

Actual Wellpath Report

Carse Unit 2H AWP Proj: 18631

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Tyler County, WV	Well	Carse Unit 2H
Field	Tyler	Wellbore	Carse Unit 2H AWB
Facility	Rush Fork Pad		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect@ 5.1
North Reference	Grid	User	Delaset
Scale	0.999600	Report Generated	5/6/2019 at 2:00:32 PM
Convergence at slot	0.02° East	Database/Source file	WA_MPL_EasternUS_Defn\Carse_Unit_2H_AWP_Proj_18631.xml

WELLPATH LOCATION			
Slot Location	North [ft]	East [ft]	Easting [US ft]
	-69.00	-10.33	1648990.64
Facility Reference Pt	North [ft]	East [ft]	Easting [US ft]
			14313727.10
Field Reference Pt	North [ft]	East [ft]	Easting [US ft]
			39°25'01.492"N
Field Reference Pt	North [ft]	East [ft]	Easting [US ft]
			0°00'00.000"
Field Reference Pt	North [ft]	East [ft]	Easting [US ft]
			85°29'19.301"W

WELLPATH DATUM			
Calculation method	Minimum curvature	H&P 317 (RKB) to Facility Vertical Datum	1011.50ft
Horizontal Reference Pt	Slot	H&P 317 (RKB) to Mean Sea Level	1011.50ft
Vertical Reference Pt	H&P 317 (RKB)	H&P 317 (RKB) to Ground Level at Slot (Slot #08)	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	160.16°

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WV Department of
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Operator	Antero Resources Corporation
Area	Tyler County, WV
Field	Tyler
Facility	Rush Fork Pad
Well	Carse Unit 2H
Wellbore	Carse Unit 2H AWP
Slot	Wellbore
Slot #08	Well

WELLPATH DATA (231 stations) † = interpolated/extrapolated station												
MD	Inclination	Azimuth	TVD	Vert Sact	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
0.00	0.00	127.060	0.00	0.00	0.00	0.00	14313727.10	39°25'00.810"N	80°58'10.710"W	0.00	0.00	
25.50	0.000	127.060	25.50	0.00	0.00	0.00	14313726.81	39°25'00.807"N	80°58'10.705"W	0.47	127.060	0.75
110.50	0.640	127.060	110.50	0.40	-0.29	0.38	14313726.63	39°25'00.805"N	80°58'10.702"W	0.77	127.060	0.75
135.50	0.760	125.280	135.50	0.65	-0.47	0.61	14313726.43	39°25'00.803"N	80°58'10.699"W	1.09	127.496	0.27
160.50	0.760	125.280	160.49	0.92	-0.67	0.87	14313726.22	39°25'00.801"N	80°58'10.695"W	1.43	127.427	0.26
185.50	0.800	129.030	185.49	1.21	-0.87	1.14	14313726.04	39°25'00.800"N	80°58'10.693"W	1.73	127.633	0.96
210.50	0.560	128.060	210.49	1.46	-1.06	1.37	14313725.80	39°25'00.797"N	80°58'10.690"W	2.03	129.751	0.74
235.50	0.350	147.090	235.49	1.64	-1.20	1.51	14313725.90	39°25'00.796"N	80°58'10.691"W	1.93	128.417	1.02
260.50	0.180	163.920	260.49	1.75	-1.30	1.56	14313725.75	39°25'00.795"N	80°58'10.692"W	2.05	130.914	0.78
285.50	0.100	240.490	285.49	1.79	-1.34	1.55	14313725.66	39°25'00.792"N	80°58'10.694"W	1.92	132.791	0.22
310.50	0.190	286.600	310.49	1.77	-1.34	1.49	14313725.51	39°25'00.789"N	80°58'10.694"W	1.79	133.617	0.76
335.50	0.220	299.790	335.49	1.71	-1.31	1.41	14313725.36	39°25'00.786"N	80°58'10.694"W	1.74	133.924	0.57
360.50	0.410	303.150	360.49	1.60	-1.23	1.29	14313725.21	39°25'00.783"N	80°58'10.693"W	1.58	135.342	0.58
367.50	0.450	303.710	367.49	1.56	-1.20	1.25	14313725.06	39°25'00.780"N	80°58'10.693"W	1.43	135.342	0.58
390.50	0.450	303.710	367.49	1.56	-1.20	1.25	14313724.91	39°25'00.777"N	80°58'10.693"W	1.28	135.342	0.58
437.50	0.830	316.750	437.48	0.87	-0.68	0.67	14313724.76	39°25'00.774"N	80°58'10.693"W	1.13	135.342	0.58
472.50	1.600	290.840	529.46	-0.58	0.26	-0.98	14313724.61	39°25'00.771"N	80°58'10.693"W	1.02	284.826	1.01
529.50	1.600	290.840	529.46	-0.58	0.26	-0.98	14313724.46	39°25'00.768"N	80°58'10.693"W	0.96	284.826	1.01
579.50	3.150	288.280	621.38	-2.98	1.51	-4.58	14313724.31	39°25'00.765"N	80°58'10.693"W	0.83	288.234	1.69
621.50	4.000	283.090	713.20	-6.28	3.03	-10.11	14313724.16	39°25'00.762"N	80°58'10.693"W	0.73	283.907	0.89
671.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313724.01	39°25'00.759"N	80°58'10.693"W	0.64	281.496	0.38
713.50	4.000	283.090	713.20	-6.28	3.03	-10.11	14313723.86	39°25'00.756"N	80°58'10.693"W	0.55	286.683	0.99
763.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313723.71	39°25'00.753"N	80°58'10.693"W	0.48	280.323	0.48
805.50	5.020	275.510	899.60	-13.23	5.07	-24.94	14313723.56	39°25'00.750"N	80°58'10.693"W	0.40	280.263	0.39
848.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313723.41	39°25'00.747"N	80°58'10.693"W	0.33	279.048	1.24
899.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313723.26	39°25'00.744"N	80°58'10.693"W	0.26	277.653	1.32
948.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313723.11	39°25'00.741"N	80°58'10.693"W	0.19	276.571	1.40
999.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313722.96	39°25'00.738"N	80°58'10.693"W	0.12	275.484	1.38
1048.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313722.81	39°25'00.735"N	80°58'10.693"W	0.05	274.484	1.38
1099.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313722.66	39°25'00.732"N	80°58'10.693"W	0.00	273.933	0.92
1148.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313722.51	39°25'00.729"N	80°58'10.693"W	0.00	273.933	0.92
1199.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313722.36	39°25'00.726"N	80°58'10.693"W	0.00	273.933	0.92
1248.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313722.21	39°25'00.723"N	80°58'10.693"W	0.00	273.933	0.92
1299.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313722.06	39°25'00.720"N	80°58'10.693"W	0.00	273.933	0.92
1348.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313721.91	39°25'00.717"N	80°58'10.693"W	0.00	273.933	0.92
1399.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313721.76	39°25'00.714"N	80°58'10.693"W	0.00	273.933	0.92
1448.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313721.61	39°25'00.711"N	80°58'10.693"W	0.00	273.933	0.92
1499.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313721.46	39°25'00.708"N	80°58'10.693"W	0.00	273.933	0.92
1548.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313721.31	39°25'00.705"N	80°58'10.693"W	0.00	273.933	0.92
1599.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313721.16	39°25'00.702"N	80°58'10.693"W	0.00	273.933	0.92
1648.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313721.01	39°25'00.699"N	80°58'10.693"W	0.00	273.933	0.92
1699.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313720.86	39°25'00.696"N	80°58'10.693"W	0.00	273.933	0.92
1748.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313720.71	39°25'00.693"N	80°58'10.693"W	0.00	273.933	0.92
1799.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313720.56	39°25'00.690"N	80°58'10.693"W	0.00	273.933	0.92
1848.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313720.41	39°25'00.687"N	80°58'10.693"W	0.00	273.933	0.92
1899.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313720.26	39°25'00.684"N	80°58'10.693"W	0.00	273.933	0.92
1948.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313720.11	39°25'00.681"N	80°58'10.693"W	0.00	273.933	0.92
1999.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313720.00	39°25'00.678"N	80°58'10.693"W	0.00	273.933	0.92
2048.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313719.85	39°25'00.675"N	80°58'10.693"W	0.00	273.933	0.92
2099.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313719.70	39°25'00.672"N	80°58'10.693"W	0.00	273.933	0.92
2148.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313719.55	39°25'00.669"N	80°58'10.693"W	0.00	273.933	0.92
2199.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313719.40	39°25'00.666"N	80°58'10.693"W	0.00	273.933	0.92
2248.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313719.25	39°25'00.663"N	80°58'10.693"W	0.00	273.933	0.92
2299.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313719.10	39°25'00.660"N	80°58'10.693"W	0.00	273.933	0.92
2348.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313718.95	39°25'00.657"N	80°58'10.693"W	0.00	273.933	0.92
2399.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313718.80	39°25'00.654"N	80°58'10.693"W	0.00	273.933	0.92
2448.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313718.65	39°25'00.651"N	80°58'10.693"W	0.00	273.933	0.92
2499.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313718.50	39°25'00.648"N	80°58'10.693"W	0.00	273.933	0.92
2548.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313718.35	39°25'00.645"N	80°58'10.693"W	0.00	273.933	0.92
2599.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313718.20	39°25'00.642"N	80°58'10.693"W	0.00	273.933	0.92
2648.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313718.05	39°25'00.639"N	80°58'10.693"W	0.00	273.933	0.92
2699.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313717.90	39°25'00.636"N	80°58'10.693"W	0.00	273.933	0.92
2748.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313717.75	39°25'00.633"N	80°58'10.693"W	0.00	273.933	0.92
2799.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313717.60	39°25'00.630"N	80°58'10.693"W	0.00	273.933	0.92
2848.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313717.45	39°25'00.627"N	80°58'10.693"W	0.00	273.933	0.92
2899.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313717.30	39°25'00.624"N	80°58'10.693"W	0.00	273.933	0.92
2948.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313717.15	39°25'00.621"N	80°58'10.693"W	0.00	273.933	0.92
2999.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313717.00	39°25'00.618"N	80°58'10.693"W	0.00	273.933	0.92
3048.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313716.85	39°25'00.615"N	80°58'10.693"W	0.00	273.933	0.92
3099.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313716.70	39°25'00.612"N	80°58'10.693"W	0.00	273.933	0.92
3148.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313716.55	39°25'00.609"N	80°58'10.693"W	0.00	273.933	0.92
3199.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313716.40	39°25'00.606"N	80°58'10.693"W	0.00	273.933	0.92
3248.50	4.680	276.870	805.93	-9.75	4.22	-17.04	14313716.25	39°25'00.603"N	80°58'10.693"W			



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Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Rush Fork Pad
		Carse Unit 2H	
		Wellbore	
		Carse Unit 2H AWB	
		Slot #08	

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
1942.50	2.180	51.310	1940.38	-25.07	6.34	-56.30	1648934.36	14313733.43	39°25'00.873"N	80°58'11.427"W	56.66	276.424	1.03	1.34	1.75	
2037.50	1.890	68.170	2035.33	-25.71	8.05	-53.44	1648937.23	14313733.14	39°25'00.890"N	80°58'11.391"W	54.04	278.568	0.70	1.03	1.75	
2132.50	1.510	82.340	2130.28	-25.50	8.80	-50.74	1648939.92	14313735.89	39°25'00.897"N	80°58'11.357"W	51.50	279.839	0.59	-0.40	14.92	
2227.50	0.720	120.640	2225.27	-24.78	8.66	-48.99	1648941.67	14313735.76	39°25'00.896"N	80°58'11.334"W	49.75	280.028	1.10	-0.83	40.32	
2322.50	0.410	197.100	2320.26	-24.04	8.03	-48.58	1648942.09	14313735.13	39°25'00.890"N	80°58'11.329"W	49.24	279.391	0.78	-0.33	80.48	
2417.50	0.610	220.140	2415.26	-23.52	7.32	-49.00	1648941.66	14313734.41	39°25'00.883"N	80°58'11.334"W	49.55	278.499	0.30	0.21	24.25	
2511.50	0.570	229.680	2509.25	-23.10	6.64	-49.68	1648940.98	14313733.73	39°25'00.876"N	80°58'11.343"W	50.12	277.609	0.11	-0.04	10.04	
2555.50	0.540	222.520	2553.25	-22.93	6.34	-49.99	1648940.67	14313733.43	39°25'00.873"N	80°58'11.347"W	50.39	277.231	0.17	-0.07	-16.05	
2658.50	0.510	249.410	2655.25	-22.70	5.82	-50.74	1648939.92	14313732.92	39°25'00.868"N	80°58'11.357"W	51.08	276.547	0.24	-0.03	26.11	WFT EM <8-3/4">(2545)(2648-5939)
2753.50	2.240	297.000	2751.22	-24.05	6.52	-52.79	1648937.87	14313733.61	39°25'00.875"N	80°58'11.383"W	53.20	277.038	2.03	1.82	50.09	
2848.50	4.280	293.490	2846.06	-27.84	8.77	-57.70	1648932.96	14313735.87	39°25'00.897"N	80°58'11.445"W	58.36	278.646	2.16	2.15	-3.69	
3043.50	7.980	300.290	3039.87	-43.64	18.84	-76.35	1648914.32	14313745.93	39°25'00.996"N	80°58'11.683"W	78.64	283.864	1.66	1.65	1.49	
3137.50	9.590	294.290	3132.77	-54.10	25.36	-89.12	1648901.55	14313752.44	39°25'01.061"N	80°58'11.845"W	92.66	285.881	1.97	1.71	-6.38	
3232.50	11.440	291.650	3226.17	-65.85	32.09	-105.09	1648885.59	14313765.17	39°25'01.127"N	80°58'12.049"W	109.88	286.979	2.01	1.95	-2.78	
3327.50	13.460	292.290	3318.93	-79.51	39.76	-124.08	1648866.61	14313773.66	39°25'01.294"N	80°58'12.573"W	154.21	288.495	2.44	2.44	0.33	
3422.50	15.780	292.600	3410.85	-95.65	48.92	-146.24	1648844.46	14313775.99	39°25'01.294"N	80°58'12.573"W	154.21	288.495	2.44	2.44	0.33	
3517.50	17.500	292.540	3501.66	-113.99	59.36	-171.36	1648819.35	14313786.43	39°25'01.397"N	80°58'12.893"W	181.35	289.105	1.81	1.81	-0.06	
3611.50	18.960	291.500	3591.14	-133.61	70.37	-198.62	1648792.10	14313797.44	39°25'01.506"N	80°58'13.240"W	210.72	289.509	1.59	1.55	-1.11	
3706.50	20.110	288.790	3680.68	-154.00	81.29	-228.45	1648762.29	14313808.35	39°25'01.614"N	80°58'13.620"W	242.48	289.587	1.54	1.21	-2.85	
3801.50	20.770	288.110	3769.69	-174.55	91.79	-259.92	1648730.83	14313818.84	39°25'01.718"N	80°58'14.021"W	275.65	289.450	0.74	0.69	-0.72	
3896.50	21.780	285.330	3858.22	-195.06	101.68	-292.93	1648697.83	14313828.74	39°25'01.816"N	80°58'14.442"W	310.07	289.143	1.50	1.06	-2.93	
3990.50	21.410	282.850	3945.62	-214.38	110.11	-326.47	1648664.30	14313837.16	39°25'01.899"N	80°58'14.669"W	344.54	288.637	1.05	-0.39	-2.64	
4085.50	20.470	283.790	4034.35	-232.94	117.92	-359.51	1648631.27	14313844.97	39°25'01.977"N	80°58'15.290"W	378.36	288.160	1.05	-0.99	0.99	
4180.50	20.830	286.750	4123.25	-252.21	126.75	-391.82	1648598.98	14313853.80	39°25'02.064"N	80°58'15.702"W	411.81	287.926	1.16	0.38	3.12	
4274.50	21.400	289.150	4210.94	-272.96	137.19	-424.03	1648566.79	14313864.23	39°25'02.167"N	80°58'16.112"W	445.67	287.929	1.10	0.61	2.55	
4369.50	22.360	291.880	4299.10	-295.89	149.61	-457.17	1648533.66	14313876.65	39°25'02.290"N	80°58'16.534"W	481.03	288.121	1.47	1.01	2.87	
4464.50	22.630	292.790	4388.87	-320.30	163.43	-490.79	1648500.05	14313890.46	39°25'02.427"N	80°58'16.963"W	517.28	288.417	0.46	0.28	0.96	
4559.50	22.010	291.620	4474.75	-344.46	177.07	-524.19	1648466.67	14313904.09	39°25'02.562"N	80°58'17.388"W	553.29	288.665	0.80	-0.65	-1.23	
4653.50	22.600	291.650	4561.72	-368.09	190.22	-557.35	1648433.52	14313917.24	39°25'02.692"N	80°58'17.811"W	588.92	288.845	0.63	0.63	0.03	

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Actual Wellpath Report

Carse Unit 2H AWP Proj: 18631



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Area	Tyler County, WV
Field	Tyler
Facility	Rush Fork Pad
Wellbore	Carse Unit 2H AWP
Well	Carse Unit 2H
Slot	Slot #08

WELLPATH DATA (231 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
4748.50	22.380	291.430	4649.49	-392.11	203.56	-591.15	1648399.73	-14313930.58	39°25'22.82"N	80°58'18.24"W	625.22	289.001	0.26	-0.23	-0.40	
4843.50	23.010	291.050	4737.14	-416.20	216.84	-625.32	1648365.58	14313943.85	39°25'22.95"N	80°58'18.67"W	661.85	289.125	0.68	-0.66	-0.40	
4937.50	23.170	291.100	4823.61	-440.34	230.10	-659.71	1648331.19	14313957.10	39°25'03.08"N	80°58'19.115"W	698.69	289.228	0.17	0.17	0.05	
5032.50	22.850	287.620	4911.05	-463.81	242.41	-694.73	1648296.19	14313969.41	39°25'03.208"N	80°58'19.561"W	735.81	289.235	1.47	-0.34	-3.66	
5127.50	21.890	286.400	4998.90	-485.50	252.99	-729.30	1648261.63	14313979.99	39°25'03.313"N	80°58'20.001"W	771.94	289.132	1.12	-1.01	-1.28	
5221.50	20.280	285.380	5086.60	-505.25	262.26	-761.82	1648229.13	14313989.25	39°25'03.404"N	80°58'20.416"W	805.70	288.996	1.76	-1.09	-1.71	
5316.50	19.710	287.720	5175.88	-524.51	271.50	-792.96	1648198.01	14313998.49	39°25'03.496"N	80°58'20.812"W	838.15	288.901	1.03	-0.60	2.46	
5411.50	20.930	289.950	5264.97	-545.14	282.17	-824.17	1648166.81	14314009.15	39°25'03.601"N	80°58'21.210"W	871.13	288.900	1.52	2.35	-7.66	
5506.50	19.440	285.414	5354.14	-564.50	291.43	-855.55	1648135.44	14314018.41	39°25'03.693"N	80°58'21.610"W	903.82	288.811	3.07	-1.57	-7.66	
5598.50	18.540	276.510	5384.41	-569.62	293.17	-865.80	1648125.19	14314020.15	39°25'03.710"N	80°58'21.741"W	914.09	288.707	6.86	-2.81	-19.25	
5669.50	17.660	268.780	5413.88	-573.31	293.63	-875.40	1648115.60	14314020.61	39°25'03.715"N	80°58'21.863"W	923.33	288.543	8.24	-2.84	-24.94	
5693.50	16.460	249.980	5475.10	-576.50	290.43	-893.67	1648097.34	14314017.41	39°25'03.683"N	80°58'22.096"W	939.68	288.004	9.42	-1.25	-32.63	
5664.50	16.810	240.400	5504.81	-575.72	286.71	-901.69	1648089.31	14314013.69	39°25'03.647"N	80°58'22.198"W	946.18	287.639	8.91	1.13	-30.90	
5696.50	17.520	231.980	5535.39	-573.44	281.46	-908.51	1648081.50	14314008.44	39°25'03.595"N	80°58'22.298"W	952.07	287.195	8.07	2.22	-26.31	
5728.50	18.170	222.700	5565.86	-569.63	274.83	-916.69	1648074.32	14314001.81	39°25'03.529"N	80°58'22.389"W	957.00	286.689	9.11	2.03	-29.00	
5759.50	19.300	216.690	5595.22	-564.58	267.16	-923.03	1648067.98	14313994.15	39°25'03.453"N	80°58'22.470"W	960.92	286.143	7.21	3.65	-19.39	
5791.50	20.360	212.330	5625.32	-558.25	258.22	-929.17	1648061.85	14313985.21	39°25'03.365"N	80°58'22.548"W	964.38	285.531	5.68	3.31	-13.62	
5822.50	21.120	206.040	5654.31	-551.05	248.64	-934.50	1648056.51	14313975.64	39°25'03.270"N	80°58'22.616"W	967.02	284.899	7.59	2.45	-20.29	
5854.50	20.940	198.170	5684.19	-542.53	238.03	-938.82	1648052.20	14313965.03	39°25'03.166"N	80°58'22.671"W	968.52	284.227	8.84	-0.56	-24.59	
5885.50	21.530	192.680	5713.09	-533.37	227.21	-941.80	1648049.23	14313954.22	39°25'03.059"N	80°58'22.709"W	968.82	283.564	6.69	1.90	-17.71	
5917.50	22.610	187.830	5742.74	-522.97	215.39	-943.92	1648047.10	14313942.40	39°25'02.942"N	80°58'22.736"W	968.19	282.854	6.62	3.38	-15.16	
5949.50	24.590	185.790	5772.07	-511.52	202.67	-945.43	1648045.59	14313929.68	39°25'02.816"N	80°58'22.756"W	966.91	282.099	6.69	6.19	-6.38	
6012.00	30.520	183.250	5827.45	-485.17	173.86	-947.65	1648043.38	14313900.89	39°25'02.531"N	80°58'22.784"W	963.46	280.396	9.67	9.49	-4.06	BH AT Curve <-8-1/2">(5949.5)(6012-18607)
6059.00	34.430	179.410	5867.10	-461.63	148.65	-948.19	1648042.84	14313875.65	39°25'02.282"N	80°58'22.791"W	959.77	278.910	9.40	8.32	-8.17	
6107.00	38.200	176.590	5905.77	-434.58	120.25	-947.16	1648043.86	14313847.30	39°25'02.001"N	80°58'22.778"W	954.77	277.236	8.59	7.85	-5.88	
6154.00	42.050	174.320	5941.71	-405.36	90.07	-944.74	1648046.28	14313817.13	39°25'01.703"N	80°58'22.747"W	949.02	275.446	8.76	8.19	-4.83	
6202.00	46.040	172.670	5976.20	-372.90	56.92	-940.94	1648050.08	14313784.00	39°25'01.376"N	80°58'22.699"W	942.66	273.462	8.65	8.31	-3.44	
6249.00	50.140	171.230	6007.59	-338.66	22.30	-936.03	1648054.99	14313749.39	39°25'01.033"N	80°58'22.636"W	936.30	271.366	9.02	8.72	-3.06	
6297.00	53.640	169.580	6037.21	-301.50	-14.93	-929.73	1648061.29	14313712.18	39°25'00.665"N	80°58'22.556"W	929.85	269.080	7.78	7.29	-3.44	

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Slot	Slot #08

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
8290.00	157.190	6228.01	1559.79	-1862.53	-283.41	1648707.35	14311866.32	39°24'42.403"N	80°58'14.329"W	1883.96	188.652	187.182	1.32	0.00	0.99	-0.99
8385.00	155.980	6230.23	1750.57	-1949.68	-245.67	1648745.08	14311778.20	39°24'41.541"N	80°58'13.848"W	1865.09	188.652	187.182	1.32	0.00	0.99	-0.99
8480.00	155.180	6231.79	1845.26	-2036.17	-208.40	1648784.33	14311691.75	39°24'40.686"N	80°58'13.348"W	2046.60	185.788	187.182	0.97	0.48	0.99	-0.84
8575.00	156.490	6233.25	1939.97	-2122.83	-167.51	1648823.20	14311605.12	39°24'39.830"N	80°58'12.853"W	2129.43	185.788	187.182	0.97	0.48	0.99	-0.84
8669.00	156.010	6235.05	2033.74	-2208.85	-129.66	1648861.03	14311519.13	39°24'38.979"N	80°58'12.371"W	2212.65	183.359	187.182	0.52	-0.10	0.99	-0.51
8764.00	159.160	6237.01	2128.61	-2296.64	-93.45	1648897.23	14311431.37	39°24'38.111"N	80°58'11.910"W	2298.54	183.359	187.182	0.52	-0.10	0.99	-0.51
8859.00	154.930	6241.43	2223.33	-2384.00	-56.45	1648934.21	14311344.05	39°24'37.248"N	80°58'11.439"W	2384.67	183.359	187.182	0.52	-0.10	0.99	-0.51
8869.00	159.160	6237.01	2128.61	-2296.64	-93.45	1648897.23	14311431.37	39°24'38.111"N	80°58'11.910"W	2298.54	183.359	187.182	0.52	-0.10	0.99	-0.51
8949.00	154.770	6245.08	2412.98	-2563.32	5.33	1648995.97	14311164.80	39°24'35.475"N	80°58'10.653"W	2563.33	179.881	179.881	2.79	0.16	2.79	7.57
9144.00	159.810	6245.31	2507.89	-2653.79	34.22	1649024.85	14311074.37	39°24'34.581"N	80°58'10.285"W	2654.01	179.881	179.881	2.79	0.16	2.79	7.57
9238.00	157.460	6247.69	2601.81	-2741.29	68.45	1649059.06	14310986.90	39°24'33.716"N	80°58'09.850"W	2742.15	178.570	178.570	3.53	-2.49	3.53	-2.50
9333.00	160.970	6249.99	2696.75	-2830.06	102.14	1649092.74	14310898.17	39°24'32.839"N	80°58'09.421"W	2831.91	177.933	177.933	4.52	2.60	4.52	3.69
9428.00	161.440	6250.11	2791.73	-2920.00	132.75	1649123.34	14310808.27	39°24'31.950"N	80°58'09.031"W	2923.01	177.397	177.397	5.52	0.16	5.52	0.49
9523.00	160.730	6250.16	2886.72	-3009.87	163.54	1649154.12	14310718.44	39°24'31.061"N	80°58'08.639"W	3014.31	176.890	176.890	0.75	-0.06	0.75	-0.73
9618.00	155.840	6250.42	2981.64	-3098.10	198.68	1649189.24	14310630.24	39°24'30.189"N	80°58'08.192"W	3104.46	176.331	176.331	5.15	-0.20	5.15	-5.15
9713.00	150.760	6251.60	3075.92	-3182.93	241.35	1649231.90	14310545.44	39°24'29.351"N	80°58'07.649"W	3192.07	175.664	175.664	5.43	-0.97	5.43	-5.35
9808.00	155.300	6251.81	3170.16	-3267.58	284.42	1649274.95	14310460.83	39°24'28.514"N	80°58'07.101"W	3279.93	175.025	175.025	5.26	2.20	5.26	4.78
9903.00	157.190	6250.66	3264.92	-3354.52	322.68	1649313.20	14310373.93	39°24'27.655"N	80°58'06.613"W	3370.00	174.505	174.505	2.05	-0.48	2.05	1.99
9997.00	157.080	6250.31	3358.79	-3441.13	359.21	1649349.71	14310287.35	39°24'26.798"N	80°58'06.148"W	3459.83	174.041	174.041	0.53	-0.52	0.53	-0.12
10092.00	160.300	6249.88	3453.75	-3529.62	393.73	1649384.21	14310198.89	39°24'25.924"N	80°58'05.709"W	3551.51	173.635	173.635	3.44	0.61	3.44	3.39
10187.00	163.240	6249.52	3548.70	-3619.84	423.44	1649413.92	14310108.71	39°24'25.032"N	80°58'05.331"W	3644.52	173.328	173.328	3.17	-0.71	3.09	3.09
10282.00	162.810	6249.85	3643.58	-3710.70	451.18	1649441.64	14310017.88	39°24'24.134"N	80°58'04.978"W	3738.03	173.068	173.068	0.48	-0.17	0.45	-1.02
10377.00	161.840	6250.08	3738.51	-3801.22	480.02	1649470.47	14309927.41	39°24'23.239"N	80°58'04.611"W	3831.41	172.803	172.803	1.06	0.29	1.06	-1.02
10472.00	165.420	6250.16	3833.32	-3892.35	506.79	1649497.23	14309836.31	39°24'22.336"N	80°58'04.270"W	3925.20	172.582	172.582	3.77	-0.09	3.77	3.77
10567.00	169.610	6250.38	3927.52	-3985.08	527.33	1649517.76	14309743.61	39°24'21.422"N	80°58'04.009"W	4019.82	172.462	172.462	4.41	-0.09	4.41	4.41
10661.00	172.090	6251.09	4019.87	-4077.88	542.27	1649532.70	14309650.86	39°24'20.504"N	80°58'03.819"W	4113.77	172.425	172.425	2.69	-0.53	2.64	2.64
10756.00	171.820	6252.08	4112.86	-4171.94	555.57	1649545.99	14309566.84	39°24'19.575"N	80°58'03.650"W	4208.77	172.415	172.415	0.33	0.17	0.28	-0.28
10851.00	168.360	6253.00	4206.42	-4265.50	571.91	1649562.32	14309463.31	39°24'18.650"N	80°58'03.442"W	4303.67	172.363	172.363	3.64	-0.06	-3.64	-3.64
10946.00	164.120	6253.96	4300.86	-4357.75	594.50	1649584.91	14309371.10	39°24'17.738"N	80°58'03.155"W	4398.11	172.231	172.231	4.46	0.00	-4.46	-4.46
11041.00	162.970	6254.89	4395.69	-4448.85	621.41	1649611.80	14309280.03	39°24'16.838"N	80°58'02.813"W	4492.04	172.048	172.048	1.21	0.03	-1.21	

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MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
1136.00	89.290	165.390	6255.94	4490.44	-450.24	647.31	1649637.69	14309188.68	39°24'15.934"N	80°58'02.483"W	4586.15	171.886	2.55	-0.17	2.55	
11230.00	89.320	163.650	6257.08	4584.16	-4630.82	702.39	1649662.76	14309098.14	39°24'15.039"N	80°58'02.164"W	4679.38	171.738	1.85	0.03	-1.85	
11325.00	89.260	161.420	6258.26	4679.06	-4721.43	700.90	1649691.26	14309007.56	39°24'14.143"N	80°58'01.801"W	4773.17	171.556	2.35	-0.06	-2.35	
11420.00	89.350	158.010	6259.41	4774.04	-4810.52	733.83	1649724.18	14308918.51	39°24'13.263"N	80°58'01.382"W	4866.17	171.327	3.59	0.09	-3.59	
11515.00	89.380	156.750	6260.46	4868.92	-4898.20	770.36	1649760.70	14308830.86	39°24'12.396"N	80°58'00.917"W	4958.41	171.062	1.33	0.03	-1.33	
11610.00	89.350	158.270	6261.52	4963.81	-4985.97	806.70	1649797.02	14308743.13	39°24'11.528"N	80°58'00.455"W	5050.81	170.810	1.60	-0.03	1.60	
11705.00	89.480	161.440	6262.49	5058.79	-5075.14	839.41	1649829.72	14308653.99	39°24'10.647"N	80°58'00.038"W	5144.09	170.608	3.34	0.14	3.34	
11800.00	89.480	160.140	6263.35	5153.78	-5164.85	870.67	1649860.96	14308564.33	39°24'09.760"W	80°57'59.641"W	5237.72	170.431	1.37	-0.00	-1.37	
11895.00	89.230	156.690	6264.42	5248.72	-5253.16	905.61	1649895.89	14308476.04	39°24'08.887"N	80°57'59.196"W	5330.65	170.219	3.64	-0.26	-3.63	
11990.00	89.350	154.490	6265.60	5343.40	-5339.66	944.86	1649935.13	14308389.58	39°24'08.032"N	80°57'58.696"W	5422.61	169.965	2.32	0.13	-2.32	
12084.00	89.260	155.330	6266.74	5437.00	-5424.78	984.72	1649974.97	14308304.49	39°24'07.191"N	80°57'58.189"W	5513.43	169.712	0.89	-0.10	0.89	
12179.00	89.320	156.000	6267.91	5531.70	-5511.34	1023.86	1650014.09	14308217.97	39°24'06.335"N	80°57'57.691"W	5605.63	169.476	0.71	0.06	0.71	
12274.00	89.320	155.790	6269.04	5626.43	-5598.05	1062.66	1650052.87	14308131.30	39°24'05.478"N	80°57'57.197"W	5698.01	169.252	0.00	-0.22	-0.22	
12369.00	89.320	155.060	6270.17	5721.10	-5684.43	1102.17	1650092.36	14308044.95	39°24'04.624"N	80°57'56.694"W	5790.30	169.027	0.77	0.00	-0.77	
12464.00	89.480	156.470	6271.16	5815.81	-5771.06	1141.16	1650131.34	14307958.36	39°24'03.768"N	80°57'56.198"W	5882.80	168.815	1.49	0.17	1.48	
12559.00	89.480	157.880	6272.02	5910.88	-5858.61	1178.01	1650168.18	14307870.84	39°24'02.902"N	80°57'55.729"W	5975.87	168.631	1.48	0.00	1.48	
12654.00	89.480	161.370	6272.89	6005.65	-5947.65	1211.08	1650201.23	14307781.84	39°24'02.022"N	80°57'55.308"W	6069.70	168.491	3.67	0.00	3.67	
12749.00	89.510	163.120	6273.72	6100.58	-6038.12	1240.04	1650230.19	14307691.41	39°24'01.128"N	80°57'54.939"W	6164.13	168.395	1.84	0.03	1.84	
12844.00	89.540	162.130	6274.51	6195.49	-6128.78	1268.41	1650268.54	14307600.78	39°24'00.232"N	80°57'54.579"W	6258.66	168.307	-1.04	0.03	-1.04	
12938.00	89.420	158.040	6275.37	6289.47	-6217.13	1300.42	1650290.54	14307512.46	39°23'59.358"N	80°57'54.171"W	6351.68	168.186	4.35	-0.13	-4.35	
13033.00	89.510	158.700	6276.25	6384.42	-6305.44	1335.44	1650325.55	14307424.19	39°23'58.485"N	80°57'53.726"W	6445.31	168.042	0.70	0.09	0.69	
13128.00	89.510	160.360	6277.07	6479.40	-6394.43	1368.66	1650358.75	14307335.23	39°23'57.606"N	80°57'53.303"W	6539.27	167.919	1.75	0.00	1.75	
13223.00	88.950	159.120	6278.34	6574.39	-6483.55	1401.55	1650391.63	14307246.15	39°23'56.725"N	80°57'52.884"W	6633.30	167.802	-0.59	-0.59	-1.31	
13318.00	89.170	161.760	6279.90	6669.37	-6573.04	1433.35	1650423.42	14307156.69	39°23'55.840"N	80°57'52.480"W	6727.51	167.698	2.79	0.23	2.78	
13413.00	89.080	163.750	6281.35	6764.25	-6663.76	1461.51	1650451.57	14307066.01	39°23'54.943"N	80°57'52.121"W	6822.15	167.630	2.10	-0.05	2.09	
13508.00	89.110	165.430	6282.85	6858.95	-6755.33	1486.75	1650476.79	14306974.48	39°23'54.038"N	80°57'51.800"W	6917.00	167.588	1.77	0.03	1.77	
13603.00	88.950	164.660	6284.46	6953.60	-6847.10	1511.26	1650501.30	14306882.75	39°23'53.131"N	80°57'51.489"W	7011.89	167.553	0.83	-0.17	-0.81	
13698.00	89.170	162.270	6286.02	7048.42	-6938.15	1538.29	1650528.32	14306791.73	39°23'52.231"N	80°57'51.145"W	7106.64	167.499	2.53	0.23	-2.52	
13792.00	89.050	163.260	6287.48	7142.31	-7027.92	1566.14	1650556.15	14306702.00	39°23'51.344"N	80°57'50.790"W	7200.31	167.437	1.06	-0.13	1.05	
13887.00	89.050	163.170	6289.05	7237.16	-7118.86	1593.57	1650583.57	14306611.10	39°23'50.445"N	80°57'50.442"W	7295.04	167.382	0.09	0.00	-0.09	

WELLPATH DATA (231 stations)

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Actual Wellpath Report

Carse Unit 2H AWP Proj: 18631'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Rush Fork Pad
Slot #8	Carse Unit 2H	Well	Carse Unit 2H AWB

WELLPATH DATA (231 stations)											
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Comments
13982.00	89.080	162.160	6290.60	7332.06	-2209.53	1621.87	1650611.86	14306520.46	39°23'49.549"N	80°57'50.081"W	
14077.00	89.148	163.160	6292.08	7426.95	-7300.20	1650.18	1650640.16	14306429.83	39°23'48.652"N	80°57'49.721"W	
14171.00	89.080	162.980	6293.54	7520.82	-7390.11	1677.55	1650667.52	14306339.95	39°23'47.764"N	80°57'49.373"W	
14266.00	89.140	161.160	6295.02	7615.75	-7480.49	1706.79	1650696.75	14306249.62	39°23'46.870"N	80°57'49.001"W	
14361.00	89.200	159.350	6296.39	7710.74	-7569.89	1738.88	1650728.83	14306160.25	39°23'45.986"N	80°57'48.593"W	
14456.00	89.020	161.280	6297.87	7805.72	-7659.32	1770.88	1650760.81	14306070.85	39°23'44.102"N	80°57'48.186"W	
14551.00	89.170	159.290	6299.37	7900.70	-7748.74	1802.92	1650792.84	14305981.47	39°23'44.219"N	80°57'47.778"W	
14646.00	89.050	159.240	6300.84	7995.68	-7837.57	1836.55	1650826.46	14305892.67	39°23'43.340"N	80°57'47.350"W	
14740.00	89.570	158.040	6301.98	8089.64	-7925.11	1870.79	1650860.68	14305805.17	39°23'42.475"N	80°57'46.915"W	
14835.00	89.480	157.810	6302.76	8184.56	-8013.14	1906.49	1650896.36	14305717.18	39°23'41.605"N	80°57'46.460"W	
14930.00	89.350	155.000	6303.73	8279.35	-8100.18	1944.51	1650934.37	14305630.17	39°23'40.744"N	80°57'45.976"W	
15025.00	89.540	151.650	6304.65	8373.65	-8185.06	1987.15	1650976.99	14305545.33	39°23'39.905"N	80°57'45.434"W	
15120.00	89.600	153.690	6305.37	8467.83	-8269.45	2030.76	1651020.59	14305460.97	39°23'39.071"N	80°57'44.879"W	
15215.00	89.690	155.620	6305.96	8562.39	-8355.30	2071.42	1651061.23	14305375.16	39°23'38.223"N	80°57'44.361"W	
15310.00	89.750	154.550	6306.42	8657.01	-8441.45	2111.44	1651101.24	14305289.04	39°23'37.371"N	80°57'43.852"W	
15405.00	89.570	154.380	6306.98	8751.54	-8527.17	2152.39	1651142.17	14305203.35	39°23'36.526"N	80°57'43.331"W	
15500.00	89.690	155.550	6307.60	8846.15	-8613.24	2192.59	1651182.35	14305117.31	39°23'35.673"N	80°57'42.819"W	
15594.00	90.120	155.890	6307.75	8939.87	-8698.93	2231.25	1651220.99	14305031.66	39°23'34.826"N	80°57'42.327"W	
15689.00	89.600	158.940	6307.99	9034.75	-8786.63	2267.73	1651257.46	14304944.00	39°23'33.959"N	80°57'41.863"W	
15784.00	89.750	162.400	6308.52	9129.73	-8876.26	2299.17	1651288.89	14304854.40	39°23'33.073"N	80°57'41.463"W	
15879.00	89.630	163.150	6309.04	9224.63	-8967.00	2327.30	1651317.01	14304763.70	39°23'32.176"N	80°57'41.105"W	
15974.00	89.650	163.770	6309.47	9319.47	-9058.07	2354.34	1651344.04	14304672.67	39°23'31.275"N	80°57'40.761"W	
16069.00	90.030	166.640	6309.57	9414.09	-9149.91	2378.60	1651368.29	14304580.87	39°23'30.368"N	80°57'40.453"W	
16164.00	90.000	168.870	6309.54	9508.25	-9242.74	2398.75	1651388.43	14304488.07	39°23'29.450"N	80°57'40.197"W	
16259.00	90.030	168.500	6309.52	9602.20	-9335.89	2417.39	1651407.06	14304394.96	39°23'28.529"N	80°57'39.960"W	
16353.00	90.000	166.270	6309.50	9695.45	-9427.62	2437.91	1651427.58	14304303.27	39°23'27.623"N	80°57'39.699"W	
16448.00	90.000	163.120	6309.50	9790.14	-9519.24	2462.99	1651452.64	14304211.68	39°23'26.717"N	80°57'39.380"W	
16543.00	89.820	159.760	6309.64	9885.10	-9609.28	2493.22	1651482.86	14304121.67	39°23'25.827"N	80°57'38.996"W	
16638.00	89.910	155.340	6309.87	9979.98	-9697.06	2529.49	1651519.12	14304033.93	39°23'24.959"N	80°57'38.534"W	
16733.00	89.970	153.830	6309.97	10074.53	-9782.86	2570.26	1651559.87	14303948.16	39°23'24.111"N	80°57'38.015"W	

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Actual Wellpath Report

Carse Unit 2H AWP Proj: 18631
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Operator		ANTERO RESOURCES CORPORATION	
Area	Tyler County, WV	Well	Carse Unit 2H
Field	Tyler	Wellbore	Carse Unit 2H AWB
Facility	Rush Fork Pad	Slot	Slot #08

WELLPATH DATA (231 stations)										
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude
(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
16828.00	154.240	6309.94	10168.98	-9868.28	2611.85	1651601.45	1651601.45	39°23'23.267"N	80°57'37.486"W	10208.07
16922.00	90.030	158.010	6309.87	10262.73	-9954.22	1651639.47	14303776.88	39°23'22.417"N	80°57'37.002"W	10300.89
17017.00	90.060	160.400	6309.79	10357.71	-10043.02	1651673.18	14303688.11	39°23'21.539"N	80°57'36.573"W	10395.39
17121.00	90.030	163.240	6309.72	10452.66	-10133.27	1651702.81	14303597.90	39°23'20.647"N	80°57'36.196"W	10490.23
17207.00	90.090	165.770	6309.62	10547.38	-10224.81	1651728.17	14303506.40	39°23'19.742"N	80°57'34.489"W	10585.22
17302.00	89.970	164.080	6309.57	10642.05	-10316.54	1651752.87	14303414.71	39°23'18.836"N	80°57'33.559"W	10680.21
17397.00	90.150	162.440	6309.47	10736.91	-10407.51	1651780.22	14303323.77	39°23'17.936"N	80°57'35.211"W	10775.17
17491.00	90.000	162.690	6309.35	10830.83	-10497.19	1651808.37	14303234.13	39°23'17.050"N	80°57'34.853"W	10869.08
17586.00	89.850	162.210	6309.47	10925.75	-10587.77	1651837.01	14303143.58	39°23'16.154"N	80°57'34.489"W	10963.99
17681.00	90.030	157.990	6309.57	11020.73	-10677.07	1651869.33	14303054.31	39°23'15.272"N	80°57'33.077"W	11058.63
17776.00	89.880	155.100	6309.65	11115.53	-10764.21	1651907.12	14302967.21	39°23'14.410"N	80°57'33.596"W	11152.62
17871.00	89.970	155.350	6309.77	11210.18	-10850.47	1651946.91	14302880.99	39°23'13.558"N	80°57'33.090"W	11246.30
17966.00	90.250	157.170	6309.59	11304.95	-10937.43	1651985.14	14302794.06	39°23'12.698"N	80°57'32.603"W	11340.26
18061.00	90.180	159.360	6309.23	11399.89	-11025.67	1652020.30	14302705.86	39°23'11.826"N	80°57'32.156"W	11434.67
18155.00	90.250	160.410	6308.88	11493.89	-11113.93	1652052.62	14302617.63	39°23'10.953"N	80°57'31.744"W	11528.34
18250.00	90.250	157.840	6308.46	11588.87	-11202.69	1652086.45	14302528.91	39°23'10.076"N	80°57'31.314"W	11622.91
18344.00	90.000	153.940	6308.26	11682.59	-11288.47	1652124.83	14302443.16	39°23'09.228"N	80°57'30.825"W	11715.83
18439.00	90.180	151.730	6308.11	11776.81	-11372.99	1652168.18	14302358.68	39°23'08.392"N	80°57'30.274"W	11808.88
18534.00	90.250	150.680	6307.75	11870.65	-11456.24	1652213.92	14302275.46	39°23'07.569"N	80°57'29.691"W	11901.40
18631.00	90.060	149.720	6307.53	11966.15	-11540.31	1652262.28	14302191.42	39°23'06.943"N	80°57'29.076"W	11995.46

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18631.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18607.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18534.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18439.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18344.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18155.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18061.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17966.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17776.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17681.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17586.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17491.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17397.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17302.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17207.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17121.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17017.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16922.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16828.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Projected MD at TD: 18631'



Actual Wellpath Report

Carse Unit 2H AWP Proj: 18631



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Rush Fork Pad
Well	Carse Unit 2H
Wellbore	Carse Unit 2H AWP
Slot	Slot #08

HOLE & CASING SECTIONS - Ref Wellbore: Carse Unit 2H AWP

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	-0.25	0.34
17.5in Open Hole	105.50	394.00	288.50	105.50	393.99	0.00	0.00	-1.06	1.06
13.375in Casing Surface	25.50	394.00	368.50	25.50	393.99	0.00	0.00	-1.06	1.06
12.25in Open Hole	393.50	2595.10	2201.60	393.49	2592.85	-1.06	1.06	6.10	-50.25
9.625in Casing Intermediate	25.50	2595.10	2569.60	25.50	2592.85	0.00	0.00	6.10	-50.25
8.75in Open Hole	2595.10	6021.50	3426.40	2592.85	6835.61	6.10	6.10	-50.25	-947.89
8.5in Open Hole	6021.50	18631.00	12609.50	5835.61	6307.53	168.99	168.99	-947.89	-11540.31
5.5in Casing Production	25.50	18631.00	18605.50	25.50	6307.53	0.00	0.00	0.00	-11540.31

TARGETS

Name	TVD (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Shape
Carse Unit 2H - POE - Rev-3	6168.00	-226.19	-865.99	1648125.00	14313501.00	39°24'58.577"N	80°58'21.745"W	point
Carse Unit 2H - BHL - Rev-5	6196.00	-11553.76	3221.49	1652210.84	14302177.97	39°23'06.605"N	80°57'29.731"W	point
Carse Unit 2H - LP - Rev-3	6196.00	-442.85	-787.81	1648203.15	14313284.42	39°24'56.436"N	80°58'20.750"W	point

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Tyler County, WV	Well	Carse Unit 2H
Field	Tyler	Wellbore	Carse Unit 2H AWP
Facility	Rush Fork Pad		

WELLPATH COMPOSITION - Ref Wellbore: Carse Unit 2H AWP Proj: 18631			
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment
25.50	367.50	Gyrodala standard - Drop gyro or Multi-shot	01 Gyrodala MS Gyro <17-1/2">(100'-357')
367.50	2555.50	OWSG MWD rev2 + HRGM	02 WFT EM <12-1/4">(357'x427'-2545')
2555.50	5949.50	OWSG MWD rev2 + HRGM	03 WFT EM <8-3/4">(2545'x2648'-5939')
5949.50	18607.00	BH1 AutoTrak Curve (Short)	04 BH AT Curve <8-1/2">(5949.5'x6012'-18607')
18607.00	18631.00	Blind Drilling (std)	Projection to bit
18607.00			Carse Unit 2H AWP
			Carse Unit 2H AWP
			Carse Unit 2H AWP
			Carse Unit 2H AWP
			Wellbore

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Tyler County, WV	Well	Carse Unit 2H
Field	Tyler	Wellbore	Carse Unit 2H AWB
Facility	Rush Fork Pad		

COMMENTS
<p>Wellpath general comments API: 47-095-02414-0000 BHI Job #: 109785503 Rig: H&P 317 Duration: 04/28/2019-04/30/2019 Gyrodatta MS Gyro <17-1/2">(100-357) WFT EM <12-1/4">(357)(427-2545) WFT EM <8-3/4">(2545)(2648-5939) BH AT Curve <8-1/2">(5949.5)(6012-18607) Middlesex: 6301' MD Burke: 6490' MD Tully: 6538' MD Marcellus POE: 6562' MD Projected MD at TD: 18631'</p>

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