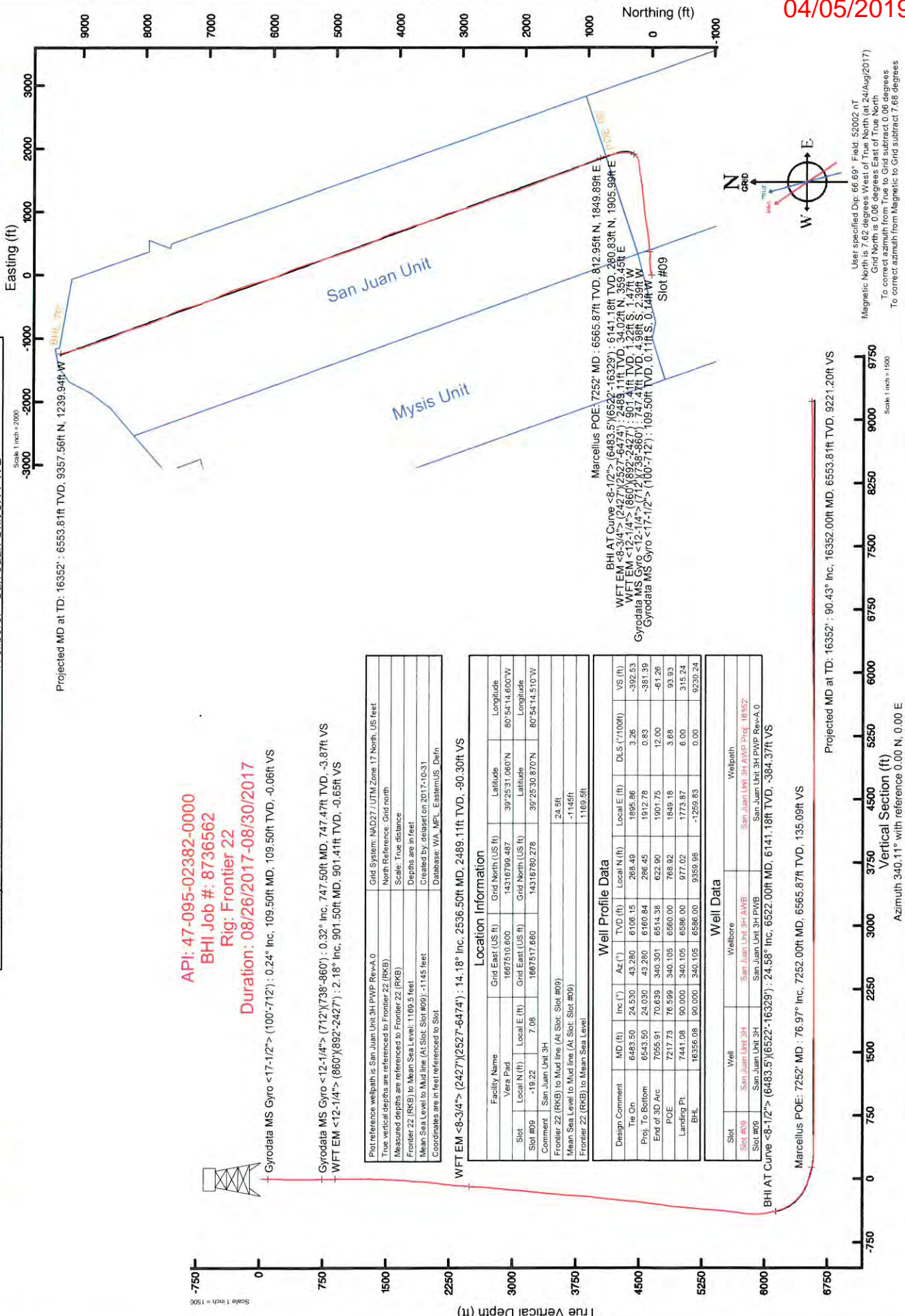




# ANTERO RESOURCES CORPORATION

Location: Tyler County, WV  
 Field: Tyler  
 Facility: Vera Pad

Slot: Slot #09  
 Well: San Juan Unit 3H  
 Wellbore: San Juan Unit 3H PWB



Projected MD at TD: 16352' : 6553.81ft TVD, 9357.56ft N, 1239.94ft W  
 Scale 1 inch = 2000'

API: 47-095-02382-0000  
 BHI Job #: 8736562  
 Rig: Frontier 22  
 Duration: 08/26/2017-08/30/2017

Gyrodatta MS Gyro <17-14'> : 0.24° Inc, 109.50ft MD, 109.50ft TVD, -0.06ft VS  
 Gyrodatta MS Gyro <12-14'> : 0.32° Inc, 747.50ft MD, 747.47ft TVD, -3.87ft VS  
 WFT EM <12-14'> : 2.18° Inc, 901.41ft MD, 901.41ft TVD, -0.65ft VS

Well Profile Data	
MD (ft)	VS (ft)
6483.50	-392.53
6543.50	-381.39
7055.91	-61.26
7217.73	93.93
7441.08	315.24
16356.08	9230.24

Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Vera Pad	1687510.600	14316799.487	39°25'31.060"N	80°54'14.600"W
Slot #09	1687517.680	14316789.278	39°25'30.870"N	80°54'14.510"W

Well Data	
Well	Wellbore
San Juan Unit 3H	San Juan Unit 3H-AWB
San Juan Unit 3H	San Juan Unit 3H-PWB
San Juan Unit 3H	San Juan Unit 3H PWB Rev-A.0

Design Comment	
MD (ft)	VS (ft)
6483.50	268.49
6543.50	286.45
7055.91	1901.75
7217.73	1849.18
7441.08	1773.87
16356.08	1259.83

Well Profile Data	
MD (ft)	VS (ft)
6483.50	268.49
6543.50	286.45
7055.91	1901.75
7217.73	1849.18
7441.08	1773.87
16356.08	1259.83

Projected MD at TD: 16352' : 90.43° Inc, 16352.00ft MD, 6553.81ft TVD, 9221.20ft VS  
 Scale 1 inch = 1500'

04/05/2019

User specified Dip: 66.69° Field: 52002 nT  
 Magnetic North is 7.62 degrees West of True North (at 24/Aug/2017)  
 Grid North is 0.06 degrees East of True North  
 To correct azimuth from True to Grid subtract 0.06 degrees  
 To correct azimuth from Magnetic to Grid subtract 7.68 degrees



Vertical Section (ft)  
 Azimuth 340.11° with reference 0.00 N, 0.00 E



# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'

Page 1 of 11



REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Vera Pad
Slot	Slot #09
Well	San Juan Unit 3H
Wellbore	San Juan Unit 3H AWB

REPORT SETUP INFORMATION	
Projection System	NAD27 / UTM Zone 17 North, US feet
North Reference	Grid
Scale	0.999601
Convergence at slot	0.06° East
Software System	WellArchitect® 5.1
User	Delaset
Report Generated	31/Oct/2017 at 10:56
Database/Source file	WA_MPL_EasternUS_Defn/San_Juan_Unit_3H_AWP_Proj_16352.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North [ft]	East [ft]	Northing [US ft]	Latitude	Longitude	
Slot Location	-19.22	7.08	14316780.28	39°25'30.870"N	80°54'14.510"W	
Facility Reference Pt			1667510.60	39°25'31.060"N	80°54'14.600"W	
Field Reference Pt			0.00	0°00'00.000"	85°29'19.301"W	

WELLPATH DATUM	
Calculation method	Minimum curvature
Horizontal Reference Pt	Slot
Vertical Reference Pt	Frontier 22 (RKB)
MD Reference Pt	Frontier 22 (RKB)
Field Vertical Reference	Mean Sea Level
	Frontier 22 (RKB) to Facility Vertical Datum
	Frontier 22 (RKB) to Mean Sea Level
	Frontier 22 (RKB) to Mud Line at Slot (Slot #09)
	Section Origin
	Section Azimuth
	24.50ft
	1169.50ft
	24.50ft
	N 0.00, E 0.00 ft
	340.11°

04/05/2019





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'  
Page 2 of 11



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #09
Operator	ANTERO RESOURCES CORPORATION	Well	San Juan Unit 3H
Area	Tyler County, WV	Wellbore	San Juan Unit 3H AWB
Field	Tyler		
Facility	Vera Pad		

WELLPATH DATA (202 stations) † = interpolated/extrapolated station																
MD ft	Inclination °	Azimuth °	TVD ft	Vert Sect ft	North ft	East ft	Grid East ft	Grid North ft	Latitude	Longitude	Closure Dist ft	Closure Dir °	DLS °/100ft	Build Rate °/100ft	Turn Rate °/100ft	Comments
0.00	0.00	231.230	0.00	0.00	0.00	0.00	1667517.68	14316780.28	39°25'30.870"N	80°54'14.510"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.00	231.230	24.50	0.00	0.00	0.00	1667517.68	14316780.28	39°25'30.870"N	80°54'14.510"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.240	231.230	109.50	-0.06	-0.11	-0.14	1667517.54	14316780.17	39°25'30.869"N	80°54'14.512"W	0.18	231.230	0.28	0.28	-151.49	Gyrodata MS Gyro <17-1/2"> (100--712)
209.50	0.520	147.430	209.50	-0.57	-0.63	-0.06	1667517.62	14316779.65	39°25'30.864"N	80°54'14.511"W	0.63	185.284	0.55	0.28	-83.80	
309.50	0.590	211.290	309.49	-1.33	-1.45	-0.08	1667517.60	14316778.83	39°25'30.856"N	80°54'14.511"W	1.45	183.181	0.59	0.07	-63.80	
409.50	0.770	209.290	409.49	-2.10	-2.47	-0.68	1667517.00	14316777.81	39°25'30.846"N	80°54'14.519"W	2.56	195.286	0.18	0.18	-1.94	
509.50	1.050	224.780	509.47	-2.93	-3.71	-1.65	1667516.03	14316776.57	39°25'30.836"N	80°54'14.531"W	4.06	203.978	0.37	0.28	15.49	
609.50	0.150	205.110	609.47	-3.41	-4.48	-2.35	1667515.33	14316775.80	39°25'30.826"N	80°54'14.540"W	5.06	207.695	0.91	-0.90	-19.67	
709.50	0.340	177.760	709.47	-3.79	-4.89	-2.40	1667515.29	14316775.39	39°25'30.822"N	80°54'14.541"W	5.45	206.076	0.22	0.19	-27.35	
721.50	0.370	180.540	721.47	-3.86	-4.97	-2.39	1667515.29	14316775.31	39°25'30.821"N	80°54'14.541"W	5.52	205.727	0.29	0.25	23.17	
747.50	0.320	4.240	747.47	-3.87	-4.98	-2.39	1667515.29	14316775.30	39°25'30.821"N	80°54'14.541"W	5.52	205.632	2.65	-0.19	-678.08	Gyrodata MS Gyro <12-1/4"> (712)(738'-860')
776.50	0.880	11.800	776.47	-3.61	-4.68	-2.34	1667515.34	14316775.60	39°25'30.824"N	80°54'14.540"W	5.23	206.539	1.95	1.93	26.07	
806.50	1.230	12.500	806.46	-3.14	-4.14	-2.22	1667515.46	14316776.14	39°25'30.829"N	80°54'14.538"W	4.70	208.206	1.17	1.17	2.33	
839.50	1.780	8.140	839.45	-2.39	-3.29	-2.07	1667515.61	14316776.99	39°25'30.838"N	80°54'14.536"W	3.89	212.215	1.70	1.67	-13.21	
869.50	2.010	15.250	869.43	-1.55	-2.32	-1.87	1667515.81	14316777.96	39°25'30.847"N	80°54'14.534"W	2.98	218.840	1.09	0.77	23.70	
901.50	2.180	24.430	901.41	-0.65	-1.22	-1.47	1667516.21	14316779.05	39°25'30.858"N	80°54'14.529"W	1.91	230.184	1.17	0.53	28.69	MFT <12-1/4"> (860')(892'-2427)
952.50	2.760	45.200	952.36	0.56	0.52	-0.20	1667517.48	14316780.80	39°25'30.928"N	80°54'14.512"W	0.56	339.520	2.07	1.14	40.73	
1019.50	3.970	61.790	1019.25	1.58	2.76	2.99	1667520.67	14316783.04	39°25'30.897"N	80°54'14.472"W	4.07	47.321	2.30	1.81	24.70	
1113.50	6.020	71.120	1112.89	1.96	5.89	10.52	1667528.20	14316786.17	39°25'30.928"N	80°54'14.376"W	12.06	60.745	2.34	2.18	9.97	
1208.50	7.820	75.340	1207.19	1.29	9.14	21.49	1667539.16	14316789.42	39°25'30.960"N	80°54'14.236"W	23.35	66.954	1.97	1.89	4.44	
1302.50	9.460	75.720	1300.12	-0.05	12.67	35.16	1667552.83	14316792.94	39°25'30.995"N	80°54'14.062"W	37.38	70.190	1.75	1.74	0.40	
1396.50	11.080	79.000	1392.61	-2.20	16.30	51.52	1667569.18	14316796.37	39°25'31.031"N	80°54'13.853"W	54.03	72.447	1.83	1.72	3.49	
1490.50	12.090	81.370	1484.70	-5.52	19.50	70.12	1667587.77	14316799.77	39°25'31.062"N	80°54'13.616"W	72.78	74.461	1.19	1.07	2.52	
1585.50	13.600	83.960	1577.32	-10.14	22.16	91.06	1667608.71	14316802.43	39°25'31.110"N	80°54'13.349"W	93.72	76.320	1.70	1.59	2.73	
1680.50	15.470	85.330	1669.28	-16.14	24.37	114.80	1667632.43	14316804.64	39°25'31.128"N	80°54'13.047"W	117.36	78.014	2.00	1.97	1.44	
1774.50	16.270	86.230	1759.69	-23.09	26.26	140.43	1667658.06	14316806.53	39°25'31.128"N	80°54'12.720"W	142.87	79.409	0.89	0.85	0.96	
1869.50	15.360	82.060	1851.10	-29.39	28.87	166.18	1667683.79	14316809.14	39°25'31.154"N	80°54'12.392"W	168.67	80.144	1.53	-0.96	-4.39	
1963.50	16.730	84.490	1941.44	-35.32	31.89	191.97	1667709.58	14316812.16	39°25'31.183"N	80°54'12.063"W	194.61	80.568	1.62	1.46	2.59	
2057.50	17.280	87.270	2031.33	-42.80	33.85	219.39	1667736.98	14316814.12	39°25'31.202"N	80°54'11.714"W	221.98	81.228	1.04	0.59	2.96	
2152.50	19.040	92.070	2121.60	-52.76	33.97	248.97	1667766.55	14316816.23	39°25'31.203"N	80°54'11.337"W	251.28	82.231	2.43	1.85	5.05	





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'

Page 3 of 11



## REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #09
ANTERO RESOURCES CORPORATION	Well	San Juan Unit 3H
Tyler County, WV	Wellbore	San Juan Unit 3H AWB
Tyler		
Vera Pad		

## WELLPATH DATA (202 stations)

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
2247.50	18.460	92.480	2211.55	-64.28	32.76	279.48	1667797.05	14316813.02	39°25'31.191"N	80°54'10.948"W	281.40	83.315	0.63	-0.61	0.43	
2342.50	17.730	90.810	2301.86	-75.12	31.90	308.97	1667826.53	14316812.17	39°25'31.182"N	80°54'10.572"W	310.62	84.105	0.94	-0.77	-1.76	
2436.50	14.330	87.890	2392.19	-83.73	32.13	334.92	1667852.46	14316812.39	39°25'31.184"N	80°54'10.242"W	336.46	84.521	3.72	-3.62	-3.11	
2536.50	14.180	83.240	2489.11	-90.30	34.02	359.45	1667876.99	14316814.29	39°25'31.202"N	80°54'09.929"W	361.06	84.593	1.15	-0.15	-4.65	MFT EM <8-3/4"> (2427')(2527'-6474')
2700.50	14.690	80.990	2647.94	-98.78	39.65	399.94	1667917.46	14316819.91	39°25'31.258"N	80°54'09.413"W	401.90	84.339	0.46	0.31	-1.37	
2794.50	16.820	87.410	2738.41	-105.08	42.13	425.30	1667942.81	14316822.39	39°25'31.282"N	80°54'09.090"W	427.38	84.343	2.92	2.27	6.83	
2888.50	19.540	85.900	2827.71	-113.40	43.87	454.57	1667972.07	14316824.13	39°25'31.299"N	80°54'08.717"W	456.68	84.488	2.94	2.89	-1.61	
3079.50	20.970	84.650	3006.44	-130.62	49.81	521.63	1668039.10	14316830.07	39°25'31.357"N	80°54'07.862"W	490.31	84.539	1.61	1.55	-1.33	
3173.50	20.640	83.950	3094.31	-138.81	53.13	554.86	1668072.31	14316833.39	39°25'31.389"N	80°54'07.439"W	524.01	84.545	0.08	-0.07	0.04	
3267.50	21.920	85.090	3181.90	-147.31	56.38	588.81	1668106.26	14316836.63	39°25'31.421"N	80°54'07.006"W	557.39	84.530	0.44	-0.35	-0.74	
3362.50	24.070	84.430	3269.35	-156.69	59.78	625.77	1668143.20	14316840.03	39°25'31.454"N	80°54'06.535"W	591.51	84.531	1.43	1.36	1.21	
3457.50	23.610	82.960	3356.24	-165.71	63.99	663.93	1668181.34	14316844.24	39°25'31.495"N	80°54'06.049"W	628.62	84.543	2.28	2.26	-0.69	
3551.50	23.190	81.720	3442.51	-173.62	68.96	700.93	1668218.33	14316849.21	39°25'31.544"N	80°54'05.577"W	667.01	84.495	0.79	-0.48	-1.55	
3645.50	23.140	83.070	3528.93	-181.49	73.85	737.58	1668254.96	14316854.10	39°25'31.592"N	80°54'05.110"W	704.31	84.381	0.69	-0.45	-1.32	
3740.50	24.430	80.870	3615.86	-189.34	79.22	775.51	1668292.87	14316859.47	39°25'31.645"N	80°54'04.627"W	741.27	84.282	0.57	-0.05	1.44	
3835.50	24.070	79.160	3702.48	-196.06	85.98	813.93	1668331.28	14316866.23	39°25'31.711"N	80°54'04.137"W	779.54	84.167	1.65	1.36	-2.32	
3929.50	22.980	78.770	3789.67	-201.83	93.16	850.76	1668368.09	14316873.40	39°25'31.782"N	80°54'03.667"W	818.46	83.970	0.83	-0.38	-1.80	
4024.50	23.740	81.870	3875.88	-208.52	99.48	887.88	1668405.20	14316879.72	39°25'31.844"N	80°54'03.194"W	855.84	83.751	1.17	-1.16	-0.41	
4118.50	23.910	83.690	3961.87	-216.85	104.25	925.54	1668442.85	14316884.49	39°25'31.890"N	80°54'02.714"W	893.43	83.607	1.52	0.80	3.26	
4213.50	25.520	83.870	4048.17	-226.24	108.55	965.03	1668482.32	14316888.79	39°25'31.933"N	80°54'02.211"W	931.40	83.574	0.80	0.18	1.94	
4308.50	26.190	83.440	4133.66	-235.94	113.13	1006.20	1668523.48	14316893.36	39°25'31.977"N	80°54'01.686"W	971.11	83.582	1.70	1.69	0.19	
4402.50	25.380	82.980	4218.30	-245.21	117.96	1046.81	1668564.07	14316898.19	39°25'32.025"N	80°54'01.169"W	1012.54	83.585	0.73	0.71	-0.45	
4497.50	25.510	83.600	4304.08	-254.52	122.73	1087.34	1668604.59	14316902.96	39°25'32.071"N	80°54'00.652"W	1053.43	83.571	0.89	-0.86	-0.49	
4592.50	24.770	82.500	4390.08	-263.56	127.61	1127.40	1668644.63	14316907.84	39°25'32.119"N	80°54'00.142"W	1094.25	83.560	0.31	0.14	0.65	
4686.50	25.510	85.140	4475.18	-273.04	131.90	1167.10	1668684.31	14316912.12	39°25'32.161"N	80°54'00.714"W	1134.60	83.542	0.92	-0.78	-1.16	
4781.50	24.940	84.410	4561.12	-283.29	135.58	1207.41	1668724.61	14316915.80	39°25'32.197"N	80°53'59.636"W	1174.53	83.552	1.43	0.79	2.81	
4875.50	24.140	81.960	4646.63	-292.13	140.20	1246.17	1668763.35	14316920.42	39°25'32.242"N	80°53'58.628"W	1215.00	83.593	0.68	-0.60	-0.77	
4970.50	25.520	83.470	4732.85	-300.85	145.24	1285.74	1668802.91	14316925.46	39°25'32.292"N	80°53'58.124"W	1254.03	83.581	1.38	-0.85	-2.61	
5065.50	26.370	86.460	4818.28	-311.52	148.87	1327.13	1668844.28	14316929.09	39°25'32.327"N	80°53'57.596"W	1293.92	83.555	1.60	1.45	1.59	
											1335.46	83.600	1.64	0.89	3.15	





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'

Page 4 of 11



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #09
Operator	ANTERO RESOURCES CORPORATION	Well	San Juan Unit 3H
Area	Tyler County, WV	Wellbore	San Juan Unit 3H AWB
Field	Tyler		
Facility	Vera Pad		

WELLPATH DATA (202 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
5160.50	25.880	84.740	4903.57	-322.69	152.08	1368.84	1668885.97	14316932.29	39°25'32.358"N	80°53'57.065"W	1377.26	83.660	0.95	-0.52	-1.81	
5255.50	24.900	84.080	4989.40	-332.76	156.04	1409.38	1668926.49	14316936.26	39°25'32.397"N	80°53'56.548"W	1417.99	83.682	1.07	-1.03	-0.69	
5349.50	24.230	82.450	5074.89	-341.66	160.62	1448.18	1668965.28	14316940.83	39°25'32.442"N	80°53'56.053"W	1457.06	83.671	1.01	-0.71	-1.73	
5444.50	25.890	81.870	5160.94	-350.05	166.11	1488.04	1669005.13	14316946.32	39°25'32.496"N	80°53'55.545"W	1497.29	83.630	1.77	1.75	-0.61	
5539.50	25.930	79.930	5246.40	-357.82	172.68	1529.03	1669046.09	14316952.88	39°25'32.560"N	80°53'55.023"W	1538.75	83.557	0.89	0.04	-2.04	
5633.50	25.730	79.290	5331.01	-364.58	180.06	1569.31	1669086.36	14316960.27	39°25'32.633"N	80°53'54.510"W	1579.61	83.455	0.37	-0.21	-0.68	
5728.50	25.830	78.100	5416.55	-370.75	188.16	1609.82	1669126.86	14316968.36	39°25'32.712"N	80°53'53.993"W	1620.78	83.333	0.55	0.11	-1.25	
5822.50	25.080	82.130	5501.43	-377.75	195.11	1649.80	1669166.82	14316975.31	39°25'32.781"N	80°53'53.486"W	1661.10	83.254	2.01	-0.80	4.29	
5916.50	24.860	87.590	5586.66	-387.83	198.67	1689.08	1669206.08	14316978.87	39°25'32.815"N	80°53'52.983"W	1700.73	83.292	2.46	-0.23	5.81	
6011.50	24.250	86.870	5673.06	-399.46	200.58	1728.51	1669245.50	14316983.12	39°25'32.834"N	80°53'52.480"W	1740.11	83.381	0.72	-0.64	-0.76	
6105.50	24.040	86.140	5758.84	-410.31	202.92	1766.89	1669283.86	14316988.30	39°25'32.856"N	80°53'51.991"W	1778.51	83.449	0.39	-0.22	-0.78	
6137.50	23.960	83.400	5788.08	-413.60	204.10	1779.85	1669296.82	14316994.30	39°25'32.868"N	80°53'51.826"W	1791.52	83.458	3.49	-0.25	-8.56	
6169.50	22.960	79.310	5817.43	-416.10	206.01	1792.44	1669309.40	14316998.20	39°25'32.887"N	80°53'51.666"W	1804.24	83.444	5.97	-3.13	-12.78	
6200.50	21.340	71.400	5846.15	-417.19	208.93	1803.73	1669320.69	14316998.13	39°25'32.915"N	80°53'51.522"W	1815.79	83.393	10.94	-5.23	-25.52	
6231.50	22.000	64.840	5874.96	-416.78	213.20	1814.33	1669331.29	14316993.39	39°25'32.957"N	80°53'51.387"W	1826.82	83.298	8.09	2.13	-21.16	
6263.50	22.580	69.180	5904.57	-416.13	217.93	1825.50	1669342.45	14316998.12	39°25'33.004"N	80°53'51.244"W	1838.46	83.192	5.45	1.81	13.56	
6294.50	21.950	69.520	5933.26	-415.98	222.07	1836.49	1669353.44	14317002.26	39°25'33.045"N	80°53'51.104"W	1849.87	83.105	2.07	-2.03	1.10	
6325.50	22.690	64.180	5961.94	-415.30	226.71	1847.30	1669364.24	14317006.89	39°25'33.091"N	80°53'50.966"W	1861.16	83.003	6.96	2.39	-17.23	
6357.50	23.520	57.270	5991.38	-413.24	232.85	1858.23	1669375.17	14317013.03	39°25'33.151"N	80°53'50.827"W	1872.76	82.858	8.86	2.59	-21.59	
6388.50	23.270	49.340	6019.84	-409.69	240.18	1868.08	1669385.01	14317020.37	39°25'33.224"N	80°53'50.701"W	1883.46	82.674	10.18	-0.81	-25.58	
6420.50	24.740	42.790	6049.08	-404.38	249.22	1877.43	1669394.36	14317029.40	39°25'33.313"N	80°53'50.582"W	1893.90	82.439	9.50	4.59	-20.47	
6451.50	25.460	44.400	6077.15	-398.51	258.74	1886.50	1669403.42	14317038.91	39°25'33.407"N	80°53'50.466"W	1904.16	82.190	3.20	2.32	5.19	
6483.50	24.530	43.280	6106.15	-392.53	268.49	1895.86	1669412.78	14317048.66	39°25'33.503"N	80°53'50.347"W	1914.78	81.939	3.26	-2.91	-3.50	
6522.00	24.580	35.460	6141.18	-384.37	280.83	1905.99	1669422.91	14317058.00	39°25'33.625"N	80°53'50.218"W	1926.57	81.618	8.44	0.13	-20.31	BH AT Curve <-8-172"> (6483.5)/(6522-16329)
6578.00	25.860	27.540	6191.85	-369.48	301.16	1918.40	1669435.31	14317068.31	39°25'33.826"N	80°53'50.059"W	1941.89	81.078	6.44	2.29	-14.14	
6625.00	29.110	17.580	6233.57	-353.46	321.16	1926.60	1669443.51	14317101.31	39°25'34.023"N	80°53'49.954"W	1953.18	80.536	11.96	6.91	-21.19	
6674.00	31.720	9.690	6275.84	-332.78	345.23	1932.37	1669449.27	14317125.37	39°25'34.261"N	80°53'49.881"W	1962.97	79.871	9.73	5.33	-16.10	
6721.00	36.230	3.370	6314.82	-309.26	371.30	1935.27	1669452.78	14317151.43	39°25'34.519"N	80°53'49.843"W	1970.57	79.139	12.18	9.60	-13.45	
6769.00	40.180	359.160	6352.53	-281.57	400.96	1935.88	1669452.78	14317181.08	39°25'34.812"N	80°53'49.835"W	1976.96	78.298	9.85	8.23	-8.77	
6816.00	44.600	356.120	6387.24	-251.36	432.60	1934.54	1669451.44	14317212.71	39°25'35.125"N	80°53'49.852"W	1982.32	77.395	10.36	9.40	-6.47	

04/05/2019





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'  
Page 5 of 11



## REFERENCE WELLPATH IDENTIFICATION

Operator	Area	Field	Facility	Slot	Slot #09
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Vera Pad	Well	San Juan Unit 3H
				Wellbore	San Juan Unit 3H AWB

## WELLPATH DATA (202 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
6852.00	48.890	353.751	6411.91	-226.02	458.71	1932.20	1669449.11	14317238.80	39°25'35.383"N	80°53'49.881"W	1985.91	76.645	12.84	11.92	-6.58	Middlesex: 6852' MD
6864.00	50.330	353.030	6419.68	-217.13	467.79	1931.15	1669448.06	14317247.88	39°25'35.472"N	80°53'49.894"W	1987.00	76.383	12.84	12.00	-6.01	
6911.00	55.980	351.320	6447.86	-180.36	505.03	1926.01	1669442.92	14317285.10	39°25'35.940"N	80°53'49.959"W	1991.12	75.307	12.37	12.02	-3.64	
6959.00	60.920	350.030	6472.96	-140.16	545.38	1919.37	1669436.28	14317325.43	39°25'36.239"N	80°53'50.043"W	1995.35	74.138	10.54	10.29	-2.89	
7006.00	65.300	348.710	6494.22	-98.80	586.56	1911.63	1669428.55	14317366.60	39°25'36.646"N	80°53'50.141"W	1999.60	72.942	9.65	9.32	-2.81	
7037.00	68.309	347.926	6506.43	-70.60	614.46	1905.86	1669422.78	14317394.49	39°25'36.922"N	80°53'50.214"W	2002.47	72.130	9.98	9.71	-2.53	Burkett: 7037' MD
7094.00	69.960	347.510	6512.48	-54.85	629.98	1902.48	1669419.40	14317410.01	39°25'37.076"N	80°53'50.257"W	2004.08	71.678	9.98	9.71	-2.45	
7118.00	73.970	345.896	6532.03	-5.67	689.26	1888.44	1669405.36	14317453.44	39°25'37.505"N	80°53'50.386"W	2008.82	70.411	7.72	7.30	-2.64	
7149.00	75.030	345.220	6540.32	35.41	718.19	1880.99	1669397.91	14317498.18	39°25'37.948"N	80°53'50.530"W	2010.29	69.948	4.01	3.41	-2.20	Tully: 7118' MD
7196.00	75.060	341.620	6552.45	80.73	761.70	1868.03	1669384.96	14317541.68	39°25'38.378"N	80°53'50.694"W	2017.36	67.816	7.40	3.42	-2.18	
7244.00	76.930	339.690	6564.07	127.30	805.64	1852.60	1669369.54	14317585.60	39°25'38.812"N	80°53'50.890"W	2020.20	66.497	5.51	3.90	-7.66	
7252.00	76.967	339.504	6565.87	135.09	812.95	1849.89	1669366.82	14317592.90	39°25'38.885"N	80°53'50.925"W	2020.63	66.277	2.31	0.46	-4.02	Marcellus POE: 7252' MD
7291.00	77.150	338.600	6574.61	173.09	848.44	1836.30	1669353.24	14317628.38	39°25'39.236"N	80°53'51.098"W	2022.83	65.201	2.31	0.47	-2.32	
7339.00	81.880	338.640	6583.34	220.26	892.38	1819.10	1669336.05	14317672.30	39°25'39.870"N	80°53'51.316"W	2026.19	63.869	9.65	9.85	0.08	
7386.00	86.120	338.980	6588.25	266.98	935.95	1802.20	1669319.16	14317715.86	39°25'40.101"N	80°53'51.531"W	2030.75	62.555	9.05	9.02	0.72	
7435.00	89.850	339.220	6589.97	315.94	981.69	1784.74	1669301.70	14317761.58	39°25'40.553"N	80°53'51.753"W	2036.91	61.187	7.63	7.61	0.49	
7529.00	90.310	337.070	6589.84	409.88	1068.93	1749.75	1669286.73	14317848.78	39°25'41.416"N	80°53'52.197"W	2050.42	58.579	2.34	0.49	-2.29	
7624.00	89.420	334.000	6590.07	504.56	1155.39	1710.41	1669227.40	14317935.20	39°25'42.271"N	80°53'52.697"W	2064.08	55.961	3.36	-0.94	-3.23	
7719.00	89.630	335.480	6590.85	599.14	1241.30	1669.87	1669186.88	14318021.08	39°25'43.120"N	80°53'53.213"W	2080.70	53.375	1.57	0.22	1.56	
7813.00	89.630	339.700	6591.46	693.02	1328.18	1634.05	1669151.07	14318107.93	39°25'43.979"N	80°53'53.668"W	2105.75	50.895	4.49	0.00	4.49	
7908.00	89.690	342.070	6592.03	788.01	1417.93	1602.94	1669119.98	14318197.64	39°25'44.867"N	80°53'54.063"W	2140.08	48.505	2.50	0.06	2.49	
8002.00	89.750	342.120	6592.48	881.95	1507.38	1574.04	1669091.09	14318287.05	39°25'45.751"N	80°53'54.430"W	2179.40	46.239	0.08	0.06	0.05	
8097.00	89.850	340.010	6592.82	976.93	1597.23	1543.22	1669060.28	14318376.87	39°25'46.640"N	80°53'54.822"W	2220.96	44.015	2.22	0.11	-2.22	
8192.00	89.910	337.460	6593.02	1071.89	1685.76	1508.76	1669025.84	14318465.36	39°25'47.515"N	80°53'55.260"W	2262.33	41.829	2.68	0.06	-2.68	
8287.00	90.280	337.800	6592.86	1166.80	1773.61	1472.61	1669089.70	14318553.18	39°25'48.384"N	80°53'55.719"W	2305.27	39.702	0.53	0.39	0.36	
8382.00	89.690	339.330	6592.88	1261.77	1862.04	1437.89	1668955.00	14318641.57	39°25'49.258"N	80°53'56.160"W	2352.60	37.676	1.73	-0.62	1.61	
8477.00	90.030	338.580	6593.11	1356.75	1950.70	1403.78	1668920.90	14318730.19	39°25'50.135"N	80°53'56.594"W	2403.29	35.740	0.87	0.36	-0.79	
8572.00	90.030	338.150	6593.07	1451.70	2039.00	1368.75	1668865.88	14318818.47	39°25'51.008"N	80°53'57.039"W	2455.81	33.873	0.45	0.00	-0.45	
8667.00	91.540	341.310	6591.76	1546.68	2128.10	1335.85	1668852.99	14318907.52	39°25'51.889"N	80°53'57.457"W	2512.63	32.117	3.69	1.59	3.33	





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'

Page 6 of 11



## REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #09
ANTERO RESOURCES CORPORATION	Well	San Juan Unit 3H
Tyler County, WV	Wellbore	San Juan Unit 3H AWB
Tyler		
Vera Pad		

## WELLPATH DATA (202 stations)

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (F/100ft)	Build Rate (F/100ft)	Turn Rate (F/100ft)	Comments
8762.00	90.340	342.850	6590.20	1641.60	2218.47	1308.62	1668823.78	14319897.86	39°25'52.782"N	80°53'57.828"W	2574.66	30.497	2.05	-1.26	1.62	
8857.00	91.110	342.790	6589.00	1736.49	2309.23	1278.57	1668795.73	14319088.58	39°25'53.679"N	80°53'58.184"W	2639.56	28.972	0.81	0.81	-0.06	
8951.00	90.150	340.860	6587.97	1830.44	2398.53	1249.25	1668766.43	14319177.84	39°25'54.562"N	80°53'58.567"W	2704.36	27.512	2.29	-1.02	-2.05	
9046.00	90.180	340.760	6587.70	1925.43	2488.25	1218.02	1668735.21	14319267.53	39°25'55.449"N	80°53'58.953"W	2770.37	26.082	0.11	0.03	-0.11	
9141.00	90.090	339.110	6587.47	2020.42	2577.48	1185.43	1668702.63	14319356.72	39°25'56.332"N	80°53'59.367"W	2837.01	24.699	1.74	-0.09	-1.74	
9235.00	90.030	338.750	6587.37	2114.40	2665.19	1151.64	1668668.85	14319444.40	39°25'57.199"N	80°53'59.797"W	2903.36	23.389	0.39	-0.06	-0.38	
9330.00	89.910	340.730	6587.42	2209.40	2754.31	1118.74	1668635.97	14319533.48	39°25'58.080"N	80°54'00.215"W	2972.85	22.106	2.09	-0.13	2.08	
9426.00	89.820	341.510	6587.65	2305.38	2845.15	1087.68	1668604.92	14319624.28	39°25'58.978"N	80°54'00.610"W	3045.96	20.921	0.82	-0.09	0.81	
9521.00	89.660	342.990	6588.08	2400.31	2935.62	1058.72	1668575.37	14319714.72	39°25'59.873"N	80°54'00.977"W	3120.70	19.832	1.57	-0.17	1.56	
9616.00	89.760	342.830	6588.54	2495.20	3026.42	1030.80	1668548.06	14319805.49	39°26'00.771"N	80°54'01.332"W	3197.15	18.809	0.21	0.13	-0.17	
9712.00	89.570	345.460	6589.09	2590.95	3118.76	1004.57	1668521.85	14319897.79	39°26'01.683"N	80°54'01.695"W	3276.56	17.854	2.75	-0.22	2.74	
9807.00	89.850	342.760	6589.57	2685.71	3210.12	978.57	1668495.85	14319989.11	39°26'02.587"N	80°54'01.995"W	3355.96	16.953	2.86	0.29	-2.84	
9902.00	89.660	337.950	6589.98	2780.68	3299.57	946.64	1668463.94	14320078.52	39°26'03.471"N	80°54'02.401"W	3432.67	16.008	5.07	-0.20	-5.06	
9997.00	89.510	337.000	6590.66	2875.57	3387.31	910.25	1668427.56	14320166.23	39°26'04.339"N	80°54'02.863"W	3507.48	15.041	1.01	-0.16	-1.00	
10092.00	89.320	337.910	6591.63	2970.47	3475.05	873.82	1668391.15	14320253.93	39°26'05.206"N	80°54'03.326"W	3583.23	14.115	0.98	-0.20	0.96	
10187.00	89.170	338.990	6592.89	3065.42	3563.40	838.93	1668356.28	14320342.25	39°26'06.080"N	80°54'03.770"W	3660.82	13.248	1.15	-0.16	1.14	
10282.00	89.510	341.590	6593.98	3160.40	3652.82	806.90	1668324.25	14320431.63	39°26'06.964"N	80°54'04.177"W	3740.88	12.456	2.76	0.36	2.74	
10377.00	89.630	345.510	6594.69	3255.21	3743.91	780.00	1668297.37	14320522.69	39°26'07.866"N	80°54'04.518"W	3824.30	11.769	4.13	0.13	4.13	
10471.00	90.090	342.340	6594.92	3348.99	3834.22	753.98	1668271.36	14320612.96	39°26'08.757"N	80°54'04.849"W	3907.65	11.125	3.41	0.49	-3.37	
10565.00	90.030	339.870	6594.83	3442.97	3923.15	723.54	1668240.83	14320701.86	39°26'09.637"N	80°54'05.235"W	3989.31	10.450	2.63	-0.06	-2.63	
10661.00	89.880	342.000	6594.90	3538.95	4013.88	692.18	1668209.59	14320792.55	39°26'10.534"N	80°54'05.634"W	4073.13	9.784	2.22	-0.16	2.22	
10755.00	90.220	341.480	6594.82	3632.91	4103.15	662.73	1668180.15	14320881.78	39°26'11.416"N	80°54'06.008"W	4156.32	9.175	0.66	0.36	-0.55	
10850.00	89.970	338.530	6594.66	3727.90	4192.41	630.25	1668147.68	14320971.01	39°26'12.299"N	80°54'06.420"W	4239.52	8.549	3.12	-0.26	-3.11	
10945.00	90.030	334.730	6594.66	3822.71	4279.60	592.67	1668110.02	14321058.16	39°26'13.161"N	80°54'06.899"W	4320.43	7.883	4.00	0.06	-4.00	
11040.00	89.970	334.300	6594.66	3917.29	4365.51	552.02	1668069.48	14321144.04	39°26'14.011"N	80°54'07.415"W	4400.27	7.207	0.06	-0.06	0.00	
11134.00	90.310	336.390	6594.43	4010.99	4451.08	513.13	1668030.60	14321229.58	39°26'14.857"N	80°54'07.910"W	4480.56	6.576	1.80	0.36	1.77	
11229.00	90.520	338.450	6593.74	4105.88	4538.79	476.66	1667994.14	14321317.25	39°26'15.724"N	80°54'08.373"W	4563.75	5.995	2.18	0.22	2.17	
11323.00	90.520	338.710	6592.89	4199.84	4626.30	442.33	1667959.83	14321404.72	39°26'16.589"N	80°54'08.810"W	4647.39	5.482	0.28	0.00	0.28	
11418.00	90.620	340.210	6591.95	4294.83	4715.25	409.00	1667926.51	14321493.64	39°26'17.469"N	80°54'09.233"W	4732.96	4.957	1.58	0.11	1.58	
11513.00	90.370	341.400	6591.12	4389.81	4804.96	377.77	1667895.29	14321583.31	39°26'18.356"N	80°54'09.630"W	4819.79	4.485	1.28	-0.26	1.25	





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'

Page 7 of 11



04/05/2019

## REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #09
ANTERO RESOURCES CORPORATION	Well	San Juan Unit 3H
Tyler County, WV	Wellbore	San Juan Unit 3H AWB
Tyler		
Vera Pad		

## WELLPATH DATA (202 stations)

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (JUS ft)	Grid North (JUS ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
11608.00	90.710	340.990	4484.79	4894.89	347.14	1667864.69	14321673.20	39°26'19.245"N	80°54'10.019"W	4907.18	4.057	0.56	0.36	-0.43		
11702.00	90.620	342.300	6589.14	4578.75	4984.10	1667835.10	14321762.38	39°26'20.127"N	80°54'10.395"W	4994.20	3.645	1.40	-0.10	1.39		
11797.00	90.650	342.240	6588.09	4673.68	5074.58	1667806.18	14321852.82	39°26'21.021"N	80°54'10.763"W	5082.78	3.255	0.07	0.03	-0.06		
11892.00	90.550	342.710	6587.09	4768.59	5165.17	1667779.59	14321943.37	39°26'21.917"N	80°54'11.126"W	5171.71	2.882	0.51	-0.11	0.49		
11987.00	90.580	343.290	6586.15	4863.47	5256.01	1667749.83	14322034.18	39°26'22.815"N	80°54'11.479"W	5261.14	2.530	0.61	0.03	0.61		
12082.00	90.650	343.600	6585.13	4958.30	5347.07	1667722.77	14322125.20	39°26'23.715"N	80°54'11.822"W	5351.00	2.197	0.33	0.07	0.33		
12176.00	90.580	341.210	6584.12	5052.21	5436.86	1667694.37	14322204.75	39°26'24.601"N	80°54'12.183"W	5439.53	1.862	2.54	-0.07	-2.54		
12366.00	90.620	342.290	6582.27	5242.14	5616.82	1667663.81	14322294.85	39°26'25.490"N	80°54'12.572"W	5528.53	1.515	0.07	-0.06	0.03		
12461.00	90.620	338.630	6581.24	5337.12	5706.33	1667634.09	14322384.32	39°26'26.382"N	80°54'12.949"W	5618.03	1.188	1.11	0.11	1.11		
12555.00	90.580	334.830	6580.25	5430.93	5792.66	1667602.34	14322474.32	39°26'27.267"N	80°54'13.353"W	5706.96	0.850	3.85	0.00	-3.85		
12650.00	90.620	335.060	6579.26	5525.54	5878.72	1667565.23	14322564.64	39°26'28.121"N	80°54'13.825"W	5792.86	0.470	4.04	-0.04	-4.04		
12745.00	91.050	338.840	6577.87	5620.37	5966.11	1667528.84	14322654.99	39°26'28.972"N	80°54'14.337"W	5878.72	0.072	0.25	0.04	0.04		
12841.00	90.520	341.650	6576.56	5716.35	6056.44	1667487.84	14322743.99	39°26'29.836"N	80°54'14.810"W	5966.18	359.713	4.00	0.45	3.98		
12936.00	90.550	345.460	6575.67	5811.16	6147.63	1667455.42	14322834.29	39°26'30.729"N	80°54'15.222"W	6056.76	359.411	2.98	-0.55	2.93		
13031.00	90.710	345.960	6574.63	5905.70	6239.59	1667428.54	14322925.35	39°26'31.630"N	80°54'15.663"W	6148.18	359.169	4.01	0.03	4.01		
13127.00	90.830	342.430	6573.34	6001.43	6331.94	1667405.10	14323017.36	39°26'32.540"N	80°54'15.861"W	6240.61	358.966	0.55	0.17	0.53		
13222.00	90.740	342.110	6572.04	6096.35	6422.42	1667378.97	14323109.67	39°26'33.453"N	80°54'16.193"W	6333.46	358.745	3.68	0.13	-3.68		
13317.00	90.710	340.950	6570.83	6191.32	6512.51	1667350.05	14323200.12	39°26'34.348"N	80°54'16.560"W	6424.60	358.504	0.35	-0.09	-0.34		
13412.00	90.620	338.430	6569.73	6286.30	6601.99	1667319.97	14323290.18	39°26'35.238"N	80°54'16.943"W	6515.52	358.260	1.22	-0.03	-1.22		
13507.00	90.550	337.030	6568.76	6381.21	6689.50	1667287.02	14323379.22	39°26'36.119"N	80°54'17.362"W	6606.63	357.998	2.65	-0.09	-2.65		
13602.00	90.950	335.670	6567.52	6476.00	6776.51	1667251.03	14323467.10	39°26'36.988"N	80°54'17.819"W	6694.82	357.716	1.48	-0.07	-1.47		
13696.00	90.490	334.890	6566.34	6569.65	6861.89	1667212.94	14323554.07	39°26'37.849"N	80°54'18.304"W	6783.37	357.424	1.49	0.42	-1.43		
13791.00	90.580	337.430	6565.45	6664.42	6948.77	1667173.65	14323639.42	39°26'38.693"N	80°54'18.804"W	6870.52	357.129	0.96	-0.49	-0.83		
13886.00	89.880	338.620	6565.07	6759.35	7036.87	1667135.27	14323726.27	39°26'39.522"N	80°54'19.292"W	6959.30	356.849	2.68	0.09	2.67		
13980.00	90.050	341.400	6565.12	6853.34	7125.20	1667099.74	14323814.32	39°26'40.423"N	80°54'19.744"W	7049.28	356.600	1.45	-0.74	1.25		
14075.00	90.000	342.470	6565.07	6948.29	7215.51	1667067.62	14323902.62	39°26'41.296"N	80°54'20.152"W	7139.41	356.384	2.96	0.19	2.96		
14170.00	89.880	346.290	6565.17	7043.01	7306.99	1667038.18	14323992.90	39°26'42.189"N	80°54'20.527"W	7231.44	356.196	1.13	-0.06	1.13		
14264.00	89.820	342.690	6565.41	7136.72	7397.55	1667012.61	14324084.33	39°26'43.094"N	80°54'20.851"W	7324.44	356.044	4.02	-0.13	4.02		
14359.00	90.090	338.890	6565.49	7231.69	7487.24	1666987.49	14324174.86	39°26'43.989"N	80°54'21.171"W	7416.54	355.899	3.83	-0.06	-3.83		
						1666956.25	14324264.52	39°26'44.876"N	80°54'21.568"W	7508.28	355.710	4.01	0.28	-4.00		





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'  
Page 8 of 11



04/05/2019

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #09
Area	Tyler County, WV	Well	San Juan Unit 3H
Field	Tyler	Wellbore	San Juan Unit 3H AWB
Facility	Vera Pad		

WELLPATH DATA (202 stations)																
MD ft	Inclination °	Azimuth °	TVD ft	Vert Sect ft	North ft	East ft	Grid East ft	Grid North ft	Latitude	Longitude	Closure Dist ft	Closure Dir °	DLS ft/100ft	Build Rate ft/100ft	Turn Rate ft/100ft	Comments
14453.00	90.000	337.030	6565.41	7325.62	7574.37	-596.93	1666920.99	14324351.61	39°26'45.73"N	80°54'22.016"W	7597.86	355.494	1.98	-0.10	-1.98	
14548.00	90.120	333.560	6565.31	7420.27	7660.66	-636.63	1666881.31	14324437.87	39°26'46.591"N	80°54'22.521"W	7687.07	355.249	3.65	0.13	-3.65	
14643.00	90.580	334.060	6564.73	7514.70	7745.91	-678.55	1666839.40	14324523.08	39°26'47.433"N	80°54'23.054"W	7775.57	354.994	0.72	0.48	0.53	
14737.00	90.340	336.450	6563.98	7608.35	7831.27	-717.90	1666800.07	14324608.40	39°26'48.278"N	80°54'23.555"W	7864.10	354.762	2.56	-0.26	2.54	
14832.00	90.030	338.190	6563.67	7703.23	7918.92	-754.53	1666763.46	14324696.02	39°26'49.144"N	80°54'24.021"W	7954.78	354.557	1.86	-0.33	1.83	
14928.00	90.490	341.710	6563.24	7799.22	8009.08	-787.43	1666730.56	14324786.15	39°26'50.036"N	80°54'24.439"W	8047.70	354.385	3.70	0.48	3.67	
15022.00	90.520	342.440	6562.81	7893.13	8098.78	-815.58	1666702.43	14324875.79	39°26'50.922"N	80°54'24.796"W	8139.73	354.249	1.90	-0.49	1.84	
15117.00	90.460	340.400	6561.54	8082.97	8279.62	-873.72	1666644.31	14325058.58	39°26'52.710"N	80°54'25.151"W	8232.90	354.120	1.17	0.52	-1.05	
15212.00	90.370	338.090	6560.85	8177.95	8368.45	-907.38	1666610.67	14325145.37	39°26'53.589"N	80°54'25.963"W	8325.59	353.976	2.15	-0.06	-2.15	
15307.00	90.310	336.110	6560.29	8271.82	8455.03	-943.95	1666574.10	14325231.92	39°26'54.445"N	80°54'26.428"W	8417.50	353.812	2.43	-0.09	-2.43	
15496.00	90.250	337.110	6559.83	8366.64	8542.23	-981.67	1666536.41	14325319.08	39°26'55.307"N	80°54'26.908"W	8507.56	353.630	2.11	-0.06	-2.11	
15591.00	90.340	342.040	6559.34	8461.60	8631.22	-1014.81	1666503.28	14325408.04	39°26'56.187"N	80°54'27.329"W	8598.45	353.444	1.05	-0.06	1.05	
15686.00	90.370	342.460	6558.75	8556.54	8721.70	-1043.77	1666474.33	14325498.48	39°26'57.081"N	80°54'27.697"W	8690.68	353.294	5.19	0.09	5.19	
15780.00	90.550	340.770	6558.00	8650.50	8810.90	-1073.42	1666444.69	14325587.64	39°26'57.963"N	80°54'28.074"W	8783.93	353.176	0.44	0.03	0.44	
15875.00	90.120	338.240	6557.44	8745.48	8899.87	-1106.68	1666411.45	14325676.58	39°26'58.843"N	80°54'28.497"W	8876.04	353.054	1.81	0.19	-1.80	
15970.00	90.740	342.430	6556.73	8840.46	8989.31	-1138.64	1666379.50	14325765.98	39°26'59.727"N	80°54'28.903"W	8968.42	352.912	2.70	-0.45	-2.66	
16065.00	90.250	344.280	6555.91	8935.30	9080.32	-1165.85	1666352.30	14325856.96	39°27'00.627"N	80°54'29.249"W	9061.14	352.781	4.46	0.65	4.41	
16159.00	90.430	345.010	6555.35	9029.00	9170.96	-1190.74	1666327.42	14325947.56	39°27'01.523"N	80°54'29.565"W	9154.86	352.684	2.01	-0.52	1.95	
16254.00	90.490	344.210	6554.59	9123.70	9262.55	-1215.95	1666302.22	14326039.12	39°27'02.429"N	80°54'29.885"W	9247.94	352.602	0.80	0.19	0.78	
16329.00	90.430	346.830	6553.99	9198.36	9335.16	-1234.70	1666283.48	14326111.70	39°27'03.146"N	80°54'30.123"W	9342.02	352.521	0.84	0.06	-0.84	
16352.00	90.430	346.830	6553.81	9221.20	9357.56	-1239.94	1666278.24	14326134.08	39°27'03.368"N	80°54'30.190"W	9439.35	352.452	0.00	0.00	0.00	Projected MD at TD: 16352'





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'

Page 9 of 11



## REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #09
ANTERO RESOURCES CORPORATION	Well	San Juan Unit 3H
Area	Wellbore	San Juan Unit 3H AWB
Field		
Facility		

## HOLE & CASING SECTIONS - Ref Wellbore: San Juan Unit 3H AWB Ref Wellpath: San Juan Unit 3H AWP Proj: 16352'

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	24.50	104.50	80.00	24.50	104.50	0.00	0.00	-0.10	-0.12
17.5in Open Hole	104.50	746.50	642.00	104.50	746.47	-0.10	-0.12	-4.99	-2.39
13.375in Casing Surface	24.50	746.50	722.00	24.50	746.47	0.00	0.00	-4.99	-2.39
12.25in Open Hole	746.50	2620.10	1873.60	746.47	2570.12	-4.99	-2.39	36.67	379.94
9.625in Casing Production	24.50	2620.10	2595.60	24.50	2570.12	0.00	0.00	36.67	379.94
8.75in Open Hole	2620.10	6543.50	3923.40	2570.12	6160.70	36.67	379.94	288.32	1911.02
8.5in Open Hole	6543.50	16352.00	9808.50	6160.70	6553.81	288.32	1911.02	9357.56	-1239.94
5.5in Casing Production	24.50	16352.00	16327.50	24.50	6553.81	0.00	0.00	9357.56	-1239.94

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
San Juan Unit 3H POE - Rev-2	6560.00	768.92	1849.18	1669366.12	14317548.89	39°25'38.449"N	80°53'50.935"W	point
San Juan Unit 3H BHL - Rev-2	6586.00	9359.98	-1259.82	1666258.36	14326136.50	39°27'03.392"N	80°54'30.443"W	point
San Juan Unit 3H LP - Rev-1	6586.00	977.02	1773.87	1669290.84	14317756.91	39°25'40.507"N	80°53'51.891"W	point

04/05/2019





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'  
Page 10 of 11



## REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #09
ANTERO RESOURCES CORPORATION	Well	San Juan Unit 3H
Tyler County, WV	Wellbore	San Juan Unit 3H AWB
Tyler		
Vera Pad		

## WELLPATH COMPOSITION - Ref Wellbore: San Juan Unit 3H AWB

Start MID ft	End MID ft	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	721.50	Gyrodata standard - Drop gyro or Multi-shot	01 Gyrodata MS Gyro <17-1/2">(100'-712')	San Juan Unit 3H AWB
721.50	869.50	Gyrodata standard - Drop gyro or Multi-shot	02 Gyrodata MS Gyro <12-1/4">(712')(738'-860')	San Juan Unit 3H AWB
869.50	2436.50	ISCWSA MWD, Rev. 4 (Standard)	03 WFT EM <12-1/4">(860')(822'-2427')	San Juan Unit 3H AWB
2436.50	6483.50	ISCWSA MWD, Rev. 4 (Standard)	04 WFT EM <8-3/4">(2427')(2527'-6474')	San Juan Unit 3H AWB
6483.50	16329.00	BHI AutoTrak Curve (Short)	05 BHI AT Curve <8-1/2">(6483.5')(6522'-16329')	San Juan Unit 3H AWB
16329.00	16352.00	Blind Drilling (std)	Protection to bit	San Juan Unit 3H AWB





# Actual Wellpath Report

San Juan Unit 3H AWP Proj: 16352'  
Page 11 of 11



## REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #09
ANTERO RESOURCES CORPORATION	Well	San Juan Unit 3H
Tyler County, WV	Wellbore	San Juan Unit 3H AWB
Tyler		
Vera Pad		

## COMMENTS

### Wellpath general comments

API: 47-095-02382-0000  
 BHI Job #: 8736562  
 Rig: Frontier 22  
 Duration: 08/26/2017-08/30/2017  
 Gyrodatta MS Gyro <17-1/2"> (100'-712')  
 Gyrodatta MS Gyro <12-1/4"> (712')(738'-860')  
 WFT EM <12-1/4"> (860')(892'-2427')  
 WFT EM <8-3/4"> (2427')(2527'-6474')  
 BHI AT Curve <8-1/2"> (6483.5')(6522'-16329')  
 Middlesex: 6852' MD  
 Burkett: 7037' MD  
 Tully: 7118' MD  
 Marcellus POE: 7252' MD  
 Projected MD at TD: 16352'