286.15	14300382.48	39°22'48.630"N	80°52'23.022"W	31.97	336.528	1.98	1.37	13.59	
3210.00	8.500	351.930	3207.34	-44.26	41.73	-14.75	1676284.13	14300394.89	39°22'48.753"N	80°52'23.047"W	44.27	340.529	1.91	1.87	2.82	
3305.00	9.000	348.970	3301.23	-58.54	55.98	-17.16	1676281.72	14300409.13	39°22'48.894"N	80°52'23.078"W	58.55	342.956	0.71	0.53	-3.12	
3400.00	8.320	344.680	3395.15	-72.77	69.90	-20.40	1676278.49	14300423.04	39°22'49.031"N	80°52'23.119"W	72.82	343.731	0.99	-0.72	-4.52	
3494.00	9.290	353.170	3488.04	-87.00	84.00	-23.10	1676275.79	14300437.13	39°22'49.171"N	80°52'23.153"W	87.11	344.624	1.72	1.03	9.03	
3589.00	8.670	349.730	3581.88	-101.60	98.66	-25.29	1676273.60	14300451.79	39°22'49.315"N	80°52'23.180"W	101.85	345.623	0.86	-0.65	-3.62	
3683.00	8.180	346.390	3674.87	-115.28	112.13	-28.12	1676270.77	14300465.25	39°22'49.449"N	80°52'23.216"W	115.60	345.919	0.74	-0.52	-3.55	
3778.00	8.060	353.270	3768.92	-128.54	125.31	-30.50	1676268.40	14300478.43	39°22'49.579"N	80°52'23.246"W	128.97	346.322	1.03	-0.13	7.24	
3872.00	7.520	350.520	3862.05	-141.07	137.92	-32.28	1676266.61	14300491.04	39°22'49.704"N	80°52'23.269"W	141.65	346.827	0.70	-0.57	-2.93	
3967.00	8.490	351.670	3956.12	-154.11	150.99	-34.32	1676264.57	14300504.10	39°22'49.833"N	80°52'23.294"W	154.84	347.194	1.03	1.02	1.21	
4062.00	7.980	347.500	4050.14	-167.58	164.37	-36.76	1676262.13	14300517.47	39°22'49.965"N	80°52'23.325"W	168.43	347.392	0.83	-0.54	-4.39	
4157.00	9.200	347.940	4144.08	-181.69	178.23	-39.78	1676259.12	14300531.33	39°22'50.102"N	80°52'23.363"W	182.62	347.419	1.29	1.28	0.46	
4254.00	8.780	344.470	4239.88	-196.79	192.95	-43.38	1676255.52	14300546.04	39°22'50.248"N	80°52'23.409"W	197.77	347.329	0.71	-0.43	-3.58	



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Field	Tyler	Wellbore	Kiliska Unit 2H AWB
Facility	Dawson Pad		

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 (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
4349.00	8.483	351.880	4333.81	-210.92	206.87	-46.31	1676252.59	14300559.96	39°22'50.385"N	80°52'23.446"W	211.99	347.382	1.21	-0.32	7.80	
4444.00	8.020	350.480	4427.83	-224.37	220.34	-48.40	1676250.50	14300573.42	39°22'50.518"N	80°52'23.472"W	225.59	347.612	0.53	-0.48	-1.47	
4538.00	7.700	347.520	4520.95	-237.11	232.96	-50.84	1676248.06	14300586.03	39°22'50.643"N	80°52'23.503"W	238.44	347.688	0.55	-0.34	-3.15	
4632.00	8.750	352.270	4613.98	-250.40	246.19	-53.16	1676246.74	14300599.26	39°22'50.774"N	80°52'23.533"W	251.87	347.814	1.33	1.12	5.05	
4727.00	8.740	350.770	4707.87	-264.63	260.48	-55.29	1676243.61	14300613.54	39°22'50.915"N	80°52'23.560"W	266.26	348.015	0.24	-0.01	-1.58	
4822.00	8.630	347.130	4801.79	-278.85	274.55	-58.04	1676240.86	14300627.61	39°22'51.054"N	80°52'23.594"W	280.62	348.063	0.59	-0.12	-3.83	
4917.00	8.160	344.630	4895.77	-292.68	288.00	-61.41	1676237.49	14300641.05	39°22'51.187"N	80°52'23.637"W	294.47	347.962	0.63	-0.49	-2.63	
5011.00	7.920	342.350	4988.84	-305.81	300.60	-65.15	1676233.76	14300653.65	39°22'51.312"N	80°52'23.684"W	307.58	347.772	0.42	-0.26	-2.43	
5106.00	7.920	351.360	5082.94	-318.81	313.31	-68.11	1676230.79	14300666.35	39°22'51.438"N	80°52'23.722"W	320.63	347.735	1.31	0.00	9.48	
5201.00	7.860	350.200	5177.04	-331.68	326.18	-70.20	1676228.71	14300679.22	39°22'51.565"N	80°52'23.748"W	333.65	347.854	0.18	-0.06	-1.22	
5296.00	8.200	347.320	5271.11	-344.85	339.19	-72.80	1676226.11	14300692.23	39°22'51.693"N	80°52'23.781"W	346.92	347.887	0.55	0.36	-3.03	
5391.00	9.130	348.300	5365.03	-359.08	353.18	-75.81	1676223.10	14300706.21	39°22'51.832"N	80°52'23.819"W	361.23	347.885	0.99	0.98	1.03	
5485.00	10.350	350.730	5457.67	-374.82	368.82	-78.68	1676220.23	14300721.84	39°22'51.986"N	80°52'23.855"W	377.12	347.957	1.37	1.30	2.59	
5580.00	10.490	348.920	5551.10	-391.83	385.73	-81.72	1676217.19	14300738.74	39°22'52.154"N	80°52'23.894"W	394.29	348.038	0.37	0.15	-1.91	
5675.00	8.670	349.410	5644.77	-407.50	401.26	-84.70	1676214.22	14300754.26	39°22'52.307"N	80°52'23.932"W	410.10	348.081	1.92	-1.92	0.52	
5706.00	5.830	350.750	5675.52	-411.37	405.11	-85.38	1676213.53	14300758.11	39°22'52.345"N	80°52'23.940"W	414.01	348.098	9.18	-9.16	4.32	
5738.00	3.200	345.210	5707.42	-413.87	407.58	-85.87	1676213.04	14300760.58	39°22'52.369"N	80°52'23.946"W	416.52	348.103	8.32	-8.22	-17.31	
5769.00	0.470	326.070	5738.40	-414.85	408.52	-86.16	1676212.75	14300761.52	39°22'52.379"N	80°52'23.950"W	417.51	348.090	8.90	-8.81	-61.74	
5801.00	2.180	175.460	5770.40	-414.39	408.02	-86.19	1676212.73	14300761.03	39°22'52.374"N	80°52'23.950"W	417.02	348.073	8.12	5.34	-470.66	
5832.00	4.850	173.200	5801.33	-412.53	406.13	-85.99	1676212.93	14300759.14	39°22'52.355"N	80°52'23.948"W	415.13	348.046	8.62	8.61	-7.28	
5863.00	7.660	174.950	5832.15	-409.24	402.77	-85.65	1676213.27	14300755.78	39°22'52.322"N	80°52'23.944"W	411.78	347.995	9.08	9.06	5.65	
5894.00	10.720	175.470	5862.75	-404.43	397.84	-85.24	1676213.68	14300750.85	39°22'52.273"N	80°52'23.938"W	406.87	347.907	9.87	9.87	1.68	
5925.00	12.650	169.730	5893.10	-398.27	391.62	-84.41	1676214.51	14300744.63	39°22'52.212"N	80°52'23.928"W	400.61	347.837	7.26	6.23	-18.52	
5956.00	14.400	164.870	5923.24	-391.06	384.56	-82.79	1676216.12	14300737.58	39°22'52.142"N	80°52'23.908"W	393.37	347.850	6.73	5.65	-15.68	
5987.00	15.920	160.390	5953.16	-382.96	376.83	-80.36	1676218.55	14300729.85	39°22'52.066"N	80°52'23.877"W	385.31	347.962	6.19	4.90	-14.45	
6019.00	16.990	155.690	5983.85	-373.92	368.44	-76.96	1676221.95	14300721.46	39°22'51.983"N	80°52'23.834"W	376.39	348.201	5.34	3.34	-14.68	
6050.00	19.140	154.400	6013.32	-364.37	359.73	-72.90	1676226.01	14300712.75	39°22'51.896"N	80°52'23.782"W	367.04	348.544	7.05	6.94	-4.16	
6081.00	22.550	156.430	6042.29	-353.41	349.69	-68.33	1676230.58	14300702.72	39°22'51.797"N	80°52'23.724"W	356.30	348.944	11.24	11.00	6.55	
6128.00	27.860	164.910	6084.82	-333.45	330.81	-61.86	1676237.05	14300683.85	39°22'51.610"N	80°52'23.642"W	336.54	349.408	13.64	11.30	18.04	BH AT Curve <8-1/2"> (6081\6128-22285)
6223.00	33.010	166.860	6166.70	-285.48	284.14	-50.19	1676248.71	14300637.20	39°22'51.149"N	80°52'23.494"W	288.54	349.983	5.52	5.42	2.05	



Actual Wellpath Report

Kiliska Unit 2H AWP Proj: 22310'

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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #13
Operator	ANTERO RESOURCES CORPORATION	Well	Kiliska Unit 2H
Area	Tyler County, WV	Wellbore	Kiliska Unit 2H AWB
Field	Tyler		
Facility	Dawson Pad		

WELLPATH DATA (267 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
6318.00	41.000	164.970	6242.51	-228.51	228.76	-36.20	1676262.69	14300581.83	39°22'50.601"N	80°52'23.317"W	231.60	351.007	8.49	8.41	-1.99	
6378.00†	45.354	162.820	6286.25	-187.50	189.33	-24.79	1676274.10	14300542.43	39°22'50.212"N	80°52'23.172"W	190.95	352.541	7.66	7.26	-3.58	Middlesex: 6378' MD
6413.00	47.910	161.710	6310.28	-162.06	165.11	-17.03	1676281.85	14300518.21	39°22'49.972"N	80°52'23.074"W	165.98	354.110	7.66	7.30	-3.17	
6508.00	55.190	159.930	6369.32	-87.72	94.91	7.45	1676306.32	14300448.04	39°22'48.278"N	80°52'22.764"W	95.20	4.487	7.80	7.66	-1.87	
6585.00†	60.858	159.739	6410.08	-22.47	33.62	29.96	1676328.83	14300386.78	39°22'48.672"N	80°52'22.478"W	45.03	41.703	7.36	7.36	-0.25	Burkett: 6585' MD
6602.00	62.110	159.700	6418.20	-7.54	19.61	35.14	1676334.00	14300372.77	39°22'48.583"N	80°52'22.412"W	40.24	60.834	7.36	7.36	-0.23	
6664.00†	67.406	160.540	6444.63	48.50	-33.11	54.19	1676353.05	14300291.07	39°22'48.012"N	80°52'22.171"W	63.51	121.427	8.63	8.55	1.35	Tully: 6664' MD
6697.00	70.230	160.960	6456.55	79.27	-62.16	64.33	1676363.19	14300290.03	39°22'47.725"N	80°52'22.042"W	89.46	134.016	8.63	8.55	1.27	
6745.00	74.110	162.050	6471.24	124.95	-105.49	78.82	1676377.67	14300247.72	39°22'47.296"W	80°52'21.858"W	131.68	143.233	8.37	8.08	2.27	
6755.00†	74.756	162.214	6473.93	134.59	-114.66	81.78	1676380.62	14300238.56	39°22'47.206"N	80°52'21.821"W	140.83	144.502	6.67	6.48	1.64	Marcellus POE: 6755' MD
6793.00	77.220	162.830	6483.13	171.45	-149.82	92.85	1676391.69	14300203.41	39°22'46.856"N	80°52'21.680"W	176.26	148.213	6.67	6.48	1.62	
6840.00	81.320	162.720	6491.88	217.61	-193.92	106.52	1676405.36	14300159.33	39°22'46.422"N	80°52'21.507"W	221.25	151.220	8.73	8.72	-0.23	
6888.00	84.420	163.630	6497.83	265.21	-239.50	120.30	1676419.13	14300113.76	39°22'45.971"N	80°52'21.332"W	288.02	153.330	6.73	6.46	1.90	
6936.00	89.230	163.210	6500.49	313.10	-285.42	133.97	1676432.80	14300067.86	39°22'45.517"N	80°52'21.159"W	315.30	154.855	10.06	10.02	-0.87	
6984.00	90.520	162.450	6500.59	361.09	-331.28	148.14	1676446.97	14300022.02	39°22'45.064"N	80°52'20.979"W	362.90	155.907	3.12	2.69	-1.58	
7080.00	91.480	158.580	6498.92	457.04	-421.75	180.15	1676478.96	14299931.59	39°22'44.169"N	80°52'20.573"W	458.62	156.870	4.15	1.00	-4.03	
7174.00	93.260	157.190	6495.03	550.75	-508.76	215.51	1676514.30	14299844.62	39°22'43.309"N	80°52'20.125"W	552.52	157.043	2.40	1.89	-1.48	
7269.00	90.460	157.570	6491.99	645.43	-596.39	252.02	1676550.80	14299757.01	39°22'42.442"N	80°52'19.661"W	647.46	157.092	2.97	-2.95	0.40	
7365.00	91.260	160.270	6490.51	741.30	-685.95	286.55	1676585.31	14299667.49	39°22'41.556"N	80°52'19.223"W	743.40	157.328	2.93	0.83	2.81	
7459.00	91.350	160.720	6488.37	835.26	-774.53	317.92	1676616.68	14299578.95	39°22'40.680"N	80°52'18.825"W	837.24	157.683	0.49	0.10	0.48	
7555.00	90.460	162.940	6486.85	931.24	-865.73	347.85	1676646.59	14299487.79	39°22'39.779"N	80°52'18.446"W	933.00	158.110	2.49	-0.93	2.31	
7649.00	90.180	163.370	6486.33	1025.20	-955.69	375.09	1676673.82	14299397.86	39°22'38.869"N	80°52'18.101"W	1026.67	158.571	0.55	-0.30	0.46	
7743.00	90.370	160.830	6485.87	1119.19	-1045.13	403.98	1676702.70	14299308.45	39°22'38.005"N	80°52'17.734"W	1120.49	158.867	2.71	0.20	-2.70	
7838.00	89.020	160.040	6486.38	1214.17	-1134.65	435.79	1676734.50	14299218.98	39°22'37.120"N	80°52'17.331"W	1215.46	158.989	1.65	-1.42	-0.83	
7933.00	90.220	160.260	6487.01	1309.13	-1224.00	468.05	1676766.74	14299129.66	39°22'36.236"N	80°52'16.922"W	1310.43	159.073	1.28	1.26	0.23	
8027.00	90.520	157.550	6486.40	1403.01	-1311.69	501.88	1676800.56	14299042.01	39°22'35.369"N	80°52'16.493"W	1404.42	159.062	2.90	0.32	-2.88	
8122.00	89.380	158.080	6486.49	1497.80	-1399.65	537.75	1676836.41	14298954.08	39°22'34.499"N	80°52'16.037"W	1499.40	158.983	1.32	-1.20	0.56	
8216.00	89.510	161.470	6487.40	1591.73	-1487.84	570.24	1676868.89	14298865.93	39°22'33.627"N	80°52'15.625"W	1593.37	159.030	3.61	0.14	3.61	
8312.00	90.370	162.970	6487.50	1687.72	-1579.25	599.55	1676898.19	14298774.55	39°22'32.723"N	80°52'15.254"W	1689.23	159.211	1.80	0.90	1.56	
8407.00	91.110	161.210	6486.27	1782.71	-1669.64	628.76	1676927.39	14298684.20	39°22'31.829"N	80°52'14.883"W	1784.10	159.364	2.01	0.78	-1.85	



Actual Wellpath Report

Kiliska Unit 2H AWP Proj: 22310'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #13
Area	Tyler County, WV	Well	Kiliska Unit 2H
Field	Tyler	Wellbore	Kiliska Unit 2H AWB
Facility	Dawson Pad		

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 (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (°/100ft)	Comments
8502.00	89.910	159.980	6485.42	1877.69	-1759.23	660.32	1676958.94	14298594.64	39°22'30.943"N	80°52'14.483"W	1879.08	159.426	1.81	-1.26	-1.29	
8596.00	89.570	163.260	6485.85	1971.67	-1848.42	689.96	1676988.56	14298505.49	39°22'30.061"N	80°52'14.107"W	1973.00	159.531	1.81	-0.36	3.49	
8691.00	90.580	167.440	6485.73	2066.45	-1940.31	713.98	1677012.58	14298413.63	39°22'29.153"N	80°52'13.803"W	2067.51	159.798	4.53	1.06	4.40	
8787.00	91.690	167.490	6483.82	2161.93	-2034.01	734.61	1677033.40	14298319.98	39°22'28.226"N	80°52'13.539"W	2162.67	160.137	1.16	1.16	0.05	
8881.00	92.060	162.420	6480.75	2255.69	-2124.71	759.19	1677057.77	14298229.32	39°22'27.330"N	80°52'13.231"W	2256.27	160.337	5.41	0.39	-6.39	
8976.00	91.020	158.270	6478.19	2350.61	-2214.12	791.13	1677089.89	14298139.94	39°22'26.446"N	80°52'12.826"W	2351.21	160.338	4.50	-1.09	-4.37	
9072.00	90.580	158.400	6476.85	2446.44	-2303.33	826.56	1677125.11	14298050.77	39°22'25.563"N	80°52'12.376"W	2447.15	160.259	0.48	-0.46	0.14	
9168.00	89.510	157.960	6476.78	2542.27	-2392.45	862.25	1677160.78	14297961.68	39°22'24.682"N	80°52'11.923"W	2543.08	160.181	1.21	-1.11	-0.46	
9264.00	89.970	159.780	6477.21	2638.15	-2481.99	896.95	1677195.37	14297872.18	39°22'23.797"N	80°52'11.484"W	2639.05	160.133	1.96	0.48	1.90	
9359.00	90.890	162.730	6476.50	2733.14	-2571.93	927.38	1677225.88	14297782.27	39°22'22.907"N	80°52'11.097"W	2734.02	160.172	3.25	0.97	3.11	
9454.00	91.170	160.640	6474.79	2828.12	-2662.10	957.22	1677255.72	14297692.13	39°22'22.015"N	80°52'10.719"W	2828.97	160.223	2.22	0.29	-2.20	
9549.00	90.680	162.080	6473.26	2923.10	-2752.11	987.58	1677286.07	14297602.17	39°22'21.125"N	80°52'10.334"W	2923.94	160.260	1.60	-0.52	1.52	
9644.00	91.720	160.330	6471.27	3018.07	-2842.02	1018.18	1677316.65	14297512.29	39°22'20.236"N	80°52'09.946"W	3018.90	160.289	2.14	1.09	-1.84	
9739.00	90.400	160.920	6469.51	3113.04	-2931.62	1049.69	1677348.15	14297422.73	39°22'19.350"N	80°52'09.546"W	3113.88	160.300	1.52	-1.39	0.62	
9834.00	90.490	160.130	6468.77	3208.02	-3021.18	1081.36	1677379.61	14297333.20	39°22'18.465"N	80°52'09.145"W	3208.87	160.306	0.84	0.09	-0.83	
9929.00	90.520	158.870	6467.94	3302.94	-3110.16	1114.63	1677413.06	14297244.26	39°22'17.585"N	80°52'08.723"W	3303.86	160.283	1.33	0.03	-1.33	
10023.00	90.680	158.650	6466.95	3396.82	-3197.77	1148.68	1677447.10	14297156.68	39°22'16.718"N	80°52'08.291"W	3397.82	160.241	0.29	0.17	-0.23	
10119.00	90.650	157.490	6465.84	3492.63	-3286.81	1184.53	1677482.94	14297067.67	39°22'15.838"N	80°52'07.836"W	3493.74	160.181	1.21	-0.03	-1.21	
10215.00	90.280	158.610	6465.06	3588.44	-3375.85	1220.41	1677518.80	14296978.67	39°22'14.957"N	80°52'07.381"W	3589.68	160.124	1.23	-0.39	1.17	
10310.00	90.120	160.760	6464.73	3683.38	-3464.93	1253.39	1677551.77	14296889.62	39°22'14.076"N	80°52'06.962"W	3684.67	160.113	2.27	-0.17	2.26	
10406.00	90.280	161.960	6464.39	3779.37	-3555.90	1284.08	1677582.44	14296798.70	39°22'13.177"N	80°52'06.573"W	3780.64	160.145	1.26	0.17	1.25	
10500.00	89.230	159.900	6464.79	3873.36	-3644.73	1314.79	1677613.14	14296709.90	39°22'12.298"N	80°52'06.184"W	3874.63	160.164	2.46	-1.12	-2.19	
10595.00	89.820	162.430	6465.58	3968.34	-3734.63	1345.45	1677643.79	14296620.03	39°22'11.409"N	80°52'05.795"W	3969.60	160.188	2.73	0.62	2.66	
10691.00	90.000	164.670	6465.73	4064.28	-3826.70	1372.64	1677670.97	14296528.00	39°22'10.499"N	80°52'05.451"W	4065.43	160.267	2.34	0.19	2.33	
10787.00	90.680	166.560	6465.16	4160.04	-3919.68	1396.48	1677694.90	14296435.06	39°22'09.580"N	80°52'05.149"W	4161.02	160.390	2.09	0.71	1.97	
10882.00	91.170	164.760	6463.63	4254.79	-4011.71	1420.01	1677718.32	14296343.07	39°22'08.670"N	80°52'04.851"W	4255.61	160.508	1.96	0.52	-1.89	
10976.00	91.260	162.080	6461.63	4348.72	-4101.77	1446.82	1677745.12	14296253.04	39°22'07.779"N	80°52'04.511"W	4349.46	160.571	2.85	0.10	-2.85	
11072.00	91.200	160.400	6459.57	4444.69	-4192.64	1477.69	1677775.98	14296162.20	39°22'06.881"N	80°52'04.120"W	4445.43	160.585	1.75	-0.06	-1.75	
11166.00	91.510	159.280	6457.35	4538.62	-4280.86	1510.08	1677808.35	14296074.03	39°22'06.008"N	80°52'03.709"W	4538.39	160.570	1.24	0.33	-1.19	
11261.00	90.310	158.200	6455.84	4633.48	-4369.38	1544.52	1677842.78	14295985.54	39°22'05.133"N	80°52'03.272"W	4634.33	160.532	1.70	-1.26	-1.14	



Actual Wellpath Report

Kiliska Unit 2H AWP Proj: 22310'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #13
Area	Tyler County, WV	Well	Kiliska Unit 2H
Field	Tyler	Wellbore	Kiliska Unit 2H AWB
Facility	Dawson Pad		

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 (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (°/100ft)	Comments
11357.00	89.780	159.620	6456.77	4729.37	-4458.95	1579.06	1677877.31	14295896.01	39°22'04.247"N	80°52'02.834"W	4730.29	160.499	1.58	-0.55	1.48	
11452.00	89.750	161.530	6456.16	4824.35	-4548.53	1610.65	1677908.89	14295806.46	39°22'03.361"N	80°52'02.434"W	4825.28	160.501	2.01	-0.03	2.01	
11548.00	89.540	162.770	6456.75	4920.34	-4639.91	1640.08	1677938.30	14295715.12	39°22'02.458"N	80°52'02.061"W	4921.24	160.533	1.31	-0.22	1.29	
11643.00	90.400	162.700	6456.80	5015.32	-4730.63	1668.27	1677966.49	14295624.44	39°22'01.561"N	80°52'01.703"W	5016.17	160.575	0.91	0.91	-0.07	
11737.00	89.660	161.960	6456.75	5109.31	-4820.19	1696.81	1677995.01	14295534.91	39°22'00.675"N	80°52'01.342"W	5110.13	160.607	1.11	-0.79	-0.79	
11832.00	88.800	163.660	6458.03	5204.28	-4910.94	1724.88	1678023.07	14295444.20	39°21'59.778"N	80°52'00.986"W	5205.05	160.647	2.01	-0.91	1.79	
11926.00	88.950	165.070	6459.87	5298.15	-5001.44	1750.21	1678048.39	14295353.74	39°21'58.883"N	80°52'00.665"W	5298.83	160.713	1.51	0.16	1.50	
12021.00	89.020	164.330	6461.56	5393.00	-5093.06	1775.27	1678073.44	14295262.15	39°21'57.977"N	80°52'00.348"W	5393.59	160.783	0.78	0.07	-0.78	
12115.00	89.690	164.910	6462.62	5486.87	-5183.68	1800.20	1678098.36	14295171.56	39°21'57.081"N	80°52'00.032"W	5487.38	160.849	0.94	0.71	0.62	
12210.00	88.950	164.580	6463.74	5581.72	-5275.33	1825.19	1678123.34	14295079.95	39°21'56.175"N	80°51'59.716"W	5582.15	160.915	0.85	-0.78	-0.35	
12305.00	89.750	164.460	6464.82	5676.59	-5366.88	1850.55	1678148.69	14294988.44	39°21'55.270"N	80°51'59.395"W	5676.96	160.975	0.85	0.84	-0.13	
12400.00	89.660	163.900	6465.31	5771.49	-5458.28	1876.45	1678174.57	14294897.08	39°21'54.366"N	80°51'59.067"W	5771.81	161.028	0.60	-0.09	-0.59	
12494.00	90.030	163.960	6465.56	5865.42	-5548.60	1902.47	1678200.58	14294806.79	39°21'53.473"N	80°51'58.737"W	5865.69	161.075	0.40	0.39	0.06	
12588.00	90.060	163.930	6465.49	5959.34	-5638.94	1928.46	1678226.57	14294716.49	39°21'52.580"N	80°51'58.408"W	5959.58	161.120	0.05	0.03	-0.03	
12684.00	90.710	162.980	6464.85	6055.29	-5730.96	1955.80	1678253.90	14294624.51	39°21'51.670"N	80°51'58.061"W	6055.50	161.157	1.20	0.68	-0.99	
12779.00	90.150	162.310	6464.13	6150.27	-5821.63	1984.14	1678282.22	14294533.87	39°21'50.773"N	80°51'57.702"W	6150.46	161.180	0.92	-0.59	-0.71	
12874.00	90.000	162.110	6464.01	6245.27	-5912.09	2013.16	1678311.23	14294443.45	39°21'49.879"N	80°51'57.334"W	6245.44	161.195	0.26	-0.16	-0.21	
12969.00	90.060	161.810	6463.96	6340.26	-6002.42	2042.58	1678340.64	14294353.16	39°21'48.986"N	80°51'56.962"W	6340.44	161.207	0.32	0.06	-0.32	
13065.00	90.180	160.830	6463.76	6436.26	-6093.36	2073.33	1678371.38	14294262.25	39°21'48.086"N	80°51'56.572"W	6436.43	161.209	1.03	0.12	-1.02	
13160.00	89.940	160.710	6463.66	6531.25	-6183.06	2104.62	1678402.65	14294172.59	39°21'47.199"N	80°51'56.175"W	6531.43	161.202	0.28	-0.25	-0.13	
13255.00	90.310	161.750	6463.45	6626.25	-6273.00	2135.18	1678433.21	14294082.68	39°21'46.310"N	80°51'55.788"W	6626.43	161.203	1.16	0.39	1.09	
13350.00	90.520	161.610	6462.76	6721.24	-6363.19	2165.04	1678463.06	14293992.53	39°21'45.418"N	80°51'55.409"W	6721.42	161.209	0.27	0.22	-0.15	
13445.00	90.250	160.820	6462.12	6816.24	-6453.12	2195.63	1678493.64	14293902.63	39°21'44.529"N	80°51'55.021"W	6816.42	161.209	0.88	-0.28	-0.63	
13541.00	90.310	161.030	6461.65	6912.23	-6543.85	2227.01	1678525.00	14293811.94	39°21'43.631"N	80°51'54.624"W	6912.42	161.205	0.23	0.06	0.22	
13636.00	90.430	161.260	6461.04	7007.22	-6633.75	2257.71	1678555.68	14293722.08	39°21'42.742"N	80°51'54.235"W	7007.42	161.205	0.27	0.13	0.24	
13731.00	90.680	162.740	6460.12	7102.21	-6724.09	2287.06	1678585.03	14293631.77	39°21'41.849"N	80°51'53.863"W	7102.40	161.215	1.58	0.26	1.56	
13826.00	90.400	161.910	6459.23	7197.20	-6814.60	2315.90	1678614.36	14293541.30	39°21'40.954"N	80°51'53.487"W	7197.38	161.230	0.92	-0.23	-0.87	
13922.00	90.280	161.450	6458.66	7293.20	-6905.74	2346.08	1678644.02	14293450.20	39°21'40.053"N	80°51'53.115"W	7293.37	161.236	0.50	-0.12	-0.48	
14017.00	90.490	161.730	6458.02	7388.20	-6995.87	2376.08	1678674.01	14293360.10	39°21'39.162"N	80°51'52.734"W	7388.37	161.240	0.37	0.22	0.29	
14112.00	90.430	161.790	6457.25	7483.19	-7086.10	2406.81	1678703.73	14293269.91	39°21'38.270"N	80°51'52.358"W	7483.36	161.247	0.09	-0.06	0.06	



Actual Wellpath Report

Kiliska Unit 2H AWP Proj: 22310'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #13
Area	Tyler County, WV	Well	Kiliska Unit 2H
Field	Tyler	Wellbore	Kiliska Unit 2H AWB
Facility	Dawson Pad		

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
14207.00	90.430	162.280	6456.54	7578.19	-7176.46	2435.12	1678733.02	14293179.58	39°21'37.376"N	80°51'51.986"W	7578.35	161.257	0.52	0.00	0.52	
14304.00	90.400	162.690	6455.84	7675.18	-7268.96	2464.31	1678762.20	14293067.12	39°21'36.461"N	80°51'51.616"W	7675.33	161.272	0.42	-0.03	0.42	
14399.00	90.310	161.690	6455.25	7770.17	-7359.41	2493.36	1678791.24	14292996.71	39°21'35.567"N	80°51'51.248"W	7770.31	161.284	1.06	-0.09	-1.05	
14496.00	90.310	161.690	6454.73	7867.17	-7451.49	2523.84	1678821.71	14292904.66	39°21'34.656"N	80°51'50.862"W	7867.31	161.289	0.00	0.00	0.00	
14591.00	90.370	161.160	6454.16	7962.16	-7541.54	2554.10	1678851.95	14292814.65	39°21'33.766"N	80°51'50.479"W	7962.30	161.290	0.56	0.06	-0.56	
14685.00	90.460	160.150	6453.48	8056.15	-7630.23	2585.23	1678883.08	14292725.99	39°21'32.889"N	80°51'50.084"W	8056.29	161.283	1.08	0.10	-1.07	
14780.00	90.220	158.260	6452.92	8151.06	-7719.04	2618.96	1678916.79	14292637.22	39°21'32.011"N	80°51'49.656"W	8151.23	161.259	2.01	-0.25	-1.99	
14876.00	90.250	158.850	6452.52	8246.92	-7808.39	2654.06	1678951.87	14292547.91	39°21'31.127"N	80°51'49.211"W	8247.12	161.227	0.62	0.00	0.61	
14971.00	90.250	159.710	6452.11	8341.83	-7897.24	2687.67	1678985.47	14292459.09	39°21'30.248"N	80°51'48.785"W	8342.06	161.205	0.91	0.00	0.91	
15065.00	90.310	159.450	6451.65	8435.77	-7985.34	2720.46	1679018.25	14292371.03	39°21'29.377"N	80°51'48.369"W	8436.03	161.187	0.28	0.06	-0.28	
15159.00	90.340	159.530	6451.12	8529.71	-8073.38	2753.40	1679051.18	14292283.03	39°21'28.506"N	80°51'47.951"W	8529.96	161.168	0.09	0.03	0.09	
15254.00	90.150	159.580	6450.71	8624.64	-8162.39	2786.58	1679084.35	14292194.05	39°21'27.626"N	80°51'47.531"W	8624.95	161.150	0.21	-0.20	0.05	
15349.00	89.290	158.800	6451.17	8719.55	-8251.19	2820.33	1679118.08	14292105.28	39°21'26.748"N	80°51'47.103"W	8719.89	161.129	1.22	-0.91	-0.82	
15443.00	89.750	159.690	6451.96	8813.47	-8339.09	2853.64	1679151.38	14292017.42	39°21'25.879"N	80°51'46.680"W	8813.83	161.109	1.07	0.49	0.95	
15538.00	89.750	160.160	6452.38	8908.43	-8428.31	2886.25	1679183.97	14291928.23	39°21'24.996"N	80°51'46.267"W	8908.81	161.096	0.49	0.00	0.49	
15632.00	89.820	161.080	6452.73	9002.41	-8516.99	2917.44	1679215.15	14291839.59	39°21'24.120"N	80°51'45.872"W	9002.81	161.091	0.98	0.07	0.98	
15727.00	89.750	162.790	6453.09	9097.40	-8607.30	2946.90	1679244.60	14291749.32	39°21'23.226"N	80°51'45.498"W	9097.79	161.100	1.80	-0.07	1.80	
15822.00	89.880	163.300	6453.39	9192.37	-8698.17	2974.60	1679272.29	14291658.48	39°21'22.328"N	80°51'45.147"W	9192.74	161.120	0.55	0.14	0.54	
15917.00	89.850	162.660	6453.62	9287.35	-8789.01	3002.41	1679300.09	14291567.68	39°21'21.430"N	80°51'44.795"W	9287.69	161.139	0.67	-0.03	-0.67	
16011.00	89.820	162.450	6453.89	9381.33	-8878.68	3030.59	1679328.26	14291478.04	39°21'20.543"N	80°51'44.438"W	9381.66	161.154	0.23	-0.03	-0.22	
16108.00	89.780	162.870	6454.23	9478.32	-8971.28	3059.50	1679357.15	14291385.49	39°21'19.627"N	80°51'44.072"W	9478.62	161.169	0.43	-0.04	0.43	
16203.00	89.850	162.800	6454.53	9573.30	-9062.04	3087.54	1679385.18	14291294.76	39°21'18.730"N	80°51'43.717"W	9573.58	161.185	0.10	0.07	-0.07	
16299.00	89.970	162.680	6454.68	9669.28	-9153.70	3116.10	1679413.73	14291203.14	39°21'17.824"N	80°51'43.355"W	9669.55	161.200	0.26	0.13	-0.23	
16394.00	88.920	161.290	6455.60	9764.27	-9244.00	3145.56	1679443.18	14291112.87	39°21'16.931"N	80°51'42.982"W	9764.54	161.208	1.75	-1.11	-1.36	
16490.00	89.970	161.480	6456.53	9860.26	-9334.98	3176.20	1679473.81	14291021.93	39°21'16.031"N	80°51'42.630"W	9860.53	161.209	1.11	1.09	0.20	
16585.00	89.880	161.280	6456.66	9955.26	-9425.00	3206.53	1679504.13	14290931.94	39°21'15.141"N	80°51'42.209"W	9955.53	161.211	0.23	-0.09	-0.21	
16680.00	89.910	161.610	6456.83	10050.26	-9515.07	3236.76	1679534.35	14290841.92	39°21'14.250"N	80°51'41.826"W	10050.53	161.213	0.35	0.03	0.35	
16776.00	90.310	161.780	6456.65	10146.26	-9605.21	3266.91	1679564.48	14290750.81	39°21'13.349"N	80°51'41.444"W	10146.52	161.218	0.45	0.42	0.18	
16870.00	90.400	161.690	6456.07	10240.26	-9695.47	3296.37	1679593.93	14290661.58	39°21'12.466"N	80°51'41.071"W	10240.52	161.222	0.14	0.10	-0.10	
16965.00	90.150	161.410	6455.61	10335.26	-9785.59	3326.44	1679623.99	14290571.50	39°21'11.575"N	80°51'40.690"W	10335.82	161.225	0.40	-0.26	-0.29	



Actual Wellpath Report

Kiliska Unit 2H AWP Proj: 22310'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #13
Area	Tyler County, WV	Well	Kiliska Unit 2H
Field	Tyler	Wellbore	Kiliska Unit 2H AWB
Facility	Dawson Pad		

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
17080.00	90.090	161.890	6455.41	10430.26	-9875.75	3356.35	1679653.88	14290481.37	39°21'10.683"N	80°51'40.311"W	10430.51	161.229	0.51	-0.06	0.51	
17156.00	89.820	162.160	6455.48	10526.25	-9967.07	3385.97	1679683.50	14290390.09	39°21'09.760"N	80°51'39.935"W	10526.50	161.237	0.40	-0.28	0.28	
17252.00	89.850	162.290	6455.76	10622.25	-10058.49	3415.28	1679712.79	14290298.71	39°21'08.876"N	80°51'39.564"W	10622.49	161.245	0.14	0.03	0.14	
17347.00	89.940	162.490	6455.94	10717.24	-10149.03	3444.02	1679741.52	14290208.20	39°21'07.991"N	80°51'39.200"W	10717.47	161.256	0.23	0.08	0.21	
17443.00	89.480	161.090	6456.42	10813.24	-10240.22	3474.02	1679771.51	14290117.05	39°21'07.079"N	80°51'38.820"W	10813.46	161.260	1.54	-0.48	-1.46	
17537.00	89.600	160.530	6457.18	10907.22	-10329.00	3504.91	1679802.39	14290028.31	39°21'06.201"N	80°51'38.428"W	10907.45	161.257	0.81	0.13	-0.60	
17632.00	90.000	161.480	6457.51	11002.22	-10418.82	3535.84	1679833.30	14289938.52	39°21'05.313"N	80°51'38.036"W	11002.45	161.254	1.09	0.42	1.00	
17728.00	90.340	161.560	6457.22	11098.21	-10509.87	3566.26	1679863.72	14289847.51	39°21'04.413"N	80°51'37.651"W	11098.45	161.257	0.36	0.35	0.08	
17823.00	90.030	161.160	6456.92	11193.21	-10599.89	3596.63	1679894.07	14289757.53	39°21'03.523"N	80°51'37.266"W	11193.45	161.258	0.63	-0.33	-0.42	
17918.00	89.820	160.600	6457.04	11288.20	-10689.64	3627.74	1679925.17	14289667.81	39°21'02.635"N	80°51'36.872"W	11288.45	161.254	0.83	-0.22	-0.59	
18013.00	90.120	160.640	6457.09	11383.19	-10779.26	3659.27	1679956.68	14289578.23	39°21'01.749"N	80°51'36.472"W	11383.44	161.249	0.32	0.32	0.04	
18109.00	90.280	160.500	6456.76	11479.17	-10869.79	3691.20	1679988.61	14289487.73	39°21'00.854"N	80°51'36.068"W	11479.43	161.243	0.22	0.17	-0.15	
18204.00	90.250	160.640	6456.32	11574.15	-10959.38	3722.81	1680020.19	14289398.18	39°20'59.968"N	80°51'35.667"W	11574.43	161.238	0.15	-0.03	0.15	
18299.00	90.310	160.740	6455.85	11669.14	-11049.04	3754.22	1680051.60	14289308.56	39°20'59.081"N	80°51'35.269"W	11669.42	161.233	0.12	0.06	0.11	
18395.00	90.580	161.160	6455.11	11765.13	-11139.78	3785.55	1680082.92	14289217.86	39°20'58.184"N	80°51'34.872"W	11765.42	161.231	0.52	0.28	0.44	
18490.00	89.850	162.110	6454.75	11860.13	-11229.94	3815.48	1680112.83	14289127.73	39°20'57.292"N	80°51'34.493"W	11860.41	161.234	1.26	-0.77	1.00	
18586.00	89.910	162.600	6454.95	11956.12	-11321.42	3844.58	1680141.92	14289036.29	39°20'56.388"N	80°51'34.124"W	11956.39	161.243	0.51	0.06	0.51	
18681.00	89.290	163.690	6455.61	12051.08	-11412.33	3872.13	1680169.46	14288945.41	39°20'55.489"N	80°51'33.775"W	12051.34	161.258	1.32	-0.65	1.15	
18777.00	89.940	164.930	6456.26	12146.97	-11504.75	3898.09	1680195.41	14288853.03	39°20'54.575"N	80°51'33.447"W	12147.20	161.282	1.46	0.68	1.29	
18871.00	89.850	166.030	6456.43	12240.76	-11595.75	3921.65	1680218.96	14288762.07	39°20'53.675"N	80°51'33.148"W	12240.95	161.315	1.17	-0.10	1.17	
18967.00	90.090	166.880	6456.48	12336.42	-11689.08	3944.14	1680241.44	14288668.77	39°20'52.752"N	80°51'32.864"W	12336.56	161.355	0.92	0.25	0.89	
19063.00	89.780	165.830	6456.59	12432.09	-11782.37	3966.78	1680264.08	14288575.52	39°20'51.830"N	80°51'32.578"W	12432.20	161.393	1.14	-0.32	-1.09	
19158.00	89.850	165.300	6456.90	12526.87	-11874.37	3990.47	1680287.75	14288483.56	39°20'50.920"N	80°51'32.278"W	12526.95	161.425	0.56	0.07	-0.56	
19253.00	89.910	163.990	6457.10	12621.73	-11965.97	4015.62	1680312.89	14288391.99	39°20'50.014"N	80°51'31.960"W	12621.80	161.449	1.38	0.06	-1.38	
19347.00	90.150	162.950	6457.05	12715.68	-12056.09	4042.37	1680339.63	14288301.91	39°20'49.123"N	80°51'31.621"W	12715.74	161.464	1.14	0.26	-1.11	
19441.00	90.030	162.270	6456.90	12809.67	-12145.79	4070.46	1680367.71	14288212.25	39°20'48.236"N	80°51'31.265"W	12809.72	161.472	0.73	-0.13	-0.72	
19536.00	90.060	161.330	6456.83	12904.67	-12236.04	4100.13	1680397.37	14288122.04	39°20'47.344"N	80°51'30.889"W	12904.71	161.475	0.99	0.03	-0.99	
19631.00	90.340	160.850	6456.49	12999.66	-12325.91	4130.92	1680428.14	14288032.20	39°20'46.455"N	80°51'30.499"W	12999.71	161.472	0.58	0.28	-0.51	
19726.00	90.090	159.120	6456.14	13094.62	-12415.17	4163.43	1680460.64	14287942.98	39°20'45.572"N	80°51'30.087"W	13094.67	161.461	1.84	-0.26	-1.82	
19821.00	89.940	157.450	6456.11	13189.45	-12503.42	4198.58	1680495.78	14287854.76	39°20'44.700"N	80°51'29.642"W	13189.53	161.438	1.76	-0.16	-1.76	



Actual Wellpath Report

Kiliska Unit 2H AWP Proj: 22310'
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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #13
Operator	ANTERO RESOURCES CORPORATION	Well	Kiliska Unit 2H
Area	Tyler County, WV	Wellbore	Kiliska Unit 2H AWB
Field	Tyler		
Facility	Dawson Pad		

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
19915.00	89.820	157.680	6456.31	13283.22	-12590.31	4234.45	1680531.64	14287667.91	39°20'43.840"N	80°51'29.187"W	13283.31	161.411	0.28	-0.13	0.24	
20010.00	89.820	157.510	6456.61	13377.98	-12678.13	4270.66	1680567.83	14287680.11	39°20'42.972"N	80°51'28.728"W	13378.10	161.384	0.18	0.00	-0.18	
20105.00	89.720	157.780	6456.99	13472.75	-12765.99	4306.79	1680603.95	14287592.29	39°20'42.103"N	80°51'28.269"W	13472.90	161.357	0.30	-0.11	0.28	
20201.00	89.820	157.700	6457.37	13568.53	-12854.84	4343.16	1680640.30	14287503.48	39°20'41.224"N	80°51'27.808"W	13568.71	161.332	0.13	0.10	-0.05	
20297.00	89.450	157.940	6457.99	13664.31	-12943.73	4379.40	1680676.53	14287414.62	39°20'40.345"N	80°51'27.349"W	13664.53	161.307	0.46	-0.39	0.25	
20391.00	89.420	157.970	6458.91	13758.12	-13030.86	4414.68	1680711.79	14287327.53	39°20'39.483"N	80°51'26.901"W	13758.37	161.284	0.05	-0.03	0.03	
20487.00	89.420	159.950	6459.88	13854.00	-13120.45	4449.14	1680746.24	14287237.98	39°20'38.597"N	80°51'26.465"W	13854.28	161.268	2.06	0.00	2.06	
20582.00	89.230	160.730	6461.00	13948.97	-13209.90	4481.10	1680778.19	14287148.56	39°20'37.713"N	80°51'26.060"W	13949.26	161.262	0.85	-0.20	0.82	
20678.00	89.170	161.140	6462.34	14044.95	-13300.63	4512.46	1680809.53	14287057.87	39°20'36.815"N	80°51'25.662"W	14045.25	161.260	0.43	-0.06	0.43	
20773.00	89.110	161.700	6463.77	14139.94	-13390.67	4542.72	1680839.78	14286967.87	39°20'35.925"N	80°51'25.273"W	14140.24	161.261	0.59	-0.06	0.58	
20869.00	89.020	163.090	6465.34	14235.92	-13482.15	4571.75	1680868.80	14286876.42	39°20'35.020"N	80°51'24.911"W	14236.20	161.268	1.45	-0.09	1.45	
20964.00	89.290	163.950	6466.74	14330.85	-13573.24	4598.70	1680895.74	14286785.37	39°20'34.120"N	80°51'24.570"W	14331.12	161.283	0.95	0.28	0.91	
21059.00	90.030	163.560	6467.30	14425.79	-13664.45	4625.28	1680922.30	14286694.20	39°20'33.218"N	80°51'24.234"W	14426.03	161.300	0.88	0.78	-0.41	
21153.00	90.310	162.940	6467.02	14519.75	-13754.46	4652.37	1680949.38	14286604.22	39°20'32.328"N	80°51'23.891"W	14519.97	161.312	0.72	0.30	-0.63	
21247.00	90.120	163.060	6466.67	14613.72	-13844.35	4679.85	1680976.85	14286514.37	39°20'31.439"N	80°51'23.543"W	14613.93	161.323	0.24	-0.20	0.13	
21343.00	90.120	163.290	6466.47	14709.69	-13936.24	4707.64	1681004.63	14286422.51	39°20'30.530"N	80°51'23.191"W	14709.88	161.335	0.24	0.00	0.24	
21438.00	90.250	163.690	6466.16	14804.63	-14027.32	4734.63	1681031.62	14286331.47	39°20'29.630"N	80°51'22.849"W	14804.81	161.349	0.44	0.14	0.42	
21533.00	90.060	163.040	6465.91	14899.59	-14118.34	4761.83	1681058.80	14286240.48	39°20'28.730"N	80°51'22.505"W	14899.75	161.362	0.71	-0.20	-0.68	
21628.00	89.780	162.000	6466.04	14994.58	-14208.96	4790.36	1681087.32	14286149.91	39°20'27.834"N	80°51'22.143"W	14994.73	161.369	1.13	-0.29	-1.05	
21723.00	89.350	161.260	6466.76	15089.57	-14299.11	4820.30	1681117.25	14286059.79	39°20'26.942"N	80°51'21.764"W	15089.73	161.371	0.90	-0.45	-0.78	
21819.00	89.320	160.970	6467.87	15185.56	-14389.94	4851.37	1681148.31	14285969.00	39°20'26.044"N	80°51'21.371"W	15185.72	161.369	0.30	-0.03	-0.30	
21915.00	89.320	160.690	6469.01	15281.55	-14480.61	4882.89	1681179.82	14285878.36	39°20'25.147"N	80°51'20.971"W	15281.71	161.366	0.29	0.00	-0.25	
22010.00	89.420	160.670	6470.06	15376.53	-14570.25	4914.32	1681211.23	14285788.75	39°20'24.261"N	80°51'20.573"W	15376.70	161.362	0.11	0.11	-0.02	
22105.00	89.480	160.960	6470.97	15471.51	-14659.97	4945.54	1681242.44	14285699.07	39°20'23.373"N	80°51'20.178"W	15471.69	161.358	0.31	0.06	0.31	
22200.00	89.290	160.670	6471.99	15566.50	-14749.69	4976.76	1681273.64	14285609.39	39°20'22.486"N	80°51'19.782"W	15566.68	161.355	0.36	-0.20	-0.31	
22285.00	89.320	160.320	6473.02	15651.48	-14829.81	5005.13	1681302.01	14285529.30	39°20'21.694"N	80°51'19.423"W	15651.66	161.350	0.41	0.04	-0.41	
22310.00	89.320	160.320	6473.32	15676.47	-14853.34	5013.55	1681310.42	14285505.77	39°20'21.461"N	80°51'19.316"W	15676.66	161.349	0.00	0.00	0.00	Projected MD at TD: 22310'



Actual Wellpath Report

Kiliska Unit 2H AWP Proj: 22310'
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REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #13
ANTERO RESOURCES CORPORATION	Well	Kiliska Unit 2H
Area	Tyler County, WV	Kiliska Unit 2H AWB
Field	Tyler	
Facility	Dawson Pad	

HOLE & CASING SECTIONS - Ref Wellbore: Kiliska Unit 2H AWB Ref Wellpath: Kiliska Unit 2H AWP Proj: 22310'

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
20in Conductor	30.00	110.00	80.00	30.00	110.00	0.00	0.00	0.00	0.06
17.5in Open Hole	110.00	573.00	463.00	110.00	572.99	0.06	0.10	0.78	2.38
13.375in Casing Surface	30.00	573.00	543.00	30.00	572.99	0.00	0.00	0.78	2.38
12.25in Open Hole	573.00	2593.00	2020.00	572.99	2592.63	0.78	2.38	-2.84	0.11
9.625in Casing Intermediate	30.00	2593.00	2563.00	30.00	2592.63	0.00	0.00	-2.84	0.11
8.75in Open Hole	2593.00	6157.00	3564.00	2592.63	6110.27	-2.84	0.11	317.37	-58.32
8.5in Open Hole	6157.00	22310.00	16153.00	6110.27	6473.32	317.37	-58.32	-14853.34	5013.55
5.5in Casing Production	30.00	22310.00	22280.00	30.00	6473.32	0.00	0.00	-14853.34	5013.55

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Kiliska Unit 2H - POE - Rev-2	6476.00	-114.85	94.52	1676393.36	14300238.37	39°22'47.204"N	80°52'21.658"W	point
Kiliska Unit 2H - BHL - Rev-2	6501.00	-14870.11	4993.85	1681290.73	14285489.02	39°20'21.296"N	80°51'19.567"W	point
Kiliska Unit 2H - LP - Rev-2	6501.00	-292.87	153.63	1676452.45	14300060.42	39°22'45.443"N	80°52'20.909"W	point



Actual Wellpath Report

Kilska Unit 2H AWP Proj: 22310'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #13
Area	Tyler County, WV	Well	Kilska Unit 2H
Field	Tyler	Wellbore	Kilska Unit 2H AWB
Facility	Dawson Pad		

WELLPATH COMPOSITION - Ref Wellbore: Kilska Unit 2H AWB Ref Wellpath: Kilska Unit 2H AWP Proj: 22310'

Start MD ft)	End MD ft)	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	565.00	Gyrodatta standard - Drop gyro or Multi-shot	01 Gyrodatta MS Gyro <17'-1/2">(100'-550')	Kilska Unit 2H AWB
565.00	2524.00	OWSG MWD rev2 + HIRGM	02 WFT EM <12'-1/4">(550')(672'-2509')	Kilska Unit 2H AWB
2524.00	6081.00	OWSG MWD rev2 + HIRGM	03 WFT EM <8'-3/4">(2509')(2623'-6066')	Kilska Unit 2H AWB
6081.00	22285.00	BHI AutoTrak Curve (Short)	04 BH AT Curve <8'-1/2"> (6081')(6128'-22285')	Kilska Unit 2H AWB
22285.00	22310.00	Blind Drilling (std)	Projection to bit	Kilska Unit 2H AWB



Actual Wellpath Report

Kiliska Unit 2H AWP Proj: 22310'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #13
Area	Tyler County, WV	Well	Kiliska Unit 2H
Field	Tyler	Wellbore	Kiliska Unit 2H AWB
Facility	Dawson Pad		

COMMENTS

Wellpath general comments

API: 47-095-02584-0000
 BHI Job #: 109933284
 Rig: H&P 519
 Duration: 08/10/2019-08/14/2019
 Gyrodatta MS Gyro <17-1/2">(100'-550')
 WFT EM <12-1/4">(550')(672'-2509')
 WFT EM <8-3/4">(2509')(2623'-6066')
 BH AT Curve <8-1/2"> (6081')(6128'-22285')
 Middlesex: 6378' MD
 Burkett: 6585' MD
 Tully: 6664' MD
 Marcellus POE: 6755' MD
 Projected MD at TD: 22310'