

ANTERO RESOURCES CORPORATION

Location: Tyler County, WV
 Field: Tyler
 Facility: McKim Pad
 Slot: Slot #07
 Well: McKim Unit 1H
 Wellbore: McKim Unit 1H PWB

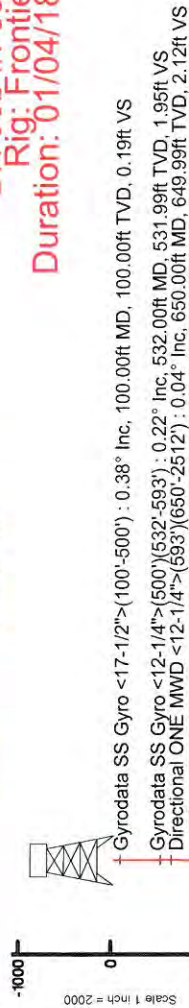
Plot reference wellpath is McKim Unit 1H PWP Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to Frontier 32 (RKB)	North Reference: Grid north
Measured depths are referenced to Frontier 32 (RKB)	Scale: True distance
Frontier 32 (RKB) to Mean Sea Level: 1204 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: Slot #07): -1172 feet	Created by: mccrifer on 2018-05-09
Coordinates are in feet referenced to Slot	Database: WA_MPL_EASTERNUS_Defn

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
McKim Pad	1654145.557	14302331.123	39°23'08.110"N	80°57'05.080"W
Slot	Local N (ft)	Grid North (US ft)	Latitude	Longitude
Slot #07	-57.66	1654162.070	39°23'07.540"N	80°57'04.870"W
Frontier 32 (RKB) to Ground level (At Slot: Slot #07)		32ft		
Mean Sea Level to Ground level (At Slot: Slot #07)		-1172ft		
Frontier 32 (RKB) to Mean Sea Level		1204ft		



API: 47-095-02418-0000
 BH Job #: 8936170
 Rig: Frontier 32
 Duration: 01/04/18 - 01/08/18



Slot	Well	Wellbore	Wellpath
Slot #07	McKim Unit 1H	McKim Unit 1H AWP	McKim Unit 1H AWP Proj: 19339
Slot #07	McKim Unit 1H	McKim Unit 1H PWB	McKim Unit 1H PWP Rev-A.0

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	5718.00	13.540	60.800	5567.98	758.70	880.72	2.69	-392.30
Proj. To Bottom	5801.00	13.600	50.800	5648.67	769.60	896.76	2.82	-396.73
Curve KOP	5874.50	13.600	50.800	5720.11	780.53	910.16	0.00	-402.12
End of 3D Arc	6717.47	59.222	154.131	6417.68	486.94	1172.08	7.50	-34.11
POE	6835.30	70.163	158.983	6468.00	389.31	1214.19	10.00	72.12
Landing Pt.	7033.68	90.000	158.983	6502.00	207.81	1283.92	10.00	266.56
BHL	19388.88	90.000	158.983	6502.00	-11325.46	5715.02	0.00	12621.75

BH AT Curve <8-1/2">(5718)-(19315) : 12.65° Inc, 5812.00ft MD, 5659.54ft TVD, -395.81ft VS
 POE Marcellus: 6827MD / 6470TVD : 71.25° Inc, 6827.00ft MD, 6469.98ft TVD, 61.59ft VS
 Projected MD @ TD: 19339MD / 6526TVD : 89.88° Inc, 19339.00ft MD, 6526.02ft TVD, 12556.47ft VS
 Projected MD @ TD: 19339MD / 6526TVD : 6526.02ft TVD, 11252.31ft S, 5723.40ft E

POE Marcellus: 6827MD / 6470TVD : 71.25° Inc, 6827.00ft MD, 6469.98ft TVD, 61.59ft VS
 Projected MD @ TD: 19339MD / 6526TVD : 89.88° Inc, 19339.00ft MD, 6526.02ft TVD, 12556.47ft VS

Vertical Section (ft)

Scale 1 inch = 2000
 Azimuth 158.98° with reference 0.00 N, 0.00 E

05/03/2019



Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'
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REFERENCE WELLPATH IDENTIFICATION		
Operator	ANTERO RESOURCES CORPORATION	Slot #07
Area	Tyler County, WV	McKim Unit 1H
Field	Tyler	McKim Unit 1H AWB
Facility	McKim Pad	

REPORT SETUP INFORMATION		
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System
North Reference	Grid	User
Scale	0.999600	Report Generated
Convergence at slot	0.03° East	Database/Source file
		WellArchitect@ 5.1
		Mccrerib
		5/9/2018 at 1:33:58 PM
		WA_MPL_EASTERNUS_Defn/McKim_Unit_1H_AWP_Proj_19339_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-57.66	16.52	1654162.07	14302273.48	39°23'07.540"N	80°57'04.870"W
Facility Reference Pt			1654145.56	14302331.12	39°23'08.110"N	80°57'05.080"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM		
Calculation method	Minimum curvature	Frontier 32 (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Frontier 32 (RKB) to Mean Sea Level
Vertical Reference Pt	Frontier 32 (RKB)	Frontier 32 (RKB) to Ground Level at Slot (Slot #07)
MD Reference Pt	Frontier 32 (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth
		32.00ft
		1204.00ft
		32.00ft
		N 0.00, E 0.00 ft
		158.98°

05/03/2019



Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'

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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #07
Operator	ANTERO RESOURCES CORPORATION	Well	McKim Unit 1H
Area	Tyler County, WV	Wellbore	McKim Unit 1H AWB
Field	Tyler		
Facility	McKim Pad		

WELLPATH DATA (233 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
0.00	0.00	124.600	0.00	0.00	0.00	0.00	1654162.07	14302273.48	39°23'07.540"N	80°57'04.870"W	0.00	0.00	0.00	0.00	0.00	
32.00	0.00	124.600	32.00	0.00	0.00	0.00	1654162.07	14302273.48	39°23'07.540"N	80°57'04.870"W	0.00	0.00	0.00	0.00	0.00	
100.00	0.384	124.600	100.00	0.19	-0.13	0.19	1654162.26	14302273.35	39°23'07.539"N	80°57'04.868"W	0.23	124.600	0.56	0.56	183.24	Gyrodata SS Gyro <17-1/2">(100'-500')
117.00	0.480	124.600	117.00	0.29	-0.20	0.29	1654162.36	14302273.28	39°23'07.538"N	80°57'04.866"W	0.36	124.600	0.56	0.56	0.00	
217.00	0.420	111.160	217.00	0.89	-0.57	0.98	1654163.05	14302272.91	39°23'07.534"N	80°57'04.858"W	1.13	120.294	0.12	-0.08	-13.44	
317.00	0.220	127.480	316.99	1.30	-0.82	1.47	1654163.54	14302272.66	39°23'07.532"N	80°57'04.851"W	1.69	119.134	0.22	-0.20	16.32	
417.00	0.150	133.670	416.99	1.58	-1.03	1.72	1654163.79	14302272.46	39°23'07.530"N	80°57'04.848"W	2.00	120.869	0.07	-0.07	6.19	
517.00	0.250	134.450	516.99	1.89	-1.27	1.97	1654164.04	14302272.21	39°23'07.527"N	80°57'04.845"W	2.35	122.829	0.10	0.10	0.78	
532.00	0.219	142.259	531.99	1.95	-1.32	2.01	1654164.08	14302272.12	39°23'07.527"N	80°57'04.844"W	2.41	123.213	0.30	-0.21	52.06	Gyrodata SS Gyro <12-1/4">(500')(532'-593')
549.00	0.190	153.950	548.99	2.01	-1.37	2.04	1654164.11	14302272.12	39°23'07.526"N	80°57'04.844"W	2.46	123.795	0.30	-0.17	68.77	
610.00	0.070	236.100	609.99	2.12	-1.48	2.06	1654164.13	14302272.00	39°23'07.525"N	80°57'04.844"W	2.53	125.723	0.32	-0.20	134.67	
650.00	0.038	262.333	649.99	2.12	-1.50	2.02	1654164.09	14302271.99	39°23'07.525"N	80°57'04.844"W	2.52	126.450	0.10	-0.08	65.58	Directional ONE MWD <12-1/4">(693')(650'-2512')
667.00	0.030	288.330	666.99	2.12	-1.49	2.01	1654164.08	14302271.99	39°23'07.525"N	80°57'04.844"W	2.51	126.571	0.10	-0.04	152.93	
727.00	0.140	334.910	726.99	2.03	-1.42	1.97	1654164.04	14302272.06	39°23'07.526"N	80°57'04.845"W	2.43	125.866	0.20	0.18	77.63	
787.00	0.480	32.430	786.99	1.81	-1.14	2.07	1654164.14	14302272.34	39°23'07.529"N	80°57'04.844"W	2.37	118.917	0.70	0.57	95.87	
847.00	1.450	47.050	846.98	1.38	-0.42	2.76	1654164.83	14302273.07	39°23'07.536"N	80°57'04.835"W	2.79	98.553	1.65	1.62	24.37	
939.00	3.250	44.280	938.90	-0.15	2.24	5.44	1654167.50	14302275.73	39°23'07.562"N	80°57'04.801"W	5.88	67.561	1.96	1.96	-3.01	
1027.00	4.700	43.660	1026.69	-2.73	6.64	9.67	1654171.73	14302280.12	39°23'07.606"N	80°57'04.747"W	11.73	55.518	1.65	1.65	-0.70	
1116.00	6.270	45.190	1115.28	-6.25	12.70	15.63	1654177.70	14302286.18	39°23'07.665"N	80°57'04.671"W	20.14	50.903	1.77	1.76	1.72	
1204.00	7.610	49.360	1202.63	-10.15	19.88	23.46	1654185.52	14302293.36	39°23'07.736"N	80°57'04.571"W	30.76	49.719	1.63	1.52	4.74	
1292.00	9.050	54.650	1289.70	-13.82	27.68	33.53	1654195.59	14302301.16	39°23'07.813"N	80°57'04.443"W	43.48	50.455	1.85	1.64	6.01	
1380.00	10.390	57.010	1378.44	-17.17	36.01	45.83	1654207.88	14302309.48	39°23'07.896"N	80°57'04.286"W	58.29	51.843	1.59	1.52	2.68	
1469.00	12.210	54.120	1463.71	-21.25	45.90	60.19	1654222.24	14302319.36	39°23'07.993"N	80°57'04.103"W	75.69	52.674	2.14	2.04	-3.23	
1557.00	14.070	49.290	1549.40	-27.24	58.33	75.84	1654237.88	14302331.79	39°23'08.116"N	80°57'03.904"W	95.68	52.436	2.45	2.11	-5.49	
1646.00	16.210	49.170	1635.31	-35.10	73.51	93.44	1654255.48	14302346.96	39°23'08.266"N	80°57'03.679"W	118.89	51.809	2.40	2.40	-0.13	
1734.00	16.490	48.610	1719.75	-43.61	89.80	112.11	1654274.13	14302363.25	39°23'08.427"N	80°57'03.442"W	143.64	51.305	0.37	0.32	-0.64	
1823.00	16.430	48.190	1805.10	-52.47	106.54	130.96	1654292.98	14302379.98	39°23'08.592"N	80°57'03.201"W	168.83	50.872	0.15	-0.07	-0.47	
1911.00	16.390	47.560	1889.52	-61.43	123.21	149.40	1654311.41	14302396.65	39°23'08.757"N	80°57'02.966"W	193.66	50.487	0.21	-0.05	-0.72	
1999.00	16.130	46.300	1974.00	-70.67	140.04	167.40	1654329.41	14302413.47	39°23'08.923"N	80°57'02.737"W	218.25	50.086	0.50	-0.30	-1.43	
2087.00	15.990	45.350	2058.56	-80.25	157.00	184.86	1654346.86	14302430.42	39°23'09.091"N	80°57'02.515"W	242.54	49.659	0.34	-0.16	-1.08	



Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #07
Area	Tyler County, WV	Well	McKim Unit 1H
Field	Tyler	Wellbore	McKim Unit 1H AWB
Facility	McKim Pad		

WELLPATH DATA (233 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 (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
2176.00	16.550	45.870	2144.00	-90.13	1174.44	202.68	1654364.67	14302447.86	39°23'09.263"N	80°57'02.287"W	267.42	49.282	0.65	0.63	0.58	
2284.00	14.960	49.930	2228.69	-98.76	1190.48	220.37	1654382.35	14302463.89	39°23'09.421"N	80°57'02.062"W	291.29	49.161	2.20	-1.81	4.61	
2352.00	15.010	49.700	2313.70	-106.23	205.17	237.76	1654399.73	14302478.57	39°23'09.566"N	80°57'01.841"W	314.04	49.208	0.09	0.06	-0.28	
2440.00	13.520	47.420	2398.99	-113.77	219.50	254.02	1654415.99	14302492.89	39°23'09.708"N	80°57'01.633"W	335.72	49.170	1.81	-1.69	-2.59	
2529.00	13.490	45.450	2485.53	-121.74	233.82	269.08	1654431.04	14302507.21	39°23'09.850"N	80°57'01.441"W	356.48	49.011	0.52	-0.03	-2.21	
2613.00†	13.647	43.699	2567.18	-129.89	247.86	282.91	1654444.87	14302521.24	39°23'09.988"N	80°57'01.265"W	376.12	48.778	0.52	0.19	-2.08	Directional ONE MWWD -8-3/4" - (2512')(2613'-5701')
2630.00	13.660	43.350	2583.70	-131.61	250.77	285.67	1654447.63	14302524.15	39°23'10.017"N	80°57'01.230"W	380.12	48.723	0.52	0.20	-2.06	
2718.00	12.590	38.600	2669.40	-140.96	265.83	298.80	1654460.75	14302539.21	39°23'10.166"N	80°57'01.063"W	399.94	48.342	1.74	-1.24	-5.40	
2807.00	10.530	43.950	2756.59	-149.31	279.27	310.50	1654472.44	14302552.64	39°23'10.298"N	80°57'00.914"W	417.61	48.031	2.61	-2.31	6.01	
2895.00	11.440	48.150	2842.98	-155.82	290.88	322.58	1654484.52	14302564.25	39°23'10.413"N	80°57'00.760"W	434.36	47.958	1.38	1.03	4.77	
2983.00	12.250	45.880	2929.11	-162.58	303.20	335.78	1654497.72	14302576.56	39°23'10.535"N	80°57'00.591"W	452.42	47.919	1.06	0.92	-2.58	
3071.00	13.110	44.850	3014.96	-170.33	316.78	349.52	1654511.45	14302590.13	39°23'10.669"N	80°57'00.416"W	471.72	47.814	1.01	0.98	-1.17	
3159.00	14.120	49.230	3100.49	-178.03	330.86	364.69	1654526.62	14302604.21	39°23'10.808"N	80°57'00.223"W	492.41	47.785	1.64	1.15	4.98	
3248.00	14.750	55.470	3186.68	-184.35	344.38	382.25	1654544.17	14302617.72	39°23'10.942"N	80°56'59.995"W	514.50	47.984	1.88	0.71	7.01	
3336.00	16.000	62.020	3271.54	-188.44	356.42	402.19	1654564.10	14302629.78	39°23'11.060"N	80°56'59.745"W	537.39	48.453	2.43	1.42	7.44	
3424.00	17.200	67.280	3355.87	-190.29	367.13	424.91	1654586.81	14302640.47	39°23'11.166"N	80°56'59.456"W	561.54	49.172	2.18	1.36	5.98	
3513.00	16.160	60.400	3441.14	-192.53	378.33	447.82	1654609.71	14302651.67	39°23'11.277"N	80°56'59.164"W	586.24	49.807	2.51	-1.17	-7.73	
3601.00	15.160	54.700	3525.87	-197.20	391.03	467.86	1654629.74	14302664.36	39°23'11.402"N	80°56'58.909"W	609.75	50.111	2.08	-1.14	-6.48	
3689.00	16.970	52.030	3610.43	-203.76	405.59	487.37	1654649.25	14302678.91	39°23'11.546"N	80°56'58.660"W	634.06	50.233	2.22	2.06	-3.03	
3778.00	18.660	51.730	3695.16	-211.79	422.40	508.79	1654670.66	14302695.71	39°23'11.712"N	80°56'58.387"W	661.28	50.301	1.90	1.90	-0.94	
3866.00	16.980	45.990	3778.95	-220.98	440.05	529.09	1654690.95	14302713.35	39°23'11.886"N	80°56'58.128"W	688.17	50.250	2.76	-1.91	-6.52	
3954.00	16.010	39.900	3863.33	-231.90	458.29	546.12	1654707.97	14302731.59	39°23'12.067"N	80°56'57.911"W	712.93	49.998	2.25	-1.10	-6.92	
4042.00	14.020	40.560	3948.32	-242.87	475.70	560.83	1654722.68	14302748.99	39°23'12.239"N	80°56'57.724"W	735.41	49.696	2.27	-2.26	0.75	
4131.00	12.760	50.580	4034.91	-251.11	490.13	575.44	1654737.28	14302763.42	39°23'12.381"N	80°56'57.538"W	755.88	49.577	2.96	-1.42	11.26	
4219.00	13.570	58.520	4120.60	-256.05	501.69	591.75	1654753.58	14302774.97	39°23'12.495"N	80°56'57.330"W	775.80	49.708	2.25	0.92	9.02	
4307.00	14.680	58.180	4205.94	-260.01	512.96	610.03	1654771.86	14302786.24	39°23'12.607"N	80°56'57.097"W	797.04	49.940	1.26	1.26	-0.39	
4395.00	15.770	58.140	4290.85	-264.35	525.16	629.66	1654791.48	14302798.43	39°23'12.727"N	80°56'56.847"W	819.92	50.171	1.24	1.24	-0.05	
4483.00	16.040	56.010	4375.48	-269.33	538.26	649.90	1654811.71	14302811.53	39°23'12.856"N	80°56'56.589"W	843.86	50.368	0.73	0.31	-2.42	
4572.00	14.830	52.800	4461.27	-275.26	552.02	669.17	1654830.97	14302825.29	39°23'12.992"N	80°56'56.344"W	867.48	50.479	1.66	-1.36	-3.61	
4660.00	13.980	49.320	4546.51	-281.98	565.76	686.20	1654848.00	14302839.02	39°23'13.128"N	80°56'56.127"W	889.36	50.495	1.38	-0.97	-3.95	



Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'

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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #07
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Field	Tyler		
Facility	McKim Pad		

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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 (F/100ft)	Build Rate (F/100ft)	Turn Rate (F/100ft)	Comments
4748.00	15.420	48.530	4631.63	-289.64	580.44	703.03	1654864.82	14302853.69	39°23'13.273"N	80°56'55.912"W	911.68	50.456	1.64	1.64	-0.90	
4836.00	16.650	47.790	4716.20	-298.29	596.66	721.13	1654882.92	14302869.90	39°23'13.433"N	80°56'55.681"W	935.97	50.396	1.42	1.42	-0.84	
4924.00	15.850	43.590	4800.69	-308.00	613.83	738.76	1654900.53	14302887.07	39°23'13.603"N	80°56'55.457"W	960.50	50.277	1.62	1.62	-0.91	-4.77
5013.00	15.110	39.710	4886.46	-318.88	631.56	754.55	1654916.32	14302904.79	39°23'13.778"N	80°56'55.256"W	983.98	50.071	1.43	1.43	-0.83	-4.36
5100.00	16.360	38.960	4970.20	-330.56	649.81	769.50	1654931.26	14302923.03	39°23'13.958"N	80°56'55.065"W	1007.17	49.820	1.46	1.44	-0.86	
5189.00	16.260	41.280	5055.62	-342.62	668.92	785.60	1654947.36	14302942.14	39°23'14.147"N	80°56'54.860"W	1031.81	49.586	0.74	0.11	2.61	
5277.00	15.810	43.590	5140.20	-353.49	686.86	802.00	1654963.74	14302960.07	39°23'14.324"N	80°56'54.651"W	1055.93	49.422	0.89	0.51	2.63	
5365.00	14.990	46.430	5225.04	-362.99	703.39	818.51	1654980.25	14302976.59	39°23'14.488"N	80°56'54.440"W	1079.22	49.326	1.27	-0.93	3.23	
5453.00	14.250	47.590	5310.19	-371.30	718.54	834.75	1654996.49	14302991.73	39°23'14.637"N	80°56'54.234"W	1101.41	49.279	0.90	-0.84	1.32	
5541.00	13.740	41.560	5395.58	-380.07	733.67	849.68	1655011.41	14303006.85	39°23'14.787"N	80°56'54.043"W	1122.60	49.191	1.75	-0.58	-6.85	
5629.00	12.590	51.060	5481.27	-387.83	747.51	864.08	1655025.80	14303020.70	39°23'14.923"N	80°56'53.860"W	1142.54	49.137	2.78	-1.31	10.80	
5718.00	13.540	60.800	5567.98	-392.30	758.70	880.72	1655042.43	14303031.87	39°23'15.034"N	80°56'53.648"W	1162.45	49.257	2.69	1.07	10.94	
5812.00	12.650	58.100	5659.54	-395.81	769.50	899.06	1655060.77	14303042.68	39°23'15.140"N	80°56'53.414"W	1183.41	49.440	1.15	-0.95	-2.87	BH AT Curve <-8.1/2">(5812'-19315')
5907.00	8.850	81.270	5752.89	-396.22	776.11	915.13	1655076.83	14303049.29	39°23'15.206"N	80°56'53.209"W	1199.82	49.699	5.98	4.00	24.39	
5954.00	10.190	106.850	5799.27	-392.89	775.46	922.69	1655084.38	14303048.63	39°23'15.199"N	80°56'53.113"W	1205.27	49.955	9.35	2.85	54.43	
6002.00	10.970	116.340	5846.45	-386.93	772.20	930.84	1655092.54	14303045.37	39°23'15.167"N	80°56'53.009"W	1209.45	50.322	3.97	1.63	19.77	
6049.00	12.080	115.440	5892.51	-380.07	768.10	939.29	1655100.98	14303041.28	39°23'15.126"N	80°56'52.902"W	1213.36	50.725	2.39	2.36	-1.91	
6096.00	14.380	118.760	5938.26	-372.05	763.18	948.85	1655110.54	14303036.36	39°23'15.078"N	80°56'52.780"W	1217.69	51.189	5.15	4.89	7.06	
6143.00	16.830	125.980	5983.52	-361.88	756.38	959.48	1655121.16	14303029.56	39°23'15.010"N	80°56'52.645"W	1221.76	51.751	6.64	5.21	15.36	
6190.00	18.410	132.040	6028.32	-349.56	747.41	970.50	1655132.18	14303020.59	39°23'14.922"N	80°56'52.504"W	1224.94	52.399	5.15	3.36	12.89	
6237.00	21.340	134.130	6072.52	-335.18	736.48	982.15	1655143.82	14303009.67	39°23'14.814"N	80°56'52.356"W	1227.61	53.135	6.41	6.23	4.45	
6285.00	25.540	133.860	6116.55	-317.88	723.22	995.88	1655157.55	14302996.42	39°23'14.683"N	80°56'52.181"W	1230.79	54.012	8.75	8.75	-0.56	
6332.00	28.630	133.980	6158.39	-298.50	708.38	1011.30	1655172.96	14302981.58	39°23'14.536"N	80°56'51.985"W	1234.71	54.990	6.88	6.57	0.26	
6379.00	32.710	135.760	6198.80	-276.61	691.46	1028.26	1655189.92	14302964.66	39°23'14.368"N	80°56'51.769"W	1239.13	56.081	8.89	8.68	3.79	
6426.00	36.940	139.350	6237.38	-251.62	671.63	1046.34	1655207.98	14302944.85	39°23'14.172"N	80°56'51.539"W	1243.34	57.304	10.00	9.00	7.64	
6473.00	37.244	139.823	6240.57	-249.35	669.80	1047.90	1655209.55	14302943.01	39°23'14.154"N	80°56'51.519"W	1243.67	57.414	8.63	7.59	6.82	Sycamore: 6430'MD / 6241'TVD
6521.00	40.620	142.390	6274.80	-223.05	648.30	1065.27	1655226.92	14302921.52	39°23'13.942"N	80°56'51.298"W	1247.04	58.676	8.63	7.67	6.28	
6569.00	44.520	144.600	6309.41	-192.41	622.74	1084.17	1655245.80	14302895.97	39°23'13.689"N	80°56'51.058"W	1250.29	60.127	8.89	8.30	4.70	
6615.00	48.840	146.570	6341.65	-159.16	594.53	1103.47	1655265.09	14302867.77	39°23'13.410"N	80°56'50.812"W	1253.44	61.685	9.68	9.19	4.19	Middlesex: 6568'MD / 6342'TVD
6615.00	53.430	148.770	6371.13	-123.28	563.60	1123.01	1655284.63	14302836.86	39°23'13.104"N	80°56'50.563"W	1256.51	63.349	10.42	9.77	4.68	



Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #07
Area	Tyler County, WV	Well	McKim Unit 1H
Field	Tyler	Wellbore	McKim Unit 1H AWB
Facility	McKim Pad		

WELLPATH DATA (233 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 (F/100ft)	Build Rate (F/100ft)	Turn Rate (F/100ft)	Comments
6663.00	57.200	150.230	6398.44	-84.36	529.60	1143.03	1655304.64	14302802.87	39°23'12.768"N	80°56'50.309"W	1259.76	65.140	8.24	7.85	3.04	
6710.00	61.830	151.190	6422.28	-44.29	494.28	1162.83	1655324.44	14302767.56	39°23'12.419"N	80°56'50.057"W	1263.52	66.971	10.01	9.85	2.04	
6745.00†	63.828	151.263	6438.26	-13.43	466.99	1177.82	1655339.42	14302740.28	39°23'12.149"N	80°56'49.866"W	1267.02	68.372	5.71	5.71	0.21	Burket: 6'745'MD / 6438'TVD
6758.00†	64.570	151.290	6443.92	-1.84	456.72	1183.44	1655345.04	14302730.02	39°23'12.047"N	80°56'49.794"W	1268.52	68.897	5.71	5.71	0.20	
6787.00†	67.234	152.102	6455.76	24.42	433.42	1195.99	1655357.58	14302706.73	39°23'11.817"N	80°56'49.635"W	1272.10	70.080	9.54	9.19	2.80	Tully: 6'787'MD / 6456'TVD
6805.00	68.890	152.590	6462.49	41.00	418.63	1203.74	1655365.33	14302691.94	39°23'11.671"N	80°56'49.536"W	1274.46	70.824	9.54	9.20	2.71	
6827.00†	71.252	154.131	6469.98	61.59	400.14	1213.01	1655374.60	14302673.46	39°23'11.488"N	80°56'49.418"W	1277.31	71.744	12.59	10.73	7.00	POE Marcellus: 6827'MD / 6470'TVD
6852.00	73.950	155.830	6477.46	85.38	378.53	1223.10	1655384.68	14302651.86	39°23'11.274"N	80°56'49.290"W	1280.33	72.804	12.59	10.79	6.80	
6899.00	78.290	159.350	6488.74	130.98	336.36	1240.47	1655402.05	14302609.71	39°23'10.857"N	80°56'49.069"W	1285.27	74.829	11.75	9.23	7.49	
6947.00	80.670	161.620	6497.50	178.15	291.88	1256.23	1655417.80	14302585.25	39°23'10.418"N	80°56'48.869"W	1289.70	76.920	6.80	4.96	4.73	
6994.00	84.790	161.290	6503.45	224.71	247.69	1271.06	1655432.62	14302521.07	39°23'09.981"N	80°56'48.680"W	1294.97	78.973	8.79	8.77	-0.70	
7041.00	90.250	160.430	6503.48	271.63	203.35	1286.45	1655448.00	14302476.75	39°23'09.543"N	80°56'48.484"W	1302.42	81.018	11.76	11.62	-1.83	
7230.00	90.370	162.980	6504.12	460.46	24.37	1347.12	1655508.65	14302387.16	39°23'08.657"N	80°56'48.084"W	1322.84	85.068	0.46	-0.14	0.44	
7325.00	90.120	162.020	6504.36	555.28	-66.23	1375.69	1655537.20	14302207.28	39°23'06.878"N	80°56'47.350"W	1377.28	92.756	1.04	-0.26	-1.01	
7515.00	90.220	159.130	6503.78	745.20	-245.12	1439.64	1655601.13	14302028.46	39°23'05.109"N	80°56'46.958"W	1415.17	96.332	2.04	0.06	-2.04	
7610.00	90.090	158.030	6503.53	840.20	-333.56	1474.33	1655635.81	14301940.06	39°23'04.235"N	80°56'46.096"W	1511.60	102.748	1.17	-0.14	-1.16	
7704.00	89.880	157.310	6503.55	934.17	-420.51	1510.05	1655671.51	14301853.14	39°23'03.375"N	80°56'45.641"W	1567.51	105.561	0.80	-0.22	-0.77	
7798.00	89.970	153.520	6503.67	1027.97	-505.97	1549.15	1655710.60	14301767.71	39°23'02.530"N	80°56'45.144"W	1629.69	108.088	4.03	0.10	-4.03	
7892.00	90.000	151.810	6503.70	1121.40	-589.47	1592.31	1655753.74	14301684.25	39°23'01.705"N	80°56'44.595"W	1697.92	110.315	1.82	0.03	-1.82	
7986.00	90.150	155.750	6503.58	1214.99	-673.78	1633.84	1655795.25	14301599.97	39°23'00.871"N	80°56'44.067"W	1767.32	112.411	4.19	-0.06	4.19	
8080.00	90.090	157.150	6503.38	1308.90	-759.95	1671.39	1655832.79	14301513.84	39°23'00.020"N	80°56'43.589"W	1836.05	114.450	1.49	-0.06	1.49	
8176.00	90.030	155.250	6503.28	1404.78	-847.78	1710.13	1655871.51	14301426.04	39°22'59.151"N	80°56'43.097"W	1908.74	116.370	1.98	-0.06	-1.98	
8270.00	90.060	156.520	6503.20	1498.64	-933.58	1748.54	1655909.90	14301340.28	39°22'58.303"N	80°56'42.608"W	1982.16	118.099	1.35	0.03	1.35	
8364.00	89.820	159.010	6503.30	1592.61	-1020.58	1784.10	1655945.46	14301253.31	39°22'57.443"N	80°56'42.156"W	2055.39	119.771	2.66	-0.26	2.65	
8459.00	89.570	163.430	6503.81	1687.52	-1110.50	1814.68	1655976.02	14301163.43	39°22'56.554"N	80°56'41.767"W	2127.50	121.465	4.66	-0.26	4.65	
8554.00	89.660	162.610	6504.45	1782.28	-1201.36	1842.42	1656003.75	14301072.61	39°22'55.656"N	80°56'41.415"W	2199.49	123.107	0.87	0.09	-0.86	
8650.00	89.630	161.720	6505.04	1878.13	-1292.74	1871.82	1656033.14	14300981.26	39°22'54.752"N	80°56'41.041"W	2274.84	124.630	0.93	-0.03	-0.93	
8745.00	89.660	159.250	6505.63	1973.09	-1382.27	1903.55	1656064.86	14300891.76	39°22'53.867"N	80°56'40.637"W	2352.49	125.985	2.60	0.03	-2.60	



Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #07
Operator	ANTERO RESOURCES CORPORATION	Well	McKim Unit 1H
Area	Tyler County, WV	Wellbore	McKim Unit 1H AWB
Field	Tyler		
Facility	McKim Pad		

WELLPATH DATA (233 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 (F/100ft)	Build Rate (F/100ft)	Turn Rate (F/100ft)	Comments
8839.00	89.750	158.350	6506.11	2067.08	-1469.91	1937.55	1656098.84	14300804.16	39°22'53.00"N	80°56'40.205"W	2432.02	127.186	0.96	0.10	-0.96	
8934.00	89.780	158.680	6506.50	2162.08	-1558.31	1972.34	1656133.62	14300715.80	39°22'52.127"N	80°56'39.763"W	2513.65	128.312	0.35	0.03	0.35	
9028.00	89.600	160.310	6507.01	2256.07	-1646.35	2005.27	1656166.53	14300627.80	39°22'51.257"N	80°56'39.344"W	2594.52	129.386	1.74	-0.19	1.73	
9123.00	89.600	160.840	6507.68	2351.03	-1735.94	2036.86	1656198.11	14300538.24	39°22'50.371"N	80°56'38.943"W	2676.24	130.440	0.56	0.00	0.56	
9217.00	89.630	160.920	6508.31	2444.98	-1824.75	2067.65	1656228.89	14300449.47	39°22'49.493"N	80°56'38.551"W	2757.70	131.429	0.09	0.03	0.09	
9312.00	90.060	161.250	6508.56	2539.91	-1914.62	2098.44	1656259.67	14300359.63	39°22'47.726"N	80°56'37.711"W	2840.64	132.377	0.57	0.45	0.35	
9406.00	89.850	160.770	6508.64	2633.85	-2003.50	2129.03	1656290.25	14300270.78	39°22'46.844"N	80°56'37.355"W	2923.49	133.260	0.56	-0.22	-0.51	
9501.00	89.910	159.000	6508.84	2728.84	-2092.71	2161.70	1656322.90	14300181.62	39°22'45.978"N	80°56'36.923"W	3008.72	134.071	1.86	0.06	-1.86	
9595.00	89.940	158.540	6508.96	2822.84	-2180.33	2195.74	1656356.93	14300094.03	39°22'45.107"N	80°56'36.470"W	3094.37	134.798	0.49	0.03	-0.49	
9690.00	90.000	157.480	6509.01	2917.82	-2268.41	2231.31	1656392.49	14300005.98	39°22'44.241"N	80°56'35.530"W	3181.89	135.472	1.12	0.06	-1.12	
9785.00	89.720	157.070	6509.24	3012.78	-2356.04	2268.01	1656429.17	14299918.39	39°22'43.366"N	80°56'35.004"W	3270.29	136.091	0.52	-0.28	-0.43	
9881.00	89.510	157.210	6509.89	3108.73	-2444.50	2305.30	1656466.45	14299829.97	39°22'42.510"N	80°56'35.065"W	3360.06	136.679	0.26	-0.22	0.15	
9975.00	89.690	157.030	6510.54	3202.67	-2531.10	2341.85	1656502.98	14299743.40	39°22'41.641"N	80°56'34.607"W	3448.29	137.224	0.27	0.19	-0.19	
10070.00	89.570	158.440	6511.16	3297.65	-2619.01	2377.84	1656538.96	14299655.52	39°22'40.779"N	80°56'34.161"W	3537.42	137.763	1.49	-0.13	1.48	
10164.00	89.820	157.740	6511.66	3391.63	-2706.22	2412.92	1656574.02	14299568.35	39°22'39.913"N	80°56'33.693"W	3625.71	138.279	0.79	0.27	-0.74	
10259.00	89.630	156.620	6512.11	3486.58	-2793.78	2449.76	1656610.85	14299480.82	39°22'39.068"N	80°56'33.195"W	3715.72	138.754	1.20	-0.20	-1.18	
10353.00	89.570	154.180	6512.77	3580.39	-2879.24	2488.89	1656649.96	14299395.40	39°22'38.229"N	80°56'32.654"W	3805.86	139.159	2.60	-0.06	-2.60	
10448.00	89.630	152.620	6513.43	3674.94	-2964.18	2531.42	1656692.48	14299310.49	39°22'37.391"N	80°56'32.138"W	3898.01	139.503	1.84	0.06	-1.64	
10542.00	89.600	156.190	6514.07	3768.62	-3048.94	2572.02	1656733.06	14299225.77	39°22'36.511"N	80°56'31.717"W	3988.90	139.850	3.80	-0.03	3.80	
10637.00	89.570	163.000	6514.75	3863.56	-3137.93	2605.13	1656766.15	14299136.82	39°22'35.625"N	80°56'31.359"W	4078.39	140.300	7.17	-0.03	7.17	
10731.00	89.690	162.080	6515.36	3957.37	-3227.59	2633.33	1656794.34	14299047.19	39°22'34.735"N	80°56'30.971"W	4165.55	140.790	0.99	0.13	-0.98	
10826.00	89.540	160.440	6516.00	4052.29	-3317.55	2663.85	1656824.85	14298957.27	39°22'33.848"N	80°56'30.206"W	4254.67	141.237	1.73	-0.16	-1.73	
10921.00	89.480	161.170	6516.81	4147.24	-3407.26	2695.08	1656856.07	14298867.59	39°22'32.954"N	80°56'30.574"W	4344.30	141.657	0.77	-0.06	0.77	
11016.00	89.660	163.400	6517.52	4242.07	-3497.75	2723.99	1656884.96	14298777.14	39°22'32.052"N	80°56'29.869"W	4433.32	142.089	2.35	0.19	2.35	
11111.00	89.750	164.090	6518.01	4336.74	-3588.95	2750.58	1656911.54	14298685.97	39°22'31.149"N	80°56'29.536"W	4521.75	142.533	0.73	0.09	0.73	
11206.00	89.660	163.960	6518.50	4431.37	-3680.28	2776.72	1656937.68	14298594.68	39°22'30.243"N	80°56'29.222"W	4610.28	142.966	0.17	-0.09	-0.14	
11301.00	89.660	165.870	6519.07	4525.86	-3772.00	2801.45	1656962.39	14298503.00	39°22'29.334"N	80°56'28.916"W	4698.52	143.399	2.01	0.00	2.01	
11396.00	89.780	164.680	6519.53	4620.28	-3863.88	2825.59	1656986.53	14298411.16	39°22'28.450"N	80°56'28.552"W	4786.81	143.823	1.26	0.13	-1.26	
11490.00	89.690	159.910	6519.97	4714.10	-3953.40	2854.17	1657015.09	14298321.67	39°22'27.561"N	80°56'28.162"W	4876.03	144.172	5.08	-0.10	-5.07	
11585.00	89.970	162.340	6520.25	4809.02	-4043.29	2884.90	1657045.81	14298231.82	39°22'26.122"W	80°56'27.761"W	4966.97	144.492	2.57	0.29	2.56	



Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #07
Area	Tyler County, WV	Well	McKim Unit 1H
Field	Tyler	Wellbore	McKim Unit 1H AWB
Facility	McKim Pad		

WELLPATH DATA (233 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
11680.00	89.970	156.700	6520.30	4903.98	-4132.24	2918.13	1657079.02	14298142.90	39°22'28.682"N	80°56'27.740"W	5058.75	144.771	5.94	0.00	-5.94	
11775.00	89.820	155.340	6520.47	4998.85	-4219.04	2956.73	1657117.62	14298056.14	39°22'25.823"N	80°56'27.249"W	5151.95	144.977	1.44	-0.16	-1.44	
11870.00	89.820	155.550	6520.77	5093.67	-4305.45	2996.21	1657157.08	14297969.76	39°22'24.969"N	80°56'26.747"W	5245.40	145.166	0.22	0.00	0.22	
11965.00	89.750	154.620	6521.13	5188.45	-4391.61	3036.21	1657197.08	14297883.84	39°22'24.117"N	80°56'26.238"W	5339.00	145.341	0.98	-0.07	-0.98	
12060.00	89.940	154.670	6521.38	5283.18	-4477.46	3076.91	1657237.75	14297797.83	39°22'23.269"N	80°56'25.720"W	5432.77	145.503	0.21	0.20	0.05	
12155.00	89.880	154.400	6521.53	5377.89	-4563.23	3117.76	1657278.58	14297712.09	39°22'22.421"N	80°56'25.201"W	5526.61	145.658	0.29	-0.06	-0.28	
12250.00	89.940	153.930	6521.68	5472.55	-4648.73	3159.16	1657319.96	14297626.62	39°22'21.575"N	80°56'24.675"W	5620.59	145.801	0.50	0.06	-0.48	
12345.00	90.280	154.380	6521.50	5567.22	-4734.23	3200.57	1657361.36	14297541.16	39°22'20.730"N	80°56'24.148"W	5714.59	145.939	0.69	0.36	0.47	
12440.00	89.880	156.870	6521.37	5662.05	-4820.75	3239.78	1657400.55	14297454.67	39°22'19.874"N	80°56'23.650"W	5808.25	146.097	2.65	-0.42	2.62	
12534.00	89.970	158.270	6521.49	5756.02	-4907.64	3275.64	1657436.40	14297367.82	39°22'19.015"N	80°56'23.194"W	5900.40	146.279	1.49	0.10	1.49	
12629.00	89.880	161.730	6521.61	5850.99	-4996.90	3308.13	1657468.87	14297278.59	39°22'18.133"N	80°56'22.781"W	5992.72	146.494	3.64	-0.08	3.64	
12724.00	89.720	158.980	6521.95	5945.95	-5086.36	3340.06	1657500.79	14297189.17	39°22'17.249"N	80°56'22.375"W	6084.99	146.708	2.90	-0.17	-2.89	
12818.00	89.880	159.300	6522.27	6039.95	-5174.20	3373.54	1657534.25	14297103.37	39°22'16.380"N	80°56'21.949"W	6176.82	146.896	0.38	0.17	0.34	
12912.00	89.880	159.150	6522.47	6133.95	-5262.08	3406.88	1657567.58	14297013.51	39°22'15.511"N	80°56'21.526"W	6268.68	147.079	0.16	0.00	-0.16	
13006.00	89.970	158.380	6522.59	6227.95	-5349.70	3440.92	1657601.61	14296925.93	39°22'14.645"N	80°56'21.093"W	6360.76	147.251	0.82	0.10	-0.82	
13101.00	89.880	160.460	6522.72	6322.94	-5438.63	3474.32	1657634.99	14296837.03	39°22'13.766"N	80°56'20.668"W	6453.65	147.429	2.19	-0.09	2.18	
13195.00	89.970	162.510	6522.84	6416.84	-5527.76	3504.16	1657664.83	14296747.94	39°22'12.885"N	80°56'20.289"W	6544.87	147.629	2.18	0.10	2.18	
13290.00	89.880	161.690	6522.97	6506.59	-5611.70	3533.36	1657694.01	14296657.58	39°22'11.991"N	80°56'19.918"W	6636.90	147.833	0.86	0.03	-0.86	
13385.00	89.880	161.760	6522.97	6606.59	-5708.37	3563.15	1657723.79	14296567.40	39°22'11.099"N	80°56'19.539"W	6729.16	148.028	0.15	-0.13	0.07	
13480.00	89.850	162.920	6523.19	6701.43	-5798.89	3591.97	1657752.60	14296476.92	39°22'10.205"N	80°56'19.173"W	6821.25	148.225	1.22	-0.03	1.22	
13574.00	89.910	163.550	6523.39	6795.17	-5888.90	3619.09	1657779.70	14296386.95	39°22'09.315"N	80°56'18.829"W	6912.08	148.427	0.67	0.06	0.67	
13669.00	89.970	163.080	6523.49	6889.89	-5979.90	3646.36	1657806.97	14296295.99	39°22'08.415"N	80°56'18.482"W	7003.94	148.626	0.50	0.06	-0.49	
13764.00	89.880	160.850	6523.61	6984.76	-6070.22	3675.77	1657836.36	14296205.70	39°22'07.522"N	80°56'18.109"W	7096.40	148.803	2.35	-0.09	-2.35	
13858.00	89.970	158.750	6523.73	7078.74	-6158.44	3708.23	1657868.81	14296117.52	39°22'06.650"N	80°56'17.696"W	7188.69	148.946	2.24	0.10	-2.23	
13953.00	90.000	156.750	6523.76	7173.72	-6246.36	3744.20	1657904.76	14296029.63	39°22'05.781"N	80°56'17.239"W	7282.58	149.061	2.11	0.03	-2.11	
14048.00	89.940	157.080	6523.81	7268.66	-6333.75	3781.45	1657942.00	14295942.28	39°22'04.917"N	80°56'16.765"W	7376.70	149.161	0.35	-0.06	0.35	
14143.00	89.820	157.560	6524.01	7363.62	-6421.41	3818.08	1657978.61	14295854.66	39°22'04.050"N	80°56'16.300"W	7470.75	149.265	0.52	-0.13	0.51	
14238.00	89.910	158.420	6524.23	7458.60	-6509.48	3853.68	1658014.20	14295766.62	39°22'03.180"N	80°56'15.847"W	7564.67	149.374	0.91	0.09	0.91	
14334.00	89.910	158.280	6524.38	7554.59	-6598.71	3889.10	1658049.60	14295677.43	39°22'02.298"N	80°56'15.397"W	7659.51	149.486	0.15	0.00	-0.15	
14428.00	89.850	158.480	6524.58	7648.59	-6686.10	3923.73	1658084.22	14295590.07	39°22'01.434"N	80°56'14.957"W	7752.39	149.593	0.22	-0.06	0.21	



Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'
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REFERENCE WELLPATH IDENTIFICATION		Slot #07
Operator	ANTERO RESOURCES CORPORATION	McKim Unit 1H
Area	Tyler County, WV	McKim Unit 1H AWB
Field	Tyler	
Facility	McKim Pad	

WELLPATH DATA (233 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
14523.00	89.880	158.900	6524.80	7743.59	-6774.60	3958.25	1658118.73	14295501.61	39°22'00.559"N	80°56'14.518"W	7846.21	149.703	0.44	0.03	0.44	
14618.00	90.090	159.440	6524.83	7838.59	-6863.39	3992.04	1658152.50	14295412.85	39°21'59.681"N	80°56'14.089"W	7939.93	149.816	0.61	0.22	0.57	
14712.00	90.000	157.950	6524.75	7932.58	-6950.96	4026.19	1658186.64	14295325.31	39°21'58.815"N	80°56'13.655"W	8032.81	149.919	1.59	-0.10	-1.59	
14807.00	89.880	157.880	6524.85	8027.57	-7038.99	4061.91	1658222.35	14295237.32	39°21'57.945"N	80°56'13.201"W	8126.90	150.013	0.15	-0.13	-0.07	
14902.00	89.720	156.930	6525.19	8122.53	-7126.70	4098.41	1658258.83	14295149.65	39°21'57.078"N	80°56'12.737"W	8221.12	150.098	1.01	-0.17	-1.00	
14998.00	89.850	156.270	6525.55	8218.44	-7214.80	4136.53	1658296.94	14295061.58	39°21'56.207"N	80°56'12.252"W	8316.51	150.173	0.70	0.14	-0.65	
15092.00	90.220	153.390	6525.49	8312.19	-7299.87	4176.51	1658336.90	14294976.55	39°21'55.366"N	80°56'11.744"W	8410.19	150.225	3.09	0.39	-3.06	
15187.00	89.780	157.260	6525.49	8408.98	-7386.18	4216.16	1658376.54	14294890.27	39°21'54.512"N	80°56'11.240"W	8504.80	150.282	4.10	-0.46	4.07	
15282.00	89.910	157.800	6525.74	8501.94	-7473.96	4252.47	1658412.83	14294802.52	39°21'53.644"N	80°56'10.778"W	8599.05	150.361	0.58	0.14	0.57	
15377.00	89.970	159.150	6525.84	8596.94	-7562.34	4287.32	1658447.67	14294714.19	39°21'52.771"N	80°56'10.335"W	8693.10	150.450	1.42	0.06	1.42	
15471.00	89.630	160.140	6526.17	8690.93	-7650.46	4320.02	1658480.35	14294626.09	39°21'51.899"N	80°56'09.920"W	8785.91	150.548	1.11	-0.36	1.05	
15567.00	89.880	160.070	6526.58	8786.91	-7740.73	4352.69	1658513.01	14294535.86	39°21'51.007"N	80°56'09.505"W	8880.59	150.651	0.27	0.26	-0.07	
15661.00	89.690	163.820	6526.94	8880.77	-7830.09	4381.82	1658542.12	14294446.54	39°21'50.124"N	80°56'09.135"W	8972.77	150.768	3.99	-0.20	3.95	
15757.00	89.750	161.150	6527.41	8976.58	-7921.63	4410.70	1658571.00	14294355.04	39°21'49.219"N	80°56'08.768"W	9066.78	150.891	2.78	0.06	-2.78	
15852.00	89.850	160.300	6527.74	9071.53	-8011.30	4442.06	1658602.35	14294265.40	39°21'48.332"N	80°56'08.369"W	9160.40	150.993	0.90	0.11	-0.88	
15946.00	89.690	158.440	6528.11	9165.53	-8099.27	4475.18	1658635.45	14294177.47	39°21'47.463"N	80°56'07.948"W	9253.40	151.078	1.99	-0.17	-1.98	
16041.00	89.720	158.950	6528.60	9260.52	-8187.78	4509.70	1658669.95	14294089.00	39°21'46.588"N	80°56'07.510"W	9347.57	151.155	0.54	0.03	0.54	
16137.00	89.880	159.840	6528.94	9356.52	-8277.63	4543.48	1658703.73	14293999.18	39°21'45.699"N	80°56'07.080"W	9442.59	151.238	0.94	0.17	0.93	
16232.00	89.690	161.010	6529.29	9451.49	-8367.14	4575.31	1658735.54	14293909.70	39°21'44.814"N	80°56'06.676"W	9536.38	151.329	1.25	-0.20	1.23	
16327.00	89.910	160.450	6529.63	9546.44	-8456.92	4606.66	1658766.88	14293820.06	39°21'43.928"N	80°56'06.278"W	9630.11	151.422	0.63	0.23	-0.59	
16421.00	89.850	160.080	6529.82	9640.42	-8545.30	4638.40	1658798.61	14293731.62	39°21'43.053"N	80°56'05.874"W	9723.01	151.507	0.40	-0.06	-0.39	
16516.00	89.970	158.480	6529.97	9735.41	-8634.15	4672.01	1658832.20	14293642.80	39°21'42.175"N	80°56'05.447"W	9817.14	151.582	1.69	0.13	-1.68	
16610.00	90.340	159.120	6529.72	9829.41	-8721.79	4706.00	1658866.18	14293555.20	39°21'41.308"N	80°56'05.015"W	9910.40	151.650	0.79	0.39	0.68	
16705.00	89.840	159.480	6529.49	9924.41	-8810.65	4739.58	1658899.75	14293466.37	39°21'40.430"N	80°56'04.589"W	10004.56	151.723	0.57	-0.42	0.38	
16799.00	90.220	158.270	6529.35	10018.41	-8898.33	4773.46	1658933.61	14293378.73	39°21'39.563"N	80°56'04.158"W	10097.83	151.789	1.32	0.30	-1.29	
16894.00	90.250	156.350	6529.87	10113.36	-8985.98	4810.10	1658970.24	14293291.12	39°21'38.696"N	80°56'03.692"W	10192.39	151.840	2.02	0.03	-2.02	
16989.00	90.250	156.930	6528.55	10208.28	-9073.22	4847.70	1659007.82	14293203.91	39°21'37.834"N	80°56'03.215"W	10287.05	151.885	0.72	0.00	0.72	
17084.00	90.150	156.920	6528.22	10303.23	-9160.65	4884.85	1659044.96	14293116.51	39°21'36.969"N	80°56'02.742"W	10381.68	151.932	0.16	-0.11	-0.12	
17178.00	90.150	157.080	6527.97	10397.17	-9247.18	4921.58	1659081.67	14293030.02	39°21'36.114"N	80°56'02.276"W	10475.32	151.977	0.17	0.00	0.17	
17273.00	90.150	157.760	6527.72	10492.13	-9334.90	4958.06	1659118.14	14292942.34	39°21'35.247"N	80°56'01.812"W	10569.89	152.026	0.72	0.00	0.72	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #07
Area	Tyler County, WV	Well	McKim Unit 1H
Field	Tyler	Wellbore	McKim Unit 1H AWB
Facility	McKim Pad		

WELLPATH DATA (233 stations)															
MD (ft)	Inclination (°)	Azimuth (°)	TVD (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
17367.00	90.090	158.540	6527.53	10586.12	-9422.14	4993.04	1659153.11	14292855.13	39°21'34.384"N	80°56'01.367"W	10663.36	152.080	0.83	-0.06	0.83
17462.00	90.220	159.930	6527.27	10681.12	-9510.97	5026.72	1659186.77	14292766.34	39°21'33.506"N	80°56'00.939"W	10757.62	152.143	1.47	0.14	1.46
17556.00	90.060	161.330	6527.04	10775.08	-9599.65	5057.90	1659217.94	14292677.70	39°21'32.629"N	80°56'00.543"W	10850.60	152.216	1.50	-0.17	1.49
17652.00	90.220	161.220	6526.81	10871.00	-9690.56	5088.72	1659248.74	14292586.81	39°21'31.730"N	80°56'00.152"W	10945.41	152.295	0.20	0.17	-0.11
17746.00	90.220	161.130	6526.45	10964.93	-9779.54	5119.05	1659279.06	14292497.88	39°21'30.851"N	80°55'59.767"W	11038.30	152.370	0.10	0.00	-0.10
17840.00	90.220	162.860	6526.08	11058.80	-9868.93	5148.10	1659308.10	14292408.52	39°21'29.967"N	80°55'59.397"W	11130.98	152.451	1.84	0.00	1.84
17934.00	90.150	161.030	6525.78	11152.67	-9958.29	5177.24	1659337.23	14292319.19	39°21'29.084"N	80°55'58.927"W	11223.70	152.530	1.95	-0.07	-1.95
18029.00	90.220	157.170	6525.47	11247.65	-10047.03	5211.12	1659371.10	14292230.49	39°21'28.206"N	80°55'58.597"W	11318.06	152.585	4.06	0.07	-4.06
18123.00	90.180	158.630	6525.15	11341.63	-10134.12	5246.48	1659406.44	14292143.44	39°21'27.345"N	80°55'58.148"W	11411.66	152.629	1.55	-0.04	1.55
18218.00	90.090	158.360	6524.92	11436.62	-10222.50	5281.31	1659441.26	14292055.09	39°21'26.472"N	80°55'57.705"W	11506.16	152.678	0.30	-0.09	-0.28
18312.00	90.310	157.990	6524.59	11530.61	-10309.77	5316.25	1659476.19	14291967.86	39°21'25.609"N	80°55'57.261"W	11599.73	152.722	0.46	0.23	-0.39
18406.00	90.280	158.080	6524.11	11624.60	-10396.94	5351.41	1659511.33	14291880.72	39°21'24.747"N	80°55'56.814"W	11693.33	152.765	0.10	-0.03	0.10
18502.00	90.060	156.920	6523.82	11720.56	-10485.63	5388.15	1659548.06	14291792.06	39°21'23.870"N	80°55'56.347"W	11789.01	152.803	1.23	-0.23	-1.21
18596.00	88.800	153.950	6524.76	11814.37	-10571.11	5427.22	1659587.11	14291706.62	39°21'23.025"N	80°55'55.851"W	11882.89	152.824	3.43	-1.34	-3.16
18691.00	90.180	155.210	6525.61	11909.08	-10656.90	5468.00	1659627.87	14291620.86	39°21'22.177"N	80°55'55.332"W	11977.84	152.838	1.97	1.45	1.33
18785.00	90.000	155.330	6525.46	12002.88	-10742.28	5507.32	1659667.18	14291535.52	39°21'21.333"N	80°55'54.833"W	12071.75	152.857	0.23	-0.19	0.13
18880.00	89.720	156.000	6525.69	12097.72	-10828.84	5546.47	1659706.31	14291448.99	39°21'20.477"N	80°55'54.335"W	12166.64	152.879	0.76	-0.29	0.71
18975.00	89.850	156.010	6526.05	12192.59	-10915.63	5585.10	1659744.93	14291362.24	39°21'19.619"N	80°55'53.844"W	12261.50	152.903	0.14	0.14	0.01
19070.00	90.090	157.800	6526.10	12287.53	-11003.01	5622.36	1659782.17	14291274.89	39°21'18.755"N	80°55'53.371"W	12356.26	152.934	1.90	0.25	1.88
19164.00	89.970	156.750	6526.05	12381.52	-11090.34	5657.46	1659816.95	14291187.60	39°21'17.891"N	80°55'52.929"W	12449.86	152.974	1.02	-0.13	1.01
19259.00	90.120	157.620	6525.97	12476.51	-11178.53	5692.46	1659852.24	14291099.44	39°21'17.020"N	80°55'52.480"W	12544.47	153.013	1.20	0.16	-1.19
19355.00	89.880	157.050	6525.97	12532.49	-11230.21	5714.04	1659873.81	14291047.79	39°21'16.509"N	80°55'52.206"W	12600.31	153.033	1.10	-0.43	-1.02
19339.00	89.880	157.050	6526.02	12556.47	-11252.31	5723.40	1659883.17	14291025.70	39°21'16.290"N	80°55'52.087"W	12624.25	153.040	0.00	0.00	0.00



Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'
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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #07
Operator	ANTERO RESOURCES CORPORATION	Well	McKim Unit 1H
Area	Tyler County, WV	Wellbore	McKim Unit 1H AWB
Field	Tyler		
Facility	McKim Pad		

HOLE & CASING SECTIONS - Ref Wellbore: McKim Unit 1H AWB Ref Wellpath: McKim Unit 1H AWP Proj: 19339'									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start NIS [ft]	Start E/W [ft]	End NIS [ft]	End E/W [ft]
20in Conductor	32.00	112.00	80.00	32.00	112.00	0.00	0.00	-0.18	0.26
17.5in Open Hole	112.00	551.00	439.00	112.00	550.99	-0.18	0.26	-1.37	2.05
13.375in Casing Surface	32.00	551.00	519.00	32.00	550.99	0.00	0.00	-1.37	2.05
12.25in Open Hole	551.00	2608.50	2057.50	550.99	2562.81	-1.37	2.05	247.09	282.17
9.625in Casing Intermediate	32.00	2608.50	2576.50	32.00	2562.81	0.00	0.00	247.09	282.17

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
McKim Unit 1H POE Rev-3	6468.00	389.31	1214.19	1655375.77	14302662.64	39°23'11.381"N	80°56'49.403"W	point
McKim Unit 1H BHL Rev-3	6502.00	-11325.46	5715.02	1659874.79	14290952.57	39°21'15.567"N	80°55'52.194"W	point
McKim Unit 1H LP Rev-1	6502.00	207.81	1263.92	1655445.48	14302481.21	39°23'09.567"N	80°56'48.517"W	point

WELLPATH COMPOSITION - Ref Wellbore: McKim Unit 1H AWB Ref Wellpath: McKim Unit 1H AWP Proj: 19339'			Log Name/Comment
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Wellbore
32.00	517.00	Gyrodata standard - Single-shot	McKim Unit 1H AWB
517.00	610.00	Gyrodata standard - Single-shot	McKim Unit 1H AWB
610.00	2529.00	ISCVSA MWD, Rev. 4 (Standard)	McKim Unit 1H AWB
2529.00	5718.00	ISCVSA MWD, Rev. 4 (Standard)	McKim Unit 1H AWB
5718.00	19315.00	BHL AutoTrak Curve (Short)	McKim Unit 1H AWB
19315.00	19339.00	Blind Drilling (std)	McKim Unit 1H AWB

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Actual Wellpath Report

McKim Unit 1H AWP Proj: 19339'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Slot	Slot #07	
ANTERO RESOURCES CORPORATION	Well	McKim Unit 1H	
Tyler County, WV	Wellbore	McKim Unit 1H AWB	
Tyler			
McKim Pad			

COMMENTS
<p>Wellpath general comments API: 47-095-02418-0000 BH Job #: 8936170 Rig: Frontier 32 Duration: 01/04/18 - 01/08/18 Comment Gyrodatta SS Gyro <17-1/2">(100'-500') Gyrodatta SS Gyro <12-1/4">(500')(632'-593') Directional ONE MWD <12-1/4">(593')(650'-2512') Directional ONE MWD <8-3/4">(2512')(2613'-5701') BH AT Curve <8-1/2">(5718')(5812'-19315') Sycamore: 6430'MD / 6241'TVD Middlesex: 6568'MD / 6342'TVD Burket: 6745'MD / 6438'TVD Tully: 6787'MD / 6456'TVD POE Marcellus: 6827'MD / 6470'TVD Projected MD @ TD: 19339'MD / 6526'TVD</p>

05/03/2019