

ANTERO RESOURCES CORPORATION

Location: Tyler County, WV
 Field: Tyler
 Facility: Stonelley Pad
 Slot: Slot #03
 Well: Parachute Unit 3H
 Wellbore: Parachute Unit 3H PWB



API: 47-095-02433-0000
 BH Job #: 9014372
 Rig: Frontier 22
 Duration: 02/15/18 - 02/18/18

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
Stonelley Pad	1662255.770	14314034.380	80°55'21.620"W
Slot	Local N (ft)	Grid East (US ft)	Longitude
Slot #03	85.98	1662231.375	80°55'21.930"W
Parachute Unit 3H	Local E (ft)	Grid North (US ft)	Longitude
Parachute Unit 3H	-24.40	14314120.326	80°55'21.930"W
Comment	Parachute Unit 3H		
Frontier 22 (RKB) to Ground level (At Slot: Slot #03)	24.5ft		
Mean Sea Level to Ground level (At Slot: Slot #03)	-982ft		
Frontier 22 (RKB) to Mean Sea Level	1006.5ft		

Gyrodata MS Gyro <17-1/2">(100-562) : 0.15° Inc, 109.50ft MD, 109.50ft TVD, -0.10ft VS

Gyrodata MS Gyro <12-1/4">(562)(650-1210) : 0.55° Inc, 659.50ft MD, 659.50ft TVD, -1.26ft VS

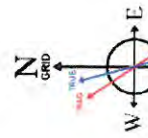
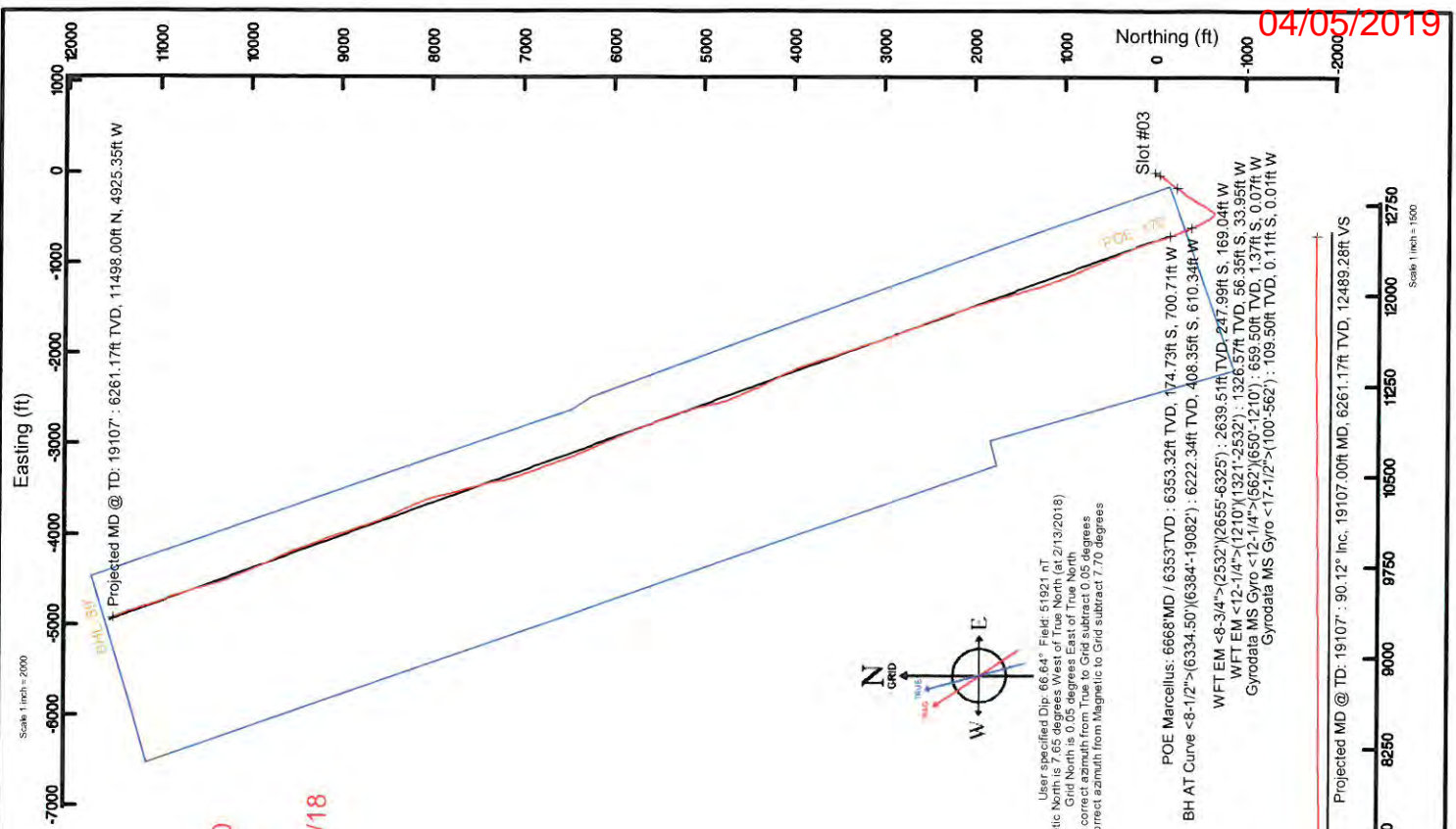
WFT EM <12-1/4">(1210)(1321-2532) : 8.63° Inc, 1330.50ft MD, 1326.57ft TVD, -41.34ft VS

WFT EM <8-3/4">(2652)(2655-6325) : 10.20° Inc, 2664.50ft MD, 2639.51ft TVD, -175.18ft VS

Well Profile Data	
Design Comment	MD (ft)
Tie On	6334.50
Proj. To Bottom	6404.50
POE	6668.24
Landing Pt.	6850.00
On Azimuth	6983.85
BHL	19125.57

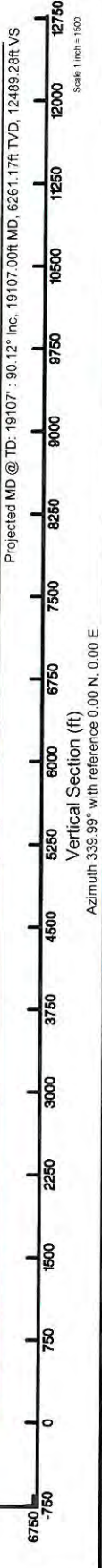
Well Data	
Slot	Well
Slot #03	Parachute Unit 3H
Slot #03	Parachute Unit 3H PWB
Slot #03	Parachute Unit 3H AWP
Slot #03	Parachute Unit 3H AWP Proj. 19107
Slot #03	Parachute Unit 3H PWP Rev-A.0
Slot #03	Parachute Unit 3H PWP Rev-A.0

BH AT Curve <8-1/2">(6334.50)(6384-19082) : 52.52° Inc, 6384.00ft MD, 6222.34ft TVD, -174.86ft VS
 POE Marcellus: 6668'MD / 6353'TVD : 70.79° Inc, 6668.00ft MD, 6353.32ft TVD, 75.59ft VS



Users specified Dip: 66.64° Field: 61921.0°
 Magnetic North is 7.65° West of True North
 Grid North is 0.05° East of True North
 To correct azimuth from True to Grid subtract 0.05 degrees
 To correct azimuth from Magnetic to Grid subtract 7.70 degrees

POE Marcellus: 6668'MD / 6353'TVD : 6353.32ft TVD, 174.73ft S, 700.71ft W
 BH AT Curve <8-1/2">(6334.50)(6384-19082) : 6222.34ft TVD, 408.35ft S, 610.34ft W
 WFT EM <8-3/4">(2652)(2655-6325) : 2639.51ft TVD, 247.99ft S, 169.04ft W
 WFT EM <12-1/4">(1210)(1321-2532) : 1326.57ft TVD, 56.35ft S, 33.95ft W
 Gyrodala MS Gyro <12-1/4">(650-1210) : 659.50ft TVD, 1.37ft S, 0.07ft W
 Gyrodala MS Gyro <17-1/2">(100-562) : 109.50ft TVD, 0.11ft S, 0.01ft W



Azimuth 339.99° with reference 0.00 N, 0.00 E.

04/05/2019



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107'

Page 1 of 12



REFERENCE WELLPATH IDENTIFICATION		
Operator	ANTERO RESOURCES CORPORATION	Slot #03
Area	Tyler County, WV	Parachute Unit 3H
Field	Tyler	Parachute Unit 3H AWB
Facility	Stonely Pad	

REPORT SETUP INFORMATION	
Projection System	NAD27 / UTM Zone 17 North, US feet
North Reference	Grid
Scale	0.999601
Convergence at slot	0.05° East
Software System	WellArchitect® 5.1
User	Mccrrib
Report Generated	5/14/2018 at 9:53:52 AM
Database/Source file	WA_MPL_EASTERNUS_DefiniParachute_Unit_3H_AWP_Proj_19107_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North [ft]	East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
Slot Location	85.98	-24.40	1662231.38	14314120.33	39°25'04.620"N	80°55'21.930"W
Facility Reference Pt			1662255.77	14314034.38	39°25'03.770"N	80°55'21.620"W
Field Reference Pt			0.00	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 Ground Level at Slot (Slot #03)
	Section Origin
	Section Azimuth
	1006.50ft
	1006.50ft
	24.50ft
	N 0.00, E 0.00 ft
	339.99°

04/05/2019



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107'
Page 2 of 12



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #03
Operator	ANTERO RESOURCES CORPORATION	Well	Parachute Unit 3H
Area	Tyler County, WV	Wellbore	Parachute Unit 3H AWB
Field	Tyler		
Facility	Stoneyfly Pad		

WELLPATH DATA (227 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	182.770	0.00	0.00	0.00	0.00	1662231.38	14314120.33	39°25'04.620"N	80°55'21.930"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.00	182.770	24.50	0.00	0.00	0.00	1662231.38	14314120.33	39°25'04.620"N	80°55'21.930"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.150	182.770	109.50	-0.10	-0.11	-0.01	1662231.37	14314120.21	39°25'04.619"N	80°55'21.930"W	0.11	182.770	0.18	0.18	0.18	-208.51 Gyrodatta MS Gyro <17-1/2">(100-562')
209.50	0.030	37.140	209.50	-0.21	-0.22	0.00	1662231.38	14314120.10	39°25'04.618"N	80°55'21.928"W	0.22	178.936	0.18	-0.12	-145.63	
309.50	0.190	142.830	309.50	-0.35	-0.33	0.12	1662231.50	14314119.99	39°25'04.617"N	80°55'21.928"W	0.35	160.129	0.20	0.16	105.69	
409.50	0.130	149.860	409.50	-0.82	-0.56	0.28	1662231.65	14314119.76	39°25'04.614"N	80°55'21.926"W	0.63	153.763	0.06	-0.06	7.03	
509.50	0.170	197.840	509.50	-0.85	-0.80	0.29	1662231.66	14314119.52	39°25'04.612"N	80°55'21.926"W	0.85	160.196	0.13	0.04	47.98	
571.50	0.120	212.910	571.50	-0.96	-0.94	0.23	1662231.90	14314119.38	39°25'04.611"N	80°55'21.927"W	0.97	166.576	0.10	-0.08	24.31	
659.50	0.550	214.770	659.50	-1.26	-1.37	-0.07	1662231.31	14314118.96	39°25'04.606"N	80°55'21.931"W	1.37	182.747	0.49	0.49	2.11	Gyrodatta MS Gyro <12-1/4">(562')(650'-1210')
748.50	1.850	222.970	748.48	-2.16	-2.77	-1.29	1662230.09	14314117.56	39°25'04.593"N	80°55'21.946"W	3.06	204.944	1.47	1.48	9.21	
839.50	3.390	222.560	839.38	-4.07	-5.83	-4.11	1662227.27	14314114.50	39°25'04.562"N	80°55'21.982"W	7.13	215.194	1.69	1.69	-0.45	
935.50	5.300	226.200	935.10	-7.17	-10.99	-9.23	1662222.15	14314109.34	39°25'04.511"N	80°55'22.048"W	14.35	220.033	2.01	1.99	3.79	
1030.50	6.910	217.130	1029.56	-12.04	-18.58	-15.65	1662215.53	14314101.75	39°25'04.436"N	80°55'22.132"W	24.42	220.460	1.97	1.69	-9.55	
1124.50	7.840	210.790	1122.78	-19.16	-28.60	-22.54	1662208.84	14314091.74	39°25'04.338"N	80°55'22.218"W	36.41	218.248	1.31	0.99	-6.74	
1219.50	8.540	199.160	1216.82	-28.72	-40.83	-28.17	1662203.21	14314079.52	39°25'04.217"N	80°55'22.289"W	49.60	214.610	1.89	0.74	-12.24	
1330.50	8.630	201.610	1326.57	-41.34	-56.35	-33.95	1662197.44	14314063.99	39°25'04.063"N	80°55'22.363"W	65.79	211.064	0.34	0.08	2.21	WFT EM <12-1/4">(1210)(1321'-2582')
1424.50	8.890	207.810	1419.48	-51.49	-69.34	-39.93	1662191.46	14314051.02	39°25'03.935"N	80°55'22.440"W	80.01	209.939	1.04	0.28	6.60	
1518.50	9.080	210.820	1512.33	-61.05	-82.13	-47.12	1662184.27	14314038.23	39°25'03.809"N	80°55'22.531"W	94.69	209.845	0.54	0.20	3.20	
1613.50	9.430	215.810	1606.09	-70.16	-94.88	-55.52	1662175.88	14314025.48	39°25'03.683"N	80°55'22.638"W	109.93	210.333	0.92	0.37	5.25	
1707.50	9.530	215.700	1698.81	-78.87	-107.44	-64.56	1662166.84	14314012.93	39°25'03.559"N	80°55'22.754"W	125.35	211.001	0.11	0.11	-0.12	
1802.50	9.380	212.990	1792.52	-87.96	-120.32	-73.37	1662158.04	14314000.05	39°25'03.431"N	80°55'22.866"W	140.93	211.373	0.49	-0.16	-2.85	
1896.50	9.400	212.650	1885.26	-97.22	-133.21	-81.68	1662149.73	14313987.17	39°25'03.304"N	80°55'22.972"W	156.26	211.515	0.06	0.02	-0.36	
2085.50	11.100	223.020	2071.21	-114.85	-159.62	-102.67	1662128.75	14313960.77	39°25'03.043"N	80°55'23.094"W	172.50	211.922	1.49	1.01	6.40	
2180.50	11.350	221.080	2164.39	-123.52	-173.35	-115.05	1662116.37	14313947.04	39°25'02.908"N	80°55'23.240"W	189.79	212.750	1.16	0.79	4.56	
2274.50	10.960	218.510	2256.62	-132.65	-187.32	-126.70	1662104.73	14313933.09	39°25'02.770"N	80°55'23.546"W	208.06	213.572	0.48	0.26	-2.04	
2368.50	11.210	216.790	2348.86	-142.32	-201.62	-137.73	1662093.70	14313918.78	39°25'02.628"N	80°55'23.687"W	226.14	214.073	0.67	-0.41	-2.73	
2463.50	11.360	215.290	2442.03	-152.71	-216.66	-148.67	1662082.77	14313903.76	39°25'02.480"N	80°55'23.827"W	244.18	214.337	0.44	0.27	-1.83	
2541.50	10.790	213.080	2518.57	-161.46	-229.04	-157.09	1662074.35	14313891.47	39°25'02.358"N	80°55'23.934"W	262.76	214.457	0.35	0.16	-1.58	
2664.50	10.200	211.350	2639.51	-175.18	-247.99	-169.04	1662062.40	14313872.43	39°25'02.170"N	80°55'24.087"W	277.74	214.444	0.91	-0.73	-2.83	
											300.13	214.280	0.54	-0.48	-1.41	WFT EM <8-3/4">(2532')(2655'-6325')



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107
Page 3 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Tyler County, WV	Well	Parachute Unit 3H
Field	Tyler	Wellbore	Parachute Unit 3H AWB
Facility	Stonefly Pad		

WELLPATH DATA (227 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
2758.50	9.570	210.560	2732.12	-185.34	-261.83	-177.34	1662054.10	14313858.60	39°25'02.034"N	80°55'24.193"W	316.24	214.111	0.69	-0.67	-0.84	
2853.50	9.000	209.940	2825.87	-195.14	-275.07	-185.07	1662046.38	14313845.37	39°25'01.903"N	80°55'24.291"W	331.53	213.933	0.61	-0.60	-0.65	
2948.50	10.020	219.300	2919.57	-204.14	-287.90	-194.01	1662037.44	14313832.54	39°25'01.776"N	80°55'24.405"W	347.17	213.975	1.95	1.07	9.85	
3043.50	9.600	220.410	3013.18	-212.27	-300.33	-204.38	1662027.08	14313820.11	39°25'01.653"N	80°55'24.537"W	363.28	214.236	0.48	-0.44	1.17	
3137.50	8.760	219.360	3105.98	-219.78	-311.83	-214.00	1662017.46	14313808.62	39°25'01.540"N	80°55'24.660"W	378.20	214.461	0.91	-0.89	-1.12	
3232.50	8.180	217.880	3199.94	-227.06	-322.76	-222.74	1662008.73	14313797.69	39°25'01.432"N	80°55'24.772"W	392.16	214.610	0.65	-0.61	-1.56	
3327.50	9.740	218.350	3293.78	-234.87	-334.40	-231.88	1661999.59	14313786.06	39°25'01.317"N	80°55'24.888"W	406.93	214.738	1.64	1.64	0.49	
3422.50	9.650	216.450	3387.42	-243.48	-347.11	-241.59	1661989.88	14313773.36	39°25'01.191"N	80°55'25.012"W	422.91	214.839	0.35	-0.09	-2.00	
3516.50	8.930	216.700	3480.19	-251.84	-359.29	-250.63	1661980.84	14313761.18	39°25'01.071"N	80°55'25.127"W	438.07	214.899	0.77	-0.77	0.27	
3611.50	8.450	215.100	3574.10	-259.88	-370.92	-259.05	1661972.43	14313749.56	39°25'00.956"N	80°55'25.235"W	452.42	214.931	0.57	-0.51	-1.68	
3705.50	9.810	216.050	3666.91	-268.30	-383.04	-267.74	1661963.75	14313737.44	39°25'00.836"N	80°55'25.346"W	467.34	214.953	1.46	1.45	1.01	
3800.50	9.490	214.370	3760.56	-277.38	-396.05	-276.92	1661954.56	14313724.44	39°25'00.708"N	80°55'25.463"W	483.26	214.962	0.45	-0.34	-1.77	
3895.50	8.690	212.340	3854.37	-286.33	-408.58	-285.18	1661946.31	14313711.91	39°25'00.584"N	80°55'25.568"W	498.26	214.915	0.91	-0.84	-2.14	
3989.50	10.430	215.710	3947.06	-295.46	-421.49	-293.95	1661937.55	14313699.01	39°25'00.457"N	80°55'25.680"W	513.86	214.892	1.94	1.85	3.59	
4084.50	10.280	215.140	4040.51	-305.15	-435.40	-303.85	1661927.65	14313686.10	39°25'00.319"N	80°55'25.806"W	530.94	214.909	0.19	-0.16	-0.60	
4178.50	9.300	210.960	4133.14	-314.72	-448.77	-312.58	1661918.92	14313673.73	39°25'00.187"N	80°55'25.918"W	546.90	214.858	1.29	-1.04	-4.45	
4273.50	8.440	208.900	4227.01	-324.14	-461.46	-319.90	1661911.60	14313659.05	39°25'00.062"N	80°55'26.011"W	561.50	214.731	0.96	-0.91	-2.17	
4368.50	7.740	205.700	4321.06	-333.19	-473.33	-326.04	1661905.46	14313647.19	39°24'59.945"N	80°55'26.089"W	574.76	214.560	0.88	-0.74	-3.37	
4463.50	9.240	206.500	4414.03	-342.80	-485.79	-332.16	1661899.55	14313634.73	39°24'59.822"N	80°55'26.167"W	588.49	214.362	1.60	1.60	0.85	
4557.50	9.490	208.230	4507.76	-353.27	-499.51	-339.26	1661892.25	14313621.01	39°24'59.686"N	80°55'26.258"W	603.83	214.184	0.40	0.26	1.82	
4651.50	9.100	207.380	4600.53	-363.46	-512.94	-346.35	1661885.17	14313607.59	39°24'59.553"N	80°55'26.349"W	618.92	214.028	0.44	-0.41	-0.90	
4746.50	8.690	206.480	4694.39	-373.49	-526.03	-353.00	1661878.51	14313594.50	39°24'59.424"N	80°55'26.434"W	633.50	213.864	0.46	-0.43	-0.95	
4840.50	10.320	213.450	4787.10	-383.39	-539.42	-360.81	1661870.71	14313581.12	39°24'59.292"N	80°55'26.533"W	648.97	213.778	2.12	1.73	7.41	
4935.50	10.440	212.790	4880.54	-393.66	-553.75	-370.16	1661861.36	14313566.79	39°24'59.150"N	80°55'26.652"W	666.08	213.761	0.18	0.13	-0.69	
5029.50	10.300	209.100	4973.01	-404.31	-568.26	-378.86	1661852.67	14313552.30	39°24'59.007"N	80°55'26.763"W	682.97	213.692	0.72	-0.15	-3.93	
5123.50	10.050	207.550	5065.53	-415.35	-582.87	-386.74	1661844.79	14313537.69	39°24'58.862"N	80°55'26.864"W	699.51	213.565	0.39	-0.27	-1.65	
5218.50	9.820	220.950	5159.12	-424.87	-596.34	-395.89	1661835.65	14313524.22	39°24'58.729"N	80°55'26.981"W	715.79	213.579	2.44	-0.24	14.11	
5313.50	9.780	222.140	5252.73	-432.58	-608.44	-406.61	1661824.93	14313512.13	39°24'58.610"N	80°55'27.117"W	731.80	213.754	0.22	-0.04	1.25	
5407.50	8.240	212.760	5345.57	-440.38	-620.03	-415.61	1661815.93	14313500.55	39°24'58.495"N	80°55'27.232"W	746.44	213.834	2.26	-1.64	-9.98	
5502.50	8.210	207.860	5439.60	-449.05	-631.75	-422.47	1661809.08	14313488.83	39°24'58.380"N	80°55'27.320"W	759.99	213.772	0.74	-0.03	-5.16	



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107'

Page 4 of 12



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #03
Operator	ANTERO RESOURCES CORPORATION	Well	Parachute Unit 3H
Area	Tyler County, WV	Wellbore	Parachute Unit 3H AWB
Field	Tyler		
Facility	Stoneyfield Pad		

WELLPATH DATA (227 stations) † = interpolated/extrapolated station																
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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Comments
5597.50	8.520	203.690	5533.59	-458.69	-644.19	-428.46	1661803.08	14313476.39	39°24'58.25"N	80°55'27.396"W	773.67	213.629	0.72	0.33	-4.39	
5660.50	9.670	219.360	5595.80	-464.76	-652.56	-433.70	1661797.85	14313498.03	39°24'58.174"N	80°55'27.463"W	783.53	213.608	4.32	1.83	24.87	
5691.50	10.130	233.250	5626.35	-466.87	-656.20	-437.53	1661794.02	14313484.39	39°24'58.138"N	80°55'27.512"W	788.69	213.694	7.83	1.48	44.81	
5723.50	10.530	247.600	5657.83	-467.81	-659.00	-442.49	1661789.06	14313461.59	39°24'58.110"N	80°55'27.575"W	793.78	213.880	8.12	1.25	44.84	
5754.50	10.310	264.270	5688.33	-467.24	-660.36	-447.87	1661783.68	14313460.23	39°24'58.097"N	80°55'27.644"W	797.91	214.146	9.72	-0.71	53.77	
5786.50	10.610	281.700	5719.80	-464.98	-660.05	-453.61	1661777.95	14313460.54	39°24'58.100"N	80°55'27.717"W	800.89	214.498	9.90	0.94	54.47	
5817.50	12.820	297.150	5750.16	-460.96	-657.90	-459.46	1661772.10	14313462.69	39°24'58.122"N	80°55'27.791"W	802.46	214.930	12.32	7.13	49.84	
5848.50	15.870	305.040	5780.20	-454.96	-653.89	-466.00	1661765.57	14313466.70	39°24'58.161"N	80°55'27.875"W	802.95	215.476	11.66	9.84	25.45	
5880.50	18.510	309.720	5810.77	-446.99	-648.13	-473.49	1661758.08	14313472.45	39°24'58.218"N	80°55'27.970"W	802.66	216.150	9.31	8.25	14.62	
5911.50	20.720	314.060	5839.97	-437.80	-641.17	-481.22	1661750.35	14313479.41	39°24'58.287"N	80°55'28.068"W	801.67	216.889	8.53	7.13	14.00	
5942.50	22.410	318.520	5868.80	-427.37	-632.93	-489.07	1661742.50	14313487.65	39°24'58.359"N	80°55'28.168"W	799.87	217.694	7.59	5.45	14.39	
5974.50	23.660	322.160	5898.25	-415.58	-623.29	-497.05	1661734.52	14313497.29	39°24'58.464"N	80°55'28.270"W	797.21	218.571	5.92	3.91	11.38	
6005.50	25.320	324.830	5926.46	-403.26	-612.96	-504.89	1661726.89	14313507.61	39°24'58.566"N	80°55'28.367"W	793.99	219.467	6.43	5.35	8.61	
6037.50	27.140	328.720	5955.16	-389.55	-601.26	-512.63	1661718.95	14313519.30	39°24'58.692"N	80°55'28.468"W	790.13	220.451	6.26	5.69	5.91	
6069.50	31.280	330.990	6009.15	-359.64	-575.12	-528.26	1661703.33	14313531.81	39°24'58.805"N	80°55'28.568"W	785.80	221.475	9.05	8.16	8.23	
6131.50	32.970	332.040	6036.25	-342.81	-560.16	-536.37	1661695.22	14313560.39	39°24'59.088"N	80°55'28.770"W	775.55	222.568	5.91	5.19	5.55	
6157.00†	34.352	332.454	6057.47	-328.80	-547.65	-544.89	1661688.64	14313572.89	39°24'59.239"N	80°55'28.854"W	771.18	224.753	5.49	5.42	1.63	Sycamore. 6157' MD / 6057' TVD
6162.50	34.650	332.540	6062.00	-325.71	-544.89	-544.39	1661682.70	14313575.65	39°24'59.212"N	80°55'28.854"W	770.24	224.974	5.49	5.49	5.42	
6194.50	37.640	334.110	6087.84	-306.97	-528.02	-552.85	1661678.74	14313592.51	39°24'59.406"N	80°55'28.960"W	764.50	226.316	9.78	9.34	4.91	
6226.50	40.140	335.040	6112.75	-286.97	-509.88	-561.47	1661670.13	14313610.65	39°24'59.585"N	80°55'29.090"W	758.44	227.757	8.02	7.81	2.91	
6257.50	42.120	334.530	6136.10	-266.67	-491.43	-570.16	1661661.44	14313629.09	39°24'59.788"N	80°55'29.200"W	752.72	229.241	6.48	6.39	-1.65	
6288.50	43.980	333.710	6158.75	-245.62	-472.40	-579.40	1661652.21	14313648.12	39°24'59.956"N	80°55'29.318"W	747.67	230.809	6.27	6.00	-2.65	
6320.50	46.730	333.450	6181.23	-222.99	-452.01	-589.53	1661642.08	14313668.50	39°25'00.137"N	80°55'29.446"W	742.87	232.522	8.61	8.59	-0.81	
6334.50	48.030	333.740	6190.71	-212.76	-442.78	-594.17	1661637.50	14313677.72	39°25'00.249"N	80°55'29.505"W	740.96	233.303	9.41	9.29	2.07	
6374.00†	51.610	335.348	6216.19	-182.72	-415.53	-607.07	1661624.55	14313704.96	39°25'00.518"N	80°55'29.670"W	735.67	235.609	9.58	9.06	4.07	Middlesex: 6374' MD / 6216' TVD
6384.00	52.520	335.730	6222.84	-174.86	-408.35	-610.34	1661621.28	14313712.13	39°25'00.589"N	80°55'29.711"W	734.35	236.215	9.58	9.10	3.82	BH AT Curve <8-1/2"> (6334.50) (6384-19082)
6465.00	58.420	338.250	6268.24	-108.25	-346.95	-636.36	1661595.27	14313773.52	39°25'01.196"N	80°55'30.042"W	724.79	241.400	7.72	7.28	3.11	
6512.00	61.800	338.820	6291.66	-67.52	-309.03	-651.26	1661580.37	14313811.42	39°25'01.571"N	80°55'30.232"W	720.86	244.615	7.27	7.19	1.21	
6542.00†	63.900	339.243	6305.95	-40.83	-284.11	-660.82	1661570.83	14313836.33	39°25'01.818"N	80°55'30.353"W	719.30	246.736	7.11	7.00	1.41	Burket: 6542' MD / 6305' TVD



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107'

Page 5 of 12



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #03
Operator	ANTERO RESOURCES CORPORATION	Well	Parachute Unit 3H
Area	Tyler County, WV	Wellbore	Parachute Unit 3H AWB
Field	Tyler		
Facility	Stoneyfield Pad		

WELLPATH DATA (227 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
8560.00	65.160	339.490	6313.09	-24.59	-268.90	-666.54	1661565.10	14313851.54	39°25'01.968"N	80°55'30.426"W	718.74	248.030	7.11	7.00	1.37	
8607.00	67.950	340.240	6331.79	18.53	-228.42	-681.38	1661550.27	14313892.00	39°25'02.368"N	80°55'30.614"W	718.65	251.467	6.11	5.94	1.60	July, 6607MD / 6332TVD
8655.00	70.090	340.140	6348.97	63.34	-186.25	-696.57	1661535.09	14313934.15	39°25'02.785"N	80°55'30.807"W	721.04	255.030	4.46	4.46	-0.21	
8668.00†	70.792	340.330	6363.32	75.59	-174.73	-700.71	1661530.95	14313945.67	39°25'02.899"N	80°55'30.860"W	722.17	255.999	5.58	5.40	1.48	POE, Marcellus, 6668MD / 6353TVD
8702.00	72.630	340.820	6363.99	107.87	-144.28	-711.45	1661520.22	14313976.10	39°25'03.200"N	80°55'30.997"W	725.93	258.536	5.58	5.40	1.44	
8749.00	78.190	341.370	6375.83	153.33	-101.27	-726.17	1661505.49	14314019.10	39°25'03.625"N	80°55'31.184"W	733.20	262.061	11.88	11.83	1.17	
8794.00	84.610	342.160	6382.55	197.78	-59.03	-740.09	1661491.59	14314061.32	39°25'04.043"N	80°55'31.361"W	742.44	265.440	14.37	14.27	1.76	
8842.00	90.280	342.430	6384.69	245.67	-13.37	-754.66	1661477.01	14314106.96	39°25'05.386"N	80°55'31.546"W	754.78	268.985	11.83	11.81	0.56	
8937.00	90.370	341.130	6384.15	340.62	76.87	-784.37	1661447.32	14314197.16	39°25'05.050"N	80°55'31.923"W	788.12	275.597	1.37	0.09	-1.37	
7031.00	90.800	339.870	6383.19	434.61	165.47	-815.74	1661415.96	14314285.73	39°25'06.262"N	80°55'32.767"W	832.35	281.467	1.42	0.46	-1.34	
7127.00	90.590	337.370	6382.03	530.57	254.85	-850.73	1661380.98	14314375.07	39°25'07.146"N	80°55'32.767"W	888.09	286.676	2.61	-0.22	-2.60	
7318.00	91.170	337.150	6379.10	721.33	430.98	-924.56	1661307.19	14314551.13	39°25'08.887"N	80°55'33.706"W	1020.07	294.993	0.32	0.30	-0.12	
7412.00	90.770	336.660	6377.50	815.18	517.43	-961.42	1661270.34	14314637.55	39°25'09.742"N	80°55'34.175"W	1091.82	298.289	0.67	-0.43	-0.52	
7506.00	90.800	337.370	6376.22	909.05	603.96	-998.12	1661233.65	14314724.05	39°25'10.598"N	80°55'34.642"W	1166.63	301.178	0.76	0.03	0.76	
7694.00	90.520	337.490	6375.13	1002.94	690.76	-1034.20	1661197.59	14314810.81	39°25'11.456"N	80°55'35.100"W	1243.67	303.740	0.32	-0.30	0.13	
7894.00	91.200	335.920	6373.72	1096.78	777.08	-1071.37	1661160.44	14314897.09	39°25'12.309"N	80°55'35.573"W	1323.51	305.954	1.82	0.72	-1.67	
7788.00	90.770	335.240	6372.11	1190.48	862.66	-1110.22	1661121.60	14314982.64	39°25'13.155"N	80°55'36.067"W	1405.98	307.848	0.86	-0.46	-0.72	
7883.00	90.400	337.650	6371.14	1285.29	949.73	-1148.18	1661083.65	14315069.68	39°25'14.016"N	80°55'36.550"W	1490.07	309.596	2.57	-0.39	2.54	
7977.00	89.780	338.470	6370.99	1379.23	1036.92	-1183.31	1661048.55	14315156.83	39°25'14.878"N	80°55'36.997"W	1573.35	311.228	1.09	-0.66	0.87	
8071.00	90.370	340.200	6370.87	1473.22	1124.87	-1216.48	1661015.39	14315244.74	39°25'15.748"N	80°55'37.418"W	1656.85	312.759	1.94	0.63	1.84	
8166.00	90.950	341.410	6369.77	1568.21	1214.58	-1247.71	1660984.17	14315334.42	39°25'16.635"N	80°55'37.816"W	1741.26	314.229	1.41	0.61	1.27	
8260.00	90.770	343.240	6368.36	1662.11	1304.13	-1276.24	1660955.64	14315423.93	39°25'17.520"N	80°55'38.178"W	1824.71	315.619	1.96	-0.19	1.95	
8355.00	90.430	344.180	6367.37	1756.91	1395.31	-1302.89	1660929.01	14315515.08	39°25'18.421"N	80°55'38.517"W	1909.03	316.962	1.05	-0.36	0.98	
8450.00	89.750	343.760	6367.22	1851.68	1486.62	-1329.12	1660902.79	14315606.34	39°25'19.324"N	80°55'38.850"W	1994.14	318.201	0.84	-0.72	-0.44	
8545.00	91.420	344.390	6366.25	1946.43	1577.96	-1355.19	1660876.73	14315697.65	39°25'20.227"N	80°55'39.181"W	2080.02	319.343	1.88	1.76	0.66	
8640.00	90.430	343.310	6365.71	2041.20	1669.20	-1381.61	1660850.32	14315788.85	39°25'21.129"N	80°55'39.517"W	2166.81	320.385	1.54	-1.04	-1.14	
8735.00	90.250	343.160	6364.15	2136.04	1760.16	-1409.01	1660822.93	14315879.78	39°25'22.028"N	80°55'39.865"W	2254.65	321.323	0.25	-0.19	-0.16	
8830.00	90.280	342.660	6363.71	2230.92	1850.96	-1436.93	1660795.03	14315970.54	39°25'22.926"N	80°55'40.220"W	2343.25	322.177	0.53	0.03	-0.53	
8925.00	91.080	342.760	6362.58	2325.80	1941.66	-1465.16	1660766.80	14316061.21	39°25'23.822"N	80°55'40.579"W	2432.44	322.962	0.85	0.84	0.11	
9019.00	90.340	342.310	6361.42	2419.70	2031.32	-1493.37	1660738.61	14316150.83	39°25'24.709"N	80°55'40.938"W	2521.19	323.678	0.92	-0.79	-0.48	



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107'
Page 6 of 12



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #03
Operator	ANTERO RESOURCES CORPORATION	Well	Parachute Unit 3H
Area	Tyler County, WV	Wellbore	Parachute Unit 3H AWB
Field	Tyler		
Facility	Stoneyly Pad		

WELLPATH DATA (227 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
9112.00	90.060	341.990	6361.09	2512.64	2119.84	-1521.87	16607.10.11	14318239.32	39°25'25.584"N	80°55'41.300"W	2609.57	324.325	0.46	-0.30	-0.34	
9208.00	90.000	340.770	6361.04	2608.61	2210.82	-1552.53	1660679.47	14316330.25	39°25'26.483"N	80°55'41.690"W	2701.49	324.922	1.27	-0.06	-1.27	
9302.00	90.920	341.550	6360.29	2702.58	2299.78	-1582.88	1660649.13	14316419.18	39°25'27.363"N	80°55'42.075"W	2791.86	325.451	1.28	0.98	0.83	
9396.00	89.780	339.400	6359.71	2796.57	2388.36	-1614.29	1660617.73	14316507.73	39°25'28.239"N	80°55'42.475"W	2882.74	325.945	2.59	-1.21	-2.29	
9489.00	91.230	339.360	6358.89	2889.56	2475.40	-1647.04	1660584.99	14316594.73	39°25'29.099"N	80°55'42.891"W	2973.27	326.362	1.56	1.56	-0.04	
9583.00	90.650	337.850	6357.35	2983.51	2562.91	-1681.33	1660550.72	14316682.20	39°25'29.984"N	80°55'43.327"W	3065.18	326.734	1.72	-0.62	-1.61	
9678.00	90.400	338.550	6356.48	3078.46	2651.11	-1716.61	1660515.46	14316770.37	39°25'30.836"N	80°55'43.776"W	3158.34	327.077	0.78	-0.26	0.74	
9773.00	89.910	340.400	6356.22	3173.46	2740.07	-1749.91	1660482.16	14316859.30	39°25'31.716"N	80°55'44.200"W	3251.18	327.436	2.01	-0.52	1.95	
9867.00	90.370	338.130	6355.99	3267.44	2827.98	-1783.19	1660448.90	14316947.17	39°25'32.595"N	80°55'44.623"W	3343.24	327.766	2.46	0.49	-2.41	
9961.00	91.020	339.440	6354.85	3361.41	2915.60	-1817.20	1660414.90	14317034.75	39°25'33.451"N	80°55'45.055"W	3435.54	328.066	1.56	0.69	1.39	
10056.00	90.680	340.340	6353.44	3456.40	3004.80	-1849.86	1660382.26	14317123.92	39°25'34.333"N	80°55'45.471"W	3528.57	328.382	1.01	-0.36	0.95	
10150.00	91.170	342.780	6351.93	3550.34	3093.95	-1879.59	1660352.54	14317213.03	39°25'35.214"N	80°55'45.848"W	3620.14	328.721	2.65	0.52	2.60	
10244.00	90.770	342.550	6350.34	3644.23	3183.66	-1907.61	1660324.53	14317302.71	39°25'36.101"N	80°55'46.205"W	3711.43	329.071	0.50	-0.43	-0.27	
10337.00	91.050	340.520	6348.86	3737.18	3271.85	-1937.07	1660295.08	14317390.87	39°25'36.973"N	80°55'46.579"W	3802.27	329.373	2.18	0.30	-2.16	
10431.00	90.770	339.610	6347.37	3831.17	3360.21	-1969.12	1660263.05	14317479.19	39°25'37.847"N	80°55'46.987"W	3894.67	329.629	1.01	-0.30	-0.97	
10525.00	90.650	340.370	6346.20	3925.16	3448.53	-2001.28	1660230.90	14317567.47	39°25'38.720"N	80°55'47.396"W	3987.16	329.872	0.82	-0.13	0.81	
10618.00	90.550	341.950	6345.23	4018.13	3536.54	-2031.31	1660200.88	14317655.44	39°25'39.590"N	80°55'47.778"W	4078.40	330.128	1.70	-0.11	1.70	
10712.00	90.400	343.890	6344.45	4112.00	3626.37	-2058.97	1660173.24	14317745.24	39°25'40.478"N	80°55'48.129"W	4170.12	330.413	2.01	-0.16	2.00	
10900.00	90.620	340.850	6342.77	4299.82	3805.48	-2115.99	166016.23	14317924.28	39°25'42.248"N	80°55'48.854"W	4354.21	330.924	1.59	0.12	-1.59	
10994.00	90.550	339.250	6341.81	4393.81	3893.84	-2149.06	1660084.18	14318012.60	39°25'43.122"N	80°55'49.262"W	4447.03	331.116	1.70	-0.07	-1.70	
11089.00	90.580	337.200	6340.88	4488.75	3982.05	-2183.30	1660048.95	14318100.77	39°25'43.994"N	80°55'49.710"W	4541.31	331.265	2.16	0.03	-2.16	
11184.00	90.460	335.150	6340.01	4583.53	4068.94	-2221.67	1660010.60	14318187.64	39°25'44.853"N	80°55'50.198"W	4635.96	331.365	2.16	-0.13	-2.16	
11279.00	90.490	332.660	6339.23	4677.99	4154.25	-2263.45	1659968.83	14318272.91	39°25'45.697"N	80°55'50.730"W	4730.86	331.416	2.62	0.03	-2.62	
11374.00	90.310	331.900	6338.56	4772.13	4238.34	-2307.64	1659924.66	14318356.97	39°25'46.528"N	80°55'51.292"W	4825.84	331.433	0.82	-0.19	-0.80	
11469.00	89.940	332.980	6338.36	4866.30	4322.56	-2351.59	1659880.73	14318441.15	39°25'47.361"N	80°55'51.851"W	4920.83	331.453	1.20	-0.39	1.14	
11564.00	90.280	337.990	6338.17	4960.98	4408.97	-2391.01	1659841.94	14318527.53	39°25'48.215"N	80°55'52.353"W	5015.57	331.529	5.29	0.36	5.27	
11659.00	90.490	337.000	6337.54	5055.88	4496.73	-2427.36	1659804.99	14318615.25	39°25'49.083"N	80°55'52.815"W	5110.06	331.640	1.07	0.22	-1.04	
11754.00	90.460	336.120	6336.75	5150.71	4583.89	-2465.15	1659767.22	14318702.38	39°25'49.945"N	80°55'53.296"W	5204.71	331.729	0.93	-0.03	-0.93	
11849.00	90.520	338.550	6335.94	5245.60	4671.54	-2501.75	1659730.63	14318789.99	39°25'50.811"N	80°55'53.762"W	5299.25	331.830	2.56	0.06	2.56	
11944.00	90.430	340.920	6335.15	5340.58	4760.65	-2534.65	1659697.74	14318879.07	39°25'51.682"N	80°55'54.180"W	5393.36	331.968	2.50	-0.09	2.49	



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107

Page 7 of 12



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #03
Operator	ANTERO RESOURCES CORPORATION	Well	Parachute Unit 3H
Area	Tyler County, WV	Wellbore	Parachute Unit 3H AWB
Field	Tyler		
Facility	Stoneyfield Pad		

WELLPATH DATA (227 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Closure Dist. (ft)	Closure Dir. (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
12040.00	90.580	346.640	6334.30	5436.33	4852.79	-2561.46	1659670.95	14318971.17	39°25'52.603"N	80°55'54.921"W	5487.73	332.174	5.96	0.16	5.96	
12134.00	90.490	349.650	6333.42	5529.37	4944.77	-2580.76	1659851.65	14319063.11	39°25'53.512"N	80°55'54.766"W	5577.32	332.439	3.20	-0.10	3.20	
12230.00	90.680	347.510	6332.44	5624.28	5038.86	-2599.77	1659632.65	14319157.16	39°25'54.442"N	80°55'55.007"W	5670.00	332.709	2.24	0.20	-2.23	
12325.00	90.820	344.700	6331.37	5718.72	5131.07	-2622.58	1659609.85	14319249.33	39°25'55.354"N	80°55'55.297"W	5762.44	332.928	2.96	-0.06	-2.96	
12420.00	90.580	341.870	6330.37	5813.55	5222.04	-2649.90	1659582.54	14319340.27	39°25'56.253"N	80°55'55.644"W	5855.91	333.095	2.98	-0.04	-2.98	
12516.00	90.550	339.300	6329.42	5909.53	5312.57	-2681.80	1659550.85	14319430.76	39°25'57.148"N	80°55'56.050"W	5951.09	333.215	2.68	-0.03	-2.68	
12611.00	90.680	339.630	6328.40	6004.52	5401.52	-2715.13	1659517.34	14319519.68	39°25'58.027"N	80°55'56.474"W	6045.53	333.313	0.37	0.14	0.35	
12709.00	90.580	338.560	6327.29	6098.50	5489.33	-2748.66	1659483.81	14319607.45	39°25'58.896"N	80°55'56.901"W	6139.05	333.402	1.14	0.00	-1.14	
12802.00	90.340	339.200	6326.25	6192.49	5577.19	-2782.07	1659450.43	14319695.27	39°25'59.764"N	80°55'57.325"W	6232.57	333.489	1.33	-0.11	1.33	
12896.00	90.800	337.630	6324.57	6285.48	5664.30	-2814.63	1659417.98	14319782.35	39°26'00.625"N	80°55'57.740"W	6325.06	333.577	0.70	-0.26	-0.66	
13080.00	91.050	336.970	6323.05	6473.32	5838.40	-2885.47	1659383.32	14319869.71	39°26'01.489"N	80°55'58.179"W	6418.72	333.648	1.74	0.49	-1.67	
13174.00	90.950	337.280	6321.41	6567.19	5925.00	-2922.01	1659310.54	14320042.95	39°26'02.347"N	80°55'58.641"W	6512.52	333.700	0.75	0.27	-0.70	
13268.00	90.860	337.260	6319.93	6661.07	6011.69	-2958.32	1659274.24	14320129.60	39°26'03.203"N	80°55'59.106"W	6606.34	333.749	0.35	-0.11	0.33	
13363.00	90.980	336.310	6318.40	6755.91	6098.98	-2995.77	1659236.81	14320216.86	39°26'04.060"N	80°56'00.044"W	6700.15	333.798	0.10	-0.10	-0.02	
13457.00	91.170	336.040	6316.64	6849.68	6184.96	-3033.73	1659198.86	14320302.80	39°26'04.923"N	80°56'00.527"W	6795.01	333.840	1.01	0.13	-1.00	
13550.00	90.860	337.540	6314.99	6942.52	6270.41	-3070.37	1659162.23	14320388.22	39°26'05.618"N	80°56'00.993"W	6888.92	333.872	0.35	0.20	-0.29	
13641.00	90.800	338.770	6313.68	7033.46	6354.87	-3104.23	1659128.39	14320472.64	39°26'06.433"N	80°56'01.424"W	6981.78	333.911	1.65	-0.33	1.61	
13737.00	90.890	341.010	6312.28	7129.42	6444.20	-3139.37	1659093.27	14320561.94	39°26'07.336"N	80°56'01.871"W	7072.53	333.965	1.35	-0.07	1.35	
13831.00	90.950	339.250	6310.80	7223.39	6531.81	-3173.40	1659059.25	14320649.51	39°26'08.336"N	80°56'02.304"W	7168.22	334.026	0.50	0.06	-0.50	
13925.00	90.890	341.010	6309.29	7317.37	6620.20	-3205.34	1659027.32	14320737.86	39°26'09.202"N	80°56'02.710"W	7261.88	334.088	1.03	0.10	1.02	
14019.00	90.980	339.790	6307.76	7411.36	6708.74	-3238.87	1658995.80	14320826.37	39°26'10.076"N	80°56'03.111"W	7355.35	334.165	1.87	-0.06	1.87	
14115.00	90.860	337.810	6306.21	7507.32	6796.22	-3271.58	1658961.11	14320915.82	39°26'10.951"N	80°56'03.553"W	7448.79	334.243	1.30	0.10	-1.30	
14209.00	90.490	339.940	6305.11	7601.29	6885.89	-3305.45	1658927.25	14321003.46	39°26'11.836"N	80°56'03.984"W	7544.47	334.301	2.07	-0.12	-2.06	
14304.00	90.460	339.860	6304.32	7696.28	6975.11	-3338.10	1658894.61	14321092.63	39°26'12.702"N	80°56'04.399"W	7638.17	334.357	2.30	-0.39	2.27	
14399.00	90.580	341.730	6303.46	7791.27	7064.81	-3369.35	1658863.38	14321182.30	39°26'13.584"N	80°56'04.796"W	7732.72	334.425	0.09	-0.03	-0.08	
14495.00	90.580	345.980	6302.49	7887.02	7157.00	-3396.04	1658836.70	14321274.45	39°26'14.471"N	80°56'05.136"W	7827.14	334.503	1.97	0.13	1.97	
14590.00	91.510	351.070	6300.75	7980.92	7250.05	-3414.93	1658817.82	14321367.47	39°26'15.383"N	80°56'05.375"W	7921.85	334.615	4.43	0.00	4.43	
14685.00	91.290	347.780	6298.43	8074.60	7343.40	-3432.35	1658800.40	14321460.78	39°26'16.302"N	80°56'05.597"W	8014.05	334.779	5.45	0.98	5.36	
14781.00	91.220	344.350	6297.25	8170.03	7436.55	-3455.47	1658777.30	14321553.89	39°26'17.225"N	80°56'05.890"W	8105.96	334.948	3.47	-0.23	-3.46	
14877.00	91.220	344.350	6296.00	8267.25	7530.00	-3478.00	1658750.00	14321647.00	39°26'18.146"N	80°56'06.211"W	8200.15	335.078	3.77	-1.22	-3.57	



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107
Page 8 of 12



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #03
Operator	ANTERO RESOURCES CORPORATION	Well	Parachute Unit 3H
Area	Tyler County, WV	Wellbore	Parachute Unit 3H AWB
Field	Tyler		
Facility	Stoneyly Pad		

WELLPATH DATA (227 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
14876.00	90.060	344.310	6297.10	8264.76	7528.02	-3481.13	1658751.65	14321645.32	39°26'19.050"N	80°56'06.217"W	8293.93	335.183	0.08	-0.06	-0.04	
14972.00	90.250	342.950	6296.84	8360.56	7620.13	-3508.18	1658724.60	14321737.39	39°26'19.961"N	80°56'06.561"W	8388.90	335.279	1.43	0.20	-1.42	
15068.00	90.090	344.890	6296.55	8456.33	7712.36	-3534.77	1658698.02	14321829.59	39°26'20.873"N	80°56'06.899"W	8483.82	335.377	2.03	-0.17	2.02	
15167.00	90.460	346.480	6296.08	8554.84	7808.29	-3559.25	1658673.56	14321925.48	39°26'21.821"N	80°56'07.210"W	8581.23	335.495	1.65	0.37	1.61	
15263.00	90.490	345.630	6295.28	8650.30	7901.45	-3582.38	1658650.43	14322018.61	39°26'22.742"N	80°56'07.504"W	8675.62	335.611	0.89	0.03	-0.89	
15359.00	90.620	341.030	6294.35	8746.11	7993.39	-3609.91	1658622.91	14322110.51	39°26'23.651"N	80°56'07.854"W	8770.73	335.695	4.79	0.14	-4.79	
15455.00	90.490	339.850	6293.42	8842.10	8083.84	-3642.05	1658590.79	14322200.92	39°26'24.545"N	80°56'08.263"W	8866.40	335.747	1.24	-0.14	-1.23	
15459.00	90.520	335.970	6292.59	8936.01	8170.92	-3677.39	1658555.46	14322287.27	39°26'25.406"N	80°56'08.712"W	8960.31	335.769	4.13	0.03	-4.13	
15643.00	90.580	337.450	6291.69	9029.85	8257.26	-3714.55	1658518.31	14322374.21	39°26'26.259"N	80°56'09.185"W	9054.29	335.779	1.58	0.06	1.57	
15737.00	90.650	332.630	6290.68	9123.47	8342.45	-3754.21	1658478.68	14322459.42	39°26'27.101"N	80°56'09.690"W	9148.25	335.772	5.13	0.07	-5.13	
15830.00	90.520	334.480	6289.73	9215.87	8425.71	-3795.62	1658437.28	14322542.65	39°26'27.925"N	80°56'10.217"W	9241.17	335.749	1.99	-0.14	1.99	
15925.00	90.460	337.910	6288.92	9310.65	8512.61	-3833.96	1658398.96	14322629.52	39°26'28.784"N	80°56'10.705"W	9336.15	335.754	3.61	-0.06	3.61	
16019.00	90.520	340.770	6288.12	9404.63	8600.55	-3867.12	1658365.81	14322717.43	39°26'29.653"N	80°56'11.127"W	9429.96	335.790	3.04	0.06	3.04	
16112.00	90.400	339.900	6287.37	9497.62	8688.13	-3898.41	1658334.53	14322804.96	39°26'30.519"N	80°56'11.525"W	9522.66	335.834	0.94	-0.13	-0.94	
16207.00	90.580	342.230	6286.56	9592.60	8777.97	-3929.24	1658303.72	14322894.78	39°26'31.407"N	80°56'11.917"W	9617.26	335.886	2.46	0.19	2.45	
16300.00	90.550	341.040	6285.64	9685.55	8866.23	-3958.54	1658274.43	14322983.00	39°26'32.280"N	80°56'12.290"W	9709.79	335.941	1.28	-0.03	-1.28	
16394.00	90.580	341.630	6284.71	9779.52	8955.28	-3988.82	1658244.36	14323072.01	39°26'33.160"N	80°56'12.672"W	9803.38	335.992	0.63	0.03	0.63	
16489.00	90.520	340.920	6283.80	9874.49	9045.25	-4019.11	1658213.68	14323161.95	39°26'34.049"N	80°56'13.060"W	9897.97	336.043	0.75	-0.06	-0.75	
16585.00	90.310	339.600	6283.00	9970.49	9135.60	-4051.54	1658181.47	14323252.26	39°26'34.943"N	80°56'13.473"W	9993.71	336.083	1.39	-0.22	-1.38	
16681.00	90.580	339.590	6282.36	10068.48	9225.58	-4085.01	1658148.01	14323342.20	39°26'35.832"N	80°56'13.898"W	10069.53	336.117	0.28	0.28	-0.01	
16776.00	90.550	339.800	6281.42	10161.48	9314.67	-4117.97	1658115.06	14323431.26	39°26'36.713"N	80°56'14.318"W	10184.34	336.150	0.22	-0.03	0.22	
16870.00	90.520	340.580	6280.55	10255.47	9403.10	-4149.83	1658083.22	14323519.65	39°26'37.587"N	80°56'14.723"W	10278.10	336.187	0.83	-0.03	0.83	
16964.00	90.460	339.860	6279.74	10349.46	9491.55	-4181.63	1658051.42	14323608.07	39°26'38.462"N	80°56'15.128"W	10371.87	336.223	0.77	-0.06	-0.77	
17059.00	90.490	336.790	6278.95	10444.41	9579.82	-4216.72	1658016.35	14323696.30	39°26'39.334"N	80°56'15.574"W	10466.79	336.243	3.23	0.03	-3.23	
17154.00	90.430	334.390	6278.20	10538.12	9665.12	-4255.56	1657977.52	14323781.86	39°26'40.180"N	80°56'16.068"W	10560.77	336.237	2.55	-0.06	-2.55	
17248.00	90.550	333.450	6277.39	10632.59	9750.73	-4297.32	1657935.78	14323867.15	39°26'41.024"N	80°56'16.600"W	10655.69	336.216	1.00	0.13	-0.99	
17342.00	90.490	336.190	6276.53	10726.19	9835.79	-4337.71	1657895.81	14323952.17	39°26'41.865"N	80°56'17.109"W	10749.65	336.204	2.92	-0.06	2.91	
17435.00	90.860	337.720	6275.44	10819.05	9921.36	-4373.71	1657859.42	14324037.70	39°26'42.711"N	80°56'17.572"W	10842.64	336.210	1.69	0.40	1.65	
17530.00	90.710	337.670	6274.14	10913.97	10009.24	-4409.76	1657823.38	14324125.55	39°26'43.560"N	80°56'18.031"W	10937.59	336.223	0.17	-0.16	-0.05	
17624.00	90.860	337.400	6272.85	11007.87	10096.10	-4445.68	1657787.48	14324212.37	39°26'44.438"N	80°56'18.488"W	11031.56	336.234	0.33	0.16	-0.29	



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107
Page 9 of 12



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #03
Operator	ANTERO RESOURCES CORPORATION	Well	Parachute Unit 3H
Area	Tyler County, WV	Wellbore	Parachute Unit 3H AWB
Field	Tyler		
Facility	Stoney Pad		

WELLPATH DATA (227 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
17717.00	90.800	337.490	6271.50	11100.77	10181.98	-4481.35	1657751.83	14324298.22	39°26'45.287"N	80°56'18.942"W	11124.53	336.244	0.12	-0.06	0.10	
17811.00	90.830	338.960	6270.16	11194.71	10269.26	-4516.21	1657716.97	14324385.46	39°26'46.150"N	80°56'19.386"W	11218.46	336.261	1.56	0.03	1.56	
17905.00	90.800	344.790	6268.83	11288.61	10358.55	-4545.44	1657687.76	14324474.72	39°26'47.033"N	80°56'19.757"W	11311.97	336.308	6.20	-0.03	6.20	
17998.00	90.860	343.620	6267.48	11381.35	10448.03	-4570.75	1657662.46	14324564.16	39°26'47.917"N	80°56'20.079"W	11404.08	336.372	1.26	0.06	-1.26	
18092.00	90.770	345.170	6266.14	11475.06	10538.55	-4596.03	1657637.19	14324654.64	39°26'48.812"N	80°56'20.401"W	11497.15	336.437	1.65	-0.10	1.65	
18186.00	90.740	342.510	6264.90	11568.83	10628.82	-4622.19	1657611.04	14324744.88	39°26'49.705"N	80°56'20.734"W	11590.36	336.497	2.83	-0.03	-2.83	
18281.00	90.800	341.890	6263.63	11663.75	10719.26	-4651.23	1657582.01	14324835.29	39°26'50.599"N	80°56'21.103"W	11684.89	336.543	0.66	0.06	-0.66	
18375.00	90.800	341.010	6262.31	11757.71	10808.37	-4681.13	1657552.12	14324924.36	39°26'51.480"N	80°56'21.483"W	11778.53	336.582	0.94	0.00	-0.94	
18470.00	89.970	339.740	6261.67	11852.70	10897.85	-4713.04	1657520.23	14325013.80	39°26'52.364"N	80°56'21.889"W	11873.32	336.613	1.60	-0.87	-1.34	
18564.00	89.910	339.660	6261.77	11946.70	10986.01	-4745.65	1657487.63	14325101.92	39°26'53.236"N	80°56'22.304"W	11967.19	336.637	0.11	-0.06	-0.09	
18658.00	90.060	341.070	6261.80	12040.70	11074.54	-4777.23	1657456.06	14325190.42	39°26'54.111"N	80°56'22.706"W	12060.99	336.666	1.51	0.16	1.50	
18752.00	90.060	344.110	6261.70	12134.59	11164.22	-4805.36	1657427.95	14325280.07	39°26'54.998"N	80°56'23.064"W	12154.48	336.712	3.23	0.00	3.23	
18847.00	90.120	342.220	6261.55	12229.44	11255.15	-4832.87	1657400.45	14325370.96	39°26'55.896"N	80°56'23.414"W	12248.88	336.762	1.99	0.06	-1.99	
18942.00	90.090	340.240	6261.38	12324.41	11345.09	-4863.44	1657369.89	14325460.86	39°26'56.785"N	80°56'23.803"W	12343.59	336.796	2.08	-0.03	-2.08	
19036.00	90.030	337.150	6261.28	12418.38	11432.66	-4897.59	1657335.76	14325548.39	39°26'57.651"N	80°56'24.237"W	12437.52	336.810	3.29	-0.06	-3.29	
19082.00	90.120	336.900	6261.22	12464.31	11475.01	-4915.54	1657317.81	14325590.73	39°26'58.070"N	80°56'24.466"W	12483.52	336.811	0.58	0.20	-0.54	
19107.00	90.120	336.900	6261.17	12489.28	11498.00	-4925.35	1657308.00	14325613.71	39°26'58.297"N	80°56'24.591"W	12508.52	336.811	0.00	0.00	0.00	Projected MD @ TD: 19107



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107
Page 10 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Tyler County, WV	Well	Parachute Unit 3H
Field	Tyler	Wellbore	Parachute Unit 3H AWB
Facility	Stonefly Pad		

HOLE & CASING SECTIONS - Ref Wellbore: Parachute Unit 3H AWB Ref Wellpath: Parachute Unit 3H AWP Proj: 19107

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	0.00
17.5in Open Hole	104.50	586.50	482.00	104.50	586.50	-0.10	0.00	-0.98	0.20
13.375in Casing Surface	24.50	586.50	562.00	24.50	586.50	0.00	0.00	-0.98	0.20
12.25in Open Hole	586.50	2626.90	2040.40	586.50	2602.52	-0.98	0.20	-242.27	-165.52
9.625in Casing Intermediate	24.50	2626.90	2602.40	24.50	2602.52	0.00	0.00	-242.27	-165.52
8.75in Open Hole	2626.90	6404.50	3777.60	2602.52	6234.60	-242.27	-165.52	-393.34	-617.00
8.5in Open Hole	6404.50	19107.00	12702.50	6234.60	6281.17	-393.34	-617.00	11498.00	-4925.35
5.5in Casing Production	24.50	19107.00	19082.50	24.50	6261.17	0.00	0.00	11498.00	-4925.35

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Parachute Unit 3H POE Rev-3	6356.00	-175.93	-700.40	1661531.26	14313944.47	39°25'02.887"N	80°55'30.856"W	point
Parachute Unit 3H BHL Rev-3	6386.00	11529.99	-4950.94	1657282.42	14325645.69	39°26'58.614"N	80°56'24.917"W	point
Parachute Unit 3H LP Rev-1	6386.00	-5.62	-753.56	1661478.12	14314114.71	39°25'04.571"N	80°55'31.532"W	point



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107'
Page 11 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Tyler County, WV	Well	Parachute Unit 3H
Field	Tyler	Wellbore	Parachute Unit 3H AWB
Facility	Stonefly Pad		

WELLPATH COMPOSITION - Ref Wellbore: Parachute Unit 3H AWB Ref Wellpath: Parachute Unit 3H AWP Proj: 19107'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	571.50	Gyrodata standard - Drop gyro or Multi-shot	01 Gyrodata MS Gyro <17-1/2">(100'-562')	Parachute Unit 3H AWB
571.50	1219.50	Gyrodata standard - Drop gyro or Multi-shot	02 Gyrodata MS Gyro <12-1/4">(562')(650'-1210')	Parachute Unit 3H AWB
1219.50	2541.50	ISCWSA MWD, Rev. 4 (Standard)	03 WFT EM <12-1/4">(1210')(1321'-2532')	Parachute Unit 3H AWB
2541.50	6334.50	ISCWSA MWD, Rev. 4 (Standard)	04 WFT EM <8-3/4">(2532')(2655'-6325')	Parachute Unit 3H AWB
6334.50	19082.00	BHI AutoTrak Curve (Short)	05 BH/AT Curve <8-1/2">(6334.50')(6384'-19082')	Parachute Unit 3H AWB
19082.00	19107.00	Blind Drilling (std)	Projection to bit	Parachute Unit 3H AWB



Actual Wellpath Report

Parachute Unit 3H AWP Proj: 19107'
Page 12 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Tyler County, WV	Well	Parachute Unit 3H
Field	Tyler	Wellbore	Parachute Unit 3H AWB
Facility	Stonefly Pad		

COMMENTS
<p>Wellpath general comments API: 47-095-02433-0000 BH Job #: 9014372 Rig: Frontier 22 Duration: 02/15/18 - 02/18/18 Gyrodatta MS Gyro <17-1/2">(100'-562') Gyrodatta MS Gyro <12-1/4">(562')(650'-1210') WFT EM <12-1/4">(1210')(1321'-2532') WFT EM <8-3/4">(2532')(2655'-6325') Sycamore: 6157'MD / 6057'TVD Middlesex: 6374'MD / 6216'TVD BH AT Curve <8-1/2">(6334.50')(6384'-19082') Burket: 6542'MD / 6305'TVD Tully: 6607'MD / 6332'TVD POE Marcellus: 6668'MD / 6353'TVD Projected MD @ TD: 19107'</p>

04/05/2019

5/14/2018