



ANTERO RESOURCES CORPORATION

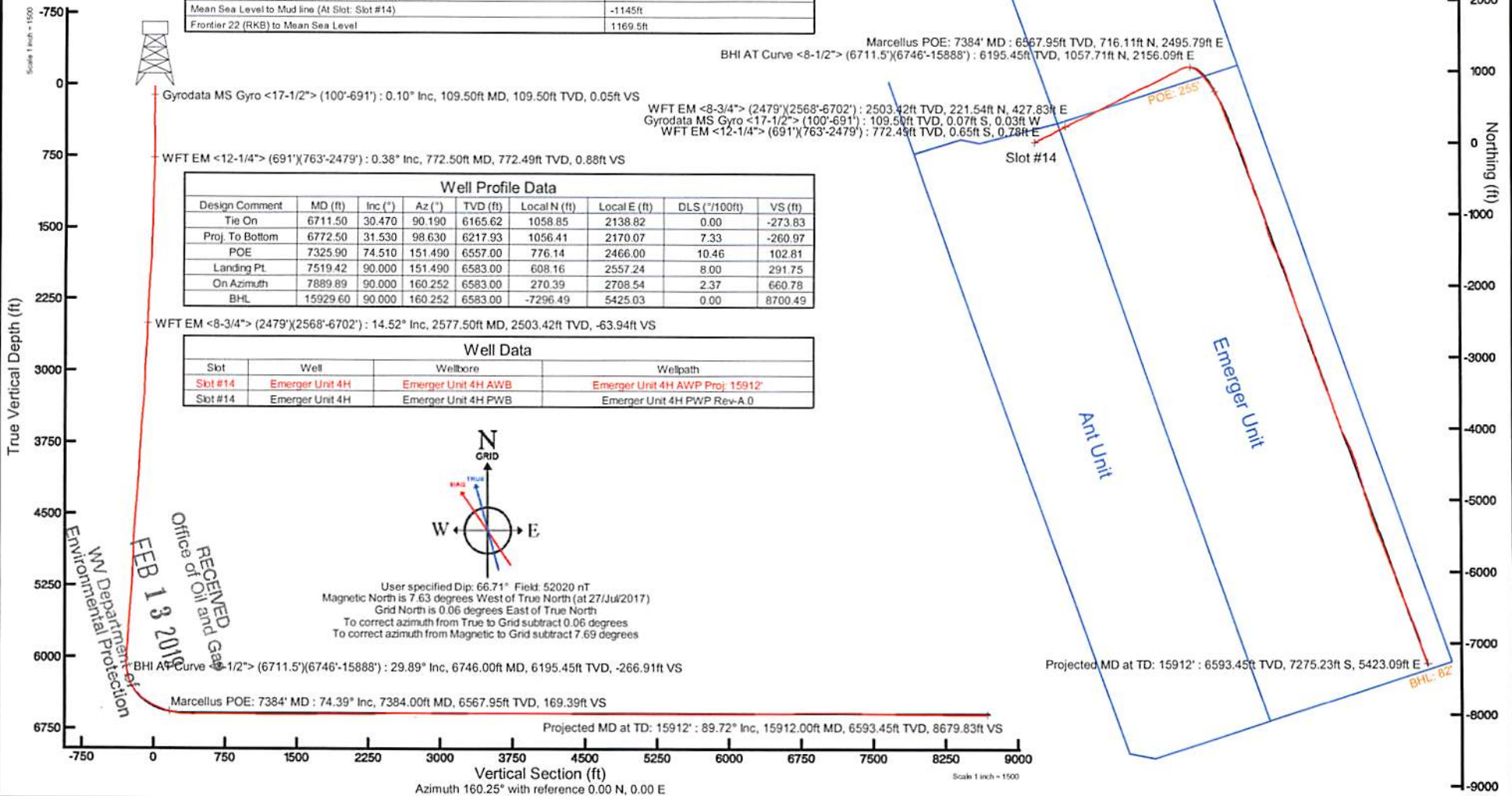


Location: Tyler County, WV Slot: Slot #14
 Field: Tyler Well: Emerger Unit 4H
 Facility: Vera Pad Wellbore: Emerger Unit 4H PWB

Plot reference wellpath is Emerger Unit 4H PWP Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to Frontier 22 (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to Frontier 22 (RKB)	North Reference: Grid north
Frontier 22 (RKB) to Mean Sea Level: 1169.5 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot #14): -1145 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: delaset on 2017-08-11
	Database: WA MPL EasternUS Defn

Location Information					
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Vera Pad		1667510.600	14316799.487	39°25'31.060"N	80°54'14.600"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
Slot #14	-66.75	22.83	1667533.419	14316732.760	39°25'30.400"N
Comment		Emerger Unit 4H			
Frontier 22 (RKB) to Mud line (At Slot: Slot #14)		24.5ft			
Mean Sea Level to Mud line (At Slot: Slot #14)		-1145ft			
Frontier 22 (RKB) to Mean Sea Level		1169.5ft			

API: 47-095-02356-0000
 BHI Job #: 8692045
 Rig: Frontier 22
 Duration: 07/31/2017-08/04/2017





Actual Wellpath Report

Emerger Unit 4H AWP Proj: 15912'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #14
Area	Tyler County, WV	Well	Emerger Unit 4H
Field	Tyler	Wellbore	Emerger Unit 4H AWB
Facility	Vera Pad		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Delaset
Scale	0.999601	Report Generated	11/Aug/2017 at 11:34
Convergence at slot	0.06° East	Database/Source file	WA_MPL_EasternUS_Defn/Emerger_Unit_4H_AWP_Proj_15912_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-66.75	22.83	1667533.42	14316732.76	39°25'30.400"N	80°54'14.310"W
Facility Reference Pt			1667510.60	14316799.49	39°25'31.060"N	80°54'14.600"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	1169.50ft
Vertical Reference Pt	Frontier 22 (RKB)	Frontier 22 (RKB) to Mud Line at Slot (Slot #14)	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	160.25°

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Emerger Unit 4H AWP Proj: 15912

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Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Vera Pad
		Wellbore	Emerger Unit 4H AWB
		Well	Emerger Unit 4H
		Slot	Slot #14

REFERENCE WELLPATH IDENTIFICATION

WELLPATH DATA (194 stations) + = Interpolated/extrapolated station														
MD	Inclination	TD	Vert Sect	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
(m)	(°)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
0.00	0.00	204.966	0.00	0.00	1667533.42	14316732.76	39°25'30.400"N	80°54'14.310"W	0.00	0.00	0.00	0.00	0.00	
24.50	0.00	204.966	0.00	0.00	1667533.42	14316732.76	39°25'30.400"N	80°54'14.310"W	0.00	0.00	0.00	0.00	0.00	
109.50	0.100	204.966	109.50	0.05	-0.07	1667533.39	14316732.69	39°25'30.399"N	80°54'14.310"W	0.07	204.960	0.12	-182.40	Gyrodata MS Gyro <17-1/2"> (100-691)
209.50	0.150	60.060	209.50	0.09	-0.08	1667533.46	14316732.68	39°25'30.399"N	80°54'14.309"W	0.09	150.791	0.24	0.05	
309.50	0.230	17.120	309.50	-0.09	0.18	1667533.64	14316732.94	39°25'30.402"N	80°54'14.307"W	0.28	51.043	0.16	-42.94	
409.50	0.220	99.470	409.50	-0.16	0.34	1667533.88	14316733.10	39°25'30.403"N	80°54'14.304"W	0.57	54.195	0.30	-0.01	
499.50	0.290	111.850	499.50	0.10	0.21	1667534.31	14316732.97	39°25'30.402"N	80°54'14.299"W	0.92	76.996	0.09	12.38	
509.50	0.300	198.160	509.50	-0.13	1.04	1667534.46	14316732.63	39°25'30.399"N	80°54'14.297"W	1.05	97.227	0.40	86.31	
609.50	0.400	202.370	609.50	-0.50	0.85	1667534.27	14316732.11	39°25'30.394"N	80°54'14.299"W	1.07	127.554	0.11	4.63	
772.50	0.380	7.510	772.49	0.88	-0.65	1667534.20	14316732.11	39°25'30.394"N	80°54'14.300"W	1.02	129.574	1.07	-0.03	WFT EM <12-1/4"> (691)/(63-2479)
802.50	1.150	32.930	802.49	0.60	-0.30	1667534.38	14316732.46	39°25'30.397"N	80°54'14.298"W	1.01	107.169	2.74	2.57	84.73
828.50	3.140	44.250	862.45	-0.48	1.39	1667535.85	14316734.14	39°25'30.414"N	80°54'14.279"W	2.80	60.356	3.37	3.32	18.87
928.50	5.960	50.840	928.23	-2.41	4.86	1667539.77	14316737.60	39°25'30.448"N	80°54'14.229"W	7.99	52.674	4.34	4.27	9.98
991.50	8.000	56.260	990.76	-4.56	9.35	1667545.95	14316742.10	39°25'30.492"N	80°54'14.150"W	15.64	53.295	3.40	3.24	8.60
1054.50	9.020	64.870	1053.07	-6.08	13.88	1667554.06	14316746.63	39°25'30.537"N	80°54'14.047"W	24.88	56.100	2.59	1.62	13.67
1149.50	11.180	60.870	1146.69	-8.28	21.53	1667568.85	14316754.28	39°25'30.612"N	80°54'13.868"W	41.47	58.728	2.39	2.27	-4.21
1243.50	13.400	61.490	1238.43	-11.43	31.16	1667586.37	14316763.91	39°25'30.707"N	80°54'13.634"W	61.46	59.535	2.37	2.36	0.66
1338.50	15.990	65.410	1330.32	-14.21	41.86	1667607.94	14316774.61	39°25'30.813"N	80°54'13.369"W	85.50	60.685	2.92	2.73	4.13
1432.50	19.100	63.790	1419.94	-17.03	54.05	1667633.51	14316786.78	39°25'30.933"N	80°54'13.033"W	113.78	61.642	3.35	3.31	-1.72
1526.50	20.090	62.160	1508.49	-21.03	68.38	1667661.57	14316801.11	39°25'31.074"N	80°54'12.675"W	145.30	61.926	1.20	1.05	-1.73
1621.50	19.200	65.080	1597.97	-24.74	82.58	1667690.16	14316815.31	39°25'31.215"N	80°54'12.311"W	177.22	62.226	1.39	-0.94	3.07
1715.50	18.220	68.850	1766.65	-28.08	106.50	1667746.88	14316839.22	39°25'31.450"N	80°54'11.587"W	238.63	63.493	1.33	-0.80	-3.28
1810.50	18.460	65.730	1877.20	-32.25	120.02	1667772.18	14316852.73	39°25'31.584"N	80°54'11.265"W	267.32	63.322	3.10	-1.76	-8.46
2000.50	18.350	59.380	1957.76	-38.05	134.97	1667796.64	14316867.68	39°25'31.731"N	80°54'10.963"W	295.90	62.862	1.73	1.64	1.78
2095.50	18.660	58.770	2047.85	-43.90	150.47	1667822.49	14316883.17	39°25'31.884"N	80°54'10.623"W	325.99	62.512	0.38	0.33	-0.64
2189.50	21.030	61.980	2136.27	-49.31	166.19	1667850.23	14316898.88	39°25'32.039"N	80°54'10.269"W	357.87	62.329	2.77	2.52	3.41
2284.50	21.630	63.280	2224.76	-53.89	182.07	1667880.91	14316914.76	39°25'32.196"N	80°54'09.878"W	392.42	62.357	0.80	0.63	1.37
2379.50	20.560	64.770	2313.39	-57.61	197.06	1667911.63	14316929.74	39°25'32.344"N	80°54'09.486"W	426.60	62.489	1.26	-1.13	1.57
2488.50	14.560	64.100	2417.27	-60.91	211.21	1667941.28	14316943.89	39°25'32.483"N	80°54'09.108"W	459.45	62.632	5.51	-5.50	-0.61

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Emerger Unit 4H AWP Proj: 15912'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #14
Area	Tyler County, WV	Well	Emerger Unit 4H
Field	Tyler	Wellbore	Emerger Unit 4H AWB
Facility	Vera Pad		

WELLPATH DATA (194 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
2577.50	14.520	60.790	2503.42	-63.94	221.54	427.83	1667961.07	14316954.21	39°25'32.585"N	80°54'08.855"W	481.79	62.623	0.93	-0.04	-3.72	WFT EM <8-3/4"> (2479')(2568'-6702')
2671.50	17.680	64.460	2593.72	-67.32	233.45	451.00	1667984.24	14316966.12	39°25'32.703"N	80°54'08.560"W	507.84	62.633	3.53	3.36	3.90	
2766.50	21.180	63.720	2683.30	-70.73	247.27	479.41	1668012.64	14316979.93	39°25'32.839"N	80°54'08.197"W	539.42	62.716	3.69	3.68	-0.78	
2860.50	26.370	58.680	2769.30	-76.85	265.66	512.50	1668045.71	14316998.31	39°25'33.020"N	80°54'07.776"W	577.26	62.600	5.92	5.52	-5.36	
2955.50	26.640	60.110	2854.31	-84.83	287.24	548.99	1668082.18	14317019.88	39°25'33.233"N	80°54'07.310"W	619.59	62.381	0.73	0.28	1.51	
3050.50	26.130	65.260	2939.43	-90.40	306.61	586.46	1668119.64	14317039.25	39°25'33.424"N	80°54'06.832"W	661.77	62.399	2.47	-0.54	5.42	
3144.50	26.360	68.140	3023.74	-92.97	323.04	624.62	1668157.79	14317055.67	39°25'33.586"N	80°54'06.346"W	703.22	62.653	1.38	0.24	3.06	
3239.50	27.010	67.950	3108.62	-94.61	338.99	664.19	1668197.35	14317071.62	39°25'33.743"N	80°54'05.841"W	745.70	62.961	0.69	0.68	-0.20	
3334.50	26.760	65.980	3193.36	-97.07	355.80	703.72	1668236.86	14317088.42	39°25'33.909"N	80°54'05.337"W	788.56	63.179	0.97	-0.26	-2.07	
3428.50	27.940	63.900	3276.85	-101.08	374.10	742.83	1668275.95	14317106.71	39°25'34.090"N	80°54'04.839"W	831.72	63.269	1.62	1.26	-2.21	
3523.50	28.420	61.330	3360.59	-107.05	394.74	782.65	1668315.76	14317127.34	39°25'34.293"N	80°54'04.331"W	876.57	63.235	1.37	0.51	-2.71	
3617.50	29.390	60.550	3442.88	-114.40	416.81	822.37	1668355.46	14317149.41	39°25'34.511"N	80°54'03.825"W	921.97	63.122	1.11	1.03	-0.83	
3712.50	28.100	60.710	3526.17	-122.04	439.22	862.18	1668395.25	14317171.80	39°25'34.732"N	80°54'03.317"W	967.61	63.004	1.36	-1.36	0.17	
3806.50	26.760	65.910	3609.61	-127.31	458.69	900.81	1668433.87	14317191.27	39°25'34.924"N	80°54'02.824"W	1010.87	63.015	2.92	-1.43	5.53	
3900.50	27.950	62.960	3693.11	-131.71	477.35	939.76	1668472.80	14317209.91	39°25'35.108"N	80°54'02.328"W	1054.04	63.072	1.92	1.27	-3.14	
3995.50	28.410	62.240	3776.85	-137.68	497.99	979.58	1668512.61	14317230.55	39°25'35.311"N	80°54'01.820"W	1098.90	63.052	0.60	0.48	-0.76	
4089.50	28.690	62.550	3859.41	-143.82	518.81	1019.40	1668552.41	14317251.36	39°25'35.517"N	80°54'01.312"W	1143.82	63.027	0.34	0.30	0.33	
4184.50	28.500	64.900	3942.83	-148.99	538.94	1060.16	1668593.15	14317271.48	39°25'35.715"N	80°54'00.793"W	1189.28	63.053	1.20	-0.20	2.47	
4279.50	28.690	63.060	4026.24	-153.96	558.88	1101.01	1668633.99	14317291.42	39°25'35.912"N	80°54'00.272"W	1234.74	63.087	0.95	0.20	-1.94	
4373.50	28.320	63.560	4108.85	-159.38	579.03	1141.09	1668674.05	14317311.56	39°25'36.111"N	80°53'59.761"W	1279.60	63.095	0.47	-0.39	0.53	
4468.50	27.190	61.260	4192.92	-165.40	599.50	1180.30	1668713.25	14317332.02	39°25'36.313"N	80°53'59.261"W	1323.83	63.073	1.64	-1.19	-2.42	
4563.50	27.700	60.620	4277.23	-172.48	620.77	1218.57	1668751.50	14317353.28	39°25'36.522"N	80°53'58.773"W	1367.58	63.004	0.62	0.54	-0.67	
4657.50	26.090	63.340	4361.06	-178.62	640.77	1256.09	1668789.00	14317373.27	39°25'36.720"N	80°53'58.294"W	1410.08	62.972	2.16	-1.71	2.89	
4752.50	28.540	58.860	4445.47	-185.62	661.88	1294.19	1668827.09	14317394.38	39°25'36.928"N	80°53'57.809"W	1453.62	62.914	3.36	2.58	-4.72	
4847.50	27.770	62.150	4529.23	-193.22	683.96	1333.18	1668866.07	14317416.45	39°25'37.146"N	80°53'57.311"W	1498.39	62.841	1.82	-0.81	3.46	
4941.50	28.810	64.020	4612.01	-198.76	704.11	1372.91	1668905.78	14317436.59	39°25'37.344"N	80°53'56.805"W	1542.94	62.848	1.45	1.11	1.99	
5036.50	29.540	64.040	4694.95	-203.78	724.39	1414.54	1668947.39	14317456.86	39°25'37.544"N	80°53'56.274"W	1589.24	62.883	0.77	0.77	0.02	
5131.50	29.930	62.110	4777.45	-209.67	745.73	1456.55	1668989.38	14317478.19	39°25'37.755"N	80°53'55.738"W	1636.35	62.888	1.09	0.41	-2.03	
5225.50	27.050	69.810	4860.08	-213.16	764.09	1497.36	1669030.18	14317496.54	39°25'37.936"N	80°53'55.218"W	1681.04	62.965	4.96	-3.06	8.19	
5320.50	28.490	67.730	4944.14	-214.32	780.13	1538.60	1669071.40	14317512.58	39°25'38.094"N	80°53'54.692"W	1725.08	63.113	1.83	1.52	-2.19	

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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Vera Pad
Slot #14	Emerger Unit 4H
Well	Emerger Unit 4H AWB
Wellbore	Emerger Unit 4H AWB

WELLPATH DATA (194 stations) $r =$ 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 (F/100ft)	Build Rate (F/100ft)	Turn Rate (F/100ft)	Comments
5414.50	29.500	64.760	5026.38	-217.52	798.50	1580.29	1669113.07	14317530.94	39°25'38.275"N	80°53'54.161"W	1770.57	63.193	1.87	1.07	-3.16	
5509.50	28.070	65.210	5109.62	-221.72	817.84	1621.74	1669154.51	14317550.27	39°25'38.466"N	80°53'53.632"W	1816.29	63.238	1.52	-1.51	0.47	
5604.50	27.750	64.140	5193.57	-226.04	836.86	1661.93	1669194.68	14317569.29	39°25'38.653"N	80°53'53.120"W	1860.74	63.273	0.63	-0.34	-1.13	
5698.50	29.270	62.720	5276.17	-231.38	856.94	1702.05	1669234.79	14317589.36	39°25'38.851"N	80°53'52.608"W	1905.60	63.276	1.77	1.62	-1.51	
5793.50	29.570	61.550	5358.92	-237.97	878.75	1743.30	1669276.02	14317611.16	39°25'39.066"N	80°53'52.082"W	1952.26	63.249	0.68	0.32	-1.23	
5888.50	29.400	63.140	5441.62	-244.40	900.45	1784.71	1669317.42	14317632.85	39°25'39.280"N	80°53'51.554"W	1999.01	63.227	0.84	-0.18	1.67	
5983.50	29.380	62.260	5524.39	-250.53	921.84	1826.14	1669358.83	14317654.23	39°25'39.491"N	80°53'51.026"W	2045.62	63.215	0.46	-0.02	-0.93	
6077.50	28.250	63.140	5606.75	-256.49	942.62	1866.40	1669399.07	14317675.00	39°25'39.696"N	80°53'50.513"W	2090.93	63.204	1.28	-1.20	0.94	
6172.50	28.030	65.300	5690.53	-261.19	962.11	1906.74	1669439.39	14317694.48	39°25'39.888"N	80°53'49.998"W	2135.72	63.225	1.10	-0.23	2.27	
6267.50	27.940	62.200	5774.42	-266.24	981.82	1946.70	1669479.34	14317714.18	39°25'40.083"N	80°53'49.489"W	2180.28	63.236	1.53	-0.09	-3.26	
6362.50	28.150	59.950	5858.27	-273.36	1003.42	1985.79	1669518.41	14317735.78	39°25'40.296"N	80°53'48.990"W	2224.91	63.193	1.14	0.22	-2.37	
6425.50	27.750	58.640	5913.92	-278.97	1018.49	2011.18	1669543.79	14317750.84	39°25'40.444"N	80°53'48.667"W	2254.37	63.142	1.16	-0.63	-2.08	
6457.50	27.400	60.100	5942.29	-281.77	1026.04	2023.92	1669566.53	14317758.39	39°25'40.519"N	80°53'48.504"W	2269.15	63.117	2.38	-1.09	4.56	
6488.50	27.300	62.180	5969.82	-284.02	1032.91	2036.39	1669569.00	14317765.26	39°25'40.587"N	80°53'48.345"W	2283.38	63.105	3.10	-0.32	6.71	
6520.50	27.370	66.630	5998.25	-285.52	1039.26	2049.64	1669582.23	14317771.60	39°25'40.649"N	80°53'48.176"W	2298.06	63.113	6.39	0.22	13.91	
6552.50	26.960	69.910	6026.72	-286.02	1044.67	2063.20	1669595.80	14317777.01	39°25'40.702"N	80°53'48.003"W	2312.60	63.145	4.85	-1.28	10.25	
6584.50	27.070	73.590	6055.23	-285.84	1049.22	2077.00	1669609.59	14317781.56	39°25'40.747"N	80°53'47.827"W	2326.97	63.199	5.23	0.34	11.50	
6616.50	29.330	76.820	6083.44	-284.32	1053.06	2091.62	1669624.20	14317785.40	39°25'40.785"N	80°53'47.641"W	2341.75	63.276	8.52	7.06	10.09	
6647.50	30.330	80.380	6110.33	-282.08	1056.10	2106.73	1669639.31	14317788.44	39°25'40.815"N	80°53'47.448"W	2356.62	63.375	6.56	3.23	11.48	
6679.50	30.330	84.890	6137.98	-278.63	1058.17	2122.70	1669655.27	14317790.50	39°25'40.835"N	80°53'47.245"W	2371.83	63.504	7.12	-0.62	14.09	
6711.50	30.470	90.190	6165.62	-273.83	1058.85	2138.82	1669671.38	14317791.19	39°25'40.842"N	80°53'47.039"W	2386.57	63.662	8.42	1.06	16.56	
6746.00	29.890	97.480	6195.45	-269.91	1057.71	2156.09	1669688.65	14317790.04	39°25'40.830"N	80°53'46.819"W	2401.56	63.869	10.75	-1.68	21.13	BHI AT Curve <8-1/2"> (6711.5')(6746'-15888')
6772.00	30.220	101.510	6217.96	-260.55	1055.56	2168.93	1669701.48	14317787.89	39°25'40.809"N	80°53'46.656"W	2412.15	64.049	7.86	1.27	15.50	
6819.00	32.590	111.670	6258.10	-248.02	1048.52	2192.30	1669724.84	14317780.86	39°25'40.739"N	80°53'46.358"W	2430.14	64.439	12.33	5.04	21.62	
6868.00	36.550	119.480	6298.46	-226.23	1036.45	2217.29	1669749.82	14317768.80	39°25'40.619"N	80°53'46.040"W	2447.57	64.947	12.12	8.08	15.94	
6915.00	40.600	125.450	6335.21	-203.05	1020.68	2241.95	1669774.47	14317753.03	39°25'40.463"N	80°53'45.726"W	2463.36	65.522	11.70	8.62	12.70	
6962.00	44.220	130.970	6369.91	-176.18	1001.05	2266.80	1669799.31	14317733.41	39°25'40.269"N	80°53'45.409"W	2478.00	66.173	11.04	7.70	11.74	
7009.00	48.210	135.140	6402.44	-146.00	977.87	2291.55	1669824.05	14317710.24	39°25'40.040"N	80°53'45.094"W	2491.47	66.891	10.63	8.49	8.87	
7029.00T	50.199	136.267	6415.50	-132.23	967.04	2302.12	1669834.61	14317699.41	39°25'39.932"N	80°53'44.960"W	2496.98	67.214	10.82	9.94	5.64	Middlesex, 7029' MD
7057.00	53.000	137.740	6432.90	-112.07	950.99	2317.08	1669849.57	14317683.36	39°25'39.774"N	80°53'44.769"W	2504.64	67.686	10.82	10.00	5.26	

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Actual Wellpath Report

Emerger Unit 4H AWP Proj: 15912
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Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Vera Pad
		Well	Emerger Unit 4H
			Emerger Unit 4H AWB
			Slot
			Slot #14

WELLPATH DATA (194 stations) + = interpolated/extrapolated station												
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	DLS
ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft/100ft
7104.00	56.88	139.57	6459.89	-76.30	922.10	2242.47	1669874.95	14317654.49	39°25'39.48"N	80°53'44.44"W	2517.43	8.26
7152.00	61.46	140.82	6484.48	-37.59	890.44	2368.84	1669901.31	14317622.84	39°25'39.17"N	80°53'44.11"W	2530.67	9.54
7199.00	65.08	141.54	6505.62	2.08	857.74	2395.15	1669927.61	14317590.15	39°25'38.85"N	80°53'43.77"W	2544.10	7.70
7211.00	65.48	141.74	6510.64	12.41	849.19	2401.92	1669934.37	14317581.61	39°25'38.76"N	80°53'43.69"W	2547.61	3.36
7246.00	66.66	142.32	6524.83	42.80	823.97	2421.60	1669954.04	14317556.40	39°25'38.57"N	80°53'43.43"W	2557.94	1.67
7288.00	70.49	144.56	6540.17	80.22	792.57	2444.87	1669977.31	14317525.01	39°25'38.20"N	80°53'43.14"W	2570.13	1.65
7293.00	70.95	144.82	6541.82	84.76	788.72	2447.60	1669980.04	14317521.16	39°25'38.16"N	80°53'43.10"W	2571.54	5.19
7340.00	74.01	146.75	6555.97	128.16	751.66	2472.79	1670005.22	14317484.11	39°25'37.80"N	80°53'42.78"W	2584.51	4.11
7384.00	74.39	147.46	6567.95	169.39	716.11	2495.79	1670028.20	14317448.58	39°25'37.45"N	80°53'42.49"W	2596.49	1.62
7387.00	74.42	147.51	6568.76	172.20	713.67	2497.34	1670029.76	14317446.14	39°25'37.42"N	80°53'42.47"W	2597.31	1.61
7435.00	76.90	149.76	6580.65	217.75	673.96	2521.54	1670053.94	14317406.45	39°25'37.03"N	80°53'42.16"W	2610.05	4.69
7482.00	81.23	152.35	6589.56	263.29	633.59	2543.86	1670076.25	14317366.10	39°25'36.63"N	80°53'41.88"W	2621.57	5.51
7530.00	86.00	155.24	6594.90	310.67	590.81	2664.91	1670097.30	14317323.33	39°25'36.21"N	80°53'41.61"W	2632.07	6.02
7577.00	89.54	158.49	6596.73	357.54	547.63	2583.35	1670115.73	14317280.17	39°25'35.78"N	80°53'41.38"W	2640.76	6.91
7626.00	89.80	161.00	6597.00	406.53	501.67	2600.31	1670132.69	14317234.22	39°25'35.30"N	80°53'41.16"W	2648.26	5.12
7721.00	91.17	160.82	6596.18	501.52	411.90	2631.38	1670163.75	14317144.49	39°25'34.42"N	80°53'40.77"W	2663.42	0.19
7815.00	89.82	156.98	6595.37	595.47	324.22	2665.21	1670197.66	14317056.85	39°25'33.57"N	80°53'40.34"W	2684.86	-1.44
7911.00	90.34	155.84	6595.24	691.25	236.24	2703.63	1670235.97	14316968.91	39°25'32.70"N	80°53'39.85"W	2713.93	-1.19
8006.00	89.97	154.76	6594.98	785.90	149.94	2743.33	1670275.65	14316882.64	39°25'31.85"N	80°53'39.34"W	2747.42	-1.14
8100.00	89.88	154.48	6595.10	879.44	65.01	2783.62	1670315.92	14316797.74	39°25'31.02"N	80°53'38.83"W	2784.38	-0.30
8195.00	89.69	155.37	6595.46	974.03	-21.03	2823.88	1670356.16	14316711.73	39°25'30.16"N	80°53'38.25"W	2823.96	0.94
8290.00	88.80	156.91	6596.71	1068.78	-107.90	2862.30	1670394.57	14316624.90	39°25'29.30"N	80°53'37.83"W	2864.33	1.62
8385.00	89.02	161.03	6598.52	1163.72	-196.54	2896.38	1670428.64	14316536.30	39°25'28.42"N	80°53'37.40"W	2903.04	4.34
8480.00	89.91	165.75	6599.41	1258.54	-287.55	2923.53	1670455.77	14316445.33	39°25'27.52"N	80°53'37.06"W	2937.63	0.94
8574.00	90.37	163.23	6599.18	1352.28	-378.12	2948.66	1670480.90	14316354.80	39°25'26.63"N	80°53'36.71"W	2972.80	4.97
8669.00	90.40	160.60	6598.54	1447.22	-468.41	2978.15	1670510.37	14316264.53	39°25'25.73"N	80°53'36.36"W	3014.76	2.77
8764.00	90.49	164.55	6597.80	1542.13	-559.03	3006.59	1670538.80	14316173.95	39°25'24.84"N	80°53'36.00"W	3058.12	0.09
8859.00	90.12	161.53	6597.29	1637.00	-649.89	3034.30	1670566.50	14316083.13	39°25'23.94"N	80°53'35.54"W	3103.11	-3.18
8933.00	90.40	158.38	6596.87	1730.99	-738.18	3066.51	1670598.70	14315994.87	39°25'23.07"N	80°53'35.24"W	3154.11	-3.35
9047.00	90.34	156.85	6596.26	1824.88	-825.10	3102.31	1670634.48	14315908.00	39°25'22.21"N	80°53'34.79"W	3210.16	-1.63

Turn Rate Comments

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Actual Wellpath Report

Emerger Unit 4H AWP Proj: 15912



Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Vera Pad
	Well	Wellbore	
	Emerger Unit 4H	Emerger Unit 4H AWB	
	Slot	Slot #14	

WELLPATH DATA (194 stations)															
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Turn Rate	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	
9142.00	90.120	158.100	6595.88	1919.77	-912.85	3138.70	1670670.86	14315820.28	39°25'21.343"N	80°53'34.327"W	3268.75	106.216	1.34	-0.23	1.32
9237.00	90.150	162.170	6595.65	2014.75	-1002.17	3170.98	1670703.12	14315730.99	39°25'20.460"N	80°53'33.917"W	3325.57	107.539	4.28	0.03	4.28
9332.00	90.220	167.680	6595.35	2109.39	-1093.87	3195.67	1670727.81	14315639.33	39°25'19.563"N	80°53'33.604"W	3377.70	108.896	5.80	0.07	5.80
9426.00	90.710	167.090	6594.58	2202.66	-1185.60	3216.20	1670748.33	14315547.64	39°25'18.646"N	80°53'33.344"W	3427.77	110.236	0.82	0.52	0.63
9522.00	91.540	163.310	6592.70	2298.27	-1278.38	3240.72	1670772.83	14315454.90	39°25'17.729"N	80°53'33.033"W	3483.74	111.528	4.03	0.86	-3.94
9616.00	92.650	158.550	6589.26	2392.17	-1367.13	3271.40	1670803.50	14315366.18	39°25'16.852"N	80°53'32.643"W	3545.57	112.680	5.20	1.18	-0.06
9711.00	93.020	154.040	6584.56	2486.80	-1453.99	3309.53	1670841.62	14315279.36	39°25'15.993"N	80°53'32.159"W	3614.84	113.717	4.76	0.39	-4.75
9806.00	93.550	151.030	6582.60	2580.90	-1538.24	3353.33	1670885.40	14315195.14	39°25'15.159"N	80°53'31.602"W	3689.30	114.642	5.00	-3.86	-3.17
9900.00	98.860	154.420	6584.06	2674.06	-1621.76	3396.39	1670928.45	14315111.65	39°25'14.333"N	80°53'31.054"W	3763.72	115.524	3.64	-0.52	3.61
9995.00	88.920	158.150	6585.90	2768.80	-1708.71	3434.58	1670966.63	14315024.74	39°25'13.474"N	80°53'30.569"W	3836.15	116.450	3.93	0.06	3.93
10089.00	89.940	162.080	6588.84	2862.77	-1797.08	3466.55	1670998.58	14314936.40	39°25'12.600"N	80°53'30.163"W	3904.67	117.403	4.32	1.09	4.18
10184.00	89.660	161.500	6587.17	2957.74	-1887.32	3496.24	1671028.25	14314846.19	39°25'11.708"N	80°53'29.786"W	3973.12	118.361	0.68	-0.29	-0.61
10280.00	90.120	160.650	6587.36	3053.73	-1978.10	3527.45	1671059.45	14314755.45	39°25'10.810"N	80°53'29.390"W	4044.23	119.283	1.10	0.48	-0.99
10374.00	89.690	161.920	6587.51	3147.71	-2067.11	3557.69	1671089.68	14314666.48	39°25'09.930"N	80°53'29.006"W	4114.62	120.158	1.53	-0.46	1.46
10470.00	90.460	164.380	6587.39	3243.58	-2158.98	3585.51	1671117.49	14314574.65	39°25'09.022"N	80°53'28.653"W	4185.34	121.054	2.69	0.80	2.56
10565.00	90.520	160.860	6586.57	3338.48	-2249.62	3613.88	1671145.85	14314484.04	39°25'08.125"N	80°53'28.293"W	4256.87	121.902	3.71	0.06	-3.71
10660.00	90.120	159.140	6586.04	3433.48	-2338.89	3646.37	1671178.33	14314394.81	39°25'07.243"N	80°53'27.880"W	4332.02	122.677	1.86	-0.42	-1.81
10754.00	90.150	160.010	6585.82	3527.47	-2426.98	3679.18	1671211.12	14314306.76	39°25'06.372"N	80°53'27.463"W	4407.56	123.411	0.93	0.03	0.93
10849.00	90.150	159.270	6585.57	3622.46	-2516.04	3712.23	1671244.16	14314217.73	39°25'05.491"N	80°53'27.044"W	4484.54	124.128	0.78	0.00	-0.78
10944.00	90.520	159.130	6585.02	3717.44	-2604.85	3745.96	1671277.88	14314128.96	39°25'04.613"N	80°53'26.615"W	4562.62	124.814	0.42	0.39	-0.15
11039.00	90.060	157.350	6584.54	3812.38	-2693.07	3781.18	1671313.08	14314040.77	39°25'03.741"N	80°53'26.168"W	4642.19	125.460	1.94	-0.48	-1.87
11133.00	89.420	161.080	6584.96	3906.35	-2780.94	3814.53	1671346.42	14313952.94	39°25'02.872"N	80°53'25.744"W	4720.62	126.093	4.03	-0.68	3.97
11228.00	89.540	164.190	6585.83	4001.25	-2871.59	3842.88	1671374.76	14313862.32	39°25'01.975"N	80°53'25.384"W	4797.27	126.769	3.28	0.13	3.27
11322.00	90.340	163.430	6585.92	4095.07	-2961.86	3869.09	1671400.96	14313772.08	39°25'01.083"N	80°53'25.052"W	4872.63	127.435	1.17	0.85	-0.81
11417.00	90.030	160.390	6585.62	4190.01	-3052.16	3898.58	1671430.44	14313681.83	39°25'00.190"N	80°53'24.617"W	4951.22	128.057	3.22	-0.33	-3.20
11511.00	89.260	159.840	6586.20	4284.01	-3140.55	3930.56	1671462.40	14313593.47	39°24'59.316"N	80°53'24.271"W	5031.14	128.625	1.01	-0.82	-0.59
11606.00	89.660	162.520	6587.10	4378.99	-3230.46	3961.20	1671493.03	14313503.60	39°24'58.427"N	80°53'23.882"W	5111.45	129.198	2.85	0.42	2.82
11701.00	89.510	161.210	6587.78	4473.94	-3320.73	3990.77	1671522.58	14313413.36	39°24'57.534"N	80°53'23.507"W	5191.68	129.764	1.39	-0.16	-1.38
11797.00	89.200	158.550	6588.86	4569.93	-3410.86	4023.78	1671555.59	14313323.27	39°24'56.643"N	80°53'23.088"W	5274.92	130.287	2.79	-0.32	-2.77
11892.00	89.450	157.540	6589.98	4664.85	-3498.97	4059.30	1671591.09	14313235.20	39°24'55.772"N	80°53'22.637"W	5359.17	130.760	1.10	0.26	-1.06

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Vera Pad
Slot	Slot #14
Well	Emergent Unit 4H
Wellbore	Emergent Unit 4H AWB

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
11987.00	89.880	159.090	6590.54	4759.79	-3587.24	4094.40	1671626.18	14313146.96	39°24'54.89"N	80°53'22.19"W	5443.56	131.223	1.69	0.45	1.63	
12081.00	90.150	161.720	6590.51	4853.78	-3675.79	4125.92	1671667.69	14313058.45	39°24'54.024"N	80°53'21.79"W	5525.82	131.698	2.81	0.29	2.80	
12176.00	90.710	162.830	6589.80	4948.72	-3766.27	4154.84	1671686.60	14312968.00	39°24'53.129"N	80°53'21.423"W	5607.81	132.192	1.31	0.59	1.17	
12272.00	89.910	160.530	6589.28	5044.68	-3857.40	4185.02	1671716.76	14312876.91	39°24'52.228"N	80°53'21.043"W	5691.56	132.667	2.54	-0.83	-2.40	
12366.00	90.000	159.280	6589.36	5138.67	-3945.67	4217.31	1671749.04	14312788.67	39°24'51.365"N	80°53'20.630"W	5775.30	133.094	1.33	0.10	-1.33	
12461.00	90.430	153.740	6589.00	5233.43	-4032.77	4255.16	1671766.87	14312701.61	39°24'50.044"N	80°53'20.149"W	5862.56	133.463	5.85	0.45	-5.83	
12556.00	89.820	152.810	6588.79	5327.73	-4117.62	4297.88	1671829.58	14312616.79	39°24'49.655"N	80°53'19.606"W	5952.02	133.773	1.17	-0.64	-0.98	
12650.00	89.820	155.480	6589.09	5421.19	-4202.20	4338.87	1671870.55	14312532.25	39°24'48.818"N	80°53'19.086"W	6040.22	134.083	2.84	0.00	2.84	
12744.00	89.880	157.420	6589.33	5514.98	-4288.37	4376.43	1671908.09	14312446.11	39°24'47.966"N	80°53'18.608"W	6127.25	134.418	2.06	0.06	2.06	
12838.00	90.030	160.650	6589.41	5608.94	-4376.13	4410.06	1671941.71	14312358.38	39°24'47.098"N	80°53'18.181"W	6212.82	134.779	3.44	0.16	3.44	
12932.00	90.000	163.620	6589.38	5702.88	-4465.59	4438.89	1671970.53	14312268.96	39°24'46.214"N	80°53'17.815"W	6296.45	135.172	3.16	-0.03	3.16	
13027.00	90.120	163.800	6589.28	5797.71	-4556.77	4465.54	1671997.17	14312177.81	39°24'45.312"N	80°53'17.477"W	6380.07	135.579	0.23	0.13	0.19	
13122.00	90.250	163.010	6588.98	5892.56	-4647.82	4492.67	1672024.29	14312086.81	39°24'44.412"N	80°53'17.133"W	6464.23	135.972	0.84	0.14	-0.83	
13217.00	90.180	165.690	6588.62	5987.31	-4739.29	4518.30	1672049.90	14311995.38	39°24'43.508"N	80°53'16.808"W	6547.96	136.367	2.82	-0.07	2.82	
13313.00	90.280	165.010	6588.23	6082.90	-4832.25	4542.25	1672073.85	14311902.45	39°24'42.589"N	80°53'16.504"W	6631.94	136.772	0.31	0.10	-0.29	
13408.00	90.340	165.000	6587.72	6177.54	-4924.10	4566.51	1672098.10	14311810.64	39°24'41.681"N	80°53'16.197"W	6715.63	137.158	0.44	0.06	-0.43	
13502.00	90.680	160.520	6586.88	6271.42	-5013.85	4594.36	1672125.94	14311720.92	39°24'40.793"N	80°53'15.843"W	6800.50	137.500	4.78	0.36	-4.77	
13597.00	90.770	164.510	6585.68	6366.32	-5104.43	4622.90	1672154.46	14311630.38	39°24'39.898"N	80°53'15.481"W	6886.68	137.834	4.20	0.09	4.20	
13692.00	90.120	164.270	6584.94	6461.07	-5195.92	4648.46	1672180.01	14311538.92	39°24'38.993"N	80°53'15.157"W	6971.79	138.183	0.73	-0.68	-0.25	
13787.00	90.920	158.210	6584.08	6556.01	-5285.83	4678.99	1672210.54	14311449.05	39°24'38.104"N	80°53'14.769"W	7059.25	138.485	6.43	0.84	-6.38	
13883.00	90.860	161.410	6582.59	6651.98	-5375.91	4712.12	1672243.65	14311359.01	39°24'37.213"N	80°53'14.349"W	7148.74	138.765	3.33	-0.06	3.33	
13978.00	91.080	157.320	6580.98	6746.94	-5464.78	4745.59	1672277.10	14311270.17	39°24'36.335"N	80°53'13.924"W	7237.71	139.029	4.31	0.23	-0.66	
14073.00	90.580	156.690	6579.60	6841.77	-5552.23	4782.69	1672314.19	14311182.76	39°24'35.470"N	80°53'13.452"W	7328.12	139.258	0.85	-0.53	-0.66	
14168.00	90.800	158.430	6578.46	6936.66	-5640.02	4818.95	1672350.44	14311095.00	39°24'34.602"N	80°53'12.992"W	7418.37	139.489	1.85	0.23	1.83	
14262.00	89.540	160.070	6578.18	7030.64	-5727.92	4852.25	1672383.73	14311007.14	39°24'33.733"N	80°53'12.569"W	7506.89	139.731	2.20	-1.34	1.74	
14358.00	89.660	160.510	6578.85	7126.64	-5818.29	4884.63	1672416.09	14310916.80	39°24'32.839"N	80°53'12.158"W	7596.85	139.986	0.48	0.12	0.46	
14453.00	89.940	157.330	6579.18	7221.60	-5906.92	4918.79	1672450.24	14310828.21	39°24'31.963"N	80°53'11.724"W	7686.76	140.215	3.36	0.29	-3.35	
14547.00	88.490	158.540	6580.47	7315.51	-5994.03	4954.10	1672485.53	14310741.14	39°24'31.101"N	80°53'11.276"W	7776.34	140.426	2.01	-1.54	1.29	
14642.00	89.380	161.980	6582.24	7410.48	-6083.41	4986.18	1672517.60	14310651.79	39°24'30.217"N	80°53'10.868"W	7865.74	140.661	3.74	0.94	3.62	
14736.00	88.520	161.680	6583.96	7504.42	-6172.71	5015.48	1672546.89	14310562.53	39°24'29.334"N	80°53'10.496"W	7953.45	140.905	0.97	-0.91	-0.32	

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Actual Wellpath Report

Emerger Unit 4H AWP Proj: 15912



Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Vera Pad
		Well	Emerger Unit 4H
		Wellbore	Emerger Unit 4H AWB
		Slot	Slot #14

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
14831.00	159.700	6586.03	7599.39	-6262.34	5046.89	1672578.28	14310472.93	39°24'28.44"N	80°53'10.09"W	8042.89	141.134	2.14	0.48	-2.08		
14926.00	157.020	6586.88	7694.33	-6350.63	5081.92	1672613.30	14310384.68	39°24'27.57"N	80°53'09.65"W	8133.66	141.332	3.02	1.07	-2.82		
15021.00	158.290	6587.47	7789.23	-6438.51	5117.99	1672649.35	14310296.83	39°24'26.70"N	80°53'09.19"W	8224.86	141.519	1.59	0.75	-1.40		
15116.00	160.580	6588.51	7884.21	-6527.47	5151.31	1672682.66	14310207.91	39°24'25.82"N	80°53'08.77"W	8315.27	141.720	2.35	0.17	2.35		
15211.00	158.980	6589.45	7979.20	-6616.60	5184.14	1672715.48	14310118.81	39°24'24.94"N	80°53'08.35"W	8405.64	141.921	1.68	-0.03	-1.68		
15307.00	156.610	6590.37	8075.10	-6705.47	5220.42	1672751.74	14310029.98	39°24'24.06"N	80°53'07.89"W	8498.01	142.098	2.47	0.06	-2.47		
15402.00	158.260	6591.41	8170.00	-6793.42	5256.31	1672787.62	14309942.07	39°24'23.19"N	80°53'07.43"W	8589.49	142.270	2.51	-0.23	2.49		
15496.00	162.460	6592.20	8263.98	-6882.13	5287.35	1672818.64	14309853.39	39°24'22.31"N	80°53'07.04"W	8678.69	142.466	3.74	0.55	3.70		
15591.00	162.330	6592.57	8358.91	-6972.68	5316.08	1672847.36	14309762.88	39°24'21.42"N	80°53'06.68"W	8768.06	142.678	0.14	0.00	-0.14		
15686.00	161.980	6592.62	8453.86	-7063.10	5345.21	1672876.48	14309672.49	39°24'20.53"N	80°53'06.31"W	8857.69	142.882	0.55	0.39	-0.39		
15781.00	158.840	6592.76	8548.84	-7152.59	5377.07	1672908.33	14309583.04	39°24'19.64"N	80°53'05.90"W	8948.32	143.065	3.32	-0.48	-3.28		
15875.00	159.670	6593.27	8642.83	-7240.49	5410.36	1672941.61	14309495.18	39°24'18.77"N	80°53'05.48"W	9038.62	143.232	0.88	0.00	0.88		
15888.00	159.930	6593.33	8655.83	-7252.69	5414.85	1672946.10	14309482.98	39°24'18.65"N	80°53'05.42"W	9051.09	143.255	2.01	0.23	2.00		Projected MD at TD: 15912
15912.00	159.930	6593.45	8679.83	-7275.23	5423.09	1672954.33	14309460.45	39°24'18.43"N	80°53'05.32"W	9074.08	143.298	0.00	0.00	0.00		

String/Diameter	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	Start E/W	End N/S	End E/W
20in Conductor	24.50	104.50	80.00	24.50	104.50	0.00	0.00	0.00	-0.06
17.5in Open Hole	104.50	723.70	619.20	104.50	723.69	-0.06	-0.03	-0.75	0.80
13.37in Casing Surface	24.50	723.70	699.20	24.50	723.69	0.00	0.00	-0.75	0.80
12.25in Open Hole	723.70	2530.00	1806.30	723.69	2457.43	-0.75	0.80	215.89	417.34
9.625in Casing Intermediate	24.50	2530.00	2505.50	24.50	2457.43	0.00	0.00	215.89	417.34

HOLE & CASING SECTIONS - Ref Wellbore: Emerger Unit 4H AWB Ref Wellpath: Emerger Unit 4H AWP Proj: 15912									
String/Diameter	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	Start E/W	End N/S	End E/W
20in Conductor	24.50	104.50	80.00	24.50	104.50	0.00	0.00	0.00	-0.06
17.5in Open Hole	104.50	723.70	619.20	104.50	723.69	-0.06	-0.03	-0.75	0.80
13.37in Casing Surface	24.50	723.70	699.20	24.50	723.69	0.00	0.00	-0.75	0.80
12.25in Open Hole	723.70	2530.00	1806.30	723.69	2457.43	-0.75	0.80	215.89	417.34
9.625in Casing Intermediate	24.50	2530.00	2505.50	24.50	2457.43	0.00	0.00	215.89	417.34

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Actual Wellpath Report

Emerger Unit 4H AWP Proj: 15912'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #14
Area	Tyler County, WV	Well	Emerger Unit 4H
Field	Tyler	Wellbore	Emerger Unit 4H AWB
Facility	Vera Pad		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Emerger Unit 4H POE - Rev-2	6557.00	776.14	2466.00	1669998.42	14317508.59	39°25'38.044"N	80°53'42.874"W	point
Emerger Unit 4H BHL - Rev-2	6583.00	-7296.49	5425.03	1672956.27	14309439.20	39°24'18.222"N	80°53'05.297"W	point
Emerger Unit 4H LP - Rev-1	6583.00	608.16	2557.24	1670089.64	14317340.67	39°25'36.383"N	80°53'41.714"W	point

WELLPATH COMPOSITION - Ref Wellbore: Emerger Unit 4H AWB Ref Wellpath: Emerger Unit 4H AWP Proj: 15912'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	700.50	Gyrodata standard - Drop gyro or Multi-shot	01 Gyrodata MS Gyro <17-1/2">(100'-691')	Emerger Unit 4H AWB
700.50	2488.50	ISCWSA MWD, Rev. 4 (Standard)	02 WFT EM <12-1/4">(691')(763'-2479')	Emerger Unit 4H AWB
2488.50	6711.50	ISCWSA MWD, Rev. 4 (Standard)	03 WFT EM <8-3/4">(2479')(2568'-6702')	Emerger Unit 4H AWB
6711.50	15888.00	BHI AutoTrak Curve (Short)	04 BHI AT Curve <8-1/2"> (6711.5')(6746'-15888')	Emerger Unit 4H AWB
15888.00	15912.00	Blind Drilling (std)	Projection to bit	Emerger Unit 4H AWB

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Actual Wellpath Report

Emerger Unit 4H AWP Proj: 15912'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #14
Area	Tyler County, WV	Well	Emerger Unit 4H
Field	Tyler	Wellbore	Emerger Unit 4H AWB
Facility	Vera Pad		

COMMENTS
<p>Wellpath general comments API: 47-095-02356-0000 BHI Job #: 8692045 Rig: Frontier 22 Duration: 07/31/2017-08/04/2017 Gyrodata MS Gyro <17-1/2"> (100'-691') WFT EM <12-1/4"> (691')(763'-2479') WFT EM <8-3/4"> (2479')(2568'-6702') BHI AT Curve <8-1/2"> (6711.5')(6746'-15888') Middlesex: 7029' MD Burket: 7211' MD Tully: 7288' MD Marcellus POE: 7384' MD Projected MD at TD: 15912'</p>

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