



ANTERO RESOURCES CORPORATION

Location: Tyler County, WV
 Slot: Slot #02
 Field: Parachute Unit 2H
 Facility: Stonefly Pad
 Well: Parachute Unit 2H PWB
 Wellbore: Parachute Unit 2H PWP Rev-A.0



BAKER
 HUGHES
 a GE company

Plot reference wellpath is Parachute Unit 2H PWP Rev-A.0
 True vertical depths are referenced to Frontier 22 (RKB)
 Measured depths are referenced to Frontier 22 (RKB)
 Frontier 22 (RKB) to Mean Sea Level: 1006.5 feet
 Mean Sea Level to Ground level (At Slot: Slot #02): -982 feet
 Coordinates are in feet referenced to Slot

Grid System: NAD27 / UTM Zone 17 North, US feet
North Reference: Grid north
Scale: True distance
Depths are in feet
Created by: mcrcrib on 2018-05-14
Database: WA_MPL_EASTERNUS_Defn

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Stonfly Pad	1662255.770	14314034.380	39°25'03.770"N	80°55'21.620"W
Slot	Local N (ft)	Grid East (US ft)	Latitude	Longitude
Slot #02	96.10	1662228.229	39°25'04.720"N	80°55'21.970"W
Comment:	Parachute Unit 2H			
Frontier 22 (RKB) to Ground level (At Slot: Slot #02)	24.5ft			
Mean Sea Level to Ground level (At Slot: Slot #02)	-982ft			
Frontier 22 (RKB) to Mean Sea Level	1006.5ft			

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	6449.50	51.650	328.940	6167.88	-702.24	-1170.85	5.55	-261.31
Proj. To Bottom	6519.50	54.420	329.420	6209.97	-654.21	-1199.50	3.99	-206.39
End of 3D Arc	6624.24	54.687	335.451	6270.75	-578.63	-1238.95	4.70	-121.89
POE	6791.53	70.910	340.075	6347.00	-441.25	-1294.64	10.00	26.24
Landing Pt.	6973.28	90.000	340.075	6377.00	-273.52	-1355.44	10.50	204.65
BHL	19318.28	90.000	340.075	6377.00	11332.49	-5562.52	0.00	12549.65

Gyrodata MS Gyro <17-1/2">(100-533'): 0.65° Inc, 109.50ft MD, 109.50ft TVD, -0.48ft VS

Gyrodata MS Gyro <12-1/4">(533)(588-679): 0.43° Inc, 597.50ft MD, 597.48ft TVD, -3.02ft VS

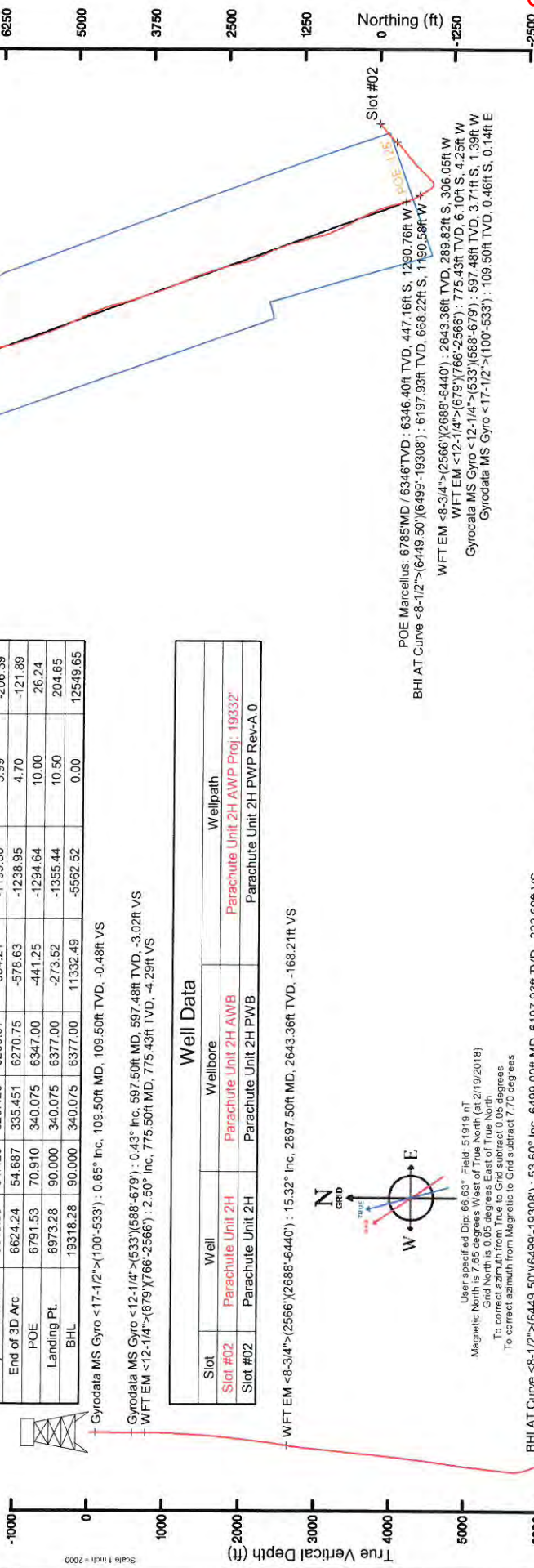
WFT EM <12-1/4">(679)(766-2566): 2.50° Inc, 775.50ft MD, 775.43ft TVD, -4.29ft VS

WFT EM <8-3/4">(2566)(2688-6440): 15.32° Inc, 2697.50ft MD, 2643.36ft TVD, -168.2ft VS

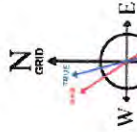
BHI AT Curve <8-1/2">(6449.50)(6499-19308'): 53.60° Inc, 6499.00ft MD, 6197.93ft TVD, -222.60ft VS

Project MD @ TD: 19332'; 90.25° Inc, 19332.00ft MD, 6252.07ft TVD, 12533.81ft VS

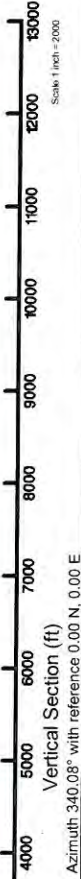
POE Marcellus: 6785MD / 6346TVD : 70.30° Inc, 6785.00ft MD, 6346.40ft TVD, 19.37ft VS



User specified Dip: 66.63° Field: 51919 ft
 Magnetic North is 7.65° East of True North
 Grid North is 0.05 degrees 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: 6785MD / 6346TVD : 6346.40ft TVD, 447.16ft S, 1290.76ft W
 BHI AT Curve <8-1/2">(6449.50)(6499-19308'): 6197.93ft TVD, 668.22ft S, 1190.58ft W
 WFT EM <8-3/4">(2566)(2688-6440): 2643.36ft TVD, 289.82ft S, 306.05ft W
 WFT EM <12-1/4">(679)(766-2566): 775.43ft TVD, 6.10ft S, 4.25ft W
 Gyrodata MS Gyro <12-1/4">(533)(588-679): 597.48ft TVD, 3.71ft S, 1.39ft W
 Gyrodata MS Gyro <17-1/2">(100-533'): 109.50ft TVD, 0.46ft S, 0.14ft E



Azimuth 340.08° with reference 0.00 N, 0.00 E

04/05/2019

API: 47-095-02430-0000

BH Job #: 9023327

Rig: Frontier 22

Duration: 02/21/18 - 02/24/18



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'

Page 1 of 12



REFERENCE WELLPATH IDENTIFICATION		
Operator	ANTERO RESOURCES CORPORATION	Slot #02
Area	Tyler County, WV	Parachute Unit 2H
Field	Tyler	Parachute Unit 2H 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	Mccrerrib
Report Generated	5/14/2018 at 10:53:43 AM
Database/Source file	WA_MPL_EASTERNUS_Defm/Parachute_Unit_2H_AWP_Proj_19332_.xml

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	96.10	-27.55	1662228.23	14314130.44	39°25'04.720"N	80°55'21.970"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 #02)
	Section Origin
	Section Azimuth
	1006.50ft
	1006.50ft
	24.50ft
	N 0.00, E 0.00 ft
	340.08°

04/05/2019



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'
Page 2 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Parachute Unit 2H
Field	Tyler	Wellbore	Parachute Unit 2H AWB
Facility	Stonely Pad		

WELLPATH DATA (232 stations) † = interpolated/extrapolated station																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	VertSect (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	162.930	0.00	0.00	0.00	0.00	1662228.23	14314130.44	39°25'04.720"N	80°55'21.970"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.00	162.930	24.50	0.00	0.00	0.00	1662228.23	14314130.44	39°25'04.720"N	80°55'21.970"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.650	162.930	109.50	-0.48	-0.46	0.14	1662228.37	14314129.98	39°25'04.715"N	80°55'21.968"W	0.48	162.930	0.76	0.76	191.68	Gyrodatta MS Gyro <17-1/2">(100-533)
209.50	0.440	214.650	209.49	-1.27	-1.32	0.09	1662228.32	14314128.51	39°25'04.707"N	80°55'21.969"W	1.32	176.109	0.51	-0.21	51.72	
309.50	0.360	202.830	309.49	-1.72	-1.92	-0.25	1662227.98	14314128.12	39°25'04.701"N	80°55'21.973"W	1.94	187.416	0.11	-0.08	-11.82	
409.50	0.370	206.920	409.49	-2.18	-2.50	-0.52	1662227.71	14314127.94	39°25'04.695"N	80°55'21.977"W	2.56	191.710	0.03	0.01	4.09	
509.50	0.490	219.970	509.49	-2.61	-3.12	-0.94	1662227.29	14314127.32	39°25'04.689"N	80°55'21.982"W	3.26	196.770	0.15	0.12	13.05	
542.50	0.520	215.340	542.49	-2.77	-3.35	-1.12	1662227.11	14314127.09	39°25'04.687"N	80°55'21.984"W	3.53	198.447	0.15	0.09	-14.03	
597.50	0.430	217.750	597.48	-3.02	-3.71	-1.39	1662226.84	14314126.72	39°25'04.683"N	80°55'21.988"W	3.97	200.481	0.17	-0.16	4.38	Gyrodatta MS Gyro <12-1/4">(533)(588-679)
688.50	0.970	227.120	688.48	-3.50	-4.51	-2.16	1662226.07	14314125.93	39°25'04.675"N	80°55'21.998"W	5.00	205.607	0.60	0.59	10.30	
775.50	2.500	234.850	775.43	-4.29	-6.10	-4.25	1662223.98	14314124.34	39°25'04.660"N	80°55'22.024"W	7.44	214.869	1.78	1.76	8.89	WFT EM <12-1/4">(679)(766-2566)
869.50	3.810	231.720	869.29	-5.81	-9.22	-8.38	1662219.85	14314121.22	39°25'04.629"N	80°55'22.077"W	12.46	222.276	1.41	1.39	-3.33	
963.50	4.480	229.360	963.04	-8.09	-13.54	-13.62	1662214.62	14314116.90	39°25'04.586"N	80°55'22.144"W	19.21	225.157	0.74	0.71	-2.51	
1058.50	4.950	225.930	1057.72	-11.08	-18.81	-19.38	1662208.86	14314111.63	39°25'04.534"N	80°55'22.217"W	27.01	225.851	0.58	0.49	-3.61	
1145.50	5.350	220.740	1144.37	-14.61	-24.49	-24.72	1662203.52	14314105.95	39°25'04.478"N	80°55'22.285"W	34.80	225.265	0.71	0.46	-5.97	
1239.50	6.150	217.200	1237.90	-19.49	-31.83	-30.63	1662197.61	14314098.62	39°25'04.406"N	80°55'22.361"W	44.17	223.900	0.93	0.85	-3.77	
1333.50	8.050	220.670	1331.17	-25.45	-40.83	-37.96	1662190.28	14314089.62	39°25'04.317"N	80°55'22.454"W	55.75	222.915	2.07	2.02	3.69	
1428.50	9.910	226.950	1425.01	-31.93	-51.46	-48.27	1662179.98	14314079.00	39°25'04.212"N	80°55'22.586"W	70.55	223.170	2.21	1.96	6.61	
1522.50	11.820	229.900	1517.32	-38.43	-63.18	-61.55	1662166.71	14314067.28	39°25'04.096"N	80°55'22.755"W	88.20	224.250	2.12	2.03	3.14	
1617.50	14.090	230.910	1609.89	-45.59	-76.74	-77.97	1662150.29	14314053.73	39°25'03.962"N	80°55'22.964"W	109.40	225.454	2.40	2.39	1.06	
1712.50	15.360	230.830	1701.77	-53.53	-91.98	-96.70	1662131.57	14314038.49	39°25'03.812"N	80°55'23.203"W	133.46	226.432	1.34	1.34	-0.08	
1806.50	15.760	229.830	1792.33	-62.05	-108.08	-116.10	1662112.17	14314022.40	39°25'03.653"N	80°55'23.451"W	158.62	227.050	0.51	0.43	-1.06	
1901.50	15.800	227.200	1883.75	-71.55	-125.19	-135.45	1662092.83	14314005.30	39°25'03.484"N	80°55'23.697"W	184.44	227.255	0.75	0.04	-2.77	
1995.50	17.710	228.670	1973.75	-81.74	-143.33	-155.58	1662072.71	14313987.17	39°25'03.305"N	80°55'23.954"W	211.54	227.348	2.08	2.03	1.56	
2090.50	18.970	230.100	2063.93	-92.29	-162.77	-178.28	1662050.02	14313967.73	39°25'03.113"N	80°55'24.243"W	241.41	227.603	1.41	1.33	1.51	
2185.50	18.470	229.020	2153.90	-102.98	-182.55	-201.48	1662026.10	14313947.96	39°25'02.917"N	80°55'24.539"W	271.88	227.823	0.64	-0.53	-1.14	
2280.50	17.410	226.880	2244.28	-113.99	-202.13	-223.22	1662006.10	14313928.39	39°25'02.724"N	80°55'24.816"W	301.14	227.838	1.31	-1.12	-2.25	
2374.50	17.600	226.430	2333.93	-125.23	-221.54	-243.78	1661984.55	14313908.99	39°25'02.532"N	80°55'25.079"W	329.41	227.737	0.25	0.20	-0.48	
2469.50	17.440	225.160	2424.52	-136.99	-241.48	-264.28	1661964.05	14313889.06	39°25'02.336"N	80°55'25.340"W	357.99	227.582	0.44	-0.17	-1.34	
2579.50	16.280	220.250	2525.97	-151.07	-264.02	-285.15	1661943.20	14313866.52	39°25'02.113"N	80°55'25.606"W	388.61	227.203	1.73	-1.09	-4.63	



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'
Page 3 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Parachute Unit 2H
Field	Tyler	Wellbore	Parachute Unit 2H AWB
Facility	Stoneyly Pad		

WELLPATH DATA (232 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
2697.50	15.320	217.690	2643.36	-168.21	-289.82	-306.05	1661922.30	14313840.73	39°25'01.858"N	80°55'25.873"W	421.50	226.560	0.97	-0.79	-2.10	WFT EM <8-3/4" (2566) (2688-6440)
2792.50	16.770	220.860	2734.66	-181.62	-310.12	-322.69	1661905.67	14313820.44	39°25'01.658"N	80°55'26.085"W	447.55	226.138	1.78	1.53	3.34	
2887.50	17.870	228.790	2825.36	-193.61	-330.09	-342.62	1661885.74	14313800.48	39°25'01.460"N	80°55'26.339"W	475.77	226.067	2.74	1.16	8.39	
2983.50	17.770	228.770	2916.76	-204.28	-349.45	-364.72	1661863.65	14313781.12	39°25'01.269"N	80°55'26.621"W	505.11	226.225	0.10	-0.10	-0.02	
3078.50	17.190	228.170	3007.37	-214.79	-368.37	-386.09	1661842.30	14313762.21	39°25'01.082"N	80°55'26.893"W	533.63	226.345	0.64	-0.61	-0.63	
3171.50	16.530	227.560	3096.37	-224.98	-386.46	-406.09	1661822.30	14313744.13	39°25'00.904"N	80°55'27.148"W	560.59	226.418	0.73	-0.71	-0.66	
3266.50	16.980	231.500	3187.34	-234.52	-404.17	-428.55	1661801.44	14313726.43	39°25'00.729"N	80°55'27.415"W	587.92	226.570	1.36	0.47	4.41	
3361.50	16.720	231.500	3278.26	-243.24	-421.27	-448.55	1661779.86	14313709.34	39°25'00.560"N	80°55'27.690"W	615.35	226.796	0.28	-0.27	-0.26	
3455.50	18.070	231.600	3367.96	-252.17	-438.74	-470.55	1661757.86	14313691.87	39°25'00.388"N	80°55'27.970"W	643.36	227.004	1.44	1.44	0.11	
3550.50	18.090	230.930	3458.27	-261.68	-457.19	-493.55	1661734.88	14313673.43	39°25'00.206"N	80°55'28.264"W	672.77	227.190	0.22	0.02	-0.71	
3644.50	17.340	230.140	3547.81	-271.24	-475.37	-515.64	1661712.80	14313655.26	39°25'00.026"N	80°55'28.545"W	701.32	227.327	0.84	-0.80	-0.84	
3738.50	16.600	230.900	3637.72	-280.43	-492.81	-536.81	1661691.64	14313637.82	39°24'59.854"N	80°55'28.815"W	728.72	227.447	0.82	-0.79	0.81	
3833.50	15.710	228.750	3728.97	-289.87	-509.85	-557.01	1661671.44	14313620.79	39°24'59.686"N	80°55'29.073"W	755.12	227.531	1.13	-0.94	-2.26	
4022.50	17.360	231.070	3820.04	-298.86	-527.24	-577.71	1661650.75	14313603.41	39°24'59.514"N	80°55'29.337"W	782.13	227.615	1.87	1.74	2.44	
4117.50	16.730	230.890	4000.65	-316.95	-562.19	-621.06	1661628.99	14313585.90	39°24'59.341"N	80°55'29.614"W	810.02	227.738	0.15	-0.14	0.21	
4212.50	16.180	229.820	4091.75	-326.03	-579.35	-641.78	1661586.70	14313561.32	39°24'58.999"N	80°55'30.154"W	837.72	227.848	0.54	-0.53	-0.40	
4306.50	15.530	227.420	4182.18	-335.41	-596.32	-661.06	1661567.44	14313534.36	39°24'58.832"N	80°55'30.399"W	890.28	227.927	0.66	-0.58	-1.13	
4401.50	16.780	225.800	4273.43	-345.95	-614.48	-680.25	1661548.25	14313516.20	39°24'58.652"N	80°55'30.644"W	916.70	227.947	0.98	-0.69	-2.55	
4495.50	16.750	224.560	4363.43	-357.37	-633.60	-699.49	1661529.02	14313497.10	39°24'58.464"N	80°55'30.889"W	943.78	227.830	0.38	-0.03	-1.32	
4589.50	16.390	222.800	4453.53	-369.28	-652.98	-718.00	1661510.52	14313477.72	39°24'58.272"N	80°55'31.125"W	970.52	227.715	0.66	-0.38	-1.87	
4684.50	17.760	224.870	4544.34	-381.60	-673.08	-737.33	1661491.19	14313457.62	39°24'58.074"N	80°55'31.372"W	998.35	227.608	1.58	1.44	2.18	
4778.50	17.930	223.780	4633.82	-394.11	-693.69	-757.46	1661471.08	14313437.03	39°24'57.870"N	80°55'31.629"W	1027.10	227.516	0.40	0.18	-1.16	
4873.50	17.930	227.090	4724.21	-406.30	-714.20	-778.28	1661450.26	14313416.52	39°24'57.668"N	80°55'31.894"W	1056.32	227.459	1.07	0.00	3.48	
4967.50	17.690	226.410	4813.70	-417.69	-733.90	-799.23	1661429.32	14313396.83	39°24'57.473"N	80°55'32.161"W	1085.07	227.440	0.34	-0.26	-0.72	
5062.50	17.140	224.130	4904.35	-429.61	-753.90	-819.43	1661409.13	14313376.84	39°24'57.276"N	80°55'32.419"W	1113.48	227.385	0.92	-0.58	-2.40	
5157.50	17.300	222.610	4995.09	-442.25	-774.35	-838.74	1661389.81	14313356.40	39°24'57.074"N	80°55'32.665"W	1141.53	227.286	0.50	0.17	-1.60	
5251.50	17.220	227.020	5084.86	-454.15	-794.12	-858.38	1661370.19	14313336.64	39°24'56.878"N	80°55'32.916"W	1169.38	227.227	1.39	-0.09	4.69	
5346.50	17.310	226.310	5175.58	-465.35	-813.47	-878.89	1661349.69	14313317.29	39°24'56.687"N	80°55'33.177"W	1197.57	227.214	0.24	0.09	-0.75	
5440.50	17.230	229.240	5265.34	-475.94	-832.22	-899.55	1661329.04	14313298.55	39°24'56.502"N	80°55'33.441"W	1225.47	227.226	0.93	-0.09	3.12	



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'

Page 4 of 12



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #02
Operator	ANTERO RESOURCES CORPORATION	Well	Parachute Unit 2H
Area	Tyler County, WV	Wellbore	Parachute Unit 2H AWB
Field	Tyler		
Facility	Stoneyly Pad		

WELLPATH DATA (232 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
5535.50	15.680	229.640	6356.45	-485.43	-849.72	-919.99	1661308.61	14313287.06	39°24'56.329"N	80°55'33.701"W	1252.36	227.274	1.64	-1.63	0.42	
5629.50	15.330	227.440	5447.03	-494.65	-866.35	-938.82	1661289.79	14313264.44	39°24'56.165"N	80°55'33.941"W	1277.47	227.299	0.73	-0.37	-2.34	
5724.50	15.360	224.420	5538.64	-504.94	-883.83	-956.87	1661271.74	14313246.96	39°24'55.993"N	80°55'34.171"W	1302.60	227.272	0.84	0.03	-3.18	
5787.50	15.880	231.780	5599.32	-511.26	-895.12	-969.49	1661259.13	14313235.67	39°24'55.881"N	80°55'34.332"W	1319.53	227.284	3.25	0.83	11.68	
5818.50	16.930	237.840	5629.06	-513.54	-900.15	-976.64	1661251.98	14313230.65	39°24'55.831"N	80°55'34.424"W	1328.19	227.334	6.47	3.39	19.55	
5850.50	17.050	246.120	5659.67	-514.86	-904.53	-984.88	1661243.75	14313226.27	39°24'55.788"N	80°55'34.528"W	1337.22	227.435	7.56	0.38	25.87	
5881.50	16.610	256.730	5689.35	-514.66	-907.39	-993.35	1661235.28	14313223.41	39°24'55.760"N	80°55'34.636"W	1345.39	227.589	10.00	-1.42	34.23	
5944.50	16.870	279.400	5749.81	-509.12	-907.87	-1010.93	1661217.70	14313222.93	39°24'55.759"N	80°55'34.861"W	1358.76	228.074	9.98	-1.84	37.94	
5976.50	18.090	288.460	5780.34	-503.76	-905.54	-1020.23	1661208.41	14313225.26	39°24'55.779"N	80°55'34.979"W	1364.14	228.408	9.31	3.81	28.31	
6007.50	19.290	296.770	5809.71	-497.05	-901.71	-1029.37	1661199.28	14313229.09	39°24'55.816"N	80°55'35.095"W	1368.46	228.762	9.41	3.87	26.81	
6039.50	20.500	304.770	5839.80	-488.63	-896.13	-1038.69	1661189.96	14313234.66	39°24'55.872"N	80°55'35.214"W	1371.84	229.214	9.30	3.78	25.00	
6070.50	21.290	314.180	5868.77	-479.13	-889.11	-1047.19	1661181.46	14313241.68	39°24'55.941"N	80°55'35.322"W	1373.73	229.667	11.11	2.55	30.35	
6102.50	22.970	321.120	5898.42	-468.00	-880.20	-1055.28	1661173.38	14313250.59	39°24'56.029"N	80°55'35.425"W	1374.18	230.169	9.70	5.25	21.69	
6134.50	25.680	323.490	5927.57	-455.45	-869.77	-1063.32	1661165.33	14313261.02	39°24'56.132"N	80°55'35.528"W	1373.03	231.304	8.45	8.39	7.41	
6165.50	28.280	324.220	5955.20	-441.94	-858.41	-1071.61	1661157.05	14313272.37	39°24'56.245"N	80°55'35.633"W	1372.28	231.967	9.63	9.62	0.84	
6197.50	31.360	324.490	5982.96	-426.63	-845.48	-1080.88	1661147.78	14313285.30	39°24'56.373"N	80°55'35.751"W	1371.51	232.668	9.67	9.55	2.81	
6228.50	34.320	325.360	6009.00	-410.40	-831.72	-1090.54	1661138.13	14313299.05	39°24'56.509"N	80°55'36.008"W	1370.60	233.453	10.38	10.25	2.78	
6260.50	37.600	325.250	6034.90	-392.19	-816.17	-1101.09	1661127.58	14313314.59	39°24'56.662"N	80°55'36.120"W	1369.80	234.118	8.70	8.48	3.13	Sycamore. 6286'MD / 6055'TVD
6291.50	40.230	327.210	6059.02	-373.25	-799.89	-1111.77	1661118.82	14313327.90	39°24'56.794"N	80°55'36.144"W	1369.82	234.266	8.70	8.49	2.99	
6323.50	42.910	328.490	6082.96	-352.50	-781.91	-1123.06	1661105.62	14313348.84	39°24'57.001"N	80°55'36.288"W	1368.45	235.153	8.79	8.37	4.00	
6354.50	45.260	328.860	6105.22	-331.36	-763.49	-1134.27	1661094.41	14313367.25	39°24'57.183"N	80°55'36.431"W	1367.29	236.055	7.63	7.58	1.19	
6386.50	47.770	329.230	6127.24	-308.57	-743.58	-1146.21	1661082.48	14313387.15	39°24'57.380"N	80°55'36.582"W	1366.28	237.027	7.89	7.84	1.16	
6417.50	49.900	329.330	6147.65	-285.65	-723.52	-1158.13	1661070.56	14313407.21	39°24'57.579"N	80°55'36.734"W	1365.56	238.006	6.88	6.87	0.32	
6449.50	51.650	328.940	6167.88	-261.31	-702.24	-1170.85	1661057.85	14313428.48	39°24'57.789"N	80°55'36.896"W	1365.30	239.046	5.55	5.47	-1.22	
6499.00	53.600	330.810	6197.93	-222.60	-668.22	-1190.58	1661038.12	14313462.49	39°24'58.125"N	80°55'37.147"W	1365.29	240.697	4.95	3.94	3.78	BHI AT Curve <8-1/2">(6449.50)/(6499-19308)
6522.00†	53.897	331.331	6211.53	-204.28	-651.99	-1199.56	1661029.15	14313478.71	39°24'58.286"N	80°55'37.261"W	1365.29	241.475	2.24	1.29	2.28	Middlesex: 6522'MD / 6212'TVD
6559.00	54.380	332.160	6233.21	-174.61	-625.57	-1213.73	1661014.96	14313505.12	39°24'58.547"N	80°55'37.442"W	1365.48	242.733	2.24	1.30	2.24	
6606.00	54.380	333.390	6260.58	-136.71	-591.60	-1231.23	1660997.49	14313539.07	39°24'58.883"N	80°55'37.664"W	1365.99	244.336	2.13	0.00	2.62	



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'

Page 5 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	Slot #02
ANTERO RESOURCES CORPORATION	Parachute Unit 2H
Tyler County, WV	Parachute Unit 2H AWB
Tyler	
Stoneyly Pad	

WELLPATH DATA (232 stations) t = 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
6654.00	56.600	335.460	6287.77	-97.36	-555.92	-1248.29	1660980.44	14313574.74	39°24'52.236"N	80°55'37.881"W	1366.49	245.994	5.83	4.63	4.31	
6681.00	59.403	337.034	6302.08	-74.52	-534.97	-1257.51	1660971.22	14313595.69	39°24'59.443"N	80°55'37.998"W	1366.57	246.954	11.50	10.38	5.83	Burket. 6681 MD / 6303 TVD
6703.00	61.700	338.250	6312.90	-55.38	-517.25	-1264.79	1660963.94	14313613.39	39°24'59.618"N	80°55'38.091"W	1366.47	247.757	11.50	10.44	5.53	
6730.00	64.363	339.048	6325.14	-31.32	-494.84	-1273.55	1660955.19	14313635.80	39°24'59.840"N	80°55'38.276"W	1366.31	248.766	10.21	9.86	2.95	Tully. 6730 MD / 6325 TVD
6748.00	66.140	339.560	6332.68	-14.98	-479.55	-1279.33	1660949.41	14313651.08	39°24'59.891"N	80°55'38.421"W	1366.25	249.452	10.21	9.87	2.85	
6785.00	70.302	341.535	6346.40	19.37	-447.16	-1290.76	1660937.99	14313683.46	39°25'00.311"N	80°55'38.459"W	1365.90	251.289	12.29	11.25	5.34	POE Marcellus. 6785 MD / 6346 TVD
6795.00	71.430	342.050	6349.68	28.81	-438.18	-1293.71	1660935.04	14313692.43	39°25'00.400"N	80°55'38.627"W	1365.32	253.184	11.61	10.98	3.91	
6842.00	76.590	343.890	6362.82	73.92	-395.00	-1306.93	1660921.82	14313735.60	39°25'00.827"N	80°55'38.782"W	1364.93	255.120	11.15	10.72	3.13	
6889.00	81.630	345.360	6371.50	119.91	-350.51	-1319.16	1660909.60	14313760.07	39°25'01.267"N	80°55'39.211"W	1363.55	261.059	3.14	3.14	-0.09	
6936.00	87.510	346.430	6375.95	166.44	-305.15	-1330.55	1660898.21	14313825.41	39°25'01.715"N	80°55'39.536"W	1383.96	264.968	4.18	-0.03	-4.18	
7031.00	90.490	346.340	6377.60	260.84	-212.84	-1352.91	1660875.86	14313917.68	39°25'02.627"N	80°55'39.917"W	1408.78	268.772	1.46	0.93	-1.13	
7126.00	90.460	342.370	6376.82	355.55	-121.38	-1378.52	1660850.26	14314009.10	39°25'03.532"N	80°55'40.347"W	1443.51	272.323	4.60	0.17	-4.60	
7222.00	91.350	341.290	6375.30	451.49	-30.19	-1408.46	1660820.34	14314100.26	39°25'04.433"N	80°55'40.848"W	1488.75	275.588	3.22	-1.29	-2.95	
7317.00	91.510	336.920	6372.93	546.43	58.52	-1442.32	1660786.49	14314188.93	39°25'05.310"N	80°55'41.366"W	1539.68	278.578	0.36	-0.03	0.36	
7412.00	90.260	334.120	6371.44	641.10	144.96	-1481.68	1660747.15	14314275.34	39°25'06.165"N	80°55'41.907"W	1595.78	281.289	3.50	0.10	-3.49	
7506.00	90.250	334.460	6371.01	734.62	229.65	-1522.45	1660706.39	14314359.99	39°25'07.002"N	80°55'42.502"W	1659.42	283.772	1.53	0.06	-1.53	
7599.00	90.340	331.210	6370.53	826.87	312.38	-1584.91	1660663.95	14314442.69	39°25'07.820"N	80°55'43.106"W	1726.14	286.014	0.16	0.03	-0.16	
7694.00	90.400	329.760	6369.92	920.53	395.05	-1611.71	1660617.17	14314525.33	39°25'08.638"N	80°55'43.684"W	1793.75	288.140	3.13	0.03	3.13	
7788.00	90.430	329.610	6369.24	1012.99	476.19	-1659.15	1660569.74	14314606.44	39°25'09.440"N	80°55'44.221"W	1861.90	290.225	2.28	-0.39	2.24	
7882.00	90.460	332.550	6368.51	1105.82	558.46	-1704.60	1660524.31	14314688.67	39°25'10.253"N	80°55'44.718"W	1928.94	292.207	1.69	0.33	1.66	
7977.00	90.090	334.680	6368.05	1200.21	643.56	-1746.82	1660482.11	14314773.73	39°25'11.095"N	80°55'45.156"W	1995.04	294.158	4.79	-0.16	4.79	
8071.00	90.400	336.240	6367.65	1293.90	729.06	-1785.86	1660443.09	14314859.21	39°25'11.940"N	80°55'45.508"W	2058.31	296.123	4.49	-0.50	4.46	
8165.00	90.250	340.740	6367.11	1387.83	816.49	-1820.31	1660408.64	14314946.60	39°25'12.805"N	80°55'45.816"W	2121.99	298.064	1.12	0.88	0.68	
8259.00	89.780	344.930	6367.09	1481.70	906.28	-1848.05	1660380.92	14315036.36	39°25'13.692"N	80°55'45.816"W	2187.51	299.885	1.31	-0.88	-0.97	
8354.00	90.820	345.580	6366.76	1576.32	998.15	-1872.23	1660356.75	14315128.19	39°25'14.600"N	80°55'46.126"W	2256.06	301.582	0.57	0.53	-0.21	
8449.00	89.780	344.660	6366.43	1670.95	1089.96	-1896.62	1660332.37	14315219.96	39°25'15.508"N	80°55'46.447"W	2326.61	303.173	0.16	-0.14	-0.07	
8544.00	90.280	344.460	6366.38	1765.66	1181.54	-1921.92	1660307.08	14315311.50	39°25'16.413"N	80°55'47.081"W	2398.70	304.711	1.85	-0.16	1.84	
8639.00	90.150	344.390	6366.02	1860.38	1273.05	-1947.42	1660281.59	14315402.97	39°25'17.318"N	80°55'47.334"W	2460.93	305.970	0.95	0.83	-0.46	
8735.00	90.000	346.160	6365.89	1955.88	1365.89	-1971.82	1660257.20	14315495.78	39°25'18.236"N							
8817.00	90.680	345.780	6365.41	2037.55	1445.44	-1991.70	1660237.33	14315575.30	39°25'19.022"N							



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'
Page 6 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Parachute Unit 2H
Field	Tyler	Wellbore	Parachute Unit 2H AWB
Facility	Stoneyly Pad		

WELLPATH DATA (232 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 (°/100ft)	Comments
8913.00	90.680	342.270	2133.30	6364.27	1537.71	-2018.12	1660210.92	14315667.53	39°25'19.934"N	80°55'47.669"W	2537.20	307.306	3.66	0.00	-3.66	
9007.00	90.710	340.200	6363.13	2227.27	1626.71	-2048.35	1660180.70	14315756.49	39°25'20.814"N	80°55'48.054"W	2615.71	308.455	2.20	0.03	-2.20	
9100.00	90.680	336.670	6362.00	2320.21	1713.18	-2082.53	1660146.54	14315842.92	39°25'21.669"N	80°55'48.488"W	2696.64	309.442	3.80	-0.03	-3.80	
9196.00	90.770	334.130	6360.78	2415.87	1800.45	-2122.48	1660106.60	14315930.16	39°25'22.532"N	80°55'48.996"W	2783.26	310.307	2.65	0.09	-2.65	
9290.00	90.620	332.990	6359.64	2509.26	1884.61	-2164.33	1660064.76	14316014.29	39°25'23.364"N	80°55'49.529"W	2869.86	311.048	1.22	0.16	-1.21	
9383.00	90.800	335.070	6358.49	2601.73	1968.21	-2205.05	1660024.06	14316097.85	39°25'24.190"N	80°55'50.047"W	2956.69	311.752	2.24	0.19	2.24	
9477.00	90.980	336.620	6357.03	2695.46	2053.96	-2243.51	1659985.62	14316183.58	39°25'25.038"N	80°55'50.536"W	3041.73	312.474	1.66	0.18	1.65	
9571.00	90.770	342.410	6355.59	2789.40	2141.97	-2276.39	1659952.75	14316271.55	39°25'25.908"N	80°55'50.954"W	3125.70	313.257	6.16	-0.22	6.16	
9666.00	91.170	345.740	6353.99	2884.14	2233.30	-2302.45	1659926.74	14316362.84	39°25'26.811"N	80°55'51.286"W	3207.63	314.127	3.53	0.42	3.51	
9761.00	91.080	345.310	6352.12	2978.69	2325.27	-2326.19	1659902.97	14316454.77	39°25'27.720"N	80°55'51.587"W	3289.08	314.989	0.46	-0.09	-0.49	
9854.00	91.080	346.420	6350.37	3071.20	2415.43	-2348.90	1659880.27	14316544.90	39°25'28.612"N	80°55'51.876"W	3369.22	315.800	1.19	0.00	1.19	
9949.00	91.170	345.260	6348.50	3165.70	2507.53	-2372.13	1659857.05	14316636.96	39°25'29.522"N	80°55'52.171"W	3451.77	316.589	1.22	0.09	-1.22	
10044.00	90.310	344.040	6347.28	3260.39	2599.13	-2397.28	1659831.91	14316728.52	39°25'30.428"N	80°55'52.490"W	3535.87	317.313	1.57	-0.91	-1.28	
10138.00	90.490	343.230	6346.62	3354.21	2689.32	-2423.76	1659805.44	14316818.67	39°25'31.319"N	80°55'52.827"W	3620.37	317.973	0.88	0.19	-0.86	
10232.00	90.460	342.560	6345.84	3448.09	2779.15	-2451.41	1659777.80	14316908.48	39°25'32.207"N	80°55'53.178"W	3705.82	318.585	0.71	-0.03	-0.71	
10325.00	90.460	341.890	6345.09	3541.02	2867.71	-2479.80	1659749.43	14316997.00	39°25'33.083"N	80°55'53.539"W	3791.20	319.149	0.72	0.00	0.00	
10419.00	90.400	340.600	6344.39	3635.00	2956.72	-2510.02	1659719.22	14317085.97	39°25'33.963"N	80°55'53.924"W	3878.45	319.671	1.37	-0.06	-1.37	
10513.00	90.400	338.710	6343.73	3728.99	3044.85	-2542.70	1659686.55	14317174.06	39°25'34.834"N	80°55'54.339"W	3966.91	320.135	2.01	0.00	-2.01	
10606.00	90.460	336.370	6343.03	3821.89	3130.78	-2578.23	1659651.04	14317259.96	39°25'35.684"N	80°55'54.791"W	4055.74	320.528	2.52	0.00	-2.52	
10700.00	90.460	336.420	6342.28	3915.69	3216.92	-2615.86	1659613.41	14317346.06	39°25'36.535"N	80°55'55.270"W	4146.24	320.883	0.05	0.00	0.05	
10794.00	90.520	338.220	6341.48	4009.57	3303.94	-2652.11	1659577.19	14317432.75	39°25'37.393"N	80°55'55.731"W	4236.47	321.243	1.92	0.06	1.91	
10888.00	90.460	337.860	6339.92	4197.52	3391.40	-2685.76	1659543.55	14317520.48	39°25'38.260"N	80°55'56.159"W	4326.07	321.623	1.70	-0.06	1.70	
10982.00	90.400	337.760	6339.21	4291.45	3566.09	-2719.69	1659509.63	14317608.10	39°25'39.127"N	80°55'56.590"W	4415.94	321.984	2.09	0.00	-2.09	
11076.00	90.400	341.240	6338.54	4387.42	3746.48	-2755.19	1659474.15	14317695.10	39°25'39.987"N	80°55'57.042"W	4506.45	322.310	0.12	-0.06	-0.11	
11172.00	90.460	343.320	6337.83	4482.35	3746.48	-2817.72	1659440.54	14317784.97	39°25'40.876"N	80°55'57.470"W	4598.23	322.664	3.62	0.00	3.63	
11267.00	90.460	340.880	6337.01	4577.28	3836.87	-2846.91	1659411.64	14317875.42	39°25'41.771"N	80°55'57.837"W	4687.82	323.063	2.19	0.06	2.19	
11362.00	90.520	342.380	6336.23	4672.23	3927.03	-2876.85	1659382.46	14317965.77	39°25'42.664"N	80°55'58.208"W	4777.71	323.425	2.57	0.06	-2.57	
11457.00	90.400	341.390	6335.54	4767.18	4017.31	-2906.39	1659352.53	14318055.89	39°25'43.555"N	80°55'58.589"W	4868.04	323.774	1.58	-0.09	1.58	
11552.00	90.400	341.960	6334.80	4862.14	4107.49	-2936.25	1659323.01	14318146.14	39°25'44.448"N	80°55'58.965"W	4958.42	324.116	1.04	-0.03	-1.04	
11647.00	90.480	341.960	6334.80	4862.14	4107.49	-2936.25	1659293.15	14318236.28	39°25'45.340"N	80°55'59.344"W	5049.07	324.441	0.61	0.09	0.60	



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332

Page 7 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Parachute Unit 2H
Field	Tyler	Wellbore	Parachute Unit 2H AWB
Facility	Stoney Pad		

WELLPATH DATA (232 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
11742.00	90.400	341.010	6334.06	4957.11	4197.57	-2966.42	1659263.00	14318326.32	39°25'46.230"N	80°55'59.728"W	5139.97	324.751	1.00	-0.09	-1.00	
11837.00	90.430	347.880	6333.37	5051.78	4289.04	-2991.88	1659237.55	14318417.75	39°25'47.134"N	80°56'00.052"W	5229.45	325.102	7.23	0.03	7.23	
11932.00	91.420	348.280	6331.84	5145.84	4381.97	-3011.50	1659217.94	14318510.65	39°25'48.053"N	80°56'00.301"W	5317.03	325.501	1.12	1.04	0.42	
12028.00	90.890	341.660	6329.90	5241.42	4474.62	-3036.38	1659193.07	14318603.26	39°25'48.969"N	80°56'00.617"W	5407.57	325.840	6.92	-0.55	-6.90	
12122.00	90.950	338.920	6328.39	5335.39	4563.09	-3068.07	1659161.39	14318691.76	39°25'49.843"N	80°56'01.020"W	5498.62	326.084	2.92	0.06	-2.91	
12218.00	90.770	339.690	6326.95	5431.37	4652.89	-3101.99	1659127.48	14318781.48	39°25'50.731"N	80°56'01.451"W	5592.11	326.309	0.82	-0.19	0.80	
12313.00	90.800	335.710	6324.84	5521.12	4828.26	-3174.96	1659092.54	14318869.74	39°25'51.604"N	80°56'01.896"W	5685.02	326.510	2.72	0.29	-2.71	
12408.00	90.740	337.120	6325.91	5526.32	4741.21	-3136.95	1659054.55	14318956.76	39°25'52.465"N	80°56'02.380"W	5778.62	326.672	1.52	0.33	-1.48	
12504.00	90.800	334.650	6323.55	5716.76	4915.39	-3215.25	1659014.27	14319043.85	39°25'53.326"N	80°56'02.892"W	5873.57	326.811	1.11	-0.06	-1.10	
12599.00	90.740	333.930	6322.32	5811.26	5000.97	-3256.46	1658973.08	14319129.40	39°25'54.173"N	80°56'03.417"W	5967.77	326.929	0.78	0.00	-0.76	
12693.00	90.740	333.530	6321.11	5904.68	5085.26	-3298.06	1658931.49	14319213.65	39°25'55.006"N	80°56'03.946"W	6061.11	327.034	0.43	0.00	-0.43	
12787.00	90.710	335.470	6319.92	5998.22	5170.09	-3338.52	1658891.04	14319298.45	39°25'55.845"N	80°56'04.461"W	6154.31	327.148	2.06	-0.03	2.06	
12880.00	90.650	337.460	6318.81	6091.02	5255.34	-3375.66	1658853.93	14319383.67	39°25'56.687"N	80°56'04.933"W	6246.09	327.286	2.14	-0.06	2.14	
12974.00	90.800	336.900	6317.63	6184.90	5341.98	-3412.11	1658817.49	14319470.27	39°25'57.544"N	80°56'05.397"W	6338.71	327.432	0.82	0.16	-0.60	
13068.00	90.770	339.560	6316.34	6278.83	5429.26	-3446.97	1658782.65	14319557.52	39°25'58.407"N	80°56'05.841"W	6431.05	327.589	2.83	-0.03	2.83	
13162.00	90.800	340.360	6315.05	6372.82	5517.56	-3479.17	1658750.45	14319645.78	39°25'59.280"N	80°56'06.250"W	6522.89	327.766	0.85	0.03	0.85	
13256.00	90.370	339.700	6314.09	6466.81	5605.90	-3511.28	1658718.36	14319734.09	39°26'00.153"N	80°56'06.659"W	6614.77	327.939	0.84	-0.46	-0.70	
13350.00	90.490	338.910	6313.41	6560.80	5693.83	-3544.49	1658685.16	14319821.98	39°26'01.022"N	80°56'07.081"W	6706.95	328.097	0.85	0.10	-0.84	
13445.00	90.370	341.710	6312.72	6655.79	5783.27	-3576.50	1658653.17	14319911.38	39°26'01.907"N	80°56'07.488"W	6799.82	328.266	2.95	-0.09	2.95	
13538.00	90.430	342.910	6312.07	6748.72	5871.87	-3604.76	1658624.92	14319999.94	39°26'02.782"N	80°56'07.848"W	6890.07	328.454	1.29	0.06	1.29	
13633.00	90.400	341.740	6311.36	6843.64	5962.38	-3633.60	1658596.09	14320090.42	39°26'03.677"N	80°56'08.214"W	6982.33	328.641	1.23	0.00	-1.23	
13727.00	90.400	342.300	6310.68	6937.58	6051.78	-3662.61	1658567.08	14320179.79	39°26'04.561"N	80°56'08.583"W	7073.81	328.817	0.60	-0.03	0.60	
13822.00	90.520	344.260	6309.91	7032.43	6142.76	-3689.94	1658539.77	14320270.73	39°26'05.460"N	80°56'08.931"W	7165.83	329.007	2.07	0.13	2.06	
13917.00	90.460	346.800	6309.10	7126.98	6234.73	-3713.68	1658516.04	14320362.67	39°26'06.370"N	80°56'09.232"W	7256.95	329.220	2.67	-0.06	2.67	
14011.00	90.520	345.780	6308.30	7220.43	6326.05	-3735.96	1658493.77	14320453.95	39°26'07.272"N	80°56'09.516"W	7346.86	329.435	1.09	0.06	-1.09	
14106.00	90.520	343.010	6307.44	7315.15	6417.51	-3761.51	1658468.23	14320545.40	39°26'08.177"N	80°56'09.840"W	7438.66	329.624	2.92	0.00	-2.92	
14201.00	90.460	341.220	6306.62	7410.08	6507.94	-3789.68	1658439.07	14320635.76	39°26'09.070"N	80°56'10.211"W	7531.44	329.780	1.89	-0.06	-1.88	
14296.00	90.490	339.210	6305.84	7505.07	6597.32	-3822.83	1658406.93	14320725.11	39°26'09.954"N	80°56'10.620"W	7624.88	329.910	2.12	0.03	-2.12	
14391.00	90.310	338.060	6305.17	7600.04	6685.79	-3857.44	1658372.34	14320813.54	39°26'10.829"N	80°56'11.061"W	7718.79	330.017	1.23	-0.19	-1.21	
14486.00	90.710	338.890	6304.33	7694.99	6774.16	-3892.30	1658337.49	14320901.98	39°26'11.702"N	80°56'11.504"W	7812.76	330.119	0.97	0.42	0.87	



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'
Page 8 of 12



REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #02
Operator	ANTERO RESOURCES CORPORATION	Well	Parachute Unit 2H
Area	Tyler County, WV	Wellbore	Parachute Unit 2H AWB
Field	Tyler		
Facility	Stoneyly Pad		

WELLPATH DATA (232 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
14581.00	90.710	341.200	6303.15	7789.98	6863.45	-3924.71	1658305.09	14320991.13	39°26'12.585"N	80°56'11.916"W	7906.34	330.238	2.43	0.00	2.43	
14677.00	90.800	341.400	6301.88	7885.95	6984.37	-3955.49	1658274.33	14321082.01	39°26'13.484"N	80°56'12.308"W	8000.57	330.370	2.23	0.09	0.21	
14772.00	90.710	339.370	6300.63	7980.94	7043.84	-3987.38	1658242.45	14321171.45	39°26'14.368"N	80°56'12.713"W	8094.13	330.487	2.14	-0.09	-2.14	
14868.00	90.710	338.980	6299.44	8076.92	7133.57	-4021.50	1658208.34	14321261.14	39°26'15.255"N	80°56'13.148"W	8189.03	330.588	0.41	0.00	-0.41	
14964.00	90.860	344.730	6298.13	8172.82	7224.74	-4051.38	1658178.47	14321352.28	39°26'16.157"N	80°56'13.528"W	8283.15	330.718	5.99	0.16	5.99	
15059.00	90.800	345.950	6296.75	8267.41	7316.64	-4075.42	1658154.44	14321444.14	39°26'17.065"N	80°56'14.168"W	8375.10	330.882	1.29	-0.06	1.28	
15155.00	90.830	342.200	6295.38	8363.15	7408.93	-4101.76	1658128.12	14321536.39	39°26'17.977"N	80°56'14.580"W	8468.57	331.030	3.91	0.03	-3.91	
15251.00	91.080	338.400	6293.78	8459.12	7499.28	-4134.11	1658095.78	14321626.71	39°26'18.871"N	80°56'15.034"W	8563.30	331.133	3.97	0.26	-3.96	
15347.00	90.920	337.920	6292.11	8555.05	7588.38	-4169.82	1658060.09	14321715.77	39°26'19.752"N	80°56'15.474"W	8658.57	331.211	0.63	-0.17	-0.50	
15443.00	90.830	339.860	6290.64	8651.01	7677.92	-4204.39	1658025.53	14321805.28	39°26'20.637"N	80°56'15.852"W	8753.70	331.295	2.02	-0.09	2.02	
15537.00	90.580	343.270	6289.49	8744.96	7767.08	-4234.10	1657995.82	14321894.40	39°26'21.518"N	80°56'16.195"W	8846.19	331.404	3.64	-0.27	3.63	
15631.00	90.550	343.390	6288.56	8838.80	7857.12	-4261.07	1657968.87	14321984.40	39°26'22.408"N	80°56'16.544"W	8938.18	331.528	0.13	-0.03	0.13	
15724.00	90.650	342.270	6287.58	8931.69	7945.97	-4288.52	1657941.43	14322073.22	39°26'23.287"N	80°56'16.924"W	9029.39	331.644	1.21	0.11	-1.20	
15818.00	90.490	340.650	6286.65	9025.66	8035.09	-4318.41	1657911.56	14322162.30	39°26'24.168"N	80°56'17.375"W	9122.02	331.744	1.73	-0.17	-1.72	
15913.00	90.650	335.550	6285.70	9120.56	8123.20	-4353.83	1657876.15	14322250.37	39°26'25.039"N	80°56'17.893"W	9216.41	331.810	5.37	0.17	-5.37	
16007.00	90.620	333.080	6284.66	9214.07	8207.90	-4394.56	1657835.43	14322335.04	39°26'25.876"N	80°56'18.427"W	9310.30	331.835	2.63	-0.03	-2.63	
16100.00	90.460	333.300	6283.78	9306.40	8290.90	-4436.51	1657793.50	14322418.00	39°26'26.697"N	80°56'18.940"W	9403.27	331.849	0.29	-0.17	0.24	
16195.00	90.580	336.450	6282.92	9400.99	8376.89	-4476.84	1657753.19	14322503.97	39°26'27.547"N	80°56'19.426"W	9498.13	331.879	3.32	0.13	3.32	
16288.00	90.580	335.120	6281.98	9493.72	8461.70	-4514.98	1657715.06	14322588.74	39°26'28.385"N	80°56'19.935"W	9590.91	331.917	1.43	0.00	-1.43	
16382.00	90.980	334.510	6280.70	9587.32	8546.76	-4554.98	1657675.08	14322673.77	39°26'29.226"N	80°56'20.432"W	9684.78	331.945	0.78	0.43	-0.65	
16477.00	90.890	336.880	6279.15	9682.02	8633.32	-4594.07	1657636.00	14322760.29	39°26'30.082"N	80°56'20.899"W	9779.56	331.981	2.50	-0.09	2.49	
16573.00	90.800	338.220	6277.74	9777.91	8722.03	-4630.73	1657599.36	14322848.97	39°26'30.959"N	80°56'21.370"W	9875.10	332.035	1.40	-0.09	1.40	
16669.00	90.950	336.390	6276.27	9873.79	8810.59	-4667.76	1657562.34	14322937.49	39°26'31.842"W	80°56'21.842"W	9970.68	332.086	1.91	0.16	-1.91	
16764.00	90.890	337.650	6274.74	9968.64	8898.04	-4704.84	1657525.28	14323024.90	39°26'32.699"N	80°56'22.257"W	10065.32	332.132	1.33	-0.06	1.33	
16858.00	90.830	341.680	6273.33	10062.60	8986.15	-4737.50	1657492.63	14323112.98	39°26'33.570"N	80°56'22.609"W	10158.48	332.202	4.29	-0.06	4.28	
16952.00	90.830	344.030	6271.97	10156.47	9075.97	-4765.16	1657464.99	14323202.76	39°26'34.458"N	80°56'23.092"W	10250.85	332.299	2.56	0.00	2.56	
17047.00	90.800	345.190	6270.62	10251.16	9167.57	-4790.32	1657439.84	14323294.32	39°26'35.364"N	80°56'23.529"W	10343.66	332.412	1.16	-0.03	1.16	
17141.00	90.800	342.760	6269.31	10344.93	9257.90	-4816.26	1657413.90	14323384.62	39°26'36.256"N	80°56'23.929"W	10435.76	332.515	2.58	0.00	-2.58	
17236.00	90.830	339.810	6267.95	10439.89	9347.86	-4846.74	1657383.44	14323474.54	39°26'37.146"N	80°56'24.406"W	10529.64	332.594	3.11	0.03	-3.11	
17330.00	90.520	341.130	6266.85	10533.88	9436.44	-4878.16	1657352.03	14323563.09	39°26'38.022"N	80°56'24.892"W	10622.75	332.663	1.44	-0.33	1.40	



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'
Page 9 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Parachute Unit 2H
Field	Tyler	Wellbore	Parachute Unit 2H AWB
Facility	Stoneyfly Pad		

WELLPATH DATA (232 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
17423.00	90.550	340.770	6265.98	10626.86	9524.34	-4908.51	1657321.69	14323650.96	39°26'38.890"N	80°56'24.433"W	10714.78	332.735	0.39	0.03	0.39	-0.39
17518.00	90.680	339.910	6264.96	10721.85	9613.80	-4940.47	1657289.74	14323740.38	39°26'39.775"N	80°56'24.839"W	10808.95	332.802	0.92	0.14	-0.91	-0.91
17611.00	90.680	339.530	6263.86	10814.85	9701.03	-4972.70	1657257.52	14323827.57	39°26'40.637"N	80°56'25.249"W	10901.27	332.861	0.41	0.00	-0.41	-0.41
17705.00	90.620	341.570	6262.79	10908.83	9789.65	-5004.00	1657226.24	14323916.16	39°26'41.513"N	80°56'25.648"W	10994.42	332.926	2.17	-0.06	2.17	2.17
17799.00	90.680	343.310	6261.72	11002.74	9879.26	-5032.36	1657197.89	14324005.73	39°26'42.399"N	80°56'26.008"W	11087.13	333.006	1.85	0.06	1.85	1.85
17893.00	90.400	344.620	6260.84	11096.52	9969.60	-5058.32	1657171.94	14324096.03	39°26'43.292"N	80°56'26.338"W	11179.42	333.098	1.43	-0.30	1.39	1.39
17986.00	90.430	344.880	6260.16	11189.21	10059.32	-5082.78	1657147.49	14324185.72	39°26'44.179"N	80°56'26.650"W	11270.52	333.193	0.28	0.03	0.28	0.28
18080.00	90.490	343.660	6259.41	11282.95	10149.80	-5108.26	1657122.02	14324276.16	39°26'45.073"N	80°56'26.974"W	11362.78	333.284	1.30	0.06	-1.30	-1.30
18174.00	90.370	339.860	6258.70	11376.89	10239.06	-5137.68	1657092.61	14324365.38	39°26'45.956"N	80°56'27.348"W	11455.74	333.354	4.04	-0.13	-4.04	-4.04
18269.00	90.430	337.210	6258.04	11471.85	10327.46	-5172.44	1657057.87	14324453.75	39°26'46.830"N	80°56'27.790"W	11550.35	333.396	2.79	0.06	-2.79	-2.79
18363.00	90.310	336.010	6257.43	11565.67	10413.73	-5209.75	1657020.57	14324539.98	39°26'47.683"N	80°56'28.265"W	11644.20	333.422	1.28	-0.13	-1.28	-1.28
18457.00	90.280	334.970	6256.95	11659.37	10499.26	-5248.75	1656981.59	14324625.48	39°26'48.528"N	80°56'28.761"W	11738.13	333.439	1.11	0.03	-1.11	-1.11
18552.00	90.400	336.670	6256.38	11754.10	10585.92	-5287.68	1656942.69	14324712.10	39°26'49.385"N	80°56'29.257"W	11833.05	333.458	1.79	0.13	1.79	1.79
18646.00	90.280	339.360	6255.83	11848.03	10673.07	-5322.85	1656907.52	14324799.22	39°26'50.247"N	80°56'29.704"W	11926.74	333.494	2.86	-0.13	2.86	2.86
18740.00	90.280	341.310	6255.37	11942.02	10761.58	-5354.48	1656875.90	14324887.70	39°26'51.122"N	80°56'30.107"W	12020.07	333.547	2.07	0.00	2.07	2.07
18835.00	90.310	340.680	6254.88	12037.01	10851.40	-5385.41	1656844.98	14324977.48	39°26'52.010"N	80°56'30.501"W	12114.27	333.605	0.66	0.03	-0.66	-0.66
18930.00	90.400	339.390	6254.29	12132.00	10940.69	-5417.85	1656812.55	14325066.73	39°26'52.892"N	80°56'30.913"W	12208.68	333.655	1.36	0.09	-1.36	-1.36
19024.00	90.310	340.810	6253.71	12226.00	11029.07	-5449.84	1656780.57	14325155.08	39°26'53.766"N	80°56'31.320"W	12302.08	333.704	1.51	-0.10	1.51	1.51
19119.00	90.310	341.650	6253.19	12320.98	11119.02	-5480.41	1656750.02	14325244.99	39°26'54.655"N	80°56'31.709"W	12396.27	333.762	0.88	0.00	0.88	0.88
19214.00	90.340	342.130	6252.65	12415.93	11209.31	-5509.94	1656720.50	14325335.25	39°26'55.548"N	80°56'32.085"W	12490.32	333.824	0.51	0.03	0.51	0.51
19308.00	90.250	342.990	6252.17	12509.84	11298.99	-5538.11	1656692.34	14325424.89	39°26'56.434"N	80°56'32.443"W	12583.24	333.889	0.92	-0.10	0.91	0.91
19332.00	90.250	342.990	6252.07	12533.81	11321.94	-5545.13	1656685.32	14325447.83	39°26'56.661"N	80°56'32.533"W	12606.93	333.906	0.00	0.00	0.00	Project MD @ TD: 19332'



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'
Page 10 of 12



REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #02
ANTERO RESOURCES CORPORATION	Well	Parachute Unit 2H
Tyler County, WV	Wellbore	Parachute Unit 2H AWB
Tyler		
Stonely Pad		

HOLE & CASING SECTIONS - Ref Wellbore: Parachute Unit 2H AWB Ref Wellpath: Parachute Unit 2H AWP Proj: 19332'

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	-0.41	0.13
17.5in Open Hole	104.50	583.50	479.00	104.50	583.48	-0.41	0.13	-3.63	-1.32
13.375in Casing Surface	24.50	583.50	559.00	24.50	583.48	0.00	0.00	-3.63	-1.32
12.25in Open Hole	583.50	2658.50	2075.00	583.48	2605.77	-3.63	-1.32	-281.64	-299.63
9.625in Casing Intermediate	24.50	2658.50	2634.00	24.50	2605.77	0.00	0.00	-281.64	-299.63
8.75in Open Hole	2658.50	6519.50	3861.00	2605.77	6210.06	-281.64	-299.63	-653.76	-1198.59
8.5in Open Hole	6519.50	19332.00	12812.50	6210.06	6252.07	-653.76	-1198.59	11321.94	-5545.13
5.5in Casing Production	24.50	19332.00	19307.50	24.50	6252.07	0.00	0.00	11321.94	-5545.13

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Parachute Unit 2H POE Rev-2	6347.00	-441.25	-1294.64	1660934.11	14313689.36	39°25'00.370"N	80°55'38.471"W	point
Parachute Unit 2H BHL Rev-2	6377.00	11332.49	-5562.52	1656667.94	14325458.38	39°26'56.765"N	80°56'32.754"W	point
Parachute Unit 2H LP Rev-1	6377.00	-273.52	-1355.44	1660873.33	14313857.03	39°25'02.028"N	80°55'39.244"W	point



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'
Page 11 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Parachute Unit 2H
Field	Tyler	Wellbore	Parachute Unit 2H AWB
Facility	Stoneyly Pad		

WELLPATH COMPOSITION - Ref Wellbore: Parachute Unit 2H AWB Ref Wellpath: Parachute Unit 2H AWP Proj: 19332'			
Start MD ft	End MD ft	Positional Uncertainty Model	Log Name/Comment
24.50	542.50	Gyrodata standard - Drop gyro or Multi-shot	01 Gyrodata MS Gyro <17-1/2">(100'-533')
542.50	688.50	Gyrodata standard - Drop gyro or Multi-shot	02 Gyrodata MS Gyro <12-1/4">(533')(588'-679')
688.50	2575.50	ISCVSA MWD, Rev. 4 (Standard)	03 WFT EM <12-1/4">(679')(766'-2566')
2575.50	6449.50	ISCVSA MWD, Rev. 4 (Standard)	04 WFT EM <8-3/4">(2566')(2688'-6440')
6449.50	19308.00	BHI AutoTrak Curve (Short)	05 BHI AT Curve <8-1/2">(6449.50)(6499'-19308')
19308.00	19332.00	Blind Drilling (std)	Projection to bit
			Parachute Unit 2H AWB
			Parachute Unit 2H AWB
			Parachute Unit 2H AWB
			Parachute Unit 2H AWB
			Parachute Unit 2H AWB
			Parachute Unit 2H AWB

04/05/2019



Actual Wellpath Report

Parachute Unit 2H AWP Proj: 19332'
Page 12 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Tyler County, WV	Well	Parachute Unit 2H
Field	Tyler	Wellbore	Parachute Unit 2H AWB
Facility	Stonefly Pad		

COMMENTS
<p>Wellpath general comments API: 47-095-02430-0000 BH Job #: 9023327 Rig: Frontier 22 Duration: 02/21/18 - 02/24/18 Gyrodatta MS Gyro <17-1/2">(100'-533') Gyrodatta MS Gyro <12-1/4">(533')(588'-679) WFT EM <12-1/4">(679)(766'-2566) WFT EM <8-3/4">(2566')(2688'-6440') Sycamore: 6286'MD / 6055'TVD BHI AT Curve <8-1/2">(6449.50')(6499'-19308') Middlesex: 6522'MD / 6212'TVD Burket: 6681'MD / 6303'TVD Tully: 6730'MD / 6325'TVD POE Marcellus: 6785'MD / 6346'TVD Project MD @ TD: 19332'</p>

04/05/2019