



# ANTERO RESOURCES CORPORATION

Location: Doddridge Co., WV  
 Field: Doddridge  
 Facility: Strickling Pad

Slot: Slot #07  
 Well: Smithers Unit 2H  
 Wellbore: Smithers Unit 2H PWB



Plot reference wellpath is Smithers Unit 2H PWB RevA.0  
 True vertical depths are referenced to Frontier 22 (RKB)  
 Measured depths are referenced to Frontier 22 (RKB)  
 Frontiers 22 (RKB) to Mean Sea Level: 1089.5 feet  
 Mean Sea Level to Ground level (At Slot: Slot #07): -1065 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: mcrnrb on 2018-05-15
Database: WA_MPL_EASTERNUS_Defn

### Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Strickling Pad	1701583.170	14282960.060	39°19'55.890"N	80°47'01.270"W
Slot	Local E (ft)	Grid East (US ft)	Latitude	Longitude
Slot #07	-4.12	1701553.335	39°19'55.850"N	80°47'01.650"W

Comment: Smithers Unit 2H  
 Frontier 22 (RKB) to Ground level (At Slot: Slot #07): 24.5ft  
 Mean Sea Level to Ground level (At Slot: Slot #07): -1065ft  
 Frontier 22 (RKB) to Mean Sea Level: 1089.5ft

Gyrodata MS Gyro <17-1/2">(100'-349') : 0.21° Inc, 109.50ft MD, 109.50ft TVD, 0.14ft VS  
 Gyrodata MS Gyro <12-1/4">(349')(376'-737') : 0.65° Inc, 385.50ft MD, 385.49ft TVD, 2.35ft VS  
 WFT EM <12-1/4">(737')(848'-2483') : 5.84° Inc, 857.50ft MD, 856.98ft TVD, -8.5ft VS

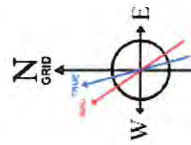
### Well Profile Data

Design Comment	MD (ft)	Az (°)	Inc (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tile On	7031.50	64.880	337.110	6665.67	-550.12	-1274.48	9.19	-40.62
Proj. To Bottom	7110.50	71.830	337.490	6694.80	-482.41	-1302.79	8.81	32.75
Landing Pt.	7270.75	80.000	340.850	6720.00	-335.12	-1358.71	11.52	190.28
Turn	7432.17	90.000	338.325	6720.00	-183.84	-1415.01	1.56	351.66
On Lateral Azimuth	7432.43	90.000	338.329	6720.00	-183.60	-1415.10	1.56	351.92
BHL	17449.68	90.000	338.329	6720.00	9125.63	-5114.24	0.00	10369.17

WFT EM <8-3/4">(2483')(2624'-7022') : 15.73° Inc, 2633.50ft MD, 2587.35ft TVD, -173.01ft VS

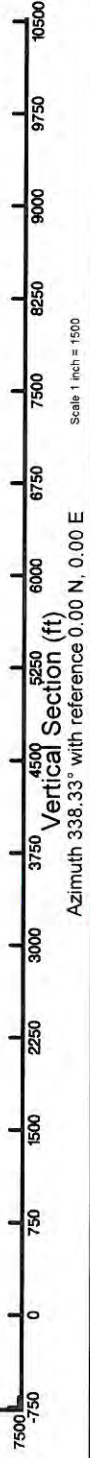
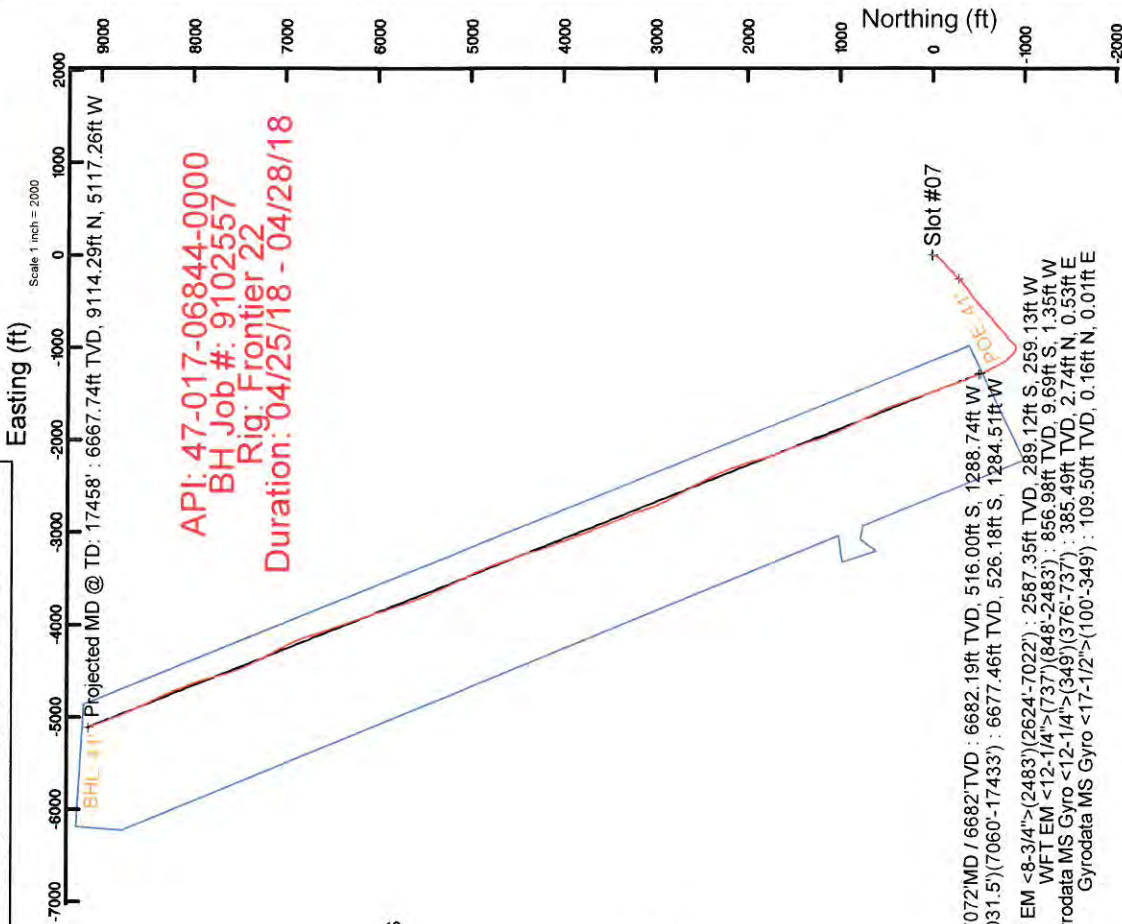
### Well Data

Slot	Well	Wellbore	Wellpath
Slot #07	Smithers Unit 2H	Smithers Unit 2H A1WB	Smithers Unit 2H A1WB Proj. 17465
Slot #07	Smithers Unit 2H	Smithers Unit 2H PWB	Smithers Unit 2H PWB RevA.0



User specified Dip: 66.56° Field: 52050 nT  
 Magnetic North is 1.65 degrees West of True North (at 4/23/2018)  
 To correct azimuth from Magnetic to Grid subtract 1.65 degrees  
 To correct azimuth from Grid to Magnetic add 1.65 degrees

BH AT Curve <8-1/2">(7031.5')(7060'-17433') : 66.26° Inc, 7060.00ft MD, 6677.46ft TVD, -14.68ft VS  
 POE Marcellus: 7072MD / 6682'TVD : 67.33° Inc, 7072.00ft MD, 6682.19ft TVD, -3.65ft VS  
 Projected MD @ TD: 17458' Inc, 17458.00ft MD, 6667.74ft TVD, 10359.75ft VS



02/15/2019



# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'

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REFERENCE WELLPATH IDENTIFICATION		
Operator	ANTERO RESOURCES CORPORATION	Slot #07
Area	Doddridge Co., WV	Smithers Unit 2H
Field	Doddridge	Smithers Unit 2H AWB
Facility	Strickling Pad	

REPORT SETUP INFORMATION		
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System
North Reference	Grid	User
Scale	0.999604	Report Generated
Convergence at slot	0.14° East	Database/Source file

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4.12	-29.85	1701553.34	14282955.94	39°19'55.850"N	80°47'01.650"W
Facility Reference Pt			1701583.17	14282960.06	39°19'55.890"N	80°47'01.270"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM	
Calculation method	Frontier 22 (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Frontier 22 (RKB) to Mean Sea Level
Vertical Reference Pt	Frontier 22 (RKB) to Ground Level at Slot (Slot #07)
MD Reference Pt	Section Origin
Field Vertical Reference	Section Azimuth

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# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'

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REFERENCE WELLPATH IDENTIFICATION									
Operator	ANTERO RESOURCES CORPORATION								
Area	Doddridge Co., WV								
Field	Doddridge								
Facility	Strickling Pad								
	Slot	Slot #07							
	Well	Smithers Unit 2H							
	Wellbore	Smithers Unit 2H AWB							

WELLPATH DATA (214 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	4.800	0.00	0.00	0.00	0.00	1701553.34	14282955.94	39°19'55.850"N	80°47'01.650"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.000	4.800	24.50	0.00	0.00	0.00	1701553.34	14282955.94	39°19'55.850"W	80°47'01.650"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.210	4.800	109.50	0.14	0.16	0.01	1701553.35	14282956.10	39°19'55.852"N	80°47'01.650"W	0.16	4.800	0.25	0.25	5.65	Gyrodatta MS Gyro <17-1/2">(100'-349')
209.50	0.520	352.560	209.50	0.74	0.79	-0.03	1701553.30	14282956.73	39°19'55.858"W	80°47'01.650"W	0.79	357.791	0.32	0.31	-12.24	
309.50	0.680	19.160	309.49	1.63	1.80	0.11	1701553.44	14282957.74	39°19'55.868"N	80°47'01.649"W	1.80	3.361	0.32	0.16	26.60	
358.50	0.910	21.130	358.49	2.14	2.44	0.34	1701553.68	14282958.38	39°19'55.874"N	80°47'01.646"W	2.46	7.976	0.47	0.47	4.02	
385.50	0.650	46.660	385.49	2.35	2.74	0.53	1701553.86	14282958.68	39°19'55.877"N	80°47'01.643"W	2.79	10.943	1.58	-0.96	94.56	Gyrodatta MS Gyro <12-1/4">(349')(376'-737')
475.50	0.810	54.110	475.48	2.70	3.46	1.42	1701554.75	14282959.40	39°19'55.884"N	80°47'01.632"W	3.74	22.241	0.21	0.18	8.28	
565.50	0.640	83.020	565.47	2.73	3.90	2.43	1701555.77	14282959.84	39°19'55.888"N	80°47'01.619"W	4.59	31.947	0.44	-0.19	32.12	
656.50	1.490	187.740	656.46	1.57	2.79	2.78	1701556.11	14282958.73	39°19'55.877"N	80°47'01.615"W	3.93	44.881	1.94	0.93	115.08	
746.50	3.620	200.760	746.37	-1.55	-1.03	1.61	1701554.95	14282954.91	39°19'55.840"N	80°47'01.630"W	1.91	122.565	2.44	2.37	14.47	
857.50	5.840	197.670	856.98	-8.51	-9.69	-1.35	1701551.99	14282946.26	39°19'55.754"N	80°47'01.715"W	9.78	187.906	2.01	2.00	-2.78	WFT EM <12-1/4">(737')(848'-2483')
953.50	7.350	201.680	952.34	-16.75	-20.05	-5.10	1701548.24	14282935.90	39°19'55.652"N	80°47'01.715"W	20.69	194.263	1.64	1.57	4.18	
1047.50	7.660	201.990	1045.54	-25.65	-31.44	-9.66	1701543.68	14282924.51	39°19'55.539"N	80°47'01.774"W	32.90	197.083	0.33	0.33	0.33	
1142.50	7.650	199.610	1139.69	-34.99	-43.27	-14.16	1701539.18	14282912.69	39°19'55.423"N	80°47'01.831"W	45.53	198.116	0.33	-0.01	-2.51	
1237.50	8.070	205.290	1233.80	-44.29	-55.26	-19.13	1701534.22	14282900.71	39°19'55.304"N	80°47'01.895"W	58.47	199.093	0.93	0.44	5.98	
1331.50	9.270	219.970	1326.74	-52.39	-67.03	-26.81	1701526.53	14282888.94	39°19'55.188"N	80°47'01.993"W	72.19	201.801	2.67	1.28	15.62	
1426.50	10.290	225.120	1420.36	-59.37	-78.88	-37.74	1701515.61	14282877.09	39°19'55.071"N	80°47'02.133"W	87.44	205.568	1.41	1.07	5.42	
1520.50	10.280	224.530	1512.85	-66.06	-90.78	-49.57	1701503.78	14282865.20	39°19'54.954"N	80°47'02.284"W	103.43	208.636	0.11	-0.01	-0.63	
1615.50	11.870	224.890	1606.07	-73.37	-103.75	-62.41	1701490.95	14282852.23	39°19'54.826"N	80°47'02.447"W	121.07	211.029	1.68	1.67	0.38	
1709.50	13.940	226.250	1697.69	-81.47	-118.43	-77.41	1701475.95	14282837.56	39°19'54.681"N	80°47'02.639"W	141.49	213.172	2.23	2.20	1.45	
1803.50	16.170	229.100	1798.46	-90.04	-134.83	-95.49	1701457.88	14282821.16	39°19'54.520"N	80°47'02.869"W	165.22	215.307	2.50	2.37	3.03	
1898.50	15.510	227.000	1879.86	-99.02	-152.15	-114.78	1701438.60	14282803.85	39°19'54.349"N	80°47'03.115"W	190.59	217.029	0.92	-0.69	-2.21	
1993.50	14.860	223.600	1971.58	-108.67	-169.52	-132.36	1701421.03	14282786.49	39°19'54.178"N	80°47'03.340"W	215.07	217.981	1.29	-0.89	-3.58	
2087.50	16.050	224.870	2062.23	-118.82	-187.35	-149.73	1701403.66	14282768.67	39°19'54.002"N	80°47'03.561"W	239.83	218.632	1.52	1.48	1.35	
2181.50	16.920	227.620	2152.36	-128.83	-205.78	-189.00	1701384.40	14282750.25	39°19'53.820"N	80°47'03.807"W	266.28	219.396	1.24	0.93	2.93	
2275.50	15.320	226.400	2242.66	-138.30	-223.56	-188.10	1701365.31	14282732.47	39°19'53.645"N	80°47'04.051"W	292.17	220.076	1.74	-1.70	-1.30	
2370.50	14.910	226.740	2334.38	-147.49	-240.59	-206.09	1701347.33	14282715.44	39°19'53.477"N	80°47'04.280"W	316.79	220.583	0.44	-0.43	0.36	
2492.50	16.400	229.480	2451.85	-158.83	-262.54	-230.61	1701322.81	14282693.51	39°19'53.281"N	80°47'04.593"W	349.44	221.296	1.36	1.22	2.25	
2633.50	15.730	224.430	2597.35	-173.01	-289.12	-259.13	1701294.31	14282666.93	39°19'52.999"N	80°47'04.956"W	388.25	221.868	1.10	-0.48	-3.58	WFT EM <8-3/4">(2483')(2624'-7022')



# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #07
Area	Doddridge Co., WV	Well	Smithers Unit 2H
Field	Doddridge	Wellbore	Smithers Unit 2H AWB
Facility	Strickling Pad		

## WELLPATH DATA (214 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
2728.50	16.070	223.990	2678.72	-183.64	-307.78	-277.27	1701276.17	14282648.28	39°19'52.815"N	80°47'05.188"W	414.26	222.015	0.38	0.36	-0.46	
2821.50	15.850	228.500	2768.13	-193.26	-325.46	-295.73	1701257.73	14282630.62	39°19'52.640"N	80°47'05.423"W	439.74	222.260	1.35	-0.24	4.85	
2916.50	15.730	232.560	2859.55	-201.16	-341.88	-315.67	1701237.79	14282614.20	39°19'52.478"N	80°47'05.678"W	465.33	222.717	1.17	-0.13	4.27	
3010.50	15.670	230.770	2950.05	-208.45	-357.66	-335.62	1701217.85	14282598.43	39°19'52.323"N	80°47'05.932"W	490.47	223.179	0.52	-0.06	-1.90	
3105.50	15.220	229.420	3041.61	-216.36	-373.88	-355.03	1701198.45	14282582.21	39°19'52.163"N	80°47'06.179"W	515.59	223.518	0.61	-0.47	-1.42	
3199.50	15.450	232.890	3132.27	-223.69	-389.46	-374.38	1701179.10	14282566.63	39°19'52.010"N	80°47'06.426"W	540.23	223.869	1.01	0.24	3.69	
3294.50	15.540	234.300	3223.82	-230.15	-404.52	-394.81	1701158.68	14282551.58	39°19'51.861"N	80°47'06.687"W	565.26	224.304	0.41	0.09	1.48	
3388.50	16.230	234.930	3314.23	-236.24	-419.42	-415.79	1701137.71	14282536.69	39°19'51.714"N	80°47'06.954"W	590.59	224.751	0.76	0.73	0.67	
3482.50	16.440	235.890	3404.43	-242.15	-434.43	-437.55	1701115.96	14282521.69	39°19'51.567"N	80°47'07.231"W	616.59	225.205	0.36	0.22	1.02	
3577.50	16.490	232.880	3495.54	-248.65	-450.11	-459.43	1701094.09	14282506.01	39°19'51.412"N	80°47'07.510"W	643.17	225.587	0.91	0.05	-3.22	
3672.50	16.640	230.860	3586.60	-256.34	-466.84	-480.72	1701072.81	14282489.28	39°19'51.247"N	80°47'07.782"W	670.10	225.839	0.61	0.16	-2.07	
3767.50	16.820	229.890	3677.58	-264.77	-484.29	-501.78	1701051.75	14282471.85	39°19'51.075"N	80°47'08.050"W	697.36	226.017	0.35	0.19	-1.02	
3861.50	16.620	229.140	3767.60	-273.49	-501.84	-522.35	1701031.19	14282454.30	39°19'50.902"N	80°47'08.313"W	724.36	226.147	0.31	-0.21	-0.80	
3955.50	16.360	227.820	3857.74	-282.55	-519.53	-542.33	1701011.22	14282436.62	39°19'50.728"N	80°47'08.567"W	751.02	226.230	0.49	-0.28	-1.40	
4050.50	16.100	226.790	3948.95	-292.07	-537.53	-561.84	1700991.72	14282418.63	39°19'50.550"N	80°47'08.816"W	777.56	226.287	0.41	-0.27	-1.08	
4144.50	15.650	225.030	4039.37	-301.87	-555.41	-580.31	1700973.25	14282400.75	39°19'50.374"N	80°47'09.052"W	803.27	226.256	0.70	-0.48	-1.87	
4239.50	15.370	224.300	4130.91	-312.07	-573.48	-598.17	1700955.40	14282382.69	39°19'50.196"N	80°47'09.280"W	828.67	226.207	0.36	-0.29	-0.77	
4333.50	15.760	229.590	4221.46	-321.24	-590.67	-616.59	1700936.99	14282365.51	39°19'50.027"N	80°47'09.515"W	853.86	226.230	1.57	0.41	5.63	
4428.50	15.770	228.590	4312.89	-329.75	-607.57	-636.10	1700917.49	14282348.61	39°19'49.860"N	80°47'09.763"W	879.64	226.314	0.29	0.01	-1.05	
4523.50	15.550	227.830	4404.36	-338.57	-624.66	-655.22	1700898.38	14282331.53	39°19'49.691"N	80°47'10.007"W	905.27	226.368	0.32	-0.23	-0.80	
4618.50	15.430	231.240	4495.91	-346.74	-641.12	-674.51	1700879.09	14282315.07	39°19'49.529"N	80°47'10.253"W	930.59	226.454	0.97	-0.13	3.59	
4712.50	15.440	231.390	4586.52	-354.06	-656.76	-694.04	1700859.57	14282299.44	39°19'49.375"N	80°47'10.502"W	955.52	226.581	0.04	0.01	0.15	
4806.50	15.550	230.340	4677.11	-361.60	-672.61	-713.51	1700840.10	14282283.60	39°19'49.219"N	80°47'10.751"W	980.57	226.680	0.32	0.12	-1.11	
4901.50	15.480	229.040	4768.65	-369.72	-689.05	-732.89	1700820.74	14282267.17	39°19'49.057"N	80°47'11.099"W	1005.94	226.766	0.37	-0.07	-1.37	
4996.50	15.410	229.000	4860.22	-378.09	-705.64	-751.99	1700801.64	14282250.58	39°19'48.893"N	80°47'11.241"W	1031.22	226.821	0.07	-0.07	-0.04	
5090.50	15.510	228.470	4950.81	-386.49	-722.17	-770.83	1700782.82	14282234.06	39°19'48.730"N	80°47'11.481"W	1056.27	226.867	0.18	0.11	-0.56	
5184.50	15.980	228.240	5041.29	-395.21	-739.12	-789.89	1700763.76	14282217.12	39°19'48.563"N	80°47'11.724"W	1081.76	226.902	0.50	0.50	-0.24	
5279.50	16.270	227.710	5132.55	-404.39	-756.78	-809.48	1700744.17	14282199.46	39°19'48.389"N	80°47'11.974"W	1108.14	226.927	0.34	0.31	-0.56	
5374.50	16.460	226.860	5223.70	-414.00	-774.94	-829.15	1700724.51	14282181.31	39°19'48.210"N	80°47'12.225"W	1134.91	226.936	0.32	0.20	-0.88	
5469.50	16.620	230.450	5314.77	-423.10	-792.79	-849.45	1700704.23	14282163.46	39°19'48.034"N	80°47'12.484"W	1161.93	226.976	1.09	0.17	3.78	



# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #07
ANTERO RESOURCES CORPORATION	Well	Smithers Unit 2H
Doddridge Co., WV	Wellbore	Smithers Unit 2H AWB
Doddridge		
Strickling Pad		

## WELLPATH DATA (214 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
5563.50	15.780	233.780	5405.04	-430.44	-808.91	-870.12	1700663.56	14282147.36	39°19'47.875"N	80°47'12.748"W	1188.04	227.088	1.33	-0.89	3.54	
5658.50	14.340	235.220	5496.78	-436.35	-823.25	-890.21	1700663.48	14282133.02	39°19'47.734"N	80°47'13.004"W	1212.53	227.238	1.57	-1.52	1.52	
5752.50	14.270	230.050	5587.87	-442.62	-837.33	-908.65	1700645.04	14282118.94	39°19'47.595"N	80°47'13.239"W	1235.63	227.339	1.36	-0.07	-5.50	
5846.50	15.620	224.490	5678.69	-451.37	-853.80	-926.40	1700627.30	14282102.48	39°19'47.433"N	80°47'13.465"W	1259.84	227.335	2.09	1.44	-5.91	
5941.50	16.530	220.990	5769.97	-462.75	-873.13	-944.23	1700609.48	14282083.16	39°19'47.243"N	80°47'13.693"W	1286.05	227.241	1.40	0.96	-3.68	
6036.50	17.030	222.610	5860.93	-475.00	-893.57	-962.52	1700591.20	14282062.73	39°19'47.041"N	80°47'13.928"W	1313.35	227.127	0.72	0.53	1.71	
6131.50	15.420	236.060	5952.18	-483.72	-910.86	-982.42	1700571.31	14282045.44	39°19'46.870"N	80°47'14.180"W	1339.71	227.164	4.29	-1.69	14.16	
6162.50	14.170	247.700	5982.15	-484.64	-914.60	-989.35	1700564.38	14282041.70	39°19'46.834"N	80°47'14.268"W	1347.34	227.248	10.38	-4.03	37.58	
6194.50	13.430	259.630	6013.24	-483.95	-916.76	-996.63	1700557.10	14282039.55	39°19'46.812"N	80°47'14.361"W	1354.15	227.390	9.17	-2.31	37.28	
6225.50	13.830	271.850	6043.37	-481.77	-917.29	-1003.88	1700549.86	14282039.02	39°19'46.807"N	80°47'14.453"W	1359.85	227.581	9.36	1.29	39.42	
6257.50	15.050	280.890	6074.36	-478.02	-916.39	-1011.78	1700541.95	14282039.11	39°19'46.816"N	80°47'14.554"W	1365.10	227.832	7.86	3.81	27.62	
6289.50	16.640	288.190	6105.15	-472.86	-914.19	-1020.22	1700533.52	14282042.11	39°19'46.838"N	80°47'14.661"W	1369.89	228.137	8.09	4.97	23.44	
6320.50	18.490	294.470	6134.70	-466.47	-910.77	-1028.91	1700524.83	14282045.53	39°19'46.872"N	80°47'14.771"W	1374.11	228.485	8.54	5.97	20.26	
6351.50	20.280	298.760	6163.95	-458.78	-906.15	-1038.10	1700515.65	14282050.15	39°19'46.918"N	80°47'14.888"W	1377.95	228.883	7.37	5.77	13.84	
6383.50	21.910	303.120	6193.80	-449.63	-900.22	-1047.96	1700505.79	14282066.08	39°19'46.977"N	80°47'15.013"W	1381.53	229.337	7.07	5.08	13.63	
6414.50	22.940	308.210	6222.46	-439.67	-893.32	-1057.55	1700496.20	14282062.98	39°19'47.046"N	80°47'15.135"W	1384.36	229.812	7.09	3.32	16.42	
6446.50	24.180	313.190	6251.80	-428.34	-884.98	-1067.23	1700486.53	14282071.32	39°19'47.128"N	80°47'15.258"W	1386.42	230.334	7.33	3.87	15.56	
6478.50	26.230	315.380	6280.75	-415.90	-875.46	-1076.98	1700476.78	14282080.83	39°19'47.223"N	80°47'15.382"W	1387.92	230.893	7.04	6.41	6.84	
6509.50	29.050	316.040	6308.21	-402.62	-865.16	-1087.02	1700466.75	14282091.13	39°19'47.325"N	80°47'15.509"W	1389.28	231.484	9.15	9.10	2.13	
6540.50	31.680	316.310	6334.95	-388.11	-853.85	-1097.87	1700455.90	14282102.43	39°19'47.437"N	80°47'15.647"W	1390.82	232.126	8.50	8.48	0.87	
6572.50	33.890	317.010	6361.86	-372.01	-841.25	-1109.76	1700444.02	14282115.03	39°19'47.561"N	80°47'15.798"W	1392.57	232.836	7.01	6.91	2.19	
6603.50	35.460	318.290	6387.35	-355.51	-828.22	-1121.63	1700432.15	14282128.06	39°19'47.691"N	80°47'15.949"W	1394.28	233.588	5.58	5.06	4.13	
6635.50	36.650	320.690	6413.22	-337.68	-813.89	-1133.86	1700419.92	14282142.37	39°19'47.832"N	80°47'16.104"W	1395.73	234.329	5.77	3.72	7.50	
6666.50	37.390	323.190	6437.97	-319.78	-799.20	-1145.36	1700408.43	14282157.06	39°19'47.978"N	80°47'16.250"W	1396.63	235.094	5.41	2.39	8.06	
6698.50	39.220	326.290	6463.09	-300.50	-783.00	-1156.80	1700396.99	14282173.25	39°19'48.138"N	80°47'16.395"W	1396.88	235.907	8.29	5.72	9.65	
6729.50	41.880	328.330	6486.64	-280.72	-766.04	-1167.68	1700386.12	14282190.21	39°19'48.306"N	80°47'16.533"W	1396.53	236.734	9.59	8.58	6.58	
6761.50	44.620	330.000	6509.95	-259.08	-747.21	-1178.91	1700374.90	14282209.03	39°19'48.492"N	80°47'16.675"W	1395.76	237.633	9.28	8.56	5.22	
6792.50	47.280	331.900	6531.50	-236.99	-727.73	-1189.72	1700364.09	14282228.50	39°19'48.685"N	80°47'16.812"W	1394.64	238.546	9.64	8.58	6.13	
6824.50	50.210	332.810	6552.60	-213.06	-706.42	-1200.87	1700352.94	14282249.80	39°19'48.896"N	80°47'16.954"W	1393.24	239.533	9.40	9.16	2.84	
6856.50	52.880	333.400	6572.50	-188.11	-684.08	-1212.21	1700341.61	14282272.14	39°19'49.117"N	80°47'17.097"W	1391.91	240.563	8.47	8.34	1.84	



# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #07
Area	Doddridge Co., WV	Well	Smithers Unit 2H
Field	Doddridge	Wellbore	Smithers Unit 2H AWB
Facility	Strickling Pad		

## WELLPATH DATA (214 stations) † = interpolated/extrapolated station

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (IUS, ft)	Grid North (IUS, ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Comments
6887.50	54.780	333.760	6590.79	-163.17	-661.66	-1223.34	17000330.48	14282294.54	39°19'49.339"N	80°47'17.238"W	1390.81	241.592	6.20	6.13	1.16	
6917.00H	55.199	334.063	6607.72	-139.08	-639.96	-1233.96	17000319.86	142822316.23	39°19'49.554"N	80°47'17.373"W	1390.04	242.588	1.65	1.42	1.03	Burket. 6917MD / 6608'TVD
6918.50	55.220	334.080	6608.57	-137.85	-638.86	-1234.50	17000319.32	14282317.34	39°19'49.565"N	80°47'17.380"W	1390.01	242.638	1.65	1.42	1.03	
6950.50	57.080	335.190	6626.40	-111.33	-614.84	-1245.88	17000307.95	14282341.34	39°19'49.802"N	80°47'17.524"W	1389.34	243.734	6.49	5.81	3.47	
6969.00H	58.779	335.670	6636.22	-95.88	-600.59	-1252.40	17000301.43	14282355.59	39°19'49.943"N	80°47'17.606"W	1388.96	244.380	9.44	9.18	2.60	Tully. 6969MD / 6636'TVD
6982.50	60.020	336.010	6643.09	-84.07	-589.98	-1257.16	1700296.68	14282366.19	39°19'50.048"N	80°47'17.666"W	1388.71	244.859	10.68	10.55	1.90	
7013.50	63.290	336.600	6657.81	-66.81	-565.00	-1268.12	1700285.72	14282391.16	39°19'50.295"N	80°47'17.805"W	1388.29	245.985	10.68	10.55	1.90	
7031.50	64.880	337.110	6665.67	-40.82	-550.12	-1274.48	1700279.36	14282406.04	39°19'50.443"N	80°47'17.886"W	1388.18	246.653	9.19	8.83	2.83	
7050.00H	65.776	337.319	6673.40	-23.82	-534.62	-1280.99	1700272.85	14282421.54	39°19'50.596"N	80°47'17.968"W	1388.08	247.347	4.95	4.84	1.13	Hamilton. 7050MD / 6673'TVD
7060.00	66.260	337.430	6677.46	-14.68	-526.18	-1284.51	1700269.34	14282429.97	39°19'50.679"N	80°47'18.013"W	1388.10	247.724	4.95	4.84	1.11	BH/AT Curve <8-1/2"> (7031.5)/(7060'-17433')
7072.00H	67.327	337.383	6682.19	-3.65	-516.00	-1288.74	1700265.10	14282440.15	39°19'50.780"N	80°47'18.066"W	1388.21	248.179	8.90	8.89	-0.39	POE Marcellus. 7072MD / 6682'TVD
7107.00	70.440	337.250	6694.80	28.99	-485.88	-1301.33	1700252.52	14282470.25	39°19'51.078"N	80°47'18.225"W	1389.08	249.526	8.90	8.89	-0.38	
7155.00	77.030	337.680	6708.23	75.04	-443.34	-1318.98	1700234.88	14282512.78	39°19'51.499"N	80°47'18.449"W	1391.50	251.421	13.76	13.73	0.90	
7202.00	84.050	337.880	6715.95	121.37	-400.45	-1336.50	1700217.37	14282555.65	39°19'51.923"N	80°47'18.670"W	1395.20	253.320	14.94	14.94	0.43	
7249.00	89.480	339.940	6718.60	168.27	-356.69	-1353.38	1700200.50	14282599.40	39°19'52.356"N	80°47'18.884"W	1399.59	255.235	12.35	11.55	4.38	
7343.00	90.060	339.350	6718.98	262.24	-288.56	-1386.07	1700167.81	14282687.49	39°19'53.228"N	80°47'19.297"W	1411.85	259.035	0.88	0.62	-0.63	
7438.00	89.780	339.730	6719.11	357.22	-179.55	-1419.28	1700134.62	14282776.46	39°19'54.109"N	80°47'19.717"W	1430.59	262.790	0.50	-0.29	0.40	
7533.00	89.850	338.530	6719.42	452.21	-90.79	-1453.12	1700100.79	14282865.19	39°19'54.957"N	80°47'20.145"W	1455.96	266.425	1.27	0.07	-1.26	
7627.00	90.710	340.530	6718.96	546.18	-2.73	-1485.99	1700067.93	14282953.21	39°19'55.858"N	80°47'20.561"W	1486.00	269.895	2.32	0.91	2.13	
7722.00	90.620	340.520	6717.86	641.11	86.83	-1517.86	1700036.27	14283042.74	39°19'56.744"N	80°47'20.961"W	1520.15	273.274	0.10	-0.09	-0.01	
7816.00	90.580	340.720	6716.88	735.03	175.50	-1548.85	1700005.10	14283131.37	39°19'57.621"N	80°47'21.356"W	1558.77	276.465	0.22	-0.04	0.21	
7910.00	90.770	340.340	6715.77	828.95	264.12	-1580.18	1699973.78	14283219.95	39°19'58.497"N	80°47'21.752"W	1602.10	279.489	0.45	0.20	-0.40	
8005.00	90.710	341.250	6714.54	923.85	353.82	-1611.43	1699942.54	14283309.62	39°19'59.385"N	80°47'22.147"W	1649.82	282.384	0.96	-0.06	0.96	
8100.00	90.860	338.880	6713.24	1018.79	443.11	-1643.82	1699910.17	14283398.88	39°20'00.268"N	80°47'22.556"W	1702.49	285.086	2.50	0.16	-2.49	
8194.00	90.550	335.580	6712.08	1112.76	529.77	-1680.19	1699873.81	14283485.50	39°20'01.125"N	80°47'23.017"W	1761.73	287.500	3.53	-0.33	-3.51	
8289.00	90.580	334.680	6711.15	1207.60	615.95	-1720.14	1699833.88	14283571.65	39°20'01.978"N	80°47'23.523"W	1827.10	289.702	0.95	0.03	-0.95	
8384.00	90.550	333.880	6710.21	1302.36	701.54	-1761.37	1699792.67	14283657.20	39°20'02.825"N	80°47'24.045"W	1895.93	291.717	0.84	-0.03	-0.84	
8478.00	90.520	333.690	6709.33	1396.06	785.87	-1802.89	1699751.16	14283741.49	39°20'03.659"N	80°47'24.571"W	1966.72	293.552	0.20	-0.03	-0.20	
8573.00	90.000	332.350	6708.90	1490.65	870.52	-1845.99	1699708.08	14283826.12	39°20'04.497"N	80°47'25.117"W	2040.95	295.247	1.51	-0.55	-1.41	
8668.00	90.580	336.140	6708.42	1585.39	956.07	-1887.26	1699666.83	14283911.63	39°20'05.343"N	80°47'25.639"W	2115.61	296.866	4.04	0.61	3.99	



# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	Area	Field	Facility	Slot	Slot #07
ANTERO RESOURCES CORPORATION	Doddridge Co., WV	Doddridge	Strickling Pad	Well	Smithers Unit 2H
				Wellbore	Smithers Unit 2H AWB

## WELLPATH DATA (214 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
8762.00	90.000	337.030	6707.94	1679.34	1042.33	-1924.61	1699629.49	14283997.85	39°20'06.197"N	80°47'26.112"W	2188.74	298.439	1.13	-0.62	0.95	
8856.00	90.120	339.240	6707.84	1773.34	1129.56	-1959.62	1699594.50	14284085.05	39°20'07.060"N	80°47'26.555"W	2261.86	299.960	2.35	0.13	2.35	
8951.00	90.150	341.150	6707.62	1868.28	1218.93	-1991.80	1699562.32	14284174.39	39°20'07.944"N	80°47'26.962"W	2335.18	301.466	2.01	0.03	2.01	
9045.00	90.280	343.050	6707.26	1963.07	1309.33	-2021.00	1699533.14	14284264.75	39°20'08.838"N	80°47'27.331"W	2408.07	302.938	2.00	0.14	2.00	
9140.00	90.060	341.230	6706.99	2056.86	1398.80	-2049.83	1699504.32	14284354.18	39°20'09.723"N	80°47'27.695"W	2481.62	304.310	1.95	-0.23	-1.94	
9235.00	90.120	338.320	6706.84	2151.82	1487.93	-2082.67	1699471.50	14284443.28	39°20'10.605"N	80°47'28.111"W	2559.58	305.543	3.06	0.06	-3.06	
9330.00	90.280	337.170	6706.50	2246.81	1575.85	-2118.64	1699435.53	14284531.17	39°20'11.474"N	80°47'28.566"W	2640.45	306.642	1.22	0.17	-1.21	
9425.00	90.220	339.300	6706.09	2341.80	1664.07	-2153.87	1699400.32	14284619.35	39°20'12.347"N	80°47'29.012"W	2721.82	307.690	2.24	-0.06	2.24	
9520.00	90.180	342.480	6705.76	2436.70	1753.83	-2184.97	1699369.24	14284709.07	39°20'13.235"N	80°47'29.405"W	2801.78	308.753	3.35	-0.04	3.35	
9614.00	90.310	344.930	6705.36	2530.28	1844.04	-2211.34	1699342.88	14284799.25	39°20'14.127"N	80°47'29.738"W	2879.32	309.825	2.61	0.14	2.61	
9709.00	90.180	344.640	6704.95	2624.67	1935.71	-2236.27	1699317.95	14284890.88	39°20'15.034"N	80°47'30.052"W	2957.68	310.879	0.33	-0.14	-0.31	
9804.00	90.180	342.180	6704.65	2719.29	2026.75	-2263.39	1699290.84	14284981.88	39°20'15.934"N	80°47'30.395"W	3038.20	311.843	2.59	0.00	-2.59	
9898.00	90.280	339.290	6704.27	2813.20	2115.47	-2294.40	1699259.84	14285070.58	39°20'16.812"N	80°47'30.787"W	3120.82	312.677	3.08	0.11	-3.07	
9993.00	90.150	338.140	6703.92	2908.19	2203.99	-2328.89	1699225.37	14285159.06	39°20'17.687"N	80°47'31.223"W	3206.45	313.422	1.22	-0.14	-1.21	
10088.00	90.180	336.080	6703.64	3003.17	2291.51	-2365.84	1699188.44	14285246.54	39°20'18.553"N	80°47'31.691"W	3293.66	314.086	2.17	0.03	-2.17	
10182.00	90.250	334.350	6703.29	3097.02	2376.84	-2405.24	1699149.05	14285331.84	39°20'19.398"N	80°47'32.190"W	3381.50	314.660	1.84	0.07	-1.84	
10277.00	90.220	332.670	6702.90	3191.68	2461.87	-2447.61	1699106.70	14285416.83	39°20'20.239"N	80°47'32.727"W	3471.54	315.166	1.77	-0.03	-1.77	
10372.00	90.090	331.930	6702.64	3286.16	2545.98	-2491.77	1699062.55	14285500.91	39°20'21.071"N	80°47'33.286"W	3562.43	315.616	0.79	-0.14	-0.78	
10466.00	90.180	331.550	6702.42	3379.53	2628.77	-2536.28	1699018.06	14285583.67	39°20'21.891"N	80°47'33.850"W	3652.83	316.026	0.42	0.10	-0.40	
10561.00	90.220	331.080	6702.09	3473.82	2712.11	-2581.88	1698972.48	14285666.98	39°20'22.715"N	80°47'34.428"W	3744.55	316.409	0.50	0.04	-0.49	
10655.00	90.150	331.110	6701.79	3567.07	2794.40	-2627.31	1698927.07	14285749.23	39°20'23.530"N	80°47'35.004"W	3835.55	316.765	0.08	-0.07	0.03	
10749.00	89.940	334.090	6701.71	3660.59	2877.85	-2670.57	1698883.83	14285832.65	39°20'24.355"N	80°47'35.552"W	3926.06	317.139	3.18	-0.22	3.17	
10843.00	90.090	337.600	6701.69	3754.49	2963.60	-2709.03	1698845.39	14285918.37	39°20'25.204"N	80°47'36.039"W	4015.19	317.570	3.74	0.16	3.73	
10937.00	90.120	341.690	6701.52	3848.45	3051.72	-2741.72	1698812.71	14286006.44	39°20'26.075"N	80°47'36.453"W	4102.44	318.063	4.35	0.03	4.35	
11032.00	90.000	342.580	6701.42	3943.23	3142.13	-2770.86	1698783.58	14286096.83	39°20'26.970"N	80°47'36.821"W	4189.35	318.593	0.95	-0.13	0.94	
11127.00	90.180	338.910	6701.27	4038.17	3230.92	-2804.51	1698749.94	14286185.58	39°20'27.848"N	80°47'37.247"W	4278.33	319.041	7.02	0.19	-7.02	
11222.00	90.800	338.360	6700.46	4133.14	3318.44	-2841.42	1698713.05	14286273.07	39°20'28.714"N	80°47'37.714"W	4368.72	319.428	2.66	0.65	2.58	
11317.00	90.340	338.790	6699.51	4228.13	3406.87	-2876.12	1698678.36	14286361.46	39°20'29.589"N	80°47'38.153"W	4458.57	319.829	0.66	-0.48	0.45	
11411.00	89.970	338.170	6699.26	4322.13	3494.32	-2910.60	1698643.90	14286448.87	39°20'30.454"N	80°47'38.589"W	4547.73	320.207	0.77	-0.39	-0.66	
11506.00	89.940	338.720	6699.33	4417.13	3582.68	-2945.50	1698609.01	14286537.19	39°20'31.328"N	80°47'39.031"W	4638.05	320.575	0.58	-0.03	0.58	



# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #07
Area	Doddridge Co., WV	Well	Smithers Unit 2H
Field	Doddridge	Wellbore	Smithers Unit 2H AWB
Facility	Strickling Pad		

WELLPATH DATA (214 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
11601.00	90.000	338.360	6699.38	4512.13	3671.09	-2980.25	1698574.27	14286625.57	39°20'32.202"N	80°47'39.471"W	4728.51	320.930	0.38	0.06	0.06	-0.38
11695.00	90.030	339.130	6699.36	4606.13	3758.69	-3014.33	16985540.20	14286613.14	39°20'33.069"N	80°47'39.902"W	4818.09	321.272	0.82	0.03	0.82	0.82
11790.00	90.060	338.790	6699.28	4701.12	3847.36	-3048.44	1698506.11	14286801.77	39°20'33.946"N	80°47'40.334"W	4908.68	321.609	0.36	0.03	0.03	-0.36
11883.00	90.030	338.420	6699.21	4794.12	3933.95	-3082.36	1698472.20	14286888.33	39°20'34.803"N	80°47'40.763"W	4997.69	321.920	0.40	-0.03	0.03	-0.40
11978.00	90.060	340.000	6699.13	4889.10	4022.76	-3116.08	1698438.49	14286977.11	39°20'35.681"N	80°47'41.190"W	5088.48	322.238	1.66	0.03	0.03	1.66
12072.00	90.030	340.730	6699.06	4983.04	4111.30	-3147.67	1698406.92	14287065.60	39°20'36.557"N	80°47'41.589"W	5177.89	322.562	0.78	-0.03	0.03	0.78
12166.00	90.250	342.360	6698.83	5076.89	4200.46	-3177.42	1698377.17	14287154.73	39°20'37.439"N	80°47'41.965"W	5266.87	322.894	1.75	0.23	0.23	1.73
12261.00	90.310	342.900	6698.37	5171.62	4291.13	-3205.79	1698348.82	14287245.36	39°20'38.336"N	80°47'42.324"W	5356.38	323.238	0.57	0.06	0.06	0.57
12354.00	90.280	341.920	6697.99	5264.39	4379.77	-3233.89	1698320.73	14287333.97	39°20'39.212"N	80°47'42.679"W	5444.31	323.559	1.05	-0.03	-0.03	-1.05
12449.00	90.520	341.580	6697.22	5359.21	4469.99	-3263.64	1698290.99	14287424.16	39°20'40.105"N	80°47'43.055"W	5534.64	323.866	0.44	0.25	0.25	-0.36
12543.00	90.250	340.370	6696.59	5453.11	4558.86	-3294.28	1698260.36	14287512.98	39°20'40.984"N	80°47'43.442"W	5624.54	324.148	1.32	-0.29	-0.29	-1.29
12638.00	90.310	339.970	6696.13	5548.06	4648.22	-3326.51	1698228.15	14287602.31	39°20'41.868"N	80°47'43.850"W	5715.91	324.411	0.43	0.06	0.06	-0.42
12732.00	90.310	339.160	6695.62	5642.04	4736.30	-3359.33	1698195.35	14287690.36	39°20'42.739"N	80°47'44.265"W	5806.69	324.653	0.86	0.00	0.00	-0.86
12827.00	90.370	337.480	6695.06	5737.03	4824.58	-3394.42	1698160.27	14287778.60	39°20'43.612"N	80°47'44.709"W	5899.04	324.871	1.77	0.06	0.06	-1.77
12922.00	90.150	338.070	6694.62	5832.02	4912.52	-3430.35	1698124.35	14287866.51	39°20'44.482"N	80°47'45.164"W	5991.67	325.074	0.66	-0.23	0.62	0.62
13016.00	90.250	334.290	6694.30	5925.94	4998.50	-3468.31	1698086.41	14287952.45	39°20'45.333"N	80°47'45.645"W	6083.92	325.244	4.02	0.11	4.02	-4.02
13110.00	90.680	335.320	6693.53	6019.76	5083.55	-3508.32	1698046.41	14288037.47	39°20'46.174"N	80°47'46.152"W	6176.63	325.389	1.19	0.46	1.10	1.10
13205.00	88.830	333.410	6693.94	6114.52	5169.19	-3549.42	1698005.33	14288123.08	39°20'47.022"N	80°47'46.672"W	6270.48	325.525	2.80	-1.95	-2.01	-2.01
13300.00	90.400	335.320	6694.58	6209.28	5254.83	-3590.51	1697964.25	14288208.68	39°20'47.869"N	80°47'47.193"W	6364.36	325.656	2.60	1.65	2.01	2.01
13395.00	90.220	335.760	6694.06	6304.17	5341.30	-3629.85	1697924.93	14288295.12	39°20'48.725"N	80°47'47.691"W	6457.97	325.801	0.50	-0.19	0.46	0.46
13489.00	90.250	334.720	6693.68	6398.03	5426.66	-3669.22	1697885.58	14288380.44	39°20'49.569"N	80°47'48.190"W	6550.71	325.936	1.11	0.03	-1.11	-1.11
13584.00	90.310	337.110	6693.21	6492.94	5513.38	-3707.98	1697846.83	14288467.13	39°20'50.427"N	80°47'48.681"W	6644.28	326.077	2.52	0.06	2.52	2.52
13678.00	90.280	339.240	6692.73	6586.93	5600.83	-3742.93	1697811.90	14288554.35	39°20'51.290"N	80°47'49.123"W	6736.22	326.245	2.27	-0.03	2.27	2.27
13773.00	90.280	340.500	6692.27	6681.89	5689.83	-3775.62	1697779.22	14288643.51	39°20'52.173"N	80°47'49.537"W	6828.58	326.433	1.33	0.00	1.33	1.33
13868.00	90.340	341.820	6691.75	6776.78	5779.74	-3806.30	1697748.55	14288733.38	39°20'53.062"N	80°47'49.925"W	6920.50	326.633	1.39	0.06	1.39	1.39
13962.00	90.280	342.570	6691.24	6870.56	5869.23	-3835.04	1697719.82	14288822.84	39°20'53.947"N	80°47'50.288"W	7011.09	326.839	0.80	-0.06	0.80	0.80
14056.00	90.280	342.350	6690.78	6964.31	5958.86	-3863.37	1697691.50	14288912.43	39°20'54.834"N	80°47'50.646"W	7101.67	327.043	0.23	0.00	-0.23	-0.23
14151.00	90.340	341.210	6690.27	7059.14	6049.10	-3893.07	1697661.81	14289002.63	39°20'55.726"N	80°47'51.021"W	7193.58	327.236	1.20	0.06	1.20	1.20
14246.00	90.310	341.020	6689.73	7154.03	6138.98	-3923.82	1697631.08	14289092.48	39°20'56.615"N	80°47'51.410"W	7285.84	327.415	0.20	-0.03	-0.20	-0.20
14340.00	90.280	340.950	6689.25	7247.92	6227.85	-3954.44	1697600.46	14289181.32	39°20'57.494"N	80°47'51.798"W	7377.25	327.586	0.08	-0.03	-0.07	-0.07





# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'  
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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #07
Operator	ANTERO RESOURCES CORPORATION	Well	Smithers Unit 2H
Area	Doddridge Co., WV	Wellbore	Smithers Unit 2H AWB
Field	Doddridge		
Facility	Strickling Pad		

WELLPATH DATA (214 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
14434.00	90.280	341.710	6688.79	7341.79	6316.90	-3984.54	1697570.38	14289270.33	39°20'58.375"N	80°47'52.178"W	7468.59	327.757	0.81	0.00	0.00	0.81
14529.00	90.460	341.170	6688.17	7436.65	6406.96	-4014.77	1697540.16	14289360.35	39°20'59.266"N	80°47'52.560"W	7560.92	327.928	0.60	0.19	0.19	-0.57
14624.00	90.460	339.690	6687.41	7531.58	6496.47	-4046.59	1697508.35	14289449.82	39°21'00.151"N	80°47'52.963"W	7653.69	328.082	1.56	0.00	0.00	-1.56
14718.00	90.490	339.900	6686.63	7625.55	6584.68	-4079.06	1697475.90	14289538.00	39°21'01.024"N	80°47'53.374"W	7745.75	328.223	0.23	0.03	0.03	0.22
14813.00	90.490	342.890	6685.82	7720.40	6674.70	-4109.36	1697445.61	14289627.99	39°21'01.914"N	80°47'53.757"W	7838.27	328.381	3.15	0.00	0.00	3.15
14908.00	90.400	340.770	6685.08	7815.21	6764.96	-4138.98	1697416.00	14289718.21	39°21'02.807"N	80°47'54.131"W	7930.69	328.541	2.23	-0.09	-0.09	-2.23
15003.00	90.980	334.070	6681.97	8004.07	6940.00	-4209.89	1697345.12	14289893.19	39°21'04.588"N	80°47'54.550"W	8023.92	328.671	2.57	0.84	0.84	-2.43
15192.00	90.370	332.050	6680.85	8098.66	7024.68	-4252.92	1697302.10	14289977.83	39°21'05.376"N	80°47'55.574"W	8211.79	328.808	2.22	-0.64	-0.64	-2.13
15286.00	90.280	331.790	6680.31	8192.07	7107.62	-4297.17	1697257.88	14290060.73	39°21'06.197"N	80°47'56.135"W	8305.65	328.843	0.29	-0.10	-0.10	-0.28
15381.00	90.340	331.890	6679.80	8286.46	7191.37	-4342.00	1697213.06	14290144.45	39°21'07.026"N	80°47'56.704"W	8400.52	328.877	0.12	0.06	0.11	0.11
15475.00	90.310	332.740	6679.27	8379.94	7274.61	-4385.67	1697169.41	14290227.66	39°21'07.849"N	80°47'57.257"W	8494.35	328.915	0.90	-0.03	0.90	0.90
15570.00	90.000	334.360	6679.01	8474.60	7359.66	-4427.99	1697127.11	14290312.68	39°21'08.691"N	80°47'57.793"W	8589.04	328.967	1.74	-0.33	1.71	1.71
15664.00	90.310	337.720	6678.75	8568.51	7445.55	-4466.15	1697088.96	14290398.53	39°21'09.541"N	80°47'58.277"W	8682.32	329.043	3.59	0.33	3.57	3.57
15758.00	90.340	339.600	6678.22	8662.51	7533.10	-4500.36	1697054.77	14290486.04	39°21'10.407"N	80°47'58.710"W	8775.01	329.145	2.00	0.03	2.00	2.00
15852.00	90.370	343.180	6677.64	8756.36	7622.17	-4530.35	1697024.79	14290575.08	39°21'11.288"N	80°47'59.089"W	8866.88	329.274	3.81	0.03	3.81	3.81
15947.00	90.430	345.450	6676.98	8850.83	7713.62	-4556.03	1696999.12	14290666.49	39°21'12.192"N	80°47'59.413"W	8958.65	329.432	2.39	0.06	2.39	2.39
16042.00	90.430	344.460	6676.26	8945.19	7805.36	-4580.69	1696974.47	14290758.20	39°21'13.099"N	80°47'59.725"W	9050.21	329.593	1.04	0.00	-1.04	-1.04
16136.00	90.430	342.480	6675.56	9038.81	7895.47	-4607.43	1696947.73	14290848.27	39°21'13.991"N	80°48'00.063"W	9141.49	329.734	2.11	0.00	-2.11	-2.11
16231.00	90.550	339.130	6674.74	9133.70	7985.17	-4638.66	1696916.52	14290937.94	39°21'14.878"N	80°48'00.458"W	9234.72	329.847	3.53	0.13	-3.53	-3.53
16325.00	90.490	338.540	6673.89	9227.69	8072.83	-4672.60	1696882.59	14291025.56	39°21'15.745"N	80°48'00.887"W	9327.58	329.937	0.63	-0.06	-0.63	-0.63
16420.00	90.340	338.760	6673.20	9322.69	8161.30	-4707.18	1696848.02	14291114.00	39°21'16.620"N	80°48'01.325"W	9421.49	330.025	0.28	-0.16	0.23	0.23
16514.00	90.490	337.510	6672.52	9416.68	8248.54	-4742.19	1696813.03	14291201.20	39°21'17.483"N	80°48'01.768"W	9514.55	330.105	1.34	0.16	-1.33	-1.33
16609.00	90.430	334.210	6671.76	9511.58	8335.22	-4781.04	1696774.20	14291287.84	39°21'18.341"N	80°48'02.260"W	9608.06	330.162	3.47	-0.06	-3.47	-3.47
16704.00	90.430	333.960	6671.05	9606.32	8420.66	-4822.55	1696732.70	14291373.25	39°21'19.186"N	80°48'02.786"W	9703.84	330.200	0.26	0.00	-0.26	-0.26
16798.00	90.550	334.480	6670.24	9700.07	8505.30	-4863.43	1696691.84	14291457.86	39°21'20.023"N	80°48'03.304"W	9797.61	330.239	0.57	0.13	0.55	0.55
16892.00	90.430	335.490	6669.44	9793.91	8590.48	-4903.18	1696652.10	14291543.00	39°21'20.866"N	80°48'03.808"W	9891.28	330.284	1.08	-0.13	1.07	1.07
16987.00	90.490	337.230	6668.68	9888.84	8677.50	-4941.27	1696614.03	14291629.99	39°21'21.727"N	80°48'04.291"W	9985.75	330.341	1.83	0.06	1.83	1.83
17083.00	89.750	335.920	6668.47	9984.79	8765.59	-4979.44	1696575.88	14291718.04	39°21'22.599"N	80°48'04.774"W	10081.18	330.401	1.57	-0.77	-1.36	-1.36
17178.00	90.490	340.390	6668.28	10079.77	8853.74	-5014.78	1696540.55	14291806.16	39°21'23.471"N	80°48'05.221"W	10175.30	330.473	4.77	0.78	4.71	4.71



# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'  
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REFERENCE WELLPATH IDENTIFICATION		Slot #07
Operator	ANTERO RESOURCES CORPORATION	Smithers Unit 2H
Area	Doddridge Co., WV	Smithers Unit 2H AWP
Field	Doddridge	
Facility	Stricking Pad	

WELLPATH DATA (214 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
17273.00	89.940	338.290	6667.92	10174.75	8942.63	-5048.29	1696507.05	14291895.01	39°21'24.350"N	80°48'05.646"W	10269.17	330.554	2.29	-0.58	-2.21	
17368.00	90.120	338.010	6667.87	10269.75	9030.80	-5083.65	1696471.71	14291983.15	39°21'25.222"N	80°48'06.093"W	10363.34	330.624	0.35	0.19	-0.29	
17433.00	90.060	338.100	6667.77	10334.75	9091.09	-5107.94	1696447.43	14292043.42	39°21'25.819"N	80°48'06.401"W	10427.80	330.670	0.17	-0.09	0.14	
17458.00	90.060	338.100	6667.74	10359.75	9114.29	-5117.26	1696438.11	14292066.60	39°21'26.048"N	80°48'06.519"W	10452.59	330.688	0.00	0.00	0.00	Projected MD @ TD: 17458'

HOLE & CASING SECTIONS - Ref Wellbore: Smithers Unit 2H AWP Proj: 17458'													
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	End N/S [ft]	Start E/W [ft]	End E/W [ft]	Start N/S [ft]	End N/S [ft]	Start E/W [ft]	End E/W [ft]
20in Conductor	24.50	104.50	80.00	24.50	104.50	0.00	0.14	0.00	0.14	0.00	0.14	0.00	0.14
17.5in Open Hole	104.50	372.20	267.70	104.50	372.19	0.00	0.00	0.01	2.61	0.00	2.61	0.01	2.61
13.375in Casing Surface	24.50	372.20	347.70	24.50	372.19	0.00	0.00	0.00	2.61	0.00	2.61	0.00	2.61
12.25in Open Hole	372.20	2577.70	2205.50	372.19	2533.67	2.61	2.61	0.43	-278.43	2.61	-278.43	0.43	-248.26
9.625in Casing Intermediate	24.50	2577.70	2553.20	24.50	2533.67	0.00	0.00	0.00	-248.26	0.00	-278.43	0.00	-248.26
8.75in Open Hole	2577.70	7110.50	4532.80	2533.67	6695.95	-278.43	-278.43	-248.26	-482.84	-278.43	-482.84	-248.26	-1302.61
8.5in Open Hole	7110.50	17458.00	10347.50	6695.95	6667.74	-482.84	-482.84	-1302.61	-5117.26	-482.84	-482.84	-1302.61	-5117.26
5.5in Casing Production	24.50	17458.00	17433.50	24.50	6667.74	0.00	0.00	0.00	9114.29	0.00	9114.29	0.00	-5117.26



# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #07
Area	Doddridge Co., WV	Well	Smithers Unit 2H
Field	Doddridge	Wellbore	Smithers Unit 2H AWB
Facility	Strickling Pad		

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Smithers Unit 2H AZI Rev-1	6720.00	-183.60	-1415.10	1700138.79	14282772.42	39°19'54.068"N	80°47'19.864"W	point
Smithers Unit 2H BHL Rev-1	6720.00	9125.63	-5114.24	1696441.13	14292077.94	39°21'26.160"N	80°48'06.480"W	point
Smithers Unit 2H LP Rev-1	6720.00	-335.12	-1358.71	1700195.17	14282620.96	39°19'52.570"N	80°47'18.951"W	point

## WELLPATH COMPOSITION - Ref Wellbore: Smithers Unit 2H AWB Ref Wellpath: Smithers Unit 2H AWP Proj: 17458'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	358.50	Gyrodata standard - Drop gyro or Multi-shot	01 Gyrodatta MS Gyro <17-1/2">(100'-349')	Smithers Unit 2H AWB
358.50	746.50	Gyrodata standard - Drop gyro or Multi-shot	02 Gyrodatta MS Gyro <12-1/4">(349')(376'-737')	Smithers Unit 2H AWB
746.50	2492.50	ISCWSA MWD. Rev. 4 (Standard)	03 WFT EM <12-1/4">(737')(848'-2483')	Smithers Unit 2H AWB
2492.50	7031.50	ISCWSA MWD. Rev. 4 (Standard)	04 WFT EM <8-3/4">(2483')(2624'-7022')	Smithers Unit 2H AWB
7031.50	17433.00	BH AutoTrak Curve (Short)	05 BH AT Curve <8-1/2">(7031.5')(7060'-17433')	Smithers Unit 2H AWB
17433.00	17458.00	Blind Drilling (std)	Projection to bit	Smithers Unit 2H AWB

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# Actual Wellpath Report

Smithers Unit 2H AWP Proj: 17458'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #07
Area	Doddridge Co., WV	Well	Smithers Unit 2H
Field	Doddridge	Wellbore	Smithers Unit 2H AWB
Facility	Strickling Pad		

COMMENTS
<p><b>Wellpath general comments</b>                      API: 47-017-06844-0000                      BH Job #: 9102557                      Rig: Frontier 22                      Duration: 04/25/18 - 04/28/18                      Gyrodatta MS Gyro &lt;17-1/2"&gt;(100'-349')                      Gyrodatta MS Gyro &lt;12-1/4"&gt;(349')(376'-737')                      WFT EM &lt;12-1/4"&gt;(737')(848'-2483')                      WFT EM &lt;8-3/4"&gt;(2483')(2624'-7022')                      Burket: 6917'MD / 6608'TVD                      Tully: 6969'MD / 6636'TVD                      Hamilton: 7050'MD / 6673'TVD                      BH AT Curve &lt;8-1/2"&gt; (7031.5')(7060'-17433')                      POE Marcellus: 7072'MD / 6682'TVD                      Projected MD @ TD: 17458'</p>

02/15/2019