



ANTERO RESOURCES CORPORATION



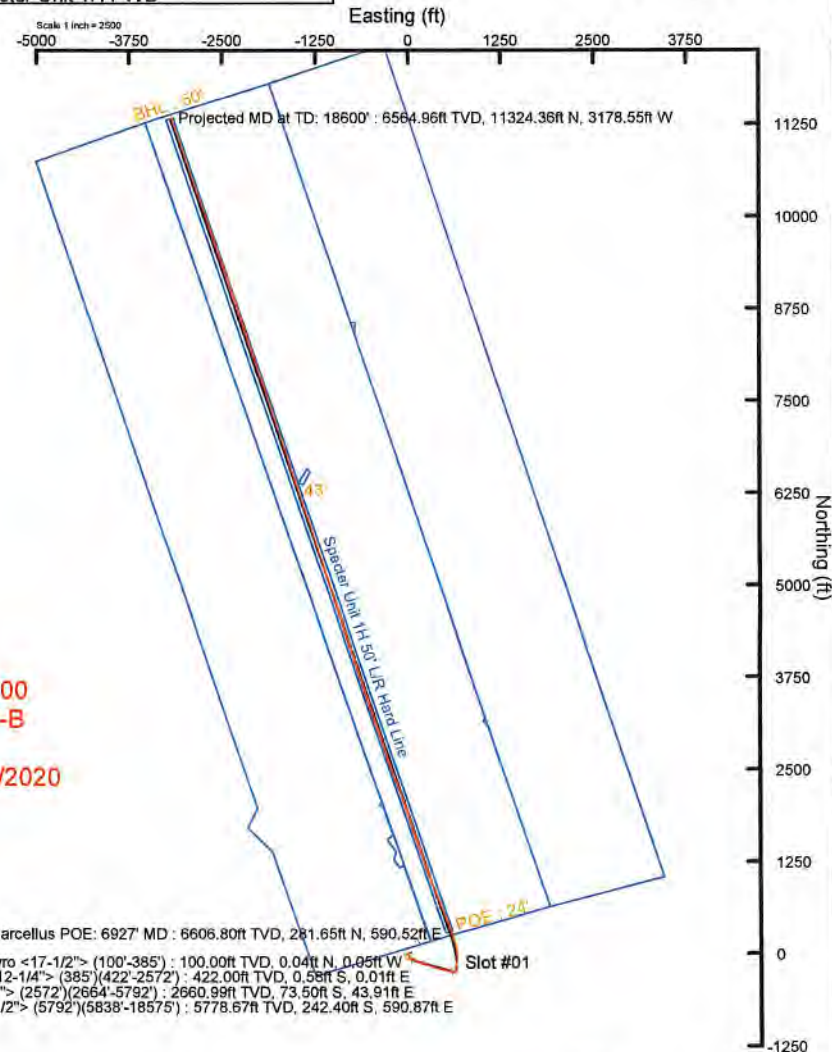
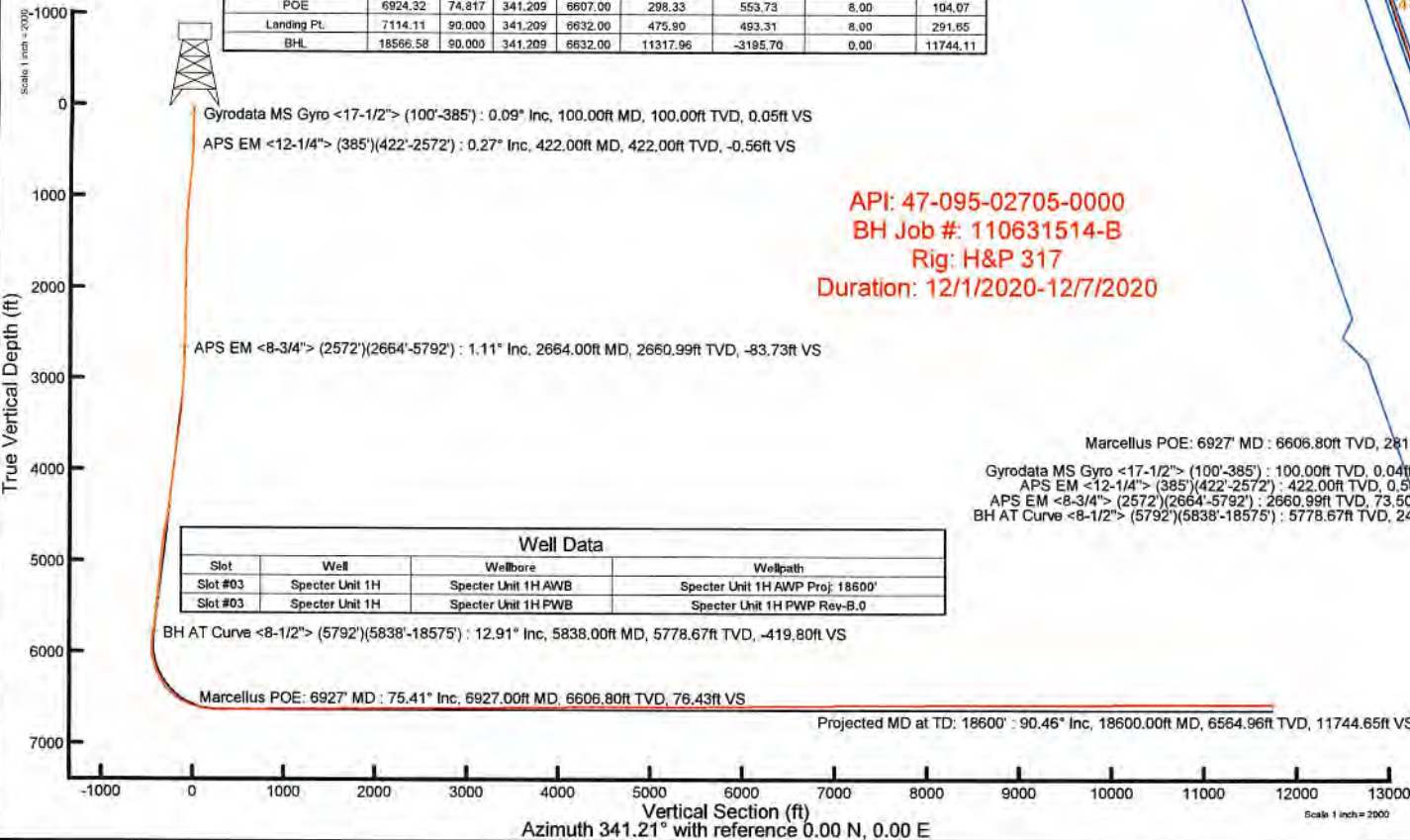
Location: Tyler County, WV
 Field: Tyler
 Facility: Margery Pad

Slot: Slot #03
 Well: Specter Unit 1H
 Wellbore: Specter Unit 1H PWB

Plot reference wellpath is Specter Unit 1H PWB Rev-B.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 317 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 317 (RKB)	Scale: True distance
H&P 317 (RKB) to Mean Sea Level: 1066.5 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot #03): -1041 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: edaryan on 2020-12-31; Database: WA_MPL_EASTERNUS_Def

Location Information							
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
Margery Pad		1688470.750	14350316.160	39°31'2.1450"N	80°49'46.5880"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Slot #03	-22.84	-38.75	1688432.020	14350293.320	39°31'11.9200"N	80°49'47.0830"W	
Comment		Specter Unit 1H					
H&P 317 (RKB) to Ground level (At Slot: Slot #03)		25.5ft					
Mean Sea Level to Ground level (At Slot: Slot #03)		-1041ft					
H&P 317 (RKB) to Mean Sea Level		1066.5ft					

Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (*/100ft)	VS (ft)
Tie On	2572.00	0.930	162.180	2569.00	-72.71	42.79	0.62	-82.62
Proj. to Bottom	2647.00	0.930	162.180	2643.99	-73.87	43.16	0.00	-83.84
KOP 1	2727.00	0.930	162.180	2723.98	-75.11	43.56	0.00	-85.13
End of 3D Arc	3284.09	11.633	106.002	3277.05	-94.96	99.11	2.00	-121.82
Curve KOP	5902.55	11.633	106.002	5841.73	-240.51	606.64	0.00	-423.09
Build / Avoid NGZ	6338.44	30.000	0.000	6256.83	-140.55	650.24	8.00	-342.50
POE	6924.32	74.817	341.209	6607.00	298.33	553.73	8.00	104.07
Landing Pt.	7114.11	90.000	341.209	6632.00	475.90	493.31	8.00	291.65
BHL	18566.58	90.000	341.209	6632.00	11317.96	-3195.70	0.00	11744.11



API: 47-095-02705-0000
 BH Job #: 110631514-B
 Rig: H&P 317
 Duration: 12/1/2020-12/7/2020

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #03	Specter Unit 1H	Specter Unit 1H AWB	Specter Unit 1H AWB Proj: 18600'
Slot #03	Specter Unit 1H	Specter Unit 1H PWB	Specter Unit 1H PWB Rev-B.0

User specified (HDGM) Dip: 66.46° Field: 51786 nT
 Magnetic North is 7.57 degrees West of True North (at 30/Nov/2020)
 Grid North is 0.11 degrees East of True North
 To correct azimuth from True to Grid subtract 0.11 degrees
 To correct azimuth from Magnetic to Grid subtract 7.68 degrees



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'
Page 1 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999603	Report Generated	11/Dec/2020 at 13:09
Convergence at slot	0.11° East	Database	WA_MPL_EASTERNUS_Defn

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-22.84	-38.75	1688432.02	14350293.32	39°31'1.9200"N	80°49'47.0830"W
Facility Reference Pt			1688470.75	14350316.15	39°31'2.1450"N	80°49'46.5880"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.3013"W

WELLPATH DATUM			
Calculation method	Minimum curvature	H&P 317 (RKB) to Facility Vertical Datum	1066.50ft
Horizontal Reference Pt	Slot	H&P 317 (RKB) to Mean Sea Level	1066.50ft
Vertical Reference Pt	H&P 317 (RKB)	H&P 317 (RKB) to Ground Level at Slot (Slot #03)	25.50ft
MD Reference Pt	H&P 317 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	341.21°



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'
Page 2 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

WELLPATH DATA (204 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]
0.00†	0.000	309.130	0.00	0.00	0.00	0.00	1688432.02	14350293.32	39°31'1.9200"N	80°49'47.0830"W	0.00	0.000	0.00	0.00	0.00
25.50	0.000	309.130	25.50	0.00	0.00	0.00	1688432.02	14350293.32	39°31'1.9200"N	80°49'47.0830"W	0.00	0.000	0.00	0.00	0.00
100.00	0.090	309.130	100.00	0.05	0.04	-0.05	1688431.97	14350293.36	39°31'1.9204"N	80°49'47.0836"W	0.06	309.130	0.12	0.12	0.00
200.00	0.070	329.380	200.00	0.18	0.14	-0.14	1688431.88	14350293.46	39°31'1.9214"N	80°49'47.0847"W	0.20	315.338	0.03	-0.02	20.25
300.00	0.270	141.950	300.00	0.01	0.01	-0.02	1688432.00	14350293.33	39°31'1.9201"N	80°49'47.0833"W	0.02	284.626	0.34	0.20	172.57
385.00	0.360	183.080	385.00	-0.42	-0.42	0.09	1688432.11	14350292.90	39°31'1.9159"N	80°49'47.0819"W	0.43	168.411	0.28	0.11	48.39
422.00	0.270	234.870	422.00	-0.56	-0.58	0.01	1688432.03	14350292.74	39°31'1.9143"N	80°49'47.0829"W	0.58	179.193	0.78	-0.24	139.97
513.00	1.190	168.660	512.99	-1.55	-1.63	0.02	1688432.04	14350291.69	39°31'1.9039"N	80°49'47.0828"W	1.63	179.345	1.22	1.01	-72.76
604.00	3.120	161.170	603.92	-4.97	-4.91	1.00	1688433.02	14350288.42	39°31'1.8715"N	80°49'47.0703"W	5.01	168.434	2.14	2.12	-8.23
693.00	5.450	158.400	692.67	-11.61	-11.13	3.34	1688435.36	14350282.20	39°31'1.8100"N	80°49'47.0406"W	11.62	163.285	2.63	2.62	-3.11
783.00	5.910	158.780	782.22	-20.51	-19.42	6.59	1688438.61	14350273.91	39°31'1.7280"N	80°49'46.9993"W	20.51	161.251	0.51	0.51	0.42
874.00	6.320	157.350	872.71	-30.19	-28.41	10.22	1688442.23	14350264.92	39°31'1.6391"N	80°49'46.9533"W	30.19	160.221	0.48	0.45	-1.57
965.00	6.220	160.830	963.16	-40.11	-37.69	13.76	1688445.78	14350255.65	39°31'1.5473"N	80°49'46.9083"W	40.12	159.938	0.43	-0.11	3.82
1055.00	4.820	156.320	1052.74	-48.76	-45.76	16.88	1688448.90	14350247.58	39°31'1.4675"N	80°49'46.8686"W	48.77	159.746	1.63	-1.56	-5.01
1150.00	3.540	152.860	1147.49	-55.64	-52.02	19.83	1688451.84	14350241.32	39°31'1.4055"N	80°49'46.8313"W	55.67	159.139	1.37	-1.35	-3.64
1244.00	3.540	150.120	1241.31	-61.36	-57.12	22.59	1688454.61	14350236.22	39°31'1.3551"N	80°49'46.7961"W	61.43	158.419	0.18	0.00	-2.91
1339.00	1.590	139.300	1336.21	-65.46	-60.67	24.92	1688456.93	14350232.68	39°31'1.3200"N	80°49'46.7665"W	65.58	157.672	2.11	-2.05	-11.39
1434.00	0.940	136.840	1431.19	-67.39	-62.23	26.31	1688458.32	14350231.11	39°31'1.3045"N	80°49'46.7488"W	67.57	157.084	0.69	-0.68	-2.59
1529.00	1.010	126.220	1526.17	-68.79	-63.30	27.52	1688459.53	14350230.05	39°31'1.2940"N	80°49'46.7334"W	69.02	156.504	0.20	0.07	-11.18
1624.00	1.210	148.270	1621.16	-70.45	-64.64	28.72	1688460.73	14350228.70	39°31'1.2806"N	80°49'46.7181"W	70.74	156.046	0.49	0.21	23.21
1718.00	1.310	123.680	1715.13	-72.27	-66.08	30.14	1688462.14	14350227.26	39°31'1.2664"N	80°49'46.7000"W	72.63	155.486	0.58	0.11	-26.16
1813.00	1.090	124.060	1810.11	-73.85	-67.19	31.79	1688463.80	14350226.15	39°31'1.2554"N	80°49'46.6790"W	74.33	154.682	0.23	-0.23	0.40
1908.00	1.310	93.800	1905.09	-74.99	-67.77	33.62	1688465.63	14350225.58	39°31'1.2496"N	80°49'46.6556"W	75.65	153.614	0.70	0.23	-31.85
2003.00	0.660	123.740	2000.08	-75.84	-68.15	35.16	1688467.16	14350225.20	39°31'1.2459"N	80°49'46.6360"W	76.68	152.709	0.85	-0.68	31.52
2098.00	1.020	130.650	2095.07	-77.00	-69.00	36.26	1688468.26	14350224.35	39°31'1.2374"N	80°49'46.6220"W	77.95	152.281	0.39	0.38	7.27
2193.00	0.720	131.480	2190.06	-78.25	-69.95	37.34	1688469.35	14350223.40	39°31'1.2280"N	80°49'46.6082"W	79.29	151.903	0.32	-0.32	0.87
2287.00	0.850	97.660	2284.05	-79.07	-70.43	38.48	1688470.48	14350222.92	39°31'1.2232"N	80°49'46.5937"W	80.26	151.352	0.50	0.14	-35.98
2382.00	1.170	85.650	2379.03	-79.63	-70.45	40.14	1688472.15	14350222.90	39°31'1.2230"N	80°49'46.5725"W	81.09	150.326	0.40	0.34	-12.64
2477.00	1.300	137.910	2474.02	-80.86	-71.18	41.83	1688473.84	14350222.17	39°31'1.2158"N	80°49'46.5509"W	82.56	149.556	1.15	0.14	55.01
2572.00	0.930	162.180	2569.00	-82.62	-72.71	42.79	1688474.79	14350220.64	39°31'1.2006"N	80°49'46.5387"W	84.37	149.523	0.62	-0.39	25.55



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'
Page 3 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

WELLPATH DATA (204 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]	
2664.00	1.110	95.120	2660.99	-83.73	-73.50	43.91	1688475.91	14350219.85	39°31'1.1928"N	80°49'46.5245"W	85.62	149.148	1.24	0.20	-72.89	
2759.00	2.630	94.670	2755.93	-84.97	-73.76	47.00	1688479.00	14350219.59	39°31'1.1902"N	80°49'46.4851"W	87.46	147.497	1.60	1.60	-0.47	
2854.00	4.260	106.480	2850.76	-87.87	-74.94	52.55	1688484.55	14350218.41	39°31'1.1784"N	80°49'46.4142"W	91.53	144.960	1.86	1.72	12.43	
2948.00	5.620	107.740	2944.41	-92.63	-77.33	60.28	1688492.28	14350216.02	39°31'1.1546"N	80°49'46.3156"W	98.05	142.062	1.45	1.45	1.34	
3046.00	7.280	105.360	3041.78	-98.97	-80.44	70.84	1688502.83	14350212.91	39°31'1.1237"N	80°49'46.1810"W	107.19	138.630	1.72	1.69	-2.43	
3141.00	8.370	105.360	3135.90	-106.23	-83.87	83.31	1688515.30	14350209.49	39°31'1.0896"N	80°49'46.0219"W	118.22	135.189	1.15	1.15	0.00	
3236.00	9.270	102.380	3229.77	-114.07	-87.34	97.46	1688529.44	14350206.02	39°31'1.0550"N	80°49'45.8416"W	130.86	131.866	1.06	0.95	-3.14	
3330.00	8.850	111.710	3322.61	-122.69	-91.64	111.57	1688543.55	14350201.72	39°31'1.0123"N	80°49'45.6616"W	144.38	129.397	1.62	-0.45	9.93	
3425.00	8.920	118.960	3416.47	-132.89	-97.91	124.80	1688556.77	14350195.45	39°31'0.9501"N	80°49'45.4929"W	158.62	128.113	1.18	0.07	7.63	
3520.00	10.550	120.360	3510.10	-144.92	-105.87	138.75	1688570.72	14350187.49	39°31'0.8711"N	80°49'45.3151"W	174.53	127.343	1.73	1.72	1.47	
3615.00	10.630	116.870	3603.48	-157.76	-114.22	154.07	1688586.03	14350179.14	39°31'0.7882"N	80°49'45.1198"W	191.80	126.552	0.68	0.08	-3.67	
3710.00	10.640	107.890	3696.86	-169.27	-120.88	170.24	1688602.19	14350172.49	39°31'0.7222"N	80°49'44.9137"W	208.79	125.377	1.74	0.01	-9.45	
3805.00	11.410	105.580	3790.10	-179.81	-126.10	187.64	1688619.58	14350167.27	39°31'0.6703"N	80°49'44.6918"W	226.07	123.902	0.93	0.81	-2.43	
3899.00	12.300	105.660	3882.10	-190.73	-131.30	206.23	1688638.17	14350162.08	39°31'0.6185"N	80°49'44.4547"W	244.48	122.483	0.95	0.95	0.09	
3994.00	12.280	109.970	3974.92	-202.78	-137.48	225.47	1688657.40	14350155.90	39°31'0.5571"N	80°49'44.2093"W	264.08	121.372	0.97	-0.02	4.54	
4089.00	11.010	106.360	4067.97	-214.32	-143.48	243.67	1688675.60	14350149.89	39°31'0.4974"N	80°49'43.9772"W	282.78	120.491	1.54	-1.34	-3.80	
4184.00	11.540	105.510	4161.13	-224.90	-148.58	261.53	1688693.45	14350144.80	39°31'0.4467"N	80°49'43.7495"W	300.79	119.602	0.58	0.56	-0.89	
4279.00	12.470	102.930	4254.05	-235.65	-153.42	280.69	1688712.59	14350139.96	39°31'0.3985"N	80°49'43.5052"W	319.88	118.660	1.13	0.98	-2.72	
4374.00	13.270	107.090	4346.67	-247.43	-158.92	301.11	1688733.01	14350134.47	39°31'0.3438"N	80°49'43.2448"W	340.47	117.824	1.29	0.84	4.38	
4468.00	12.210	114.330	4438.36	-260.55	-166.18	320.48	1688752.37	14350127.20	39°31'0.2716"N	80°49'42.9978"W	361.00	117.409	2.04	-1.13	7.70	
4563.00	12.990	116.810	4531.07	-275.05	-175.14	339.16	1688771.05	14350118.25	39°31'0.1827"N	80°49'42.7596"W	381.71	117.311	1.00	0.82	2.61	
4658.00	14.510	114.980	4623.35	-290.91	-184.98	359.48	1688791.36	14350108.41	39°31'0.0851"N	80°49'42.5006"W	404.28	117.229	1.66	1.60	-1.93	
4753.00	13.160	107.870	4715.59	-305.60	-193.33	380.56	1688812.43	14350100.07	39°31'0.0022"N	80°49'42.2318"W	426.85	116.931	2.28	-1.42	-7.48	
4848.00	12.050	99.930	4808.31	-316.82	-198.35	400.62	1688832.48	14350095.04	39°30'59.9521"N	80°49'41.9759"W	447.04	116.341	2.16	-1.17	-8.36	
4943.00	12.840	100.900	4901.08	-326.82	-202.06	420.76	1688852.61	14350091.34	39°30'59.9151"N	80°49'41.7191"W	466.76	115.652	0.86	0.83	1.02	
5037.00	11.530	96.980	4992.96	-336.08	-205.18	440.34	1688872.19	14350088.22	39°30'59.8839"N	80°49'41.4693"W	485.80	114.983	1.65	-1.39	-4.17	
5132.00	10.620	100.940	5086.19	-344.55	-207.99	458.36	1688890.20	14350085.41	39°30'59.8558"N	80°49'41.2394"W	503.34	114.407	1.25	-0.96	4.17	
5227.00	12.110	102.890	5179.33	-354.12	-211.88	476.67	1688908.50	14350081.53	39°30'59.8170"N	80°49'41.0059"W	521.64	113.965	1.62	1.57	2.05	
5322.00	10.970	97.600	5272.41	-363.37	-215.30	495.34	1688927.17	14350078.11	39°30'59.7829"N	80°49'40.7677"W	540.11	113.492	1.64	-1.20	-5.57	
5417.00	10.700	103.970	5365.72	-372.16	-218.62	512.86	1688944.68	14350074.79	39°30'59.7497"N	80°49'40.5442"W	557.52	113.087	1.29	-0.28	6.71	



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'
Page 4 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

WELLPATH DATA (204 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)	
5512.00	11.610	107.970	5458.92	-382.66	-223.70	530.52	1688962.32	14350069.71	39°30'59.6992"N	80°49'40.3191"W	575.75	112.863	1.26	0.96	4.21	
5606.00	10.880	104.420	5551.12	-393.18	-228.83	548.11	1688979.91	14350064.58	39°30'59.6482"N	80°49'40.0948"W	593.95	112.660	1.07	-0.78	-3.78	
5701.00	9.820	101.720	5644.57	-402.20	-232.70	564.72	1688996.52	14350060.71	39°30'59.6095"N	80°49'39.8829"W	610.79	112.395	1.23	-1.12	-2.84	
5792.00	12.740	112.880	5733.81	-412.81	-238.18	581.57	1689013.36	14350055.23	39°30'59.5551"N	80°49'39.6680"W	628.45	112.272	3.99	3.21	12.26	
5838.00	12.910	115.890	5778.67	-419.80	-242.40	590.87	1689022.65	14350051.02	39°30'59.5132"N	80°49'39.5495"W	638.66	112.306	1.50	0.37	6.54	
5903.00	11.180	112.930	5842.23	-429.10	-248.03	603.20	1689034.98	14350045.39	39°30'59.4574"N	80°49'39.3922"W	652.20	112.352	2.83	-2.66	-4.55	
5997.00	10.020	83.250	5934.70	-436.88	-250.62	619.73	1689051.50	14350042.80	39°30'59.4315"N	80°49'39.1814"W	668.49	112.018	5.87	-1.23	-31.57	
6092.00	9.840	24.190	6028.50	-432.65	-242.22	631.29	1689063.06	14350051.20	39°30'59.5142"N	80°49'39.0337"W	676.17	110.991	10.27	-0.19	-62.17	
6187.00	16.290	8.870	6121.02	-414.89	-221.62	636.68	1689068.44	14350071.78	39°30'59.7177"N	80°49'38.9645"W	674.15	109.193	7.65	6.79	-16.13	
6282.00	24.290	6.340	6210.05	-385.35	-188.99	640.90	1689072.66	14350104.41	39°31'0.0402"N	80°49'38.9098"W	668.18	106.430	8.47	8.42	-2.66	
6376.00	32.060	10.980	6292.86	-346.12	-145.21	647.80	1689079.56	14350148.17	39°31'0.4727"N	80°49'38.8207"W	663.87	102.634	8.58	8.27	4.94	
6471.00	38.390	5.860	6370.44	-297.37	-91.04	655.62	1689087.38	14350202.31	39°31'1.0079"N	80°49'38.7196"W	661.91	97.906	7.35	6.66	-5.39	
6566.00	47.500	357.200	6439.97	-236.71	-26.53	656.92	1689088.68	14350266.80	39°31'1.6455"N	80°49'38.7014"W	657.46	92.313	11.41	9.59	-9.12	
6613.00	52.770	353.810	6470.09	-201.76	9.41	654.06	1689085.82	14350302.73	39°31'2.0007"N	80°49'38.7371"W	654.13	89.176	12.50	11.21	-7.21	
6661.00	54.680	350.760	6498.50	-163.80	47.74	648.85	1689080.61	14350341.05	39°31'2.3797"N	80°49'38.8025"W	650.61	85.792	6.49	3.98	-6.35	
6708.00	58.430	349.830	6524.39	-125.08	86.39	642.24	1689074.00	14350379.68	39°31'2.7618"N	80°49'38.8860"W	648.02	82.339	8.15	7.98	-1.98	
6756.00	63.500	347.410	6547.69	-83.47	127.51	633.94	1689065.70	14350420.78	39°31'3.1684"N	80°49'38.9909"W	646.63	78.627	11.44	10.56	-5.04	
6803.00	68.230	345.300	6566.90	-40.77	169.17	623.81	1689055.58	14350462.43	39°31'3.5803"N	80°49'39.1191"W	646.34	74.827	10.87	10.06	-4.49	
6851.00	69.720	343.400	6584.12	3.96	212.31	611.72	1689043.49	14350505.55	39°31'4.0069"N	80°49'39.2723"W	647.52	70.859	4.83	3.10	-3.96	
6898.00	73.370	342.840	6599.00	48.51	254.97	598.77	1689030.55	14350548.19	39°31'4.4287"N	80°49'39.4365"W	650.80	66.935	7.85	7.77	-1.19	
6946.00	76.750	342.760	6611.37	94.87	299.26	585.06	1689016.85	14350592.46	39°31'4.8668"N	80°49'39.6104"W	657.16	62.910	7.04	7.04	-0.17	
7041.00	84.200	338.550	6627.09	188.46	387.57	554.02	1688985.82	14350680.73	39°31'5.7401"N	80°49'40.0043"W	676.13	55.025	8.98	7.84	-4.43	
7136.00	90.090	338.280	6631.82	283.19	475.76	519.13	1688950.94	14350768.89	39°31'6.6124"N	80°49'40.4474"W	704.16	47.496	6.21	6.20	-0.28	
7230.00	90.340	338.250	6631.46	377.07	563.08	484.32	1688916.15	14350856.17	39°31'7.4760"N	80°49'40.8894"W	742.71	40.700	0.27	0.27	-0.03	
7325.00	90.250	338.310	6630.98	471.94	651.33	449.16	1688881.00	14350944.39	39°31'8.3489"N	80°49'41.3358"W	791.19	34.591	0.11	-0.09	0.06	
7420.00	90.370	338.310	6630.46	566.82	739.60	414.05	1688845.91	14351032.63	39°31'9.2220"N	80°49'41.7817"W	847.61	29.242	0.13	0.13	0.00	
7515.00	91.230	338.810	6629.13	661.71	828.02	379.33	1688811.20	14351121.01	39°31'10.0965"N	80°49'42.2226"W	910.77	24.614	1.05	0.91	0.53	
7610.00	89.450	337.180	6628.57	756.55	916.09	343.74	1688775.62	14351209.04	39°31'10.9676"N	80°49'42.6746"W	978.46	20.567	2.54	-1.87	-1.72	
7705.00	91.200	338.270	6628.03	851.37	1003.99	307.73	1688739.63	14351296.91	39°31'11.8371"N	80°49'43.1320"W	1050.10	17.041	2.17	1.84	1.15	
7800.00	90.060	341.510	6626.99	946.32	1093.18	275.08	1688706.99	14351386.07	39°31'12.7192"N	80°49'43.5465"W	1127.26	14.124	3.62	-1.20	3.41	



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'
Page 5 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

WELLPATH DATA (204 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)
7894.00	90.180	341.280	6626.79	1040.32	1182.27	245.09	1688677.01	14351475.12	39°31'13.6002"N	80°49'43.9270"W	1207.41	11.712	0.28	0.13	-0.24
7989.00	90.550	342.710	6626.19	1135.31	1272.61	215.72	1688647.66	14351565.43	39°31'14.4936"N	80°49'44.2995"W	1290.77	9.621	1.55	0.39	1.51
8084.00	89.750	338.670	6625.94	1230.28	1362.25	184.32	1688616.26	14351655.03	39°31'15.3801"N	80°49'44.6981"W	1374.66	7.705	4.34	-0.84	-4.25
8179.00	91.420	341.710	6624.97	1325.25	1451.61	152.13	1688584.09	14351744.35	39°31'16.2639"N	80°49'45.1067"W	1459.56	5.983	3.65	1.76	3.20
8274.00	90.740	341.100	6623.18	1420.23	1541.63	121.84	1688553.81	14351834.34	39°31'17.1542"N	80°49'45.4910"W	1546.44	4.519	0.96	-0.72	-0.64
8368.00	90.120	341.310	6622.47	1514.23	1630.62	91.55	1688523.54	14351923.29	39°31'18.0342"N	80°49'45.8753"W	1633.19	3.214	0.70	-0.66	0.22
8463.00	90.650	342.040	6621.83	1609.22	1720.80	61.69	1688493.68	14352013.43	39°31'18.9261"N	80°49'46.2543"W	1721.90	2.053	0.95	0.56	0.77
8558.00	90.180	340.720	6621.14	1704.21	1810.82	31.36	1688463.36	14352103.42	39°31'19.8164"N	80°49'46.6392"W	1811.09	0.992	1.47	-0.49	-1.39
8653.00	89.420	341.950	6621.48	1799.21	1900.82	0.95	1688432.97	14352193.38	39°31'20.7064"N	80°49'47.0249"W	1900.82	0.029	1.52	-0.80	1.29
8748.00	90.150	340.740	6621.83	1894.21	1990.83	-29.43	1688402.60	14352283.35	39°31'21.5965"N	80°49'47.4105"W	1991.04	359.153	1.49	0.77	-1.27
8843.00	90.280	341.150	6621.48	1989.21	2080.62	-60.45	1688371.60	14352373.11	39°31'22.4846"N	80°49'47.8041"W	2081.50	358.336	0.45	0.14	0.43
8937.00	90.460	340.830	6620.87	2083.20	2169.49	-91.07	1688340.99	14352461.95	39°31'23.3635"N	80°49'48.1927"W	2171.40	357.596	0.39	0.19	-0.34
9032.00	90.460	339.970	6620.11	2178.19	2258.98	-122.93	1688309.14	14352551.40	39°31'24.2486"N	80°49'48.5972"W	2262.33	356.885	0.91	0.00	-0.91
9127.00	89.780	334.040	6619.91	2272.89	2346.40	-160.03	1688272.06	14352638.78	39°31'25.1132"N	80°49'49.0685"W	2351.85	356.098	6.28	-0.72	-6.24
9222.00	90.030	341.280	6620.06	2367.64	2434.21	-196.11	1688235.99	14352726.55	39°31'25.9817"N	80°49'49.5269"W	2442.09	355.394	7.63	0.26	7.62
9317.00	90.650	341.540	6619.50	2462.64	2524.25	-226.40	1688205.71	14352816.56	39°31'26.8722"N	80°49'49.9112"W	2534.38	354.875	0.71	0.65	0.27
9412.00	92.060	342.430	6617.25	2557.60	2614.56	-255.77	1688176.35	14352906.84	39°31'27.7653"N	80°49'50.2838"W	2627.04	354.413	1.75	1.48	0.94
9602.00	90.520	341.780	6612.98	2747.53	2795.32	-314.13	1688118.01	14353087.52	39°31'29.5529"N	80°49'51.0243"W	2812.91	353.588	0.88	-0.81	-0.34
9696.00	90.340	342.160	6612.27	2841.51	2884.70	-343.23	1688088.93	14353176.87	39°31'30.4368"N	80°49'51.3934"W	2905.05	353.215	0.45	-0.19	0.40
9791.00	90.220	339.200	6611.81	2936.50	2974.34	-374.65	1688057.52	14353266.47	39°31'31.3233"N	80°49'51.7923"W	2997.84	352.821	3.12	-0.13	-3.12
9886.00	90.890	342.700	6610.89	3031.48	3064.12	-405.66	1688026.53	14353356.21	39°31'32.2112"N	80°49'52.1858"W	3090.85	352.459	3.75	0.71	3.68
9981.00	89.780	342.620	6610.33	3126.44	3154.80	-433.97	1687998.22	14353446.86	39°31'33.1079"N	80°49'52.5449"W	3184.50	352.168	1.17	-1.17	-0.08
10076.00	90.030	341.390	6610.49	3221.43	3245.15	-463.32	1687968.89	14353537.17	39°31'34.0014"N	80°49'52.9173"W	3278.05	351.875	1.32	0.26	-1.29
10171.00	91.020	341.350	6609.62	3316.43	3335.16	-493.66	1687938.55	14353627.15	39°31'34.8917"N	80°49'53.3024"W	3371.50	351.580	1.04	1.04	-0.04
10265.00	90.710	342.020	6608.20	3410.41	3424.39	-523.20	1687909.03	14353716.34	39°31'35.7741"N	80°49'53.6772"W	3464.13	351.313	0.79	-0.33	0.71
10360.00	90.460	340.920	6607.23	3505.41	3514.46	-553.39	1687878.85	14353806.38	39°31'36.6648"N	80°49'54.0603"W	3557.76	351.052	1.19	-0.26	-1.16
10455.00	90.310	340.970	6606.59	3600.40	3604.25	-584.40	1687847.85	14353896.13	39°31'37.5528"N	80°49'54.4540"W	3651.32	350.790	0.17	-0.16	0.05
10550.00	90.710	341.690	6605.75	3695.40	3694.25	-614.81	1687817.45	14353986.09	39°31'38.4429"N	80°49'54.8399"W	3745.06	350.551	0.87	0.42	0.76
10645.00	90.580	341.720	6604.68	3790.39	3784.44	-644.63	1687787.65	14354076.25	39°31'39.3348"N	80°49'55.2183"W	3838.95	350.333	0.14	-0.14	0.03
10739.00	90.800	342.150	6603.54	3884.37	3873.80	-673.78	1687758.51	14354165.57	39°31'40.2185"N	80°49'55.5881"W	3931.96	350.133	0.51	0.23	0.46



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'
Page 6 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

WELLPATH DATA (204 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)
10834.00	90.580	341.570	6602.40	3979.36	3964.07	-703.35	1687728.95	14354255.81	39°31'41.1112"N	80°49'55.9634"W	4025.99	349.939	0.65	-0.23	-0.61
10929.00	90.150	341.430	6601.79	4074.36	4054.16	-733.50	1687698.82	14354345.86	39°31'42.0022"N	80°49'56.3460"W	4119.98	349.745	0.48	-0.45	-0.15
11024.00	90.490	341.250	6601.26	4169.35	4144.17	-763.89	1687668.43	14354435.83	39°31'42.8923"N	80°49'56.7317"W	4213.98	349.556	0.40	0.36	-0.19
11118.00	90.430	342.090	6600.51	4263.35	4233.39	-793.45	1687638.89	14354525.02	39°31'43.7747"N	80°49'57.1068"W	4307.11	349.384	0.90	-0.06	0.89
11213.00	89.940	341.480	6600.20	4358.34	4323.63	-823.15	1687609.20	14354615.22	39°31'44.6671"N	80°49'57.4837"W	4401.29	349.221	0.82	-0.52	-0.64
11308.00	89.750	341.820	6600.46	4453.34	4413.80	-853.05	1687579.31	14354705.36	39°31'45.5588"N	80°49'57.8632"W	4495.48	349.061	0.41	-0.20	0.36
11403.00	89.850	341.710	6600.79	4548.33	4504.03	-882.78	1687549.59	14354795.55	39°31'46.4511"N	80°49'58.2405"W	4589.73	348.911	0.16	0.11	-0.12
11498.00	90.550	342.110	6600.46	4643.32	4594.33	-912.28	1687520.10	14354885.82	39°31'47.3441"N	80°49'58.6148"W	4684.03	348.769	0.85	0.74	0.42
11592.00	89.820	342.070	6600.16	4737.31	4683.78	-941.19	1687491.21	14354975.22	39°31'48.2286"N	80°49'58.9816"W	4777.40	348.638	0.78	-0.78	-0.04
11687.00	90.030	341.550	6600.28	4832.31	4774.03	-970.84	1687461.57	14355065.44	39°31'49.1212"N	80°49'59.3579"W	4871.74	348.505	0.59	0.22	-0.55
11782.00	90.370	341.560	6599.95	4927.30	4864.15	-1000.90	1687431.52	14355155.52	39°31'50.0124"N	80°49'59.7394"W	4966.06	348.372	0.36	0.36	0.01
11877.00	89.850	342.010	6599.77	5022.30	4954.39	-1030.59	1687401.84	14355245.73	39°31'50.9048"N	80°50'0.1162"W	5060.44	348.249	0.72	-0.55	0.47
11971.00	89.910	341.810	6599.96	5116.29	5043.74	-1059.78	1687372.66	14355335.04	39°31'51.7884"N	80°50'0.4866"W	5153.88	348.134	0.22	0.06	-0.21
12066.00	91.020	342.170	6599.19	5211.28	5134.08	-1089.15	1687343.30	14355425.35	39°31'52.6818"N	80°50'0.8593"W	5248.34	348.023	1.23	1.17	0.38
12161.00	90.430	341.810	6597.99	5306.26	5224.42	-1118.52	1687313.94	14355515.65	39°31'53.5752"N	80°50'1.2320"W	5342.81	347.916	0.73	-0.62	-0.38
12256.00	90.400	342.300	6597.30	5401.25	5314.79	-1147.79	1687284.69	14355605.99	39°31'54.4689"N	80°50'1.6035"W	5437.32	347.813	0.52	-0.03	0.52
12351.00	90.680	342.020	6596.41	5496.23	5405.22	-1176.90	1687255.59	14355696.38	39°31'55.3632"N	80°50'1.9728"W	5531.86	347.717	0.42	0.29	-0.29
12446.00	90.550	341.840	6595.39	5591.22	5495.53	-1206.36	1687226.14	14355786.65	39°31'56.2563"N	80°50'2.3467"W	5626.38	347.619	0.23	-0.14	-0.19
12540.00	90.710	341.580	6594.35	5685.21	5584.78	-1235.86	1687196.66	14355875.86	39°31'57.1389"N	80°50'2.7211"W	5719.88	347.522	0.32	0.17	-0.28
12635.00	90.710	341.870	6593.18	5780.20	5674.98	-1265.65	1687166.88	14355966.03	39°31'58.0309"N	80°50'3.0991"W	5814.40	347.428	0.31	0.00	0.31
12730.00	90.090	341.410	6592.51	5875.19	5765.14	-1295.57	1687136.97	14356056.16	39°31'58.9225"N	80°50'3.4789"W	5908.92	347.335	0.81	-0.65	-0.48
12825.00	91.540	341.670	6591.16	5970.18	5855.24	-1325.65	1687106.90	14356146.22	39°31'59.8136"N	80°50'3.8606"W	6003.43	347.243	1.55	1.53	0.27
12920.00	90.950	341.800	6589.10	6065.15	5945.43	-1355.41	1687077.15	14356236.38	39°32'0.7055"N	80°50'4.2384"W	6097.97	347.157	0.64	-0.62	0.14
13015.00	90.680	341.760	6587.75	6160.14	6035.66	-1385.11	1687047.46	14356326.57	39°32'1.5978"N	80°50'4.6154"W	6192.55	347.075	0.29	-0.28	-0.04
13110.00	90.580	341.730	6586.70	6255.13	6125.87	-1414.87	1687017.72	14356416.74	39°32'2.4899"N	80°50'4.9930"W	6287.14	346.995	0.11	-0.11	-0.03
13204.00	90.150	341.210	6586.10	6349.12	6215.00	-1444.74	1686987.85	14356505.83	39°32'3.3713"N	80°50'5.3722"W	6380.71	346.913	0.72	-0.46	-0.55
13299.00	90.520	341.670	6585.55	6444.12	6305.05	-1474.98	1686957.63	14356595.85	39°32'4.2619"N	80°50'5.7560"W	6475.28	346.833	0.62	0.39	0.48
13394.00	90.030	341.160	6585.09	6539.12	6395.10	-1505.26	1686927.36	14356685.86	39°32'5.1524"N	80°50'6.1403"W	6569.86	346.755	0.74	-0.52	-0.54
13489.00	90.150	341.900	6584.94	6634.12	6485.20	-1535.35	1686897.28	14356775.93	39°32'6.0435"N	80°50'6.5224"W	6664.47	346.681	0.79	0.13	0.78
13584.00	90.120	341.380	6584.72	6729.11	6575.37	-1565.28	1686867.37	14356866.06	39°32'6.9351"N	80°50'6.9022"W	6759.11	346.610	0.55	-0.03	-0.55



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'

Page 7 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

WELLPATH DATA (204 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]
13679.00	90.680	341.370	6584.06	6824.11	6665.39	-1595.62	1686837.04	14356956.05	39°32'7.8254"N	80°50'7.2873"W	6853.71	346.537	0.59	0.59	-0.01
13773.00	90.650	341.970	6582.96	6918.10	6754.61	-1625.18	1686807.49	14357045.24	39°32'8.7078"N	80°50'7.6625"W	6947.37	346.472	0.64	-0.03	0.64
13868.00	91.110	341.600	6581.51	7013.08	6844.84	-1654.87	1686777.81	14357135.43	39°32'9.6001"N	80°50'8.0394"W	7042.05	346.408	0.62	0.48	-0.39
13963.00	90.250	342.180	6580.38	7108.07	6935.13	-1684.40	1686748.30	14357225.68	39°32'10.4929"N	80°50'8.4141"W	7136.75	346.348	1.09	-0.91	0.61
14058.00	89.940	341.440	6580.22	7203.06	7025.38	-1714.05	1686718.65	14357315.89	39°32'11.3854"N	80°50'8.7905"W	7231.45	346.289	0.84	-0.33	-0.78
14152.00	90.520	341.610	6579.84	7297.06	7114.53	-1743.84	1686688.88	14357405.01	39°32'12.2671"N	80°50'9.1686"W	7325.13	346.228	0.64	0.62	0.18
14247.00	90.710	341.630	6578.82	7392.05	7204.68	-1773.79	1686658.94	14357495.12	39°32'13.1586"N	80°50'9.5489"W	7419.82	346.169	0.20	0.20	0.02
14342.00	90.370	342.190	6577.93	7487.04	7294.98	-1803.29	1686629.45	14357585.39	39°32'14.0516"N	80°50'9.9232"W	7514.56	346.115	0.69	-0.36	0.59
14437.00	90.090	341.590	6577.55	7582.03	7385.27	-1832.82	1686599.93	14357675.64	39°32'14.9445"N	80°50'10.2981"W	7609.30	346.062	0.70	-0.29	-0.63
14532.00	90.770	343.690	6576.83	7676.99	7475.94	-1861.16	1686571.60	14357766.27	39°32'15.8411"N	80°50'10.6577"W	7704.13	346.020	2.32	0.72	2.21
14627.00	90.520	341.620	6575.76	7771.95	7566.61	-1889.48	1686543.29	14357856.91	39°32'16.7377"N	80°50'11.0171"W	7798.95	345.979	2.19	-0.26	-2.18
14722.00	90.180	341.950	6575.18	7866.94	7656.85	-1919.18	1686513.61	14357947.11	39°32'17.6301"N	80°50'11.3940"W	7893.70	345.929	0.50	-0.36	0.35
14817.00	90.000	340.340	6575.03	7961.94	7746.74	-1949.88	1686482.92	14358036.97	39°32'18.5191"N	80°50'11.7837"W	7988.37	345.872	1.71	-0.19	-1.69
14912.00	90.280	341.750	6574.80	8056.94	7836.59	-1980.73	1686452.08	14358126.78	39°32'19.4077"N	80°50'12.1755"W	8083.03	345.815	1.51	0.29	1.48
15006.00	90.120	341.920	6574.47	8150.93	7925.91	-2010.04	1686422.78	14358216.06	39°32'20.2909"N	80°50'12.5475"W	8176.81	345.770	0.25	-0.17	0.18
15101.00	90.180	342.190	6574.23	8245.92	8016.28	-2039.31	1686393.53	14358306.40	39°32'21.1847"N	80°50'12.9190"W	8271.61	345.727	0.29	0.06	0.28
15196.00	90.280	341.790	6573.84	8340.91	8106.63	-2068.68	1686364.17	14358396.71	39°32'22.0781"N	80°50'13.2918"W	8366.41	345.685	0.43	0.11	-0.42
15291.00	90.150	341.600	6573.49	8435.91	8196.82	-2098.52	1686334.34	14358486.87	39°32'22.9700"N	80°50'13.6706"W	8461.18	345.640	0.24	-0.14	-0.20
15386.00	90.310	341.380	6573.11	8530.91	8286.90	-2128.68	1686304.19	14358576.91	39°32'23.8609"N	80°50'14.0534"W	8555.94	345.594	0.29	0.17	-0.23
15481.00	90.150	341.000	6572.72	8625.90	8376.83	-2159.31	1686273.58	14358666.80	39°32'24.7502"N	80°50'14.4423"W	8650.66	345.545	0.43	-0.17	-0.40
15576.00	90.000	342.010	6572.60	8720.90	8466.92	-2189.44	1686243.45	14358756.86	39°32'25.6411"N	80°50'14.8249"W	8745.42	345.502	1.07	-0.16	1.06
15670.00	90.340	341.950	6572.32	8814.89	8556.31	-2218.52	1686214.38	14358846.21	39°32'26.5251"N	80°50'15.1940"W	8839.25	345.464	0.37	0.36	-0.06
15765.00	90.150	341.340	6571.92	8909.89	8646.48	-2248.44	1686184.48	14358936.34	39°32'27.4168"N	80°50'15.5738"W	8934.04	345.424	0.67	-0.20	-0.64
15860.00	90.030	341.880	6571.77	9004.89	8736.62	-2278.41	1686154.52	14359026.45	39°32'28.3083"N	80°50'15.9543"W	9028.83	345.383	0.58	-0.13	0.57
15955.00	90.090	342.040	6571.67	9099.88	8826.95	-2307.83	1686125.11	14359116.75	39°32'29.2015"N	80°50'16.3277"W	9123.66	345.348	0.18	0.06	0.17
16050.00	90.180	341.330	6571.44	9194.87	8917.14	-2337.68	1686095.27	14359206.90	39°32'30.0934"N	80°50'16.7067"W	9218.47	345.310	0.75	0.09	-0.75
16145.00	90.120	340.400	6571.19	9289.87	9006.89	-2368.82	1686064.15	14359296.61	39°32'30.9810"N	80°50'17.1021"W	9313.18	345.265	0.98	-0.06	-0.98
16240.00	90.250	340.760	6570.89	9384.86	9096.48	-2400.41	1686032.57	14359386.17	39°32'31.8670"N	80°50'17.5032"W	9407.87	345.218	0.40	0.14	0.38
16334.00	90.220	340.430	6570.50	9478.86	9185.14	-2431.64	1686001.35	14359474.80	39°32'32.7438"N	80°50'17.8998"W	9501.56	345.172	0.35	-0.03	-0.35
16429.00	90.370	340.960	6570.01	9573.85	9274.80	-2463.04	1685969.96	14359564.42	39°32'33.6305"N	80°50'18.2987"W	9596.28	345.128	0.58	0.16	0.56



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'
Page 8 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

WELLPATH DATA (204 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]
16524.00	90.150	340.470	6569.58	9668.85	9364.47	-2494.42	1685938.60	14359654.05	39°32'34.5173"N	80°50'18.6971"W	9691.00	345.084	0.57	-0.23	-0.52
16618.00	90.280	341.060	6569.23	9762.84	9453.22	-2525.39	1685907.64	14359742.77	39°32'35.3950"N	80°50'19.0904"W	9784.73	345.043	0.64	0.14	0.63
16713.00	90.430	341.060	6568.64	9857.84	9543.08	-2556.22	1685876.82	14359832.58	39°32'36.2836"N	80°50'19.4819"W	9879.50	345.005	0.16	0.16	0.00
16808.00	89.850	340.440	6568.41	9952.84	9632.76	-2587.54	1685845.51	14359922.24	39°32'37.1705"N	80°50'19.8796"W	9974.24	344.964	0.89	-0.61	-0.65
16903.00	90.370	341.010	6568.23	10047.83	9722.44	-2618.90	1685814.17	14360011.87	39°32'38.0574"N	80°50'20.2779"W	10068.98	344.924	0.81	0.55	0.60
16998.00	90.520	340.560	6567.49	10142.83	9812.14	-2650.16	1685782.91	14360101.54	39°32'38.9445"N	80°50'20.6749"W	10163.73	344.886	0.50	0.16	-0.47
17092.00	90.770	340.400	6566.43	10236.81	9900.73	-2681.57	1685751.52	14360190.10	39°32'39.8206"N	80°50'21.0738"W	10257.45	344.845	0.32	0.27	-0.17
17187.00	91.200	341.180	6564.80	10331.80	9990.43	-2712.82	1685720.28	14360279.76	39°32'40.7077"N	80°50'21.4707"W	10352.20	344.808	0.94	0.45	0.82
17282.00	90.920	340.520	6563.04	10426.78	10080.16	-2743.98	1685689.13	14360369.45	39°32'41.5950"N	80°50'21.8664"W	10446.96	344.772	0.75	-0.29	-0.69
17377.00	89.780	340.220	6562.46	10521.76	10169.63	-2775.90	1685657.23	14360458.89	39°32'42.4799"N	80°50'22.2717"W	10541.68	344.733	1.24	-1.20	-0.32
17472.00	89.350	340.250	6563.18	10616.75	10259.03	-2808.02	1685625.12	14360548.26	39°32'43.3640"N	80°50'22.6798"W	10636.39	344.692	0.45	-0.45	0.03
17566.00	90.090	340.490	6563.64	10710.73	10347.57	-2839.60	1685593.56	14360636.75	39°32'44.2396"N	80°50'23.0808"W	10730.12	344.655	0.83	0.79	0.26
17661.00	89.880	340.700	6563.66	10805.73	10437.17	-2871.16	1685562.00	14360726.32	39°32'45.1257"N	80°50'23.4817"W	10824.88	344.619	0.31	-0.22	0.22
17756.00	89.140	340.590	6564.48	10900.72	10526.80	-2902.65	1685530.53	14360815.91	39°32'46.0121"N	80°50'23.8816"W	10919.65	344.584	0.79	-0.78	-0.12
17850.00	89.200	341.660	6565.84	10994.71	10615.73	-2933.05	1685500.14	14360904.81	39°32'46.8916"N	80°50'24.2677"W	11013.47	344.555	1.14	0.06	1.14
17945.00	88.860	341.620	6567.45	11089.69	10705.88	-2962.97	1685470.23	14360994.93	39°32'47.7831"N	80°50'24.6476"W	11108.34	344.530	0.36	-0.36	-0.04
18040.00	90.220	340.480	6568.21	11184.69	10795.73	-2993.82	1685439.40	14361084.74	39°32'48.6716"N	80°50'25.0393"W	11203.16	344.501	1.87	1.43	-1.20
18135.00	90.340	340.380	6567.75	11279.68	10885.24	-3025.64	1685407.59	14361174.21	39°32'49.5568"N	80°50'25.4435"W	11297.92	344.466	0.16	0.13	-0.11
18230.00	90.180	340.600	6567.31	11374.67	10974.78	-3057.37	1685375.87	14361263.72	39°32'50.4424"N	80°50'25.8465"W	11392.69	344.433	0.29	-0.17	0.23
18324.00	90.310	340.950	6566.91	11468.66	11063.54	-3088.32	1685344.94	14361352.44	39°32'51.3201"N	80°50'26.2396"W	11486.50	344.403	0.40	0.14	0.37
18419.00	90.280	340.570	6566.42	11563.66	11153.23	-3119.62	1685313.64	14361442.10	39°32'52.2071"N	80°50'26.6372"W	11581.31	344.373	0.40	-0.03	-0.40
18514.00	90.580	340.850	6565.71	11658.65	11242.90	-3151.01	1685282.27	14361531.73	39°32'53.0938"N	80°50'27.0358"W	11676.11	344.344	0.43	0.32	0.29
18575.00	90.460	341.580	6565.16	11719.65	11300.64	-3170.65	1685262.64	14361589.45	39°32'53.6649"N	80°50'27.2852"W	11737.02	344.327	1.21	-0.20	1.20
18600.00†	90.460	341.580	6564.96	11744.65	11324.36	-3178.55	1685254.74	14361613.16	39°32'53.8995"N	80°50'27.3855"W	11761.99	344.322	0.00	0.00	0.00



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'

Page 9 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

HOLE & CASING SECTIONS - Ref Wellbore: Specter Unit 1H AWB Ref Wellpath: Specter Unit 1H AWP Proj: 18600'

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
20in Conductor	25.50	105.50	80.00	25.50	105.50	0.00	0.00	0.04	-0.05
17.5in Open Hole	105.50	387.00	281.50	105.50	387.00	0.04	-0.05	-0.43	0.08
13.375in Casing Surface	25.50	370.00	344.50	25.50	370.00	0.00	0.00	-0.33	0.09
12.25in Open Hole	387.00	2647.00	2260.00	387.00	2643.99	-0.43	0.08	-73.45	43.60
9.625in Casing Intermediate	25.50	2573.00	2547.50	25.50	2570.00	0.00	0.00	-72.73	42.80
8.75in Open Hole	2647.00	5862.00	3215.00	2643.99	5802.09	-73.45	43.60	-244.64	595.59
8.5in Open Hole	5862.00	18600.00	12738.00	5802.09	6564.96	-244.64	595.59	11324.36	-3178.55
5.5in Casing Production	25.50	18600.00	18574.50	25.50	6564.96	0.00	0.00	11324.36	-3178.55

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Specter Unit 1H POE Rev-2	6607.00	298.33	553.73	1688985.53	14350591.53	39°31'4.8581"N	80°49'40.0102"W	point
Specter Unit 1H BHL Rev-2	6632.00	11317.96	-3195.70	1685237.59	14361606.76	39°32'53.8365"N	80°50'27.6046"W	point
Specter Unit 1H LP Rev-2	6632.00	475.90	493.31	1688925.13	14350769.03	39°31'6.6143"N	80°49'40.7768"W	point
Specter Unit 1H 50' L/R Hard Line	7000.00	5808.14	-1320.99	1687111.56	14356099.14	39°31'59.3480"N	80°50'3.8023"W	rectangle
2D Rectangle 11640 x 100.								



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'

Page 10 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

WELLPATH COMPOSITION - Ref Wellbore: Specter Unit 1H AWB Ref Wellpath: Specter Unit 1H AWP Proj: 18600'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
25.50	385.00	Gyrodata 2015 - GC+WIR+DPIPE	01 Gyrodata MS Gyro <17-1/2"> (100'-385')	Specter Unit 1H AWB	12/Nov/2020
385.00	2572.00	BH NaviTrak (2019) (Axial)	02 APS EM <12-1/4"> (385')(422'-2572')	Specter Unit 1H AWB	12/Nov/2020
2572.00	5792.00	BH NaviTrak (2019) (Axial)	03 APS EM <8-3/4"> (2572')(2664'-5792')	Specter Unit 1H AWB	30/Nov/2020
5792.00	18600.00	BH AutoTrak Curve (2019) (Short spacing)	04 BH AT Curve <8-1/2"> (5792')(5838'-18575')	Specter Unit 1H AWB	30/Nov/2020



Actual Wellpath Report

Specter Unit 1H AWP Proj: 18600'

Page 11 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Specter Unit 1H
Field	Tyler	API	47-095-02705-0000
Facility	Margery Pad	Wellbore	Specter Unit 1H AWB
Slot	Slot #03		

COMMENTS

Wellpath general comments

API: 47-095-02705-0000

BH Job #: 110631514-B

Rig: H&P 317

Duration: 12/1/2020-12/7/2020

Gyrodatta MS Gyro <17-1/2"> (100'-385')

APS EM <12-1/4"> (385')(422'-2572')

APS EM <8-3/4"> (2572')(2664'-5792')

BH AT Curve <8-1/2"> (5792')(5838'-18575')

Sycamore: 6408' MD

Middlesex: 6547' MD

Burkett: 6714' MD

Tully: 6766' MD

Marcellus POE: 6927' MD

Projected MD at TD: 18600'

RECEIVED
Oil and Gas
MAR 28 2023
WV Department of
Environmental Protection