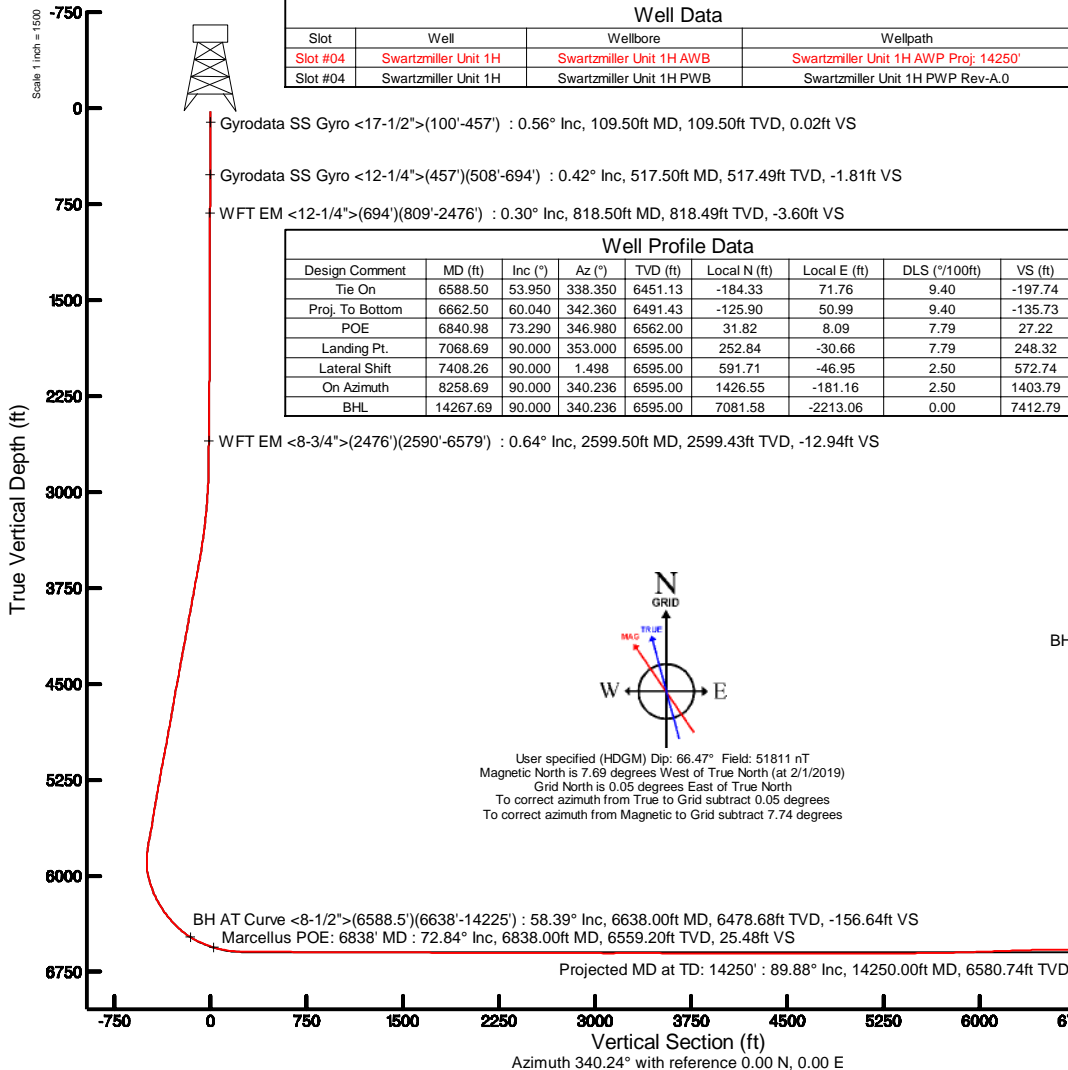
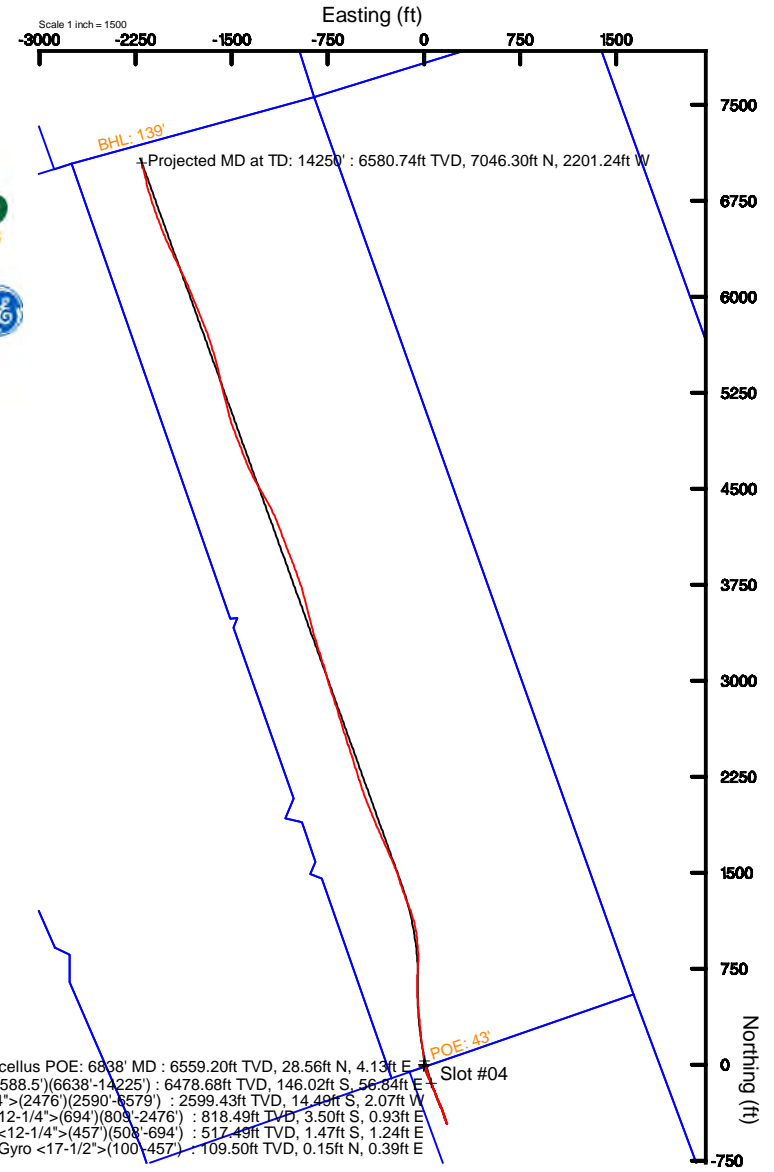


ANTERO RESOURCES CORPORATION

Location: Ritchie County, WV Slot: Slot #04
 Field: Ritchie Well: Swartzmiller Unit 1H
 Facility: Weekley Trust Pad Wellbore: Swartzmiller Unit 1H PWB

Plot reference wellpath is Swartzmiller Unit 1H PWB Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to Frontier 22 (RKB)	North Reference: Grid north
Measured depths are referenced to Frontier 22 (RKB)	Scale: True distance
Frontier 22 (RKB) to Mean Sea Level: 1259.5 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: Slot #04): -1235 feet	Created by: delaset on 2019-02-11
Coordinates are in feet referenced to Slot	Database: WA_MPL_EasternUS_Defn

Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Weekley Trust Pad	1661856.457	14297226.975	39°22'17.590"N	80°55'26.890"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot #04	4.07	29.05	1661885.500	14297231.045
Frontier 22 (RKB) to Ground level (At Slot: Slot #04)			24.5ft	
Mean Sea Level to Ground level (At Slot: Slot #04)			-1235ft	
Frontier 22 (RKB) to Mean Sea Level			1259.5ft	



Marcellus POE: 6838' MD : 6559.20ft TVD, 28.56ft N, 4.13ft E
 BH AT Curve <8-1/2">(6588.5')(6638'-14225') : 6478.68ft TVD, 146.02ft S, 56.84ft E
 WFT EM <8-3/4">(2476')(2590'-6579') : 2599.43ft TVD, 14.40ft S, 2.07ft W
 WFT EM <12-1/4">(694')(809'-2476') : 818.49ft TVD, 3.50ft S, 0.93ft E
 Gyrodatta SS Gyro <12-1/4">(457')(508'-694') : 517.49ft TVD, 1.47ft S, 1.24ft E
 Gyrodatta SS Gyro <17-1/2">(100'-457') : 109.50ft TVD, 0.15ft N, 0.39ft E

API: 47-085-10349-0000
 BHI Job #: 109636839
 Rig: Frontier 22
 Duration: 02/03/2019-02/05/2019



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Delaset
Scale	0.999601	Report Generated	2/11/2019 at 1:31:10 PM
Convergence at slot	0.05° East	Database/Source file	WA_MPL_EasternUS_Defn/Swartzmiller_Unit_1H_AWP_Proj_14250_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	4.07	29.05	1661885.50	14297231.05	39°22'17.630"N	80°55'26.520"W
Facility Reference Pt			1661856.46	14297226.98	39°22'17.590"N	80°55'26.890"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Frontier 22 (RKB) to Facility Vertical Datum	24.50ft
Horizontal Reference Pt	Slot	Frontier 22 (RKB) to Mean Sea Level	1259.50ft
Vertical Reference Pt	Frontier 22 (RKB)	Frontier 22 (RKB) to Ground Level at Slot (Slot #04)	24.50ft
MD Reference Pt	Frontier 22 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	340.24°



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Comments
0.00†	0.000	68.120	0.00	0.00	0.00	0.00	1661885.50	14297231.04	39°22'17.630"N	80°55'26.520"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.000	68.120	24.50	0.00	0.00	0.00	1661885.50	14297231.04	39°22'17.630"N	80°55'26.520"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.560	68.120	109.50	0.02	0.15	0.39	1661885.88	14297231.20	39°22'17.632"N	80°55'26.515"W	0.42	68.120	0.66	0.66	80.14	Gyrodata SS Gyro <17-1/2">(100'-457')
134.50	0.140	113.660	134.50	0.00	0.19	0.53	1661886.03	14297231.23	39°22'17.632"N	80°55'26.513"W	0.56	70.354	1.89	-1.68	182.16	
159.50	0.190	141.540	159.50	-0.06	0.14	0.58	1661886.08	14297231.19	39°22'17.631"N	80°55'26.513"W	0.60	76.130	0.37	0.20	111.52	
184.50	0.190	156.750	184.50	-0.14	0.07	0.62	1661886.12	14297231.12	39°22'17.631"N	80°55'26.512"W	0.63	83.331	0.20	0.00	60.84	
209.50	0.190	129.260	209.50	-0.22	0.01	0.67	1661886.17	14297231.05	39°22'17.630"N	80°55'26.511"W	0.67	89.275	0.36	0.00	-109.96	
234.50	0.180	146.060	234.50	-0.29	-0.05	0.73	1661886.22	14297230.99	39°22'17.629"N	80°55'26.511"W	0.73	93.969	0.22	-0.04	67.20	
259.50	0.200	156.770	259.50	-0.37	-0.12	0.76	1661886.26	14297230.92	39°22'17.629"N	80°55'26.510"W	0.77	99.141	0.16	0.08	42.84	
284.50	0.250	139.870	284.50	-0.47	-0.20	0.82	1661886.32	14297230.84	39°22'17.628"N	80°55'26.510"W	0.84	104.077	0.33	0.20	-67.60	
309.50	0.360	142.100	309.50	-0.59	-0.31	0.90	1661886.40	14297230.74	39°22'17.627"N	80°55'26.509"W	0.95	108.917	0.44	0.44	8.92	
334.50	0.390	142.320	334.50	-0.75	-0.44	1.00	1661886.50	14297230.61	39°22'17.626"N	80°55'26.507"W	1.09	113.636	0.12	0.12	0.88	
359.50	0.360	157.910	359.50	-0.91	-0.58	1.08	1661886.58	14297230.47	39°22'17.624"N	80°55'26.506"W	1.23	118.109	0.42	-0.12	62.36	
384.50	0.260	179.910	384.50	-1.04	-0.71	1.11	1661886.61	14297230.34	39°22'17.623"N	80°55'26.506"W	1.32	122.474	0.61	-0.40	88.00	
409.50	0.280	179.320	409.50	-1.15	-0.83	1.11	1661886.61	14297230.22	39°22'17.622"N	80°55'26.506"W	1.38	126.570	0.08	0.08	-2.36	
434.50	0.370	171.340	434.49	-1.29	-0.97	1.13	1661886.62	14297230.08	39°22'17.620"N	80°55'26.506"W	1.48	130.649	0.40	0.36	-31.92	
459.50	0.300	158.200	459.49	-1.43	-1.11	1.16	1661886.66	14297229.94	39°22'17.619"N	80°55'26.505"W	1.60	133.611	0.41	-0.28	-52.56	
466.50	0.340	161.910	466.49	-1.47	-1.14	1.17	1661886.67	14297229.90	39°22'17.619"N	80°55'26.505"W	1.64	134.221	0.64	0.57	53.00	
517.50	0.420	174.790	517.49	-1.81	-1.47	1.24	1661886.74	14297229.57	39°22'17.615"N	80°55'26.504"W	1.93	139.942	0.23	0.16	25.25	Gyrodata SS Gyro <12-1/4">(457')(508'-694')
609.50	0.340	205.430	609.49	-2.32	-2.06	1.15	1661886.65	14297228.99	39°22'17.610"N	80°55'26.505"W	2.36	150.728	0.23	-0.09	33.30	
703.50	0.490	187.070	703.49	-2.88	-2.71	0.98	1661886.48	14297228.34	39°22'17.603"N	80°55'26.508"W	2.88	160.038	0.21	0.16	-19.53	
818.50	0.300	178.990	818.49	-3.60	-3.50	0.93	1661886.43	14297227.55	39°22'17.595"N	80°55'26.508"W	3.62	165.134	0.17	-0.17	-7.03	WFT EM <12-1/4">(694')(809'-2476')
914.50	0.250	181.650	914.48	-4.04	-3.96	0.93	1661886.43	14297227.09	39°22'17.591"N	80°55'26.508"W	4.06	166.823	0.05	-0.05	2.77	
1009.50	0.220	200.110	1009.48	-4.37	-4.33	0.86	1661886.36	14297226.71	39°22'17.587"N	80°55'26.509"W	4.42	168.809	0.09	-0.03	19.43	
1103.50	0.200	212.620	1103.48	-4.61	-4.64	0.71	1661886.21	14297226.40	39°22'17.584"N	80°55'26.511"W	4.70	171.340	0.05	-0.02	13.31	
1198.50	0.160	200.230	1198.48	-4.81	-4.91	0.57	1661886.07	14297226.14	39°22'17.582"N	80°55'26.513"W	4.94	173.352	0.06	-0.04	-13.04	
1293.50	0.120	198.460	1293.48	-4.99	-5.13	0.49	1661885.99	14297225.92	39°22'17.579"N	80°55'26.514"W	5.15	174.489	0.04	-0.04	-1.86	
1388.50	0.110	218.470	1388.48	-5.12	-5.29	0.41	1661885.91	14297225.76	39°22'17.578"N	80°55'26.515"W	5.31	175.610	0.04	-0.01	21.06	
1483.50	0.200	200.180	1483.48	-5.29	-5.52	0.29	1661885.79	14297225.53	39°22'17.575"N	80°55'26.516"W	5.53	176.968	0.11	0.09	-19.25	
1578.50	0.240	207.560	1578.48	-5.55	-5.85	0.14	1661885.64	14297225.20	39°22'17.572"N	80°55'26.518"W	5.85	178.599	0.05	0.04	7.77	



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

WELLPATH DATA (189 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
1672.50	0.330	218.400	1672.48	-5.83	-6.24	-0.12	1661885.38	14297224.81	39°22'17.568"N	80°55'26.522"W	6.24	181.067	0.11	0.10	11.53	
1767.50	0.310	219.950	1767.48	-6.10	-6.65	-0.45	1661885.05	14297224.40	39°22'17.564"N	80°55'26.526"W	6.66	183.882	0.02	-0.02	1.63	
1862.50	0.400	218.410	1862.48	-6.41	-7.10	-0.82	1661884.68	14297223.94	39°22'17.560"N	80°55'26.531"W	7.15	186.601	0.10	0.09	-1.62	
1957.50	0.490	206.330	1957.47	-6.87	-7.73	-1.21	1661884.29	14297223.32	39°22'17.554"N	80°55'26.535"W	7.82	188.886	0.14	0.09	-12.72	
2052.50	0.540	198.110	2052.47	-7.50	-8.52	-1.53	1661883.97	14297222.53	39°22'17.546"N	80°55'26.540"W	8.65	190.168	0.09	0.05	-8.65	
2146.50	0.780	193.250	2146.46	-8.39	-9.56	-1.81	1661883.69	14297221.49	39°22'17.536"N	80°55'26.543"W	9.73	190.730	0.26	0.26	-5.17	
2241.50	0.900	194.360	2241.45	-9.55	-10.91	-2.15	1661883.36	14297220.13	39°22'17.522"N	80°55'26.547"W	11.12	191.120	0.13	0.13	1.17	
2336.50	0.570	177.600	2336.45	-10.62	-12.11	-2.31	1661883.19	14297218.94	39°22'17.510"N	80°55'26.550"W	12.33	190.803	0.41	-0.35	-17.64	
2431.50	0.450	169.880	2431.44	-11.43	-12.95	-2.23	1661883.28	14297218.10	39°22'17.502"N	80°55'26.548"W	13.14	189.751	0.15	-0.13	-8.13	
2485.50	0.480	174.250	2485.44	-11.86	-13.38	-2.17	1661883.34	14297217.67	39°22'17.498"N	80°55'26.548"W	13.56	189.191	0.09	0.06	8.09	
2599.50	0.640	175.850	2599.43	-12.94	-14.49	-2.07	1661883.43	14297216.56	39°22'17.487"N	80°55'26.547"W	14.64	188.134	0.14	0.14	1.40	WFT EM <8-3/4">(2476')(2590'-6579')
2694.50	0.610	191.430	2694.43	-13.88	-15.52	-2.13	1661883.37	14297215.53	39°22'17.477"N	80°55'26.547"W	15.66	187.827	0.18	-0.03	16.40	
2789.50	0.560	188.880	2789.42	-14.72	-16.47	-2.31	1661883.20	14297214.58	39°22'17.467"N	80°55'26.550"W	16.63	187.966	0.06	-0.05	-2.68	
2884.50	1.730	167.680	2884.40	-16.55	-18.33	-2.07	1661883.43	14297212.72	39°22'17.449"N	80°55'26.547"W	18.45	186.445	1.29	1.23	-22.32	
2979.50	3.210	159.600	2979.31	-20.63	-22.23	-0.84	1661884.66	14297208.83	39°22'17.410"N	80°55'26.531"W	22.24	182.158	1.60	1.56	-8.51	
3074.50	4.450	155.420	3074.10	-26.97	-28.07	1.62	1661887.12	14297202.99	39°22'17.353"N	80°55'26.500"W	28.12	176.692	1.34	1.31	-4.40	
3168.50	5.510	154.730	3167.74	-35.09	-35.47	5.07	1661890.56	14297195.59	39°22'17.279"N	80°55'26.456"W	35.83	171.871	1.13	1.13	-0.73	
3263.50	6.700	154.270	3262.20	-45.14	-44.59	9.42	1661894.91	14297186.48	39°22'17.189"N	80°55'26.401"W	45.57	168.071	1.25	1.25	-0.48	
3358.50	8.040	153.390	3356.42	-57.25	-55.52	14.80	1661900.29	14297175.55	39°22'17.081"N	80°55'26.332"W	57.46	165.072	1.42	1.41	-0.93	
3453.50	9.170	155.150	3450.35	-71.39	-68.33	20.96	1661906.45	14297162.74	39°22'16.955"N	80°55'26.254"W	71.47	162.947	1.22	1.19	1.85	
3553.50	10.300	156.340	3548.90	-88.25	-83.75	27.89	1661913.38	14297147.33	39°22'16.802"N	80°55'26.166"W	88.27	161.578	1.15	1.13	1.19	
3647.50	10.230	155.860	3641.40	-104.95	-99.06	34.68	1661920.17	14297132.02	39°22'16.651"N	80°55'26.079"W	104.96	160.705	0.12	-0.07	-0.51	
3742.50	10.200	155.190	3734.89	-121.74	-114.39	41.66	1661927.14	14297116.70	39°22'16.499"N	80°55'25.991"W	121.74	159.989	0.13	-0.03	-0.71	
3837.50	10.120	154.660	3828.40	-138.43	-129.57	48.76	1661934.24	14297101.52	39°22'16.349"N	80°55'25.900"W	138.44	159.377	0.13	-0.08	-0.56	
3932.50	10.250	157.810	3921.91	-155.18	-144.94	55.53	1661941.00	14297086.16	39°22'16.197"N	80°55'25.815"W	155.21	159.038	0.60	0.14	3.32	
4027.50	10.520	157.400	4015.35	-172.29	-160.78	62.05	1661947.53	14297070.33	39°22'16.040"N	80°55'25.732"W	172.33	158.896	0.29	0.28	-0.43	
4121.50	10.550	156.650	4107.77	-189.45	-176.60	68.76	1661954.23	14297054.52	39°22'15.884"N	80°55'25.646"W	189.51	158.726	0.15	0.03	-0.80	
4216.50	10.670	156.710	4201.14	-206.90	-192.66	75.68	1661961.15	14297038.46	39°22'15.725"N	80°55'25.558"W	206.99	158.553	0.13	0.13	0.06	
4311.50	10.170	160.120	4294.58	-224.07	-208.63	82.01	1661967.48	14297022.50	39°22'15.567"N	80°55'25.478"W	224.17	158.540	0.84	-0.53	3.59	
4406.50	10.170	160.310	4388.08	-240.84	-224.41	87.69	1661973.16	14297006.72	39°22'15.411"N	80°55'25.406"W	240.94	158.656	0.04	0.00	0.20	



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

WELLPATH DATA (189 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
4501.50	10.570	160.010	4481.53	-257.94	-240.50	93.50	1661978.96	14296990.65	39°22'15.252"N	80°55'25.332"W	258.03	158.756	0.42	0.42	-0.32	
4595.50	10.260	160.720	4573.98	-274.94	-256.50	99.21	1661984.67	14296974.65	39°22'15.094"N	80°55'25.260"W	275.02	158.855	0.36	-0.33	0.76	
4690.50	9.320	158.990	4667.60	-291.09	-271.67	104.76	1661990.22	14296959.49	39°22'14.944"N	80°55'25.189"W	291.17	158.913	1.04	-0.99	-1.82	
4785.50	9.820	157.460	4761.28	-306.87	-286.33	110.62	1661996.08	14296944.83	39°22'14.799"N	80°55'25.114"W	306.96	158.876	0.59	0.53	-1.61	
4880.50	10.810	157.790	4854.74	-323.86	-302.06	117.10	1662002.55	14296929.10	39°22'14.644"N	80°55'25.032"W	323.96	158.811	1.04	1.04	0.35	
4975.50	10.270	157.940	4948.14	-341.23	-318.16	123.64	1662009.09	14296913.01	39°22'14.484"N	80°55'24.949"W	341.34	158.763	0.57	-0.57	0.16	
5070.50	10.390	151.640	5041.60	-358.16	-333.55	130.89	1662016.34	14296897.63	39°22'14.332"N	80°55'24.857"W	358.31	158.573	1.20	0.13	-6.63	
5165.50	10.990	155.560	5134.95	-375.65	-349.33	138.71	1662024.15	14296881.86	39°22'14.176"N	80°55'24.758"W	375.86	158.343	0.99	0.63	4.13	
5259.50	10.390	161.410	5227.32	-393.06	-365.52	145.12	1662030.56	14296865.67	39°22'14.016"N	80°55'24.676"W	393.27	158.346	1.32	-0.64	6.22	
5354.50	9.900	164.350	5320.84	-409.77	-381.50	150.05	1662035.49	14296849.69	39°22'13.858"N	80°55'24.613"W	409.95	158.529	0.75	-0.52	3.09	
5450.50	9.640	163.520	5415.45	-426.03	-397.16	154.56	1662040.00	14296834.05	39°22'13.703"N	80°55'24.556"W	426.17	158.736	0.31	-0.27	-0.86	
5545.50	9.140	162.200	5509.17	-441.51	-411.97	159.12	1662044.56	14296819.24	39°22'13.557"N	80°55'24.498"W	441.63	158.881	0.57	-0.53	-1.39	
5640.50	9.640	158.660	5602.90	-457.00	-426.56	164.32	1662049.76	14296804.65	39°22'13.413"N	80°55'24.432"W	457.12	158.932	0.80	0.53	-3.73	
5735.50	11.240	158.710	5696.32	-474.21	-442.60	170.58	1662056.01	14296788.62	39°22'13.254"N	80°55'24.353"W	474.33	158.923	1.68	1.68	0.05	
5798.50	9.800	156.010	5758.26	-485.69	-453.22	174.99	1662060.42	14296778.01	39°22'13.149"N	80°55'24.297"W	485.83	158.888	2.42	-2.29	-4.29	
5830.50	7.520	155.640	5789.90	-490.50	-457.62	176.96	1662062.39	14296773.61	39°22'13.106"N	80°55'24.272"W	490.64	158.858	7.13	-7.12	-1.16	
5861.50	5.230	155.100	5820.70	-493.93	-460.75	178.39	1662063.82	14296770.48	39°22'13.075"N	80°55'24.253"W	494.08	158.834	7.39	-7.39	-1.74	
5893.50	3.340	153.660	5852.61	-496.31	-462.90	179.42	1662064.85	14296768.33	39°22'13.053"N	80°55'24.240"W	496.46	158.814	5.92	-5.91	-4.50	
5924.50	0.790	139.300	5883.59	-497.40	-463.88	179.96	1662065.39	14296767.36	39°22'13.044"N	80°55'24.233"W	497.56	158.796	8.33	-8.23	-46.32	
5956.50	2.220	339.380	5915.58	-496.99	-463.46	179.89	1662065.31	14296767.77	39°22'13.048"N	80°55'24.234"W	497.15	158.787	9.29	4.47	-499.75	
5987.50	5.910	336.870	5946.50	-494.79	-461.43	179.05	1662064.48	14296769.80	39°22'13.068"N	80°55'24.245"W	494.95	158.792	11.91	11.90	-8.10	
6019.50	9.990	336.230	5978.19	-490.38	-457.38	177.28	1662062.71	14296773.85	39°22'13.108"N	80°55'24.268"W	490.53	158.813	12.75	12.75	-2.00	
6051.50	13.150	338.460	6009.53	-483.97	-451.45	174.83	1662060.26	14296779.78	39°22'13.167"N	80°55'24.299"W	484.12	158.831	9.97	9.87	6.97	
6082.50	15.600	342.360	6039.56	-476.28	-444.19	172.27	1662057.70	14296787.03	39°22'13.238"N	80°55'24.331"W	476.43	158.803	8.49	7.90	12.58	
6114.50	17.910	345.730	6070.20	-467.08	-435.32	169.75	1662055.18	14296795.90	39°22'13.326"N	80°55'24.363"W	467.25	158.697	7.83	7.22	10.53	
6177.50	22.420	341.830	6129.33	-445.42	-414.51	163.61	1662049.05	14296816.70	39°22'13.532"N	80°55'24.441"W	445.63	158.460	7.47	7.16	-6.19	
6209.50	25.270	341.320	6158.59	-432.48	-402.24	159.52	1662044.96	14296828.97	39°22'13.653"N	80°55'24.493"W	432.72	158.367	8.93	8.91	-1.59	
6240.50	27.600	341.370	6186.35	-418.69	-389.16	155.11	1662040.55	14296842.04	39°22'13.782"N	80°55'24.549"W	418.94	158.269	7.52	7.52	0.16	
6272.50	29.310	340.900	6214.48	-403.44	-374.74	150.18	1662035.62	14296856.46	39°22'13.925"N	80°55'24.612"W	403.71	158.161	5.39	5.34	-1.47	
6303.50	31.440	340.100	6241.22	-387.77	-359.96	144.94	1662030.38	14296871.23	39°22'14.071"N	80°55'24.678"W	388.05	158.068	6.99	6.87	-2.58	



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

WELLPATH DATA (189 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
6335.50	33.700	338.970	6268.19	-370.55	-343.83	138.91	1662024.36	14296887.36	39°22'14.231"N	80°55'24.755"W	370.83	158.000	7.31	7.06	-3.53	
6367.50	36.640	337.470	6294.35	-352.13	-326.72	132.07	1662017.51	14296904.46	39°22'14.400"N	80°55'24.842"W	352.40	157.990	9.58	9.19	-4.69	
6398.50	39.250	336.530	6318.79	-333.10	-309.17	124.62	1662010.07	14296921.99	39°22'14.573"N	80°55'24.937"W	333.34	158.048	8.62	8.42	-3.03	
6430.50	41.240	336.160	6343.22	-312.47	-290.24	116.32	1662001.77	14296940.92	39°22'14.760"N	80°55'25.042"W	312.68	158.160	6.26	6.22	-1.16	
6462.50	42.650	336.360	6367.02	-291.14	-270.66	107.71	1661993.17	14296960.49	39°22'14.954"N	80°55'25.151"W	291.30	158.300	4.43	4.41	0.62	
6493.50	44.840	337.180	6389.41	-269.74	-250.96	99.26	1661984.72	14296980.18	39°22'15.149"N	80°55'25.259"W	269.88	158.421	7.30	7.06	2.65	
6516.00†	46.984	337.316	6405.06	-253.60	-236.06	93.01	1661978.47	14296995.08	39°22'15.296"N	80°55'25.338"W	253.72	158.495	9.54	9.53	0.60	Middlesex: 6516' MD
6525.50	47.890	337.570	6411.49	-246.62	-229.60	90.31	1661975.78	14297001.53	39°22'15.360"N	80°55'25.372"W	246.73	158.528	9.54	9.53	0.57	
6556.50	51.010	337.550	6431.64	-223.09	-207.85	81.29	1661966.75	14297023.28	39°22'15.575"N	80°55'25.487"W	223.18	158.640	10.07	10.06	0.58	
6588.50	53.950	338.350	6451.13	-197.74	-184.33	71.76	1661957.23	14297046.79	39°22'15.808"N	80°55'25.608"W	197.80	158.728	9.40	9.19	2.50	
6638.00	58.390	339.050	6478.68	-156.64	-146.02	56.84	1661942.31	14297085.08	39°22'16.186"N	80°55'25.798"W	156.70	158.733	9.05	8.97	1.41	BH AT Curve <8-1/2">(6588.5')(6638'-14225')
6707.00†	64.561	341.692	6511.62	-96.05	-88.94	36.52	1661922.01	14297142.14	39°22'16.751"N	80°55'26.056"W	96.15	157.676	9.55	8.94	3.83	Burkett: 6707' MD
6710.00	64.830	341.800	6512.90	-93.34	-86.37	35.67	1661921.16	14297144.71	39°22'16.776"N	80°55'26.067"W	93.45	157.558	9.55	8.98	3.61	
6758.00	67.920	343.980	6532.14	-49.42	-44.34	22.75	1661908.24	14297186.72	39°22'17.192"N	80°55'26.231"W	49.84	152.845	7.66	6.44	4.54	
6771.00†	68.629	344.520	6536.95	-37.38	-32.72	19.47	1661904.96	14297198.34	39°22'17.306"N	80°55'26.272"W	38.07	149.248	6.68	5.45	4.16	Tully: 6771' MD
6805.00	70.490	345.910	6548.82	-5.64	-1.92	11.34	1661896.84	14297229.13	39°22'17.611"N	80°55'26.376"W	11.50	99.599	6.68	5.47	4.09	
6838.00†	72.839	347.445	6559.20	25.48	28.56	4.13	1661889.62	14297259.59	39°22'17.912"N	80°55'26.467"W	28.86	8.221	8.38	7.12	4.65	Marcellus POE: 6838' MD
6853.00	73.910	348.130	6563.49	39.73	42.61	1.09	1661886.59	14297273.64	39°22'18.051"N	80°55'26.506"W	42.62	1.460	8.38	7.14	4.56	
6900.00	77.970	351.260	6574.91	84.69	87.45	-7.06	1661878.45	14297318.46	39°22'18.494"N	80°55'26.609"W	87.74	355.387	10.79	8.64	6.66	
6947.00	81.810	353.750	6583.16	129.89	133.31	-13.08	1661872.42	14297364.31	39°22'18.948"N	80°55'26.685"W	133.96	354.395	9.69	8.17	5.30	
6994.00	84.390	354.310	6588.81	175.20	179.72	-17.94	1661867.57	14297410.69	39°22'19.406"N	80°55'26.746"W	180.61	354.301	5.62	5.49	1.19	
7041.00	87.660	353.920	6592.07	220.71	226.35	-22.74	1661862.77	14297457.30	39°22'19.867"N	80°55'26.807"W	227.49	354.262	7.01	6.96	-0.83	
7136.00	89.910	354.060	6594.08	312.96	320.80	-32.69	1661852.83	14297551.72	39°22'20.801"N	80°55'26.933"W	322.46	354.182	2.37	2.37	0.15	
7230.00	90.030	354.450	6594.13	404.16	414.33	-42.10	1661843.42	14297645.21	39°22'21.725"N	80°55'27.052"W	416.46	354.199	0.43	0.13	0.41	
7324.00	89.720	356.080	6594.34	494.95	508.00	-49.86	1661835.66	14297738.84	39°22'22.651"N	80°55'27.149"W	510.44	354.395	1.77	-0.33	1.73	
7419.00	89.780	359.280	6594.75	585.57	602.91	-53.70	1661831.82	14297833.72	39°22'23.589"N	80°55'27.197"W	605.30	354.910	3.37	0.06	3.37	
7515.00	89.630	3.510	6595.24	675.08	698.86	-51.36	1661834.16	14297929.63	39°22'24.538"N	80°55'27.167"W	700.75	355.797	4.41	-0.16	4.41	
7609.00	89.690	2.830	6595.80	761.65	792.72	-46.17	1661839.35	14298023.44	39°22'25.465"N	80°55'27.099"W	794.06	356.667	0.73	0.06	-0.72	
7703.00	89.690	356.850	6596.31	850.16	886.67	-46.43	1661839.09	14298117.36	39°22'26.394"N	80°55'27.102"W	887.89	357.003	6.36	0.00	-6.36	
7797.00	89.820	353.810	6596.71	940.91	980.35	-54.08	1661831.44	14298211.00	39°22'27.320"N	80°55'27.198"W	981.84	356.843	3.24	0.14	-3.23	



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

WELLPATH DATA (189 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
7893.00	90.120	348.660	6596.76	1035.11	1075.19	-68.70	1661816.82	14298305.81	39°22'28.257"N	80°55'27.383"W	1077.39	356.344	5.37	0.31	-5.36	
7987.00	89.780	341.940	6596.85	1128.69	1166.07	-92.54	1661792.99	14298396.64	39°22'29.156"N	80°55'27.686"W	1169.73	355.462	7.16	-0.36	-7.15	
8082.00	89.690	337.880	6597.29	1223.67	1255.27	-125.17	1661760.38	14298485.81	39°22'30.038"N	80°55'28.100"W	1261.49	354.306	4.27	-0.09	-4.27	
8176.00	89.850	340.320	6597.66	1317.64	1343.07	-158.70	1661726.86	14298573.58	39°22'30.906"N	80°55'28.526"W	1352.42	353.261	2.60	0.17	2.60	
8270.00	89.510	342.830	6598.19	1411.61	1432.25	-188.41	1661697.17	14298662.72	39°22'31.787"N	80°55'28.904"W	1444.58	352.506	2.69	-0.36	2.67	
8365.00	89.630	339.010	6598.90	1506.58	1522.01	-219.45	1661666.13	14298752.44	39°22'32.675"N	80°55'29.298"W	1537.75	351.795	4.02	0.13	-4.02	
8459.00	89.720	336.130	6599.43	1600.47	1608.89	-255.32	1661630.29	14298839.28	39°22'33.534"N	80°55'29.754"W	1629.02	350.983	3.07	0.10	-3.06	
8553.00	89.750	336.050	6599.87	1694.22	1694.82	-293.41	1661592.20	14298925.18	39°22'34.383"N	80°55'30.238"W	1720.03	350.178	0.09	0.03	-0.09	
8648.00	89.780	335.620	6600.26	1788.94	1781.49	-332.30	1661553.33	14299011.82	39°22'35.240"N	80°55'30.733"W	1812.22	349.434	0.45	0.03	-0.45	
8743.00	89.660	336.690	6600.72	1883.69	1868.38	-370.71	1661514.94	14299098.68	39°22'36.099"N	80°55'31.221"W	1904.80	348.778	1.13	-0.13	1.13	
8838.00	89.780	338.070	6601.19	1978.57	1956.07	-407.24	1661478.42	14299186.33	39°22'36.966"N	80°55'31.685"W	1998.01	348.239	1.46	0.13	1.45	
8933.00	89.780	338.690	6601.55	2073.52	2044.39	-442.25	1661443.43	14299274.61	39°22'37.839"N	80°55'32.130"W	2091.67	347.794	0.65	0.00	0.65	
9028.00	89.940	341.030	6601.78	2168.51	2133.57	-474.95	1661410.74	14299363.76	39°22'38.721"N	80°55'32.545"W	2185.80	347.450	2.47	0.17	2.46	
9123.00	89.850	342.090	6601.96	2263.49	2223.69	-505.00	1661380.70	14299453.84	39°22'39.612"N	80°55'32.927"W	2280.31	347.205	1.12	-0.09	1.12	
9218.00	89.940	343.270	6602.13	2358.40	2314.38	-533.28	1661352.43	14299544.50	39°22'40.509"N	80°55'33.286"W	2375.03	347.024	1.25	0.09	1.24	
9313.00	89.910	342.520	6602.26	2453.29	2405.18	-561.23	1661324.50	14299635.26	39°22'41.406"N	80°55'33.641"W	2469.79	346.866	0.79	-0.03	-0.79	
9408.00	89.660	341.690	6602.61	2548.24	2495.58	-590.42	1661295.32	14299725.62	39°22'42.300"N	80°55'34.012"W	2564.47	346.689	0.91	-0.26	-0.87	
9503.00	89.720	342.420	6603.13	2643.19	2585.96	-619.69	1661266.06	14299815.96	39°22'43.194"N	80°55'34.384"W	2659.17	346.524	0.77	0.06	0.77	
9597.00	89.820	342.900	6603.50	2737.11	2675.68	-647.70	1661238.06	14299905.65	39°22'44.081"N	80°55'34.740"W	2752.96	346.392	0.52	0.11	0.51	
9691.00	89.780	343.420	6603.83	2830.99	2765.65	-674.93	1661210.84	14299995.59	39°22'44.970"N	80°55'35.085"W	2846.82	346.286	0.55	-0.04	0.55	
9786.00	89.690	341.500	6604.27	2925.91	2856.23	-703.56	1661182.22	14300086.13	39°22'45.866"N	80°55'35.449"W	2941.61	346.162	2.02	-0.09	-2.02	
9881.00	89.660	342.320	6604.81	3020.87	2946.53	-733.06	1661152.73	14300176.39	39°22'46.758"N	80°55'35.824"W	3036.35	346.029	0.86	-0.03	0.86	
9975.00	90.060	344.640	6605.04	3114.71	3036.65	-759.79	1661126.02	14300266.47	39°22'47.649"N	80°55'36.163"W	3130.25	345.953	2.50	0.43	2.47	
10070.00	90.150	342.990	6604.87	3209.52	3127.88	-786.27	1661099.55	14300357.67	39°22'48.551"N	80°55'36.500"W	3225.19	345.890	1.74	0.09	-1.74	
10165.00	89.970	341.980	6604.77	3304.45	3218.47	-814.86	1661070.97	14300448.22	39°22'49.447"N	80°55'36.863"W	3320.02	345.792	1.08	-0.19	-1.06	
10259.00	90.000	343.370	6604.79	3398.36	3308.20	-842.85	1661042.99	14300537.92	39°22'50.334"N	80°55'37.218"W	3413.89	345.707	1.48	0.03	1.48	
10353.00	89.850	345.270	6604.91	3492.12	3398.70	-868.25	1661017.60	14300628.38	39°22'51.228"N	80°55'37.541"W	3507.85	345.669	2.03	-0.16	2.02	
10449.00	89.720	345.970	6605.28	3587.69	3491.69	-892.09	1660993.76	14300721.34	39°22'52.148"N	80°55'37.843"W	3603.85	345.668	0.74	-0.14	0.73	
10544.00	89.940	345.680	6605.56	3682.24	3583.80	-915.36	1660970.51	14300813.41	39°22'53.058"N	80°55'38.139"W	3698.85	345.672	0.38	0.23	-0.31	
10639.00	89.540	344.350	6605.99	3776.91	3675.57	-939.92	1660945.96	14300905.14	39°22'53.965"N	80°55'38.451"W	3793.84	345.656	1.46	-0.42	-1.40	



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

WELLPATH DATA (189 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
10732.00	89.600	341.220	6606.69	3869.80	3764.39	-967.44	1660918.45	14300993.92	39°22'54.843"N	80°55'38.800"W	3886.71	345.587	3.37	0.06	-3.37	
10826.00	90.060	340.030	6606.97	3963.80	3853.06	-998.62	1660887.28	14301082.56	39°22'55.720"N	80°55'39.196"W	3980.37	345.470	1.36	0.49	-1.27	
10921.00	90.370	338.670	6606.61	4058.78	3941.95	-1032.13	1660853.79	14301171.42	39°22'56.599"N	80°55'39.622"W	4074.84	345.328	1.47	0.33	-1.43	
11016.00	90.030	338.810	6606.28	4153.75	4030.49	-1066.57	1660819.36	14301259.92	39°22'57.474"N	80°55'40.060"W	4169.22	345.178	0.39	-0.36	0.15	
11110.00	90.090	340.140	6606.18	4247.74	4118.52	-1099.53	1660786.41	14301347.91	39°22'58.345"N	80°55'40.479"W	4262.77	345.052	1.42	0.06	1.41	
11204.00	89.970	338.880	6606.13	4341.73	4206.57	-1132.43	1660753.52	14301435.93	39°22'59.215"N	80°55'40.897"W	4356.33	344.933	1.35	-0.13	-1.34	
11300.00	90.150	336.100	6606.03	4437.61	4295.25	-1169.18	1660716.79	14301524.57	39°23'00.092"N	80°55'41.364"W	4451.53	344.773	2.90	0.19	-2.90	
11393.00	90.000	332.200	6605.91	4530.07	4378.93	-1209.72	1660676.26	14301608.21	39°23'00.919"N	80°55'41.880"W	4542.95	344.557	4.20	-0.16	-4.19	
11488.00	90.000	328.660	6605.91	4623.66	4461.54	-1256.60	1660629.41	14301690.79	39°23'01.736"N	80°55'42.476"W	4635.12	344.270	3.73	0.00	-3.73	
11583.00	90.000	329.850	6605.91	4716.92	4543.19	-1305.16	1660580.86	14301772.41	39°23'02.543"N	80°55'43.093"W	4726.94	343.972	1.25	0.00	1.25	
11679.00	89.970	334.190	6605.93	4811.91	4627.94	-1350.19	1660535.85	14301857.13	39°23'03.381"N	80°55'43.666"W	4820.88	343.736	4.52	-0.03	4.52	
11773.00	89.970	337.810	6605.98	4905.64	4713.80	-1388.42	1660497.64	14301942.96	39°23'04.230"N	80°55'44.152"W	4914.03	343.588	3.85	0.00	3.85	
11868.00	89.970	340.130	6606.03	5000.61	4802.47	-1422.51	1660463.56	14302031.59	39°23'05.107"N	80°55'44.585"W	5008.72	343.501	2.44	0.00	2.44	
11962.00	89.970	338.380	6606.08	5094.59	4890.37	-1455.80	1660430.28	14302119.45	39°23'05.976"N	80°55'45.008"W	5102.46	343.422	1.86	0.00	-1.86	
12057.00	90.220	339.910	6605.92	5189.57	4979.14	-1489.62	1660396.48	14302208.19	39°23'06.854"N	80°55'45.438"W	5197.20	343.344	1.63	0.26	1.61	
12151.00	90.310	343.640	6605.49	5283.52	5068.41	-1519.01	1660367.10	14302297.42	39°23'07.736"N	80°55'45.812"W	5291.14	343.316	3.97	0.10	3.97	
12245.00	89.910	346.240	6605.31	5377.19	5159.18	-1543.44	1660342.68	14302388.15	39°23'08.633"N	80°55'46.122"W	5385.10	343.345	2.80	-0.43	2.77	
12339.00	90.250	346.710	6605.18	5470.64	5250.57	-1565.42	1660320.71	14302479.51	39°23'09.537"N	80°55'46.401"W	5478.96	343.398	0.62	0.36	0.50	
12433.00	90.520	347.610	6604.54	5563.95	5342.21	-1586.31	1660299.83	14302571.11	39°23'10.443"N	80°55'46.666"W	5572.76	343.462	1.00	0.29	0.96	
12528.00	90.950	346.400	6603.33	5658.28	5434.77	-1607.67	1660278.48	14302663.64	39°23'11.358"N	80°55'46.937"W	5667.57	343.521	1.35	0.45	-1.27	
12622.00	91.630	344.310	6601.21	5751.88	5525.69	-1631.43	1660254.73	14302754.52	39°23'12.257"N	80°55'47.239"W	5761.49	343.551	2.34	0.72	-2.22	
12716.00	91.720	342.520	6598.46	5845.69	5615.74	-1658.24	1660227.92	14302844.53	39°23'13.147"N	80°55'47.579"W	5855.45	343.549	1.91	0.10	-1.90	
12811.00	91.780	340.300	6595.56	5940.62	5705.73	-1688.51	1660197.66	14302934.49	39°23'14.036"N	80°55'47.964"W	5950.33	343.515	2.34	0.06	-2.34	
12904.00	91.820	338.710	6592.64	6033.56	5792.80	-1721.06	1660165.13	14303021.52	39°23'14.897"N	80°55'48.378"W	6043.06	343.453	1.71	0.04	-1.71	
13000.00	92.150	337.160	6589.31	6129.42	5881.71	-1757.10	1660129.11	14303110.40	39°23'15.776"N	80°55'48.836"W	6138.56	343.367	1.65	0.34	-1.61	
13095.00	92.490	337.870	6585.47	6224.24	5969.42	-1793.40	1660092.82	14303198.07	39°23'16.643"N	80°55'49.297"W	6233.00	343.278	0.83	0.36	0.75	
13188.00	91.790	337.270	6581.99	6317.07	6055.32	-1828.86	1660057.37	14303283.94	39°23'17.493"N	80°55'49.748"W	6325.48	343.194	0.99	-0.75	-0.65	
13283.00	90.740	335.460	6579.90	6411.82	6142.33	-1866.94	1660019.31	14303370.91	39°23'18.353"N	80°55'50.232"W	6419.78	343.094	2.20	-1.11	-1.91	
13377.00	89.850	334.310	6579.41	6505.41	6227.44	-1906.83	1659979.43	14303455.98	39°23'19.194"N	80°55'50.740"W	6512.83	342.975	1.55	-0.95	-1.22	
13472.00	89.820	333.580	6579.69	6599.84	6312.78	-1948.56	1659937.72	14303541.29	39°23'20.038"N	80°55'51.270"W	6606.67	342.846	0.77	-0.03	-0.77	



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

WELLPATH DATA (189 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
13566.00	89.880	334.360	6579.93	6693.27	6397.24	-1989.81	1659896.49	14303625.72	39°23'20.873"N	80°55'51.795"W	6699.56	342.722	0.83	0.06	0.83	
13661.00	89.850	338.320	6580.16	6788.03	6484.24	-2027.93	1659858.39	14303712.68	39°23'21.733"N	80°55'52.279"W	6793.96	342.633	4.17	-0.03	4.17	
13755.00	89.780	339.640	6580.46	6882.01	6571.98	-2061.64	1659824.69	14303800.39	39°23'22.601"N	80°55'52.708"W	6887.77	342.583	1.41	-0.07	1.40	
13850.00	90.000	340.320	6580.64	6977.01	6661.24	-2094.16	1659792.18	14303889.61	39°23'23.483"N	80°55'53.121"W	6982.67	342.548	0.75	0.23	0.72	
13945.00	89.970	341.730	6580.67	7071.99	6751.08	-2125.05	1659761.30	14303979.41	39°23'24.372"N	80°55'53.514"W	7077.63	342.527	1.48	-0.03	1.48	
14039.00	90.030	345.280	6580.67	7165.83	6841.20	-2151.74	1659734.62	14304069.49	39°23'25.262"N	80°55'53.853"W	7171.61	342.540	3.78	0.06	3.78	
14134.00	90.030	346.990	6580.62	7260.32	6933.42	-2174.50	1659711.87	14304161.69	39°23'26.174"N	80°55'54.142"W	7266.42	342.587	1.80	0.00	1.80	
14225.00	89.880	346.470	6580.69	7350.74	7021.99	-2195.39	1659690.99	14304250.22	39°23'27.050"N	80°55'54.407"W	7357.18	342.638	0.59	-0.16	-0.57	
14250.00	89.880	346.470	6580.74	7375.59	7046.30	-2201.24	1659685.14	14304274.52	39°23'27.290"N	80°55'54.481"W	7382.13	342.651	0.00	0.00	0.00	Projected MD at TD: 14250'

HOLE & CASING SECTIONS - Ref Wellbore: Swartzmiller Unit 1H AWB Ref Wellpath: Swartzmiller Unit 1H AWP Proj: 14250'

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	0.14	0.34
17.5in Open Hole	104.50	460.50	356.00	104.50	460.49	0.14	0.34	-1.11	1.16
13.375in Casing Surface	24.50	460.50	436.00	24.50	460.49	0.00	0.00	-1.11	1.16
12.25in Open Hole	460.50	2550.50	2090.00	460.49	2550.44	-1.11	1.16	-13.98	-2.11
9.625in Casing Intermediate	24.50	2550.50	2526.00	24.50	2550.44	0.00	0.00	-13.98	-2.11
8.75in Open Hole	2550.50	6662.50	4112.00	2550.44	6491.12	-13.98	-2.11	-126.25	49.46
8.5in Open Hole	6662.50	14250.00	7587.50	6491.12	6580.74	-126.25	49.46	7046.30	-2201.24
5.5in Casing Production	24.50	14250.00	14225.50	24.50	6580.74	0.00	0.00	7046.30	-2201.24



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Swartzmiller Unit 1H - POE - Rev-2	6562.00	31.82	8.09	1661893.59	14297262.86	39°22'17.944"N	80°55'26.417"W	point
Swartzmiller Unit 1H - BHL - Rev-2	6595.00	7129.82	-2230.39	1659656.00	14304358.00	39°23'28.116"N	80°55'54.852"W	point
Swartzmiller Unit 1H - BHL - Rev-3	6595.00	7081.58	-2213.06	1659673.32	14304309.79	39°23'27.639"N	80°55'54.632"W	point
Swartzmiller Unit 1H - LP - Rev-2	6595.00	252.84	-30.66	1661854.85	14297483.78	39°22'20.129"N	80°55'26.908"W	point

WELLPATH COMPOSITION - Ref Wellbore: Swartzmiller Unit 1H AWB Ref Wellpath: Swartzmiller Unit 1H AWP Proj: 14250'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	466.50	Gyrodatta standard - Single-shot	01_Gyrodatta SS Gyro <17-1/2">(100'-457')	Swartzmiller Unit 1H AWB
466.50	703.50	Gyrodatta standard - Single-shot	02_Gyrodatta SS Gyro <12-1/4">(457')(508'-694')	Swartzmiller Unit 1H AWB
703.50	2485.50	ISCWSA MWD, Rev. 4 (Standard)	03_WFT EM <12-1/4">(694')(809'-2476')	Swartzmiller Unit 1H AWB
2485.50	6588.50	ISCWSA MWD, Rev. 4 (Standard)	04_WFT EM <8-3/4">(2476')(2590'-6579')	Swartzmiller Unit 1H AWB
6588.50	14225.00	BHI AutoTrak Curve (Short)	05_BH AT Curve <8-1/2">(6588.5')(6638'-14225')	Swartzmiller Unit 1H AWB
14225.00	14250.00	Blind Drilling (std)	Projection to bit	Swartzmiller Unit 1H AWB



Actual Wellpath Report

Swartzmiller Unit 1H AWP Proj: 14250'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Swartzmiller Unit 1H
Field	Ritchie	Wellbore	Swartzmiller Unit 1H AWB
Facility	Weekley Trust Pad		

COMMENTS
<p>Wellpath general comments API: 47-085-10349-0000 BHI Job #: 109636839 Rig: Frontier 22 Duration: 02/03/2019-02/05/2019 Gyrodata SS Gyro <17-1/2">(100'-457') Gyrodata SS Gyro <12-1/4">(457')(508'-694') WFT EM <12-1/4">(694')(809'-2476') WFT EM <8-3/4">(2476')(2590'-6579') BH AT Curve <8-1/2">(6588.5')(6638'-14225') Middlesex: 6516' MD Burkett: 6707' MD Tully: 6771' MD Marcellus POE: 6838' MD Projected MD at TD: 14250'</p>