



# ANTERO RESOURCES CORPORATION

Location: Tyler County, WV  
 Field: Tyler  
 Facility: Colorado East Pad

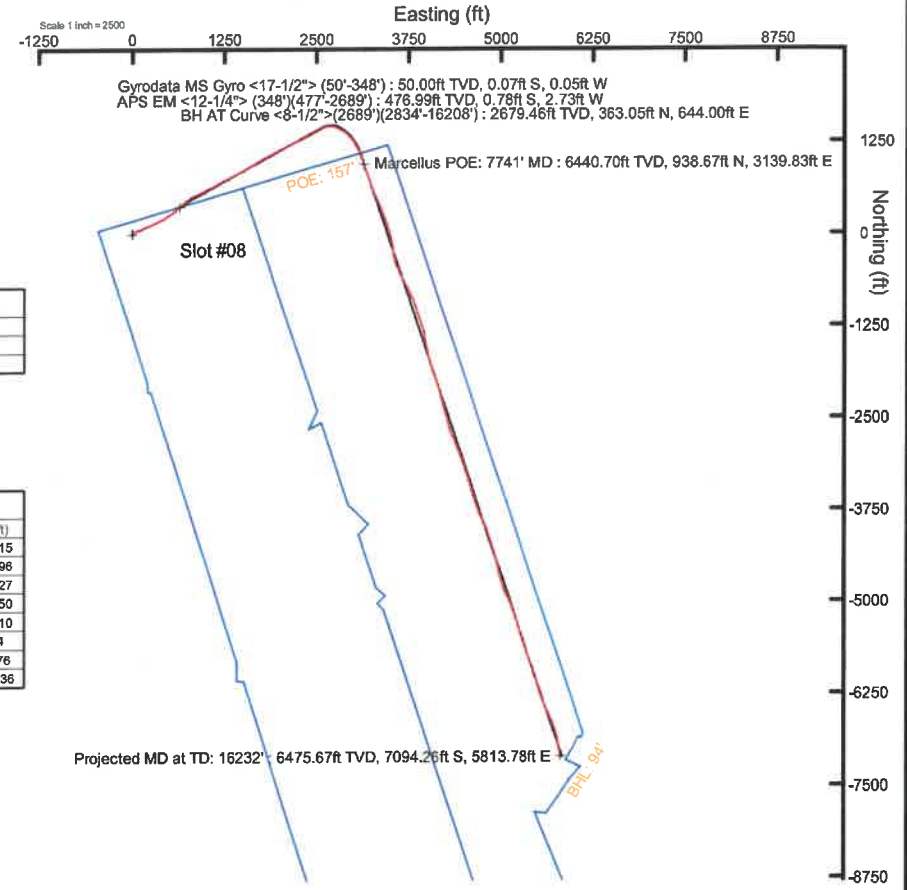
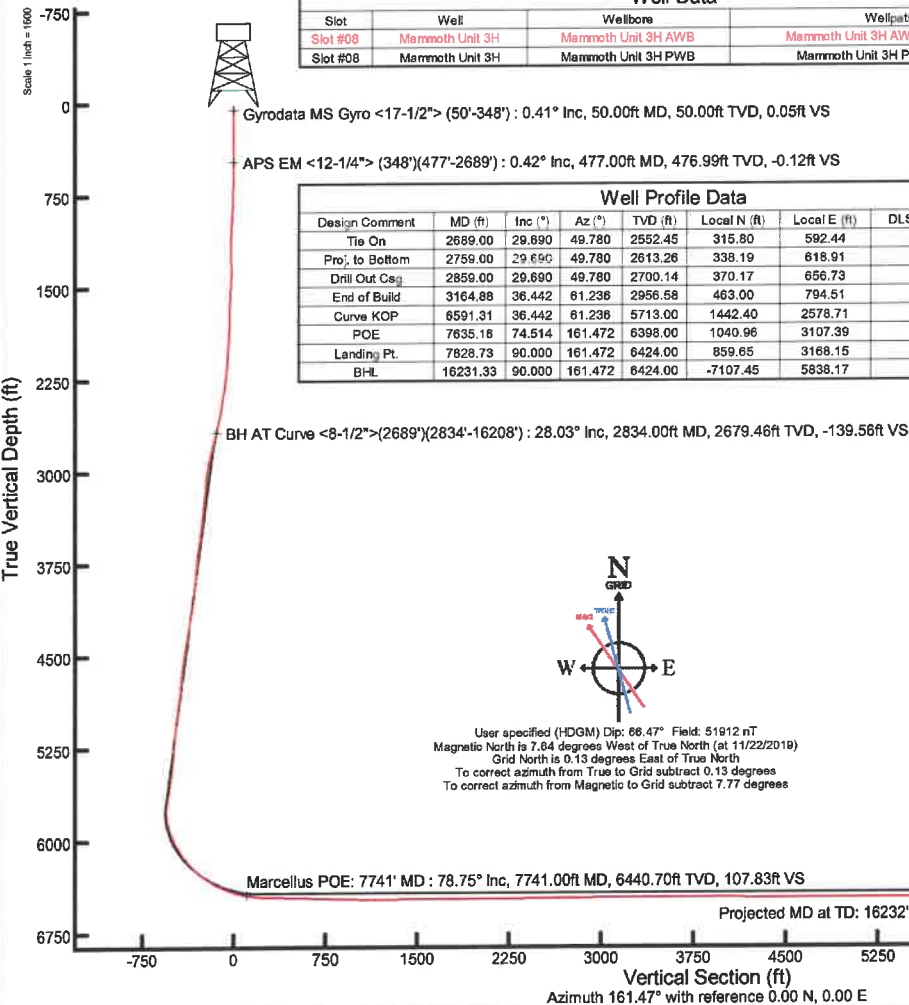
Slot: Slot #08  
 Well: Mammoth Unit 3H  
 Wellbore: Mammoth Unit 3H PWB



Plot reference wellpath is Mammoth Unit 3H PWP Rev-8.0	Grid System: NAD27 / UTM, Zone 17 North, US feet
True vertical depths are referenced to Patterson 342 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to Patterson 342 (RKB)	Scale: True distance
Patterson 342 (RKB) to Mean Sea Level: 768 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot #08): -743 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: dslat on 2019-12-03, Database: WA_MPL_EasternUS_Def

Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Colorado East Pad	1700250.880	14308700.560	39°24'10.4301"N	80°47'17.3894"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot #08	-25.37	16.03	1700272.700	14308675.200
Patterson 342 (RKB) to Ground level (At Slot: Slot #08)	25ft			
Mean Sea Level to Ground level (At Slot: Slot #08)	-743ft			
Patterson 342 (RKB) to Mean Sea Level	768ft			

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #08	Mammoth Unit 3H	Mammoth Unit 3H AWB	Mammoth Unit 3H AWP Proj: 16232'
Slot #08	Mammoth Unit 3H	Mammoth Unit 3H PWB	Mammoth Unit 3H PWP Rev-8.0



API: 47-095-02607-0000  
 BHI Job #: 110080315B  
 Rig: Patterson 342  
 Duration: 10/26/2019-11/29/2019



# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Mammoth Unit 3H
Field	Tyler	API	47-095-02607-0000
Facility	Colorado East Pad	Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08		

## REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Delaset
Scale	0.999604	Report Generated	12/3/2019 at 1:46:13 PM
Convergence at slot	0.13° East	Database	WA_MPL_EasternUS_Defn

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-25.37	16.03	1700272.70	14308675.20	39°24'10.1790"N	80°47'17.1860"W
Facility Reference Pt			1700256.68	14308700.56	39°24'10.4301"N	80°47'17.3894"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.3013"W

## WELLPATH DATUM

Calculation method	Minimum curvature	Patterson 342 (RKB) to Facility Vertical Datum	768.00ft
Horizontal Reference Pt	Slot	Patterson 342 (RKB) to Mean Sea Level	768.00ft
Vertical Reference Pt	Patterson 342 (RKB)	Patterson 342 (RKB) to Ground Level at Slot (Slot #08)	25.00ft
MD Reference Pt	Patterson 342 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	161.47°



# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Mammoth Unit 3H
Field	Tyler	API	47-095-02607-0000
Facility	Colorado East Pad	Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08		

## WELLPATH DATA (196 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†	0.000	214.020	0.00	0.00	0.00	0.00	1700272.70	14308675.20	39°24'10.1790"N	80°47'17.1860"W	0.00	0.000	0.00	0.00	0.00	
25.00	0.000	214.020	25.00	0.00	0.00	0.00	1700272.70	14308675.20	39°24'10.1790"N	80°47'17.1860"W	0.00	0.000	0.00	0.00	0.00	
50.00	0.410	214.020	50.00	0.05	-0.07	-0.05	1700272.65	14308675.13	39°24'10.1783"N	80°47'17.1866"W	0.09	214.020	1.64	1.64	0.00	Gyrodata MS Gyro <17-1/2"> (50'-348')
75.00	0.440	215.270	75.00	0.17	-0.23	-0.16	1700272.54	14308674.97	39°24'10.1768"N	80°47'17.1880"W	0.27	214.457	0.13	0.12	5.00	
100.00	0.470	213.350	100.00	0.29	-0.39	-0.27	1700272.43	14308674.81	39°24'10.1752"N	80°47'17.1894"W	0.47	214.382	0.13	0.12	-7.68	
125.00	0.490	218.230	125.00	0.41	-0.56	-0.39	1700272.31	14308674.64	39°24'10.1735"N	80°47'17.1909"W	0.68	214.829	0.18	0.08	19.52	
150.00	0.460	228.820	150.00	0.50	-0.71	-0.53	1700272.17	14308674.49	39°24'10.1720"N	80°47'17.1928"W	0.89	216.806	0.37	-0.12	42.36	
175.00	0.460	242.400	175.00	0.56	-0.82	-0.70	1700272.00	14308674.38	39°24'10.1709"N	80°47'17.1949"W	1.08	220.223	0.44	0.00	54.32	
200.00	0.470	239.000	199.99	0.60	-0.92	-0.87	1700271.83	14308674.28	39°24'10.1699"N	80°47'17.1971"W	1.27	223.423	0.12	0.04	-13.60	
225.00	0.580	258.710	224.99	0.60	-1.00	-1.08	1700271.62	14308674.20	39°24'10.1692"N	80°47'17.1998"W	1.48	227.335	0.84	0.44	78.84	
250.00	0.420	254.670	249.99	0.58	-1.05	-1.30	1700271.40	14308674.15	39°24'10.1687"N	80°47'17.2025"W	1.67	231.045	0.65	-0.64	-16.16	
275.00	0.410	264.420	274.99	0.56	-1.08	-1.47	1700271.23	14308674.12	39°24'10.1684"N	80°47'17.2048"W	1.83	233.738	0.28	-0.04	39.00	
300.00	0.380	271.980	299.99	0.51	-1.09	-1.65	1700271.05	14308674.11	39°24'10.1683"N	80°47'17.2070"W	1.97	236.554	0.24	-0.12	30.24	
325.00	0.350	280.870	324.99	0.44	-1.07	-1.80	1700270.90	14308674.13	39°24'10.1685"N	80°47'17.2090"W	2.10	239.325	0.26	-0.12	35.56	
348.00	0.320	283.910	347.99	0.37	-1.04	-1.94	1700270.77	14308674.16	39°24'10.1688"N	80°47'17.2107"W	2.20	241.715	0.15	-0.13	13.22	
477.00	0.420	291.470	476.99	-0.12	-0.78	-2.73	1700269.98	14308674.42	39°24'10.1714"N	80°47'17.2207"W	2.84	253.991	0.09	0.08	5.86	APS EM <12-1/4"> (348')(477'-2689')
505.00	0.360	293.690	504.99	-0.25	-0.71	-2.90	1700269.80	14308674.49	39°24'10.1721"N	80°47'17.2229"W	2.99	256.267	0.22	-0.21	7.93	
597.00	0.650	16.820	596.98	-0.87	-0.09	-3.02	1700269.69	14308675.11	39°24'10.1782"N	80°47'17.2244"W	3.02	268.226	0.77	0.32	90.36	
688.00	2.870	53.290	687.94	-2.00	1.76	-1.04	1700271.66	14308676.96	39°24'10.1965"N	80°47'17.1992"W	2.05	329.483	2.61	2.44	40.08	
778.00	6.080	60.190	777.65	-3.64	5.48	4.90	1700277.60	14308680.68	39°24'10.2331"N	80°47'17.1233"W	7.35	41.827	3.61	3.57	7.67	
868.00	9.620	57.350	866.80	-6.41	11.91	15.38	1700288.07	14308687.10	39°24'10.2964"N	80°47'16.9897"W	19.45	52.241	3.96	3.93	-3.16	
959.00	11.800	54.710	956.21	-10.94	21.39	29.37	1700302.06	14308696.58	39°24'10.3897"N	80°47'16.8111"W	36.34	53.941	2.45	2.40	-2.90	
1054.00	12.960	58.930	1049.00	-16.06	32.50	46.43	1700319.11	14308707.68	39°24'10.4991"N	80°47'16.5935"W	56.67	55.010	1.55	1.22	4.44	
1149.00	13.690	67.560	1141.45	-19.14	42.29	65.95	1700338.62	14308717.47	39°24'10.5954"N	80°47'16.3446"W	78.34	57.330	2.23	0.77	9.08	
1244.00	13.050	77.730	1233.89	-18.73	48.86	86.82	1700359.48	14308724.04	39°24'10.6599"N	80°47'16.0785"W	99.62	60.631	2.56	-0.67	10.71	
1338.00	12.690	78.640	1325.52	-16.29	53.15	107.31	1700379.97	14308728.33	39°24'10.7018"N	80°47'15.8173"W	119.75	63.652	0.44	-0.38	0.97	
1433.00	14.760	63.270	1417.84	-16.71	60.65	128.36	1700401.01	14308735.83	39°24'10.7755"N	80°47'15.5490"W	141.97	64.709	4.40	2.18	-16.18	
1527.00	18.120	58.930	1507.98	-21.60	73.58	151.58	1700424.22	14308748.75	39°24'10.9028"N	80°47'15.2528"W	168.50	64.106	3.80	3.57	-4.62	
1621.00	20.230	65.110	1596.77	-26.57	87.97	178.85	1700451.48	14308763.14	39°24'11.0443"N	80°47'14.9049"W	199.32	63.809	3.11	2.24	6.57	
1716.00	22.840	69.910	1685.14	-28.89	101.22	211.07	1700483.69	14308776.38	39°24'11.1745"N	80°47'14.4941"W	234.09	64.380	3.31	2.75	5.05	





# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'  
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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Mammoth Unit 3H
Field	Tyler		API	47-095-02607-0000
Facility	Colorado East Pad		Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08			

WELLPATH DATA (196 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
1811.00	23.360	69.830	1772.52	-29.93	114.05	246.07	1700518.67	14308789.20	39°24'11.3005"N	80°47'14.0479"W	271.21	65.133	0.55	0.55	-0.08	
1906.00	26.000	65.850	1858.84	-32.51	129.06	282.76	1700555.35	14308804.21	39°24'11.4481"N	80°47'13.5800"W	310.82	65.466	3.28	2.78	-4.19	
2001.00	25.750	64.270	1944.32	-37.14	146.54	320.35	1700592.92	14308821.68	39°24'11.6199"N	80°47'13.1006"W	352.28	65.418	0.77	-0.26	-1.66	
2095.00	25.030	62.170	2029.24	-42.91	164.69	356.33	1700628.89	14308839.83	39°24'11.7985"N	80°47'12.6417"W	392.55	65.194	1.23	-0.77	-2.23	
2190.00	27.360	62.680	2114.48	-49.50	184.10	393.50	1700666.05	14308859.22	39°24'11.9894"N	80°47'12.1676"W	434.44	64.928	2.46	2.45	0.54	
2285.00	27.450	60.150	2198.82	-57.13	205.01	431.89	1700704.42	14308880.13	39°24'12.1952"N	80°47'11.6779"W	478.08	64.607	1.23	0.09	-2.66	
2379.00	28.090	57.830	2282.00	-66.60	227.58	469.42	1700741.93	14308902.69	39°24'12.4174"N	80°47'11.1992"W	521.67	64.135	1.34	0.68	-2.47	
2473.00	29.110	55.490	2364.53	-78.12	252.32	506.99	1700779.49	14308927.42	39°24'12.6610"N	80°47'10.7198"W	566.31	63.541	1.61	1.09	-2.49	
2568.00	29.630	54.360	2447.32	-91.39	279.10	545.12	1700817.60	14308954.18	39°24'12.9248"N	80°47'10.2333"W	612.41	62.888	0.80	0.55	-1.19	
2662.00	29.710	51.070	2529.00	-106.34	307.27	582.13	1700854.60	14308982.35	39°24'13.2024"N	80°47'9.7610"W	658.25	62.173	1.73	0.09	-3.50	
2689.00	29.690	49.780	2552.45	-111.15	315.80	592.44	1700864.90	14308990.87	39°24'13.2864"N	80°47'9.6294"W	671.35	61.940	2.37	-0.07	-4.78	
2834.00	28.030	45.090	2679.46	-139.56	363.05	644.00	1700916.44	14309038.10	39°24'13.7522"N	80°47'8.9711"W	739.28	60.588	1.94	-1.14	-3.23	BH AT Curve <8-1/2">(2689)(2834-16208)
2929.00	30.670	47.060	2762.26	-159.50	395.32	677.55	1700949.98	14309070.36	39°24'14.0704"N	80°47'8.5427"W	784.44	59.738	2.96	2.78	2.07	
3023.00	35.040	50.380	2841.21	-179.13	428.88	715.91	1700988.32	14309103.91	39°24'14.4011"N	80°47'8.0530"W	834.54	59.075	5.03	4.65	3.53	
3118.00	37.230	54.490	2917.94	-197.34	462.97	760.32	1701032.72	14309137.99	39°24'14.7371"N	80°47'7.4862"W	890.19	58.662	3.44	2.31	4.33	
3212.00	36.690	59.540	2993.07	-211.45	493.73	807.69	1701080.06	14309168.73	39°24'15.0400"N	80°47'6.8819"W	946.64	58.563	3.28	-0.57	5.37	
3307.00	35.880	65.440	3069.67	-220.25	519.70	857.49	1701129.84	14309194.69	39°24'15.2954"N	80°47'6.2467"W	1002.68	58.781	3.77	-0.85	6.21	
3401.00	37.230	65.030	3145.18	-226.33	543.15	908.32	1701180.66	14309218.14	39°24'15.5260"N	80°47'5.5984"W	1058.33	59.122	1.46	1.44	-0.44	
3495.00	37.180	62.290	3220.05	-234.05	568.37	959.25	1701231.57	14309243.34	39°24'15.7740"N	80°47'4.9489"W	1114.99	59.353	1.76	-0.05	-2.91	
3590.00	36.480	62.530	3296.09	-243.02	594.74	1009.72	1701282.02	14309269.70	39°24'16.0335"N	80°47'4.3051"W	1171.86	59.501	0.75	-0.74	0.25	
3685.00	36.500	64.300	3372.47	-250.93	620.02	1060.23	1701332.51	14309294.97	39°24'16.2822"N	80°47'3.6608"W	1228.22	59.681	1.11	0.02	1.86	
3779.00	36.010	62.610	3448.27	-258.68	644.86	1109.96	1701382.22	14309319.80	39°24'16.5265"N	80°47'3.0265"W	1283.69	59.845	1.18	-0.52	-1.80	
3874.00	35.620	60.800	3525.31	-268.10	671.20	1158.91	1701431.15	14309346.14	39°24'16.7857"N	80°47'2.4022"W	1339.25	59.922	1.19	-0.41	-1.91	
3969.00	36.420	60.400	3602.15	-278.64	698.63	1207.58	1701479.80	14309373.55	39°24'17.0556"N	80°47'1.7813"W	1395.11	59.949	0.88	0.84	-0.42	
4064.00	36.420	62.010	3678.59	-288.69	725.79	1257.00	1701529.20	14309400.71	39°24'17.3229"N	80°47'1.1509"W	1451.49	59.998	1.01	0.00	1.69	
4158.00	36.540	62.510	3754.18	-297.63	751.81	1306.47	1701578.65	14309426.71	39°24'17.5789"N	80°47'0.5199"W	1507.34	60.082	0.34	0.13	0.53	
4253.00	35.430	63.900	3831.05	-305.67	776.98	1356.28	1701628.44	14309451.87	39°24'17.8264"N	80°46'59.8845"W	1563.07	60.193	1.45	-1.17	1.46	
4348.00	36.440	65.570	3907.97	-312.20	800.76	1406.70	1701678.84	14309475.64	39°24'18.0603"N	80°46'59.2415"W	1618.65	60.349	1.48	1.06	1.76	
4442.00	36.510	64.770	3983.56	-318.33	824.23	1457.42	1701729.54	14309499.10	39°24'18.2910"N	80°46'58.5947"W	1674.34	60.510	0.51	0.07	-0.85	
4537.00	35.420	61.150	4060.45	-326.56	849.56	1507.10	1701779.20	14309524.42	39°24'18.5402"N	80°46'57.9610"W	1730.06	60.590	2.51	-1.15	-3.81	



# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'  
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REFERENCE WELLPATH IDENTIFICATION			
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Field	Tyler	API	47-095-02607-0000
Facility	Colorado East Pad	Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08		

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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 (°/100ft)	Buidl Rate (°/100ft)	Turn Rate (°/100ft)	Comments
4632.00	36.440	58.470	4137.38	-337.84	877.60	1555.27	1701827.35	14309552.45	39°24'18.8162"N	80°46'57.3465"W	1785.79	60.565	1.97	1.07	-2.82	
4726.00	35.890	57.660	4213.27	-350.69	906.94	1602.34	1701874.40	14309581.78	39°24'19.1051"N	80°46'56.7459"W	1841.21	60.490	0.78	-0.59	-0.86	
4820.00	37.030	58.260	4288.87	-363.74	936.57	1649.69	1701921.74	14309611.40	39°24'19.3968"N	80°46'56.1417"W	1897.01	60.415	1.27	1.21	0.64	
4915.00	36.470	59.250	4364.99	-376.25	966.05	1698.29	1701970.31	14309640.87	39°24'19.6871"N	80°46'55.5218"W	1953.83	60.367	0.86	-0.59	1.04	
5009.00	36.720	59.640	4440.46	-387.93	994.54	1746.54	1702018.55	14309669.35	39°24'19.9675"N	80°46'54.9061"W	2009.86	60.341	0.36	0.27	0.41	
5104.00	36.480	60.730	4516.73	-399.01	1022.70	1795.69	1702067.67	14309697.50	39°24'20.2446"N	80°46'54.2792"W	2066.50	60.337	0.73	-0.25	1.15	
5199.00	36.410	61.460	4593.15	-409.18	1049.98	1845.09	1702117.06	14309724.76	39°24'20.5131"N	80°46'53.6490"W	2122.93	60.357	0.46	-0.07	0.77	
5294.00	36.250	62.530	4669.69	-418.44	1076.41	1894.78	1702166.72	14309751.18	39°24'20.7731"N	80°46'53.0152"W	2179.18	60.399	0.69	-0.17	1.13	
5388.00	35.900	63.510	4745.66	-426.58	1101.52	1944.10	1702216.03	14309776.28	39°24'21.0201"N	80°46'52.3860"W	2234.48	60.464	0.72	-0.37	1.04	
5483.00	37.250	62.930	4821.95	-434.70	1127.03	1994.64	1702266.54	14309801.78	39°24'21.2710"N	80°46'51.7415"W	2291.02	60.532	1.47	1.42	-0.61	
5578.00	36.870	60.980	4897.76	-444.16	1153.94	2045.16	1702317.05	14309828.68	39°24'21.5357"N	80°46'51.0970"W	2348.25	60.567	1.30	-0.40	-2.05	
5674.00	37.090	61.240	4974.45	-454.55	1181.84	2095.72	1702367.59	14309856.57	39°24'21.8103"N	80°46'50.4520"W	2405.99	60.580	0.28	0.23	0.27	
5768.00	37.000	63.520	5049.48	-463.49	1208.09	2145.89	1702417.74	14309882.81	39°24'22.0685"N	80°46'49.8121"W	2462.59	60.621	1.46	-0.10	2.43	
5863.00	36.430	65.120	5125.64	-470.57	1232.71	2197.07	1702468.89	14309907.42	39°24'22.3106"N	80°46'49.1593"W	2519.26	60.705	1.17	-0.60	1.68	
5958.00	36.930	64.890	5201.83	-476.96	1256.68	2248.50	1702520.31	14309931.38	39°24'22.5463"N	80°46'48.5033"W	2575.85	60.799	0.55	0.53	-0.24	
6053.00	36.990	64.160	5277.74	-483.86	1281.25	2300.07	1702571.85	14309955.94	39°24'22.7879"N	80°46'47.8457"W	2632.85	60.880	0.47	0.06	-0.77	
6148.00	37.340	64.130	5353.44	-491.18	1306.28	2351.71	1702623.48	14309980.96	39°24'23.0340"N	80°46'47.1869"W	2690.15	60.950	0.37	0.37	-0.03	
6242.00	36.730	62.580	5428.48	-499.17	1331.66	2402.32	1702674.06	14310006.33	39°24'23.2837"N	80°46'46.5415"W	2746.72	60.999	1.19	-0.65	-1.65	
6337.00	36.670	61.090	5504.65	-508.67	1358.46	2452.36	1702724.09	14310033.12	39°24'23.5473"N	80°46'45.9030"W	2803.48	61.016	0.94	-0.06	-1.57	
6432.00	36.820	59.900	5580.78	-519.49	1386.45	2501.82	1702773.53	14310061.10	39°24'23.8227"N	80°46'45.2720"W	2860.31	61.006	0.77	0.16	-1.25	
6526.00	36.960	59.100	5655.96	-531.19	1415.09	2550.44	1702822.13	14310089.73	39°24'24.1046"N	80°46'44.6518"W	2916.72	60.977	0.53	0.15	-0.85	
6620.00	35.480	63.170	5731.80	-541.19	1441.92	2599.04	1702870.71	14310116.55	39°24'24.3686"N	80°46'44.0318"W	2972.23	60.979	3.00	-1.57	4.33	
6715.00	32.410	82.650	5810.84	-540.23	1457.67	2649.06	1702920.70	14310132.29	39°24'24.5231"N	80°46'43.3942"W	3023.62	61.178	11.85	-3.23	20.51	
6809.00	36.690	94.570	5888.33	-524.30	1458.66	2702.12	1702973.74	14310133.28	39°24'24.5315"N	80°46'42.7181"W	3070.69	61.639	8.49	4.55	12.68	
6904.00	36.860	108.170	5964.55	-496.09	1447.49	2757.57	1703029.18	14310122.12	39°24'24.4198"N	80°46'42.0120"W	3114.39	62.304	8.56	0.18	14.32	
6999.00	37.870	116.550	6040.11	-458.39	1425.56	2810.77	1703082.35	14310100.19	39°24'24.2018"N	80°46'41.3350"W	3151.61	63.107	5.45	1.06	8.82	
7094.00	41.500	122.340	6113.23	-413.30	1395.67	2863.48	1703135.04	14310070.31	39°24'23.9051"N	80°46'40.6644"W	3185.50	64.015	5.45	3.82	6.09	
7188.00	44.490	134.000	6182.08	-359.82	1356.06	2913.58	1703185.12	14310030.72	39°24'23.5123"N	80°46'40.0274"W	3213.69	65.041	9.03	3.18	12.40	
7254.00†	48.144	139.274	6227.68	-316.51	1321.34	2946.27	1703217.80	14309996.01	39°24'23.1684"N	80°46'39.6120"W	3229.00	65.845	8.00	5.54	7.99	Middlesex: 7254' MD
7283.00	49.820	141.400	6246.71	-296.10	1304.49	2960.23	1703231.75	14309979.17	39°24'23.0016"N	80°46'39.4347"W	3234.91	66.218	8.00	5.78	7.33	





# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Mammoth Unit 3H
Field	Tyler	API	47-095-02607-0000
Facility	Colorado East Pad	Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08		

WELLPATH DATA (196 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
7330.00	53.490	143.680	6275.87	-261.24	1275.23	2982.63	1703254.14	14309949.92	39°24'22.7118"N	80°46'39.1503"W	3243.81	66.851	8.69	7.81	4.85	
7378.00	57.310	146.700	6303.12	-223.32	1242.79	3005.16	1703276.66	14309917.50	39°24'22.3907"N	80°46'38.8643"W	3252.00	67.532	9.49	7.96	6.29	
7425.00	59.110	149.570	6327.88	-184.45	1208.86	3026.23	1703297.73	14309883.58	39°24'22.0548"N	80°46'38.5968"W	3258.75	68.225	6.45	3.83	6.11	
7473.00	62.010	152.860	6351.48	-143.33	1172.23	3046.34	1703317.83	14309846.96	39°24'21.6923"N	80°46'38.3418"W	3264.09	68.953	8.49	6.04	6.85	
7493.00†	63.319	154.321	6360.66	-125.73	1156.32	3054.24	1703325.73	14309831.06	39°24'21.5348"N	80°46'38.2417"W	3265.80	69.264	9.22	6.55	7.30	Burkett: 7493' MD
7520.00	65.110	156.240	6372.41	-101.56	1134.23	3064.40	1703335.88	14309808.98	39°24'21.3163"N	80°46'38.1129"W	3267.58	69.689	9.22	6.63	7.11	
7559.00†	67.606	158.006	6388.05	-65.94	1101.32	3078.29	1703349.76	14309776.08	39°24'20.9907"N	80°46'37.9371"W	3269.37	70.314	7.63	6.40	4.53	Tully: 7559' MD
7567.00	68.120	158.360	6391.06	-58.54	1094.44	3081.04	1703352.51	14309769.21	39°24'20.9226"N	80°46'37.9022"W	3269.65	70.444	7.63	6.43	4.43	
7614.00	71.010	158.600	6407.47	-14.57	1053.47	3097.19	1703368.66	14309728.25	39°24'20.5173"N	80°46'37.6977"W	3271.45	71.215	6.17	6.15	0.51	
7661.00	73.760	159.050	6421.69	30.18	1011.70	3113.37	1703384.83	14309686.50	39°24'20.1041"N	80°46'37.4929"W	3273.63	71.998	5.92	5.85	0.96	
7708.00	76.660	160.350	6433.68	75.60	969.09	3129.13	1703400.59	14309643.90	39°24'19.6825"N	80°46'37.2935"W	3275.76	72.792	6.76	6.21	2.77	
7741.00†	78.749	160.909	6440.70	107.83	938.67	3139.83	1703411.28	14309613.50	39°24'19.3816"N	80°46'37.1582"W	3277.13	73.356	6.48	6.27	1.69	Marcellus POE: 7741' MD
7756.00	79.690	161.160	6443.51	122.57	924.73	3144.62	1703416.06	14309599.57	39°24'19.2438"N	80°46'37.0976"W	3277.76	73.613	6.48	6.27	1.67	
7803.00	82.600	161.510	6450.74	169.00	880.74	3159.48	1703430.92	14309555.59	39°24'18.8086"N	80°46'36.9097"W	3279.94	74.424	6.24	6.19	0.74	
7851.00	85.630	161.130	6455.66	216.74	835.52	3174.77	1703446.20	14309510.38	39°24'18.3612"N	80°46'36.7163"W	3282.87	75.256	6.36	6.31	-0.79	
7898.00	89.010	161.050	6457.86	263.69	791.11	3189.98	1703461.41	14309465.99	39°24'17.9219"N	80°46'36.5239"W	3286.61	76.072	7.19	7.19	-0.17	
7945.00	89.080	161.070	6458.65	310.68	746.66	3205.23	1703476.66	14309421.56	39°24'17.4823"N	80°46'36.3310"W	3291.05	76.887	0.15	0.15	0.04	
8040.00	88.340	160.040	6460.78	405.64	657.10	3236.85	1703508.26	14309332.04	39°24'16.5964"N	80°46'35.9311"W	3302.87	78.525	1.33	-0.78	-1.08	
8135.00	88.830	158.410	6463.13	500.53	568.31	3270.53	1703541.93	14309243.28	39°24'15.7179"N	80°46'35.5047"W	3319.54	80.142	1.79	0.52	-1.72	
8230.00	88.340	154.650	6465.48	595.13	481.21	3308.35	1703579.73	14309156.22	39°24'14.8562"N	80°46'35.0257"W	3343.16	81.724	3.99	-0.52	-3.96	
8324.00	88.250	156.750	6468.27	688.61	395.58	3347.01	1703618.38	14309070.62	39°24'14.0089"N	80°46'34.5359"W	3370.31	83.260	2.24	-0.10	2.23	
8419.00	88.120	159.020	6471.28	783.37	307.62	3382.76	1703654.11	14308982.70	39°24'13.1387"N	80°46'34.0833"W	3396.72	84.804	2.39	-0.14	2.39	
8514.00	89.020	159.550	6473.65	878.27	218.79	3416.35	1703687.69	14308893.90	39°24'12.2599"N	80°46'33.6582"W	3423.35	86.336	1.10	0.95	0.56	
8609.00	88.890	159.790	6475.39	973.21	129.72	3449.35	1703720.68	14308804.87	39°24'11.3788"N	80°46'33.2406"W	3451.79	87.846	0.29	-0.14	0.25	
8703.00	89.350	163.540	6476.83	1067.18	40.52	3478.91	1703750.23	14308715.71	39°24'10.4965"N	80°46'32.8669"W	3479.15	89.333	4.02	0.49	3.99	
8798.00	89.510	166.780	6477.78	1161.97	-51.29	3503.24	1703774.54	14308623.93	39°24'9.5884"N	80°46'32.5599"W	3503.61	90.839	3.41	0.17	3.41	
8895.00	90.490	169.920	6477.78	1258.25	-146.28	3522.82	1703794.12	14308528.98	39°24'8.6491"N	80°46'32.3134"W	3525.86	92.378	3.39	1.01	3.24	
8990.00	91.080	171.890	6476.47	1351.96	-240.07	3537.84	1703809.13	14308435.22	39°24'7.7218"N	80°46'32.1251"W	3545.97	93.882	2.16	0.62	2.07	
9081.00	90.250	169.310	6475.42	1441.79	-329.84	3552.70	1703823.98	14308345.49	39°24'6.8342"N	80°46'31.9386"W	3567.98	95.304	2.98	-0.91	-2.84	
9175.00	90.090	159.770	6475.14	1535.54	-420.33	3577.73	1703849.00	14308255.04	39°24'5.9392"N	80°46'31.6227"W	3602.33	96.701	10.15	-0.17	-10.15	



# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Mammoth Unit 3H
Field	Tyler	API	47-095-02607-0000
Facility	Colorado East Pad	Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08		

WELLPATH DATA (196 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
9270.00	90.220	157.090	6474.88	1630.40	-508.67	3612.65	1703883.91	14308166.73	39°24'5.0653"N	80°46'31.1806"W	3648.28	98.015	2.82	0.14	-2.82	
9365.00	90.550	153.190	6474.24	1724.80	-594.85	3652.58	1703923.83	14308080.59	39°24'4.2125"N	80°46'30.6747"W	3700.70	99.250	4.12	0.35	-4.11	
9459.00	90.400	150.270	6473.46	1817.43	-677.62	3697.09	1703968.32	14307997.85	39°24'3.3933"N	80°46'30.1103"W	3758.68	100.386	3.11	-0.16	-3.11	
9553.00	90.180	152.290	6472.99	1909.95	-760.05	3742.26	1704013.47	14307915.45	39°24'2.5775"N	80°46'29.5375"W	3818.66	101.481	2.16	-0.23	2.15	
9648.00	90.180	156.800	6472.69	2004.23	-845.81	3783.08	1704054.28	14307829.73	39°24'1.7289"N	80°46'29.0203"W	3876.48	102.603	4.75	0.00	4.75	
9742.00	90.150	157.960	6472.42	2097.99	-932.58	3819.23	1704090.41	14307742.99	39°24'0.8705"N	80°46'28.5625"W	3931.44	103.722	1.23	-0.03	1.23	
9837.00	90.150	161.790	6472.17	2192.93	-1021.76	3851.91	1704123.08	14307653.85	39°23'59.9882"N	80°46'28.1490"W	3985.13	104.856	4.03	0.00	4.03	
9931.00	90.180	161.720	6471.90	2286.93	-1111.03	3881.34	1704152.50	14307564.61	39°23'59.1052"N	80°46'27.7770"W	4037.23	105.974	0.08	0.03	-0.07	
10026.00	90.460	160.930	6471.37	2381.93	-1201.03	3911.76	1704182.91	14307474.65	39°23'58.2149"N	80°46'27.3924"W	4091.99	107.068	0.88	0.29	-0.83	
10120.00	90.250	163.870	6470.79	2475.90	-1290.62	3940.18	1704211.31	14307385.10	39°23'57.3288"N	80°46'27.0332"W	4146.17	108.136	3.14	-0.22	3.13	
10216.00	90.460	169.200	6470.19	2571.49	-1383.94	3962.53	1704233.65	14307291.81	39°23'56.4059"N	80°46'26.7515"W	4197.25	109.252	5.56	0.22	5.55	
10311.00	90.430	169.480	6469.45	2665.59	-1477.30	3980.10	1704251.22	14307198.49	39°23'55.4827"N	80°46'26.5307"W	4245.42	110.364	0.30	-0.03	0.29	
10406.00	90.650	168.500	6468.56	2759.77	-1570.55	3998.24	1704269.35	14307105.28	39°23'54.5607"N	80°46'26.3025"W	4295.64	111.445	1.06	0.23	-1.03	
10501.00	90.770	168.790	6467.38	2854.02	-1663.68	4016.94	1704288.05	14307012.18	39°23'53.6397"N	80°46'26.0673"W	4347.83	112.498	0.33	0.13	0.31	
10596.00	90.460	162.230	6466.36	2948.73	-1755.60	4040.70	1704311.79	14306920.30	39°23'52.7306"N	80°46'25.7676"W	4405.61	113.484	6.91	-0.33	-6.91	
10691.00	90.650	161.380	6465.44	3043.72	-1845.85	4070.36	1704341.44	14306830.09	39°23'51.8380"N	80°46'25.3926"W	4469.34	114.394	0.92	0.20	-0.89	
10785.00	90.740	159.860	6464.30	3137.70	-1934.51	4101.55	1704372.62	14306741.46	39°23'50.9609"N	80°46'24.9982"W	4534.87	115.251	1.62	0.10	-1.62	
10880.00	89.450	160.840	6464.14	3232.68	-2023.98	4133.50	1704404.55	14306652.03	39°23'50.0758"N	80°46'24.5941"W	4602.42	116.089	1.71	-1.36	1.03	
10975.00	90.000	164.140	6464.60	3327.65	-2114.56	4162.07	1704433.12	14306561.48	39°23'49.1798"N	80°46'24.2330"W	4668.43	116.933	3.52	0.58	3.47	
11069.00	89.910	163.770	6464.67	3421.56	-2204.90	4188.05	1704459.09	14306471.18	39°23'48.2863"N	80°46'23.9049"W	4733.01	117.766	0.41	-0.10	-0.39	
11164.00	90.000	165.180	6464.75	3516.43	-2296.43	4213.48	1704484.51	14306379.68	39°23'47.3811"N	80°46'23.5840"W	4798.65	118.591	1.49	0.09	1.48	
11258.00	89.970	165.460	6464.77	3610.21	-2387.36	4237.30	1704508.32	14306288.79	39°23'46.4818"N	80°46'23.2835"W	4863.56	119.398	0.30	-0.03	0.30	
11353.00	90.220	166.090	6464.61	3704.95	-2479.45	4260.65	1704531.65	14306196.74	39°23'45.5710"N	80°46'22.9891"W	4929.58	120.197	0.71	0.26	0.66	
11448.00	89.910	165.610	6464.51	3799.67	-2571.57	4283.87	1704554.87	14306104.66	39°23'44.6600"N	80°46'22.6962"W	4996.45	120.976	0.60	-0.33	-0.51	
11543.00	89.940	162.710	6464.63	3894.55	-2662.95	4309.80	1704580.78	14306013.31	39°23'43.7562"N	80°46'22.3689"W	5066.13	121.711	3.05	0.03	-3.05	
11637.00	89.570	157.020	6465.03	3988.48	-2751.17	4342.14	1704613.12	14305925.13	39°23'42.8835"N	80°46'21.9597"W	5140.34	122.358	6.07	-0.39	-6.05	
11732.00	89.570	157.430	6465.75	4083.21	-2838.76	4378.92	1704649.88	14305837.57	39°23'42.0169"N	80°46'21.4941"W	5218.57	122.954	0.43	0.00	0.43	
11826.00	89.630	158.600	6466.40	4177.04	-2925.92	4414.11	1704685.05	14305750.45	39°23'41.1545"N	80°46'21.0487"W	5295.78	123.539	1.25	0.06	1.24	
11920.00	89.820	159.710	6466.85	4270.96	-3013.76	4447.55	1704718.48	14305662.64	39°23'40.2855"N	80°46'20.6254"W	5372.48	124.122	1.20	0.20	1.18	
12015.00	89.660	159.710	6467.28	4365.91	-3102.87	4480.50	1704751.41	14305573.57	39°23'39.4040"N	80°46'20.2087"W	5450.01	124.704	0.17	-0.17	0.00	





# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Mammoth Unit 3H
Field	Tyler	API	47-095-02607-0000
Facility	Colorado East Pad	Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08		

## WELLPATH DATA (196 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
12109.00	89.630	161.490	6467.87	4459.90	-3191.52	4511.72	1704782.62	14305484.95	39°23'38.5270"N	80°46'19.8139"W	5526.43	125.275	1.89	-0.03	1.89	
12204.00	89.660	162.050	6468.45	4554.89	-3281.75	4541.44	1704812.33	14305394.75	39°23'37.6345"N	80°46'19.4382"W	5603.09	125.853	0.59	0.03	0.59	
12299.00	89.630	163.490	6469.04	4649.86	-3372.49	4569.58	1704840.46	14305304.06	39°23'36.7370"N	80°46'19.0827"W	5679.32	126.428	1.52	-0.03	1.52	
12393.00	89.690	162.900	6469.60	4743.82	-3462.47	4596.75	1704867.62	14305214.11	39°23'35.8470"N	80°46'18.7395"W	5754.90	126.989	0.63	0.06	-0.63	
12488.00	89.780	161.910	6470.04	4838.81	-3553.02	4625.47	1704896.33	14305123.59	39°23'34.9513"N	80°46'18.3766"W	5832.58	127.529	1.05	0.09	-1.04	
12582.00	89.880	161.540	6470.32	4932.80	-3642.28	4654.94	1704925.79	14305034.37	39°23'34.0683"N	80°46'17.6060"W	5910.56	128.042	0.41	0.11	-0.39	
12677.00	90.580	159.760	6469.94	5027.79	-3731.91	4686.42	1704957.26	14304944.77	39°23'33.1817"N	80°46'17.6060"W	5990.80	128.531	2.01	0.74	-1.87	
12771.00	90.060	156.500	6469.41	5121.61	-3819.13	4721.43	1704992.25	14304857.59	39°23'32.3188"N	80°46'17.1629"W	6072.70	128.969	3.51	-0.55	-3.47	
12866.00	90.120	152.930	6469.26	5215.94	-3905.02	4762.00	1705032.80	14304771.74	39°23'31.4689"N	80°46'16.6490"W	6158.39	129.353	3.76	0.06	-3.76	
12960.00	89.140	156.160	6469.87	5309.24	-3989.88	4802.39	1705073.18	14304686.91	39°23'30.6292"N	80°46'16.1372"W	6243.57	129.720	3.59	-1.04	3.44	
13055.00	90.120	163.380	6470.49	5404.13	-4078.96	4835.22	1705106.00	14304597.87	39°23'29.7480"N	80°46'15.7220"W	6325.92	130.151	7.67	1.03	7.60	
13150.00	90.180	163.330	6470.24	5499.08	-4169.97	4862.43	1705133.20	14304506.88	39°23'28.8477"N	80°46'15.3783"W	6405.62	130.616	0.08	0.06	-0.05	
13245.00	89.970	161.130	6470.11	5594.06	-4260.44	4891.43	1705162.18	14304416.46	39°23'27.9529"N	80°46'15.0120"W	6486.71	131.056	2.33	-0.22	-2.32	
13340.00	89.450	162.920	6470.59	5689.05	-4350.79	4920.74	1705191.48	14304326.14	39°23'27.0591"N	80°46'14.6415"W	6568.34	131.482	1.96	-0.55	1.88	
13434.00	90.150	165.890	6470.92	5782.92	-4441.32	4946.01	1705216.74	14304235.64	39°23'26.1637"N	80°46'14.3226"W	6647.43	131.923	3.25	0.74	3.16	
13529.00	90.120	168.800	6470.70	5877.41	-4534.00	4966.82	1705237.54	14304143.00	39°23'25.2472"N	80°46'14.0605"W	6725.06	132.392	3.06	-0.03	3.06	
13624.00	90.340	167.360	6470.32	5971.78	-4626.95	4986.44	1705257.16	14304050.09	39°23'24.3280"N	80°46'13.8136"W	6802.45	132.858	1.53	0.23	-1.52	
13718.00	90.400	164.620	6469.71	6065.47	-4718.15	5009.19	1705279.90	14303958.93	39°23'23.4261"N	80°46'13.5268"W	6881.35	133.286	2.92	0.06	-2.91	
13813.00	90.180	160.570	6469.23	6160.43	-4808.78	5037.60	1705308.30	14303868.34	39°23'22.5297"N	80°46'13.1679"W	6964.32	133.669	4.27	-0.23	-4.26	
13908.00	90.220	154.680	6468.90	6255.18	-4896.58	5073.75	1705344.43	14303780.56	39°23'21.6609"N	80°46'12.7103"W	7051.21	133.982	6.20	0.04	-6.20	
14002.00	89.970	155.420	6468.74	6348.59	-4981.81	5113.40	1705384.07	14303695.37	39°23'20.8176"N	80°46'12.2081"W	7139.00	134.253	0.83	-0.27	0.79	
14096.00	90.180	160.740	6468.62	6442.39	-5068.98	5148.48	1705419.13	14303608.23	39°23'19.9551"N	80°46'11.7641"W	7225.06	134.554	5.66	0.22	5.66	
14191.00	90.340	159.760	6468.19	6537.36	-5158.39	5180.58	1705451.22	14303518.86	39°23'19.0706"N	80°46'11.3582"W	7310.78	134.877	1.05	0.17	-1.03	
14285.00	90.180	161.220	6467.76	6631.35	-5246.99	5211.97	1705482.60	14303430.29	39°23'18.1942"N	80°46'10.9612"W	7395.65	135.192	1.56	-0.17	1.55	
14380.00	90.220	162.260	6467.43	6726.34	-5337.21	5241.74	1705512.35	14303340.12	39°23'17.3018"N	80°46'10.5850"W	7480.75	135.517	1.10	0.04	1.09	
14474.00	89.970	163.250	6467.27	6820.32	-5426.98	5269.61	1705540.21	14303250.38	39°23'16.4138"N	80°46'10.2330"W	7564.45	135.843	1.09	-0.27	1.05	
14569.00	89.660	160.550	6467.58	6915.31	-5517.27	5299.12	1705569.71	14303160.12	39°23'15.5207"N	80°46'9.8601"W	7649.90	136.155	2.86	-0.33	-2.84	
14664.00	89.780	160.590	6468.04	7010.29	-5606.86	5330.72	1705601.30	14303070.57	39°23'14.6344"N	80°46'9.4605"W	7736.50	136.446	0.13	0.13	0.04	
14759.00	89.850	160.480	6468.35	7105.28	-5696.43	5362.38	1705632.94	14302981.04	39°23'13.7484"N	80°46'9.0603"W	7823.32	136.730	0.14	0.07	-0.12	
14854.00	89.750	158.200	6468.68	7200.21	-5785.31	5395.89	1705666.45	14302892.19	39°23'12.8690"N	80°46'8.6363"W	7911.10	136.995	2.40	-0.11	-2.40	





# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Mammoth Unit 3H
Field	Tyler	API	47-095-02607-0000
Facility	Colorado East Pad	Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08		

## WELLPATH DATA (196 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
14948.00	89.890	159.640	6469.14	7294.11	-5873.02	5429.70	1705700.24	14302804.52	39°23'12.0013"N	80°46'8.2086"W	7998.38	137.246	1.53	-0.06	1.53	
16043.00	89.880	161.250	6469.50	7389.09	-5962.54	5461.50	1705732.02	14302715.04	39°23'11.1158"N	80°46'7.8066"W	8085.78	137.511	1.71	0.20	1.69	
15138.00	89.600	164.200	6469.93	7484.06	-6053.24	5489.70	1705760.22	14302624.37	39°23'10.2186"N	80°46'7.4503"W	8171.82	137.795	3.12	-0.29	3.11	
15232.00	89.480	167.090	6470.68	7577.80	-6144.29	5513.01	1705783.51	14302533.35	39°23'9.3181"N	80°46'7.1565"W	8255.03	138.100	3.08	-0.13	3.07	
15327.00	89.510	162.150	6471.52	7672.62	-6235.86	5538.19	1705808.69	14302441.82	39°23'8.4125"N	80°46'6.8387"W	8340.12	138.391	5.20	0.03	-5.20	
15422.00	89.480	159.030	6472.36	7767.59	-6325.44	5569.76	1705840.24	14302352.27	39°23'7.5262"N	80°46'6.4396"W	8428.14	138.635	3.28	-0.03	-3.28	
15517.00	89.780	157.900	6472.97	7862.46	-6413.81	5604.63	1705875.10	14302263.94	39°23'6.6520"N	80°46'5.9984"W	8517.56	138.852	1.23	0.32	-1.19	
15612.00	89.780	155.000	6473.34	7957.08	-6500.89	5642.58	1705913.04	14302176.90	39°23'5.7904"N	80°46'5.5178"W	8608.15	139.043	3.05	0.00	-3.05	
15707.00	89.750	156.830	6473.73	8051.63	-6587.61	5681.35	1705951.79	14302090.21	39°23'4.9323"N	80°46'5.0270"W	8699.10	139.225	1.93	-0.03	1.93	
15801.00	89.750	160.700	6474.14	8145.51	-6675.21	5715.39	1705985.81	14302002.64	39°23'4.0656"N	80°46'4.5963"W	8787.73	139.430	4.12	0.00	4.12	
15896.00	89.880	163.650	6474.44	8240.49	-6765.64	5744.47	1706014.88	14301912.25	39°23'3.1711"N	80°46'4.2290"W	8875.40	139.667	3.11	0.14	3.11	
15991.00	90.030	167.750	6474.52	8335.21	-6857.68	5767.93	1706038.33	14301820.25	39°23'2.2609"N	80°46'3.9332"W	8960.84	139.933	4.32	0.16	4.32	
16085.00	89.600	169.340	6474.82	8428.49	-6949.80	5786.59	1706056.99	14301728.16	39°23'1.3499"N	80°46'3.6985"W	9043.47	140.218	1.75	-0.46	1.69	
16180.00	89.820	169.990	6475.30	8522.52	-7043.26	5803.64	1706074.03	14301634.74	39°23'0.4258"N	80°46'3.4845"W	9126.32	140.512	0.72	0.23	0.68	
16208.00	89.510	168.300	6475.47	8550.27	-7070.76	5808.91	1706079.30	14301607.26	39°23'0.1539"N	80°46'3.4182"W	9150.90	140.596	6.14	-1.11	-6.04	
16232.00‡	89.510	168.300	6475.67	8574.10	-7094.26	5813.78	1706084.16	14301583.77	39°22'59.9215"N	80°46'3.3570"W	9172.16	140.665	0.00	0.00	0.00	Projected MD at TD: 16232'

## HOLE & CASING SECTIONS - Ref Wellbore: Mammoth Unit 3H AWB Ref Wellpath: Mammoth Unit 3H AWP Proj: 16232'

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	25.00	105.00	80.00	25.00	105.00	0.00	0.00	-0.42	-0.29
17.5in Open Hole	105.00	429.10	324.10	105.00	429.09	-0.42	-0.29	-0.90	-2.41
13.375in Casing Surface	25.00	429.10	404.10	25.00	429.09	0.00	0.00	-0.90	-2.41
12.25in Open Hole	429.10	2759.00	2329.90	429.09	2613.51	-0.90	-2.41	338.39	618.15
9.625in Casing Intermediate	25.00	2744.50	2719.50	25.00	2600.82	0.00	0.00	333.68	612.95
8.5in Open Hole	2759.00	16232.00	13473.00	2613.51	6475.67	338.39	618.15	-7094.26	5813.78
5.5in Casing Production	25.00	16232.00	16207.00	25.00	6475.67	0.00	0.00	-7094.26	5813.78



# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Mammoth Unit 3H
Field	Tyler	API	47-095-02607-0000
Facility	Colorado East Pad	Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Mammoth Unit 3H - POE - Rev-1	6398.00	1040.96	3107.39	1703378.85	14309715.74	39°24'20.3934"N	80°46'37.5683"W	point
Mammoth Unit 3H - BHL - Rev-2	6424.00	-7107.45	5838.17	1706108.55	14301570.58	39°22'59.7905"N	80°46'3.0468"W	point
Mammoth Unit 3H - LP - Rev-2	6424.00	859.65	3168.15	1703439.59	14309534.51	39°24'18.5999"N	80°46'36.7998"W	point

WELLPATH COMPOSITION - Ref Wellbore: Mammoth Unit 3H AWB Ref Wellpath: Mammoth Unit 3H AWP Proj: 16232'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
25.00	348.00	Gyrodata 2015 - GC+WIR+DPIPE	01 Gyrodata MS Gyro <17-1/2"> (50'-348')	Mammoth Unit 3H AWB	
348.00	2689.00	BH NaviTrak (Axial)	02 APS EM <12-1/4"> (348')(477'-2689')	Mammoth Unit 3H AWB	
2689.00	16232.00	BH AutoTrak Curve (2019) (Short spacing)	03 BH AT Curve <8-1/2"> (2689')(2834'-16208')	Mammoth Unit 3H AWB	





# Actual Wellpath Report

Mammoth Unit 3H AWP Proj: 16232'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Mammoth Unit 3H
Field	Tyler	API	47-095-02607-0000
Facility	Colorado East Pad	Wellbore	Mammoth Unit 3H AWB
Slot	Slot #08		

## COMMENTS

### Wellpath general comments

API: 47-095-02607-0000  
BHI Job #: 110080315B  
Rig: Patterson 342  
Duration: 10/26/2019-11/29/2019  
Gyrodata MS Gyro <17-1/2"> (50'-348')  
APS EM <12-1/4"> (348')(477'-2689')  
BH AT Curve <8-1/2">(2689')(2834'-16208')  
Middlesex: 7254' MD  
Burkett: 7493' MD  
Tully: 7559' MD  
Marcellus POE: 7741' MD  
Projected MD at TD: 16232'