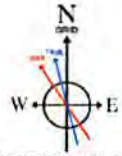




# ANTERO RESOURCES CORPORATION

Location: Ritchie County, WV  
Field: Ritchie  
Facility: Zinn Pad

Slot: Slot #05  
Well: Earnest Unit 2H  
Wellbore: Earnest Unit 2H PWB



BGGM (1945.0 to 2017.0) Dip: 66.72° Field: 52078.6 nT  
Magnetic North is 8.45 degrees West of True North (at 5/10/2019)  
Grid North is 0.04 degrees East of True North  
To correct azimuth from True to Grid subtract 0.04 degrees  
To correct azimuth from Magnetic to Grid subtract 8.49 degrees

Scale 1 inch = 1500  
Easting (ft)  
-750 0 750 1500 2250 3000 3750 4500 5250

BHI AT Curve <8-1/2">(5862.01')(5938'-15261') : 5679.96ft TVD, 893.87ft N, 1217.76ft E  
Marcellus: 6893' MD : 6423.69ft TVD, 606.30ft N, 1549.36ft E  
SDI Gyro Std Keeper (112' - 5862.01') : 112.00ft TVD, 0.08ft S, 0.11ft E Slot #05

API: 47-085-10276-0000  
BHI Job #: 7973826  
Rig: Patterson 343  
Duration: 05.25.2016-05.28.2016

SDI Gyro Std Keeper (112' - 5862.01') : 0.18° Inc, 112.00ft MD, 112.00ft TVD, 0.11ft VS

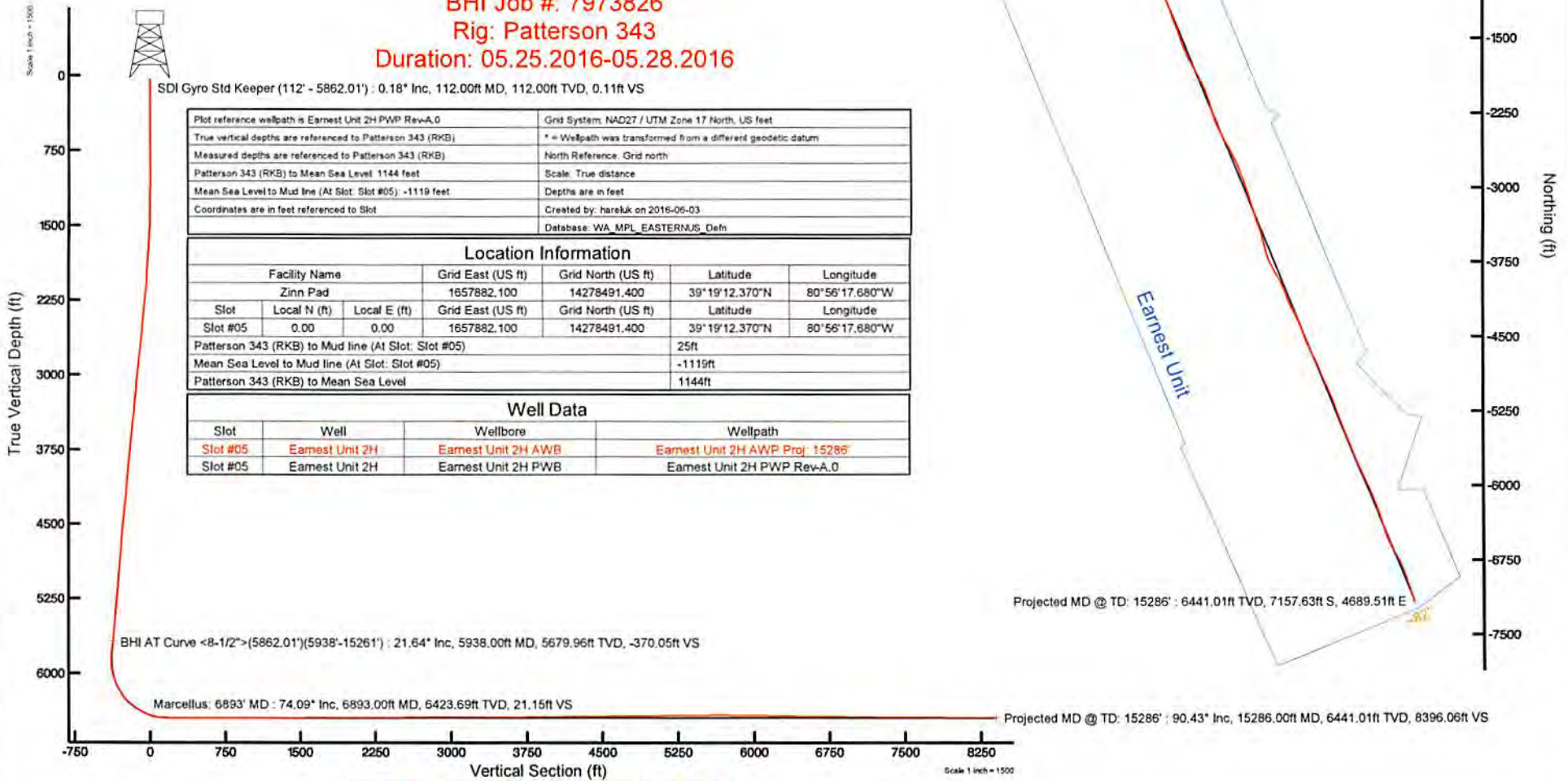
Plot reference wellpath is Earnest Unit 2H PWB Rev-A.0		Grid System: NAD27 / UTM Zone 17 North, US feet	
True vertical depths are referenced to Patterson 343 (RKB)		* = Wellpath was transformed from a different geodetic datum	
Measured depths are referenced to Patterson 343 (RKB)		North Reference: Grid north	
Patterson 343 (RKB) to Mean Sea Level: 1144 feet		Scale: True distance	
Mean Sea Level to Mud line (At Slot: Slot #05): -1119 feet		Depths are in feet	
Coordinates are in feet referenced to Slot		Created by: hareluk on 2016-06-03	
		Database: WA_MPL_EASTERNUS_Defn	

### Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Zinn Pad		1657882.100	14278491.400	39° 19' 12.370"N	80° 56' 17.680"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot #05	0.00	0.00	1657882.100	14278491.400	39° 19' 12.370"N	80° 56' 17.680"W
Patterson 343 (RKB) to Mud line (At Slot: Slot #05)				25ft		
Mean Sea Level to Mud line (At Slot: Slot #05)				-1119ft		
Patterson 343 (RKB) to Mean Sea Level				1144ft		

### Well Data

Slot	Well	Wellbore	Wellpath
Slot #05	Earnest Unit 2H	Earnest Unit 2H AWB	Earnest Unit 2H AWP Proj: 15286
Slot #05	Earnest Unit 2H	Earnest Unit 2H PWB	Earnest Unit 2H PWB Rev-A.0



BHI AT Curve <8-1/2">(5862.01')(5938'-15261') : 21.64° Inc, 5938.00ft MD, 5679.96ft TVD, -370.05ft VS

Marcellus: 6893' MD : 74.09° Inc, 6893.00ft MD, 6423.69ft TVD, 21.15ft VS

Projected MD @ TD: 15286' : 6441.01ft TVD, 7157.63ft S, 4689.51ft E

Projected MD @ TD: 15286' : 90.43° Inc, 15286.00ft MD, 6441.01ft TVD, 8396.06ft VS

Vertical Section (ft)  
Azimuth 157.90° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500



## Actual Wellpath Report

Earnest Unit 2H AWP Proj: 15286'

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### REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Ritchie County, WV	Well	Earnest Unit 2H
Field	Ritchie	Wellbore	Earnest Unit 2H AWB
Facility	Zinn Pad		

### REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Hareluk
Scale	0.999600	Report Generated	6/3/2016 at 10:32:19 AM
Convergence at slot	0.04° East	Database/Source file	WA_MPL_EASTERNUS_Defn/Earnest_Unit_2H_AWP_Proj_15286_.xml

### WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	1657882.10	14278491.40	39°19'12.370"N	80°56'17.680"W
Facility Reference Pt			1657882.10	14278491.40	39°19'12.370"N	80°56'17.680"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

### WELLPATH DATUM

Calculation method	Minimum curvature	Patterson 343 (RKB) to Facility Vertical Datum	25.00ft
Horizontal Reference Pt	Slot	Patterson 343 (RKB) to Mean Sea Level	1144.00ft
Vertical Reference Pt	Patterson 343 (RKB)	Patterson 343 (RKB) to Mud Line at Slot (Slot #05)	25.00ft
MD Reference Pt	Patterson 343 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	157.90°



**Actual Wellpath Report**  
 Earnest Unit 2H AWP Proj: 15286  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Richlie County, WV	Well	Earnest Unit 2H
Field	Richlie	Wellbore	Earnest Unit 2H AWP
Facility	Zinn Pad		

WELLPATH DATA (349 stations) † = interpolated/extrapolated station														
MD	Inclination	Azimuth	TVD	Vent Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft/100ft)	
0.007	0.000	124.940	0.000	0.000	0.000	0.000	14278491.40	39°19'12.370"N	80°56'17.680"W	0.000	0.000	0.000	0.000	
25.00	0.000	124.940	25.000	0.000	0.000	0.000	14278491.40	39°19'12.370"N	80°56'17.680"W	0.000	0.000	0.000	0.000	
112.00	0.180	124.940	112.000	0.111	-0.080	0.111	14278491.322	39°19'12.369"N	80°56'17.679"W	0.140	124.940	0.210	SDI Gyro Sid Keeper (112 - 5862.01)	
137.00	0.180	117.160	137.000	0.180	-0.120	0.180	14278491.288	39°19'12.369"N	80°56'17.678"W	0.210	123.523	0.100		
162.00	0.160	131.680	162.000	0.240	-0.160	0.240	14278491.244	39°19'12.369"N	80°56'17.677"W	0.290	123.642	0.190		
187.00	0.150	152.190	187.000	0.300	-0.210	0.300	14278491.190	39°19'12.368"N	80°56'17.677"W	0.350	126.980	0.220		
212.00	0.160	129.930	212.000	0.370	-0.260	0.370	14278491.140	39°19'12.368"N	80°56'17.676"W	0.420	129.142	0.240		
237.00	0.150	144.600	237.000	0.430	-0.310	0.430	14278491.090	39°19'12.367"N	80°56'17.676"W	0.480	130.232	0.160		
262.00	0.160	130.720	262.000	0.490	-0.360	0.490	14278491.040	39°19'12.367"N	80°56'17.675"W	0.550	131.108	0.160		
287.00	0.140	139.020	287.000	0.550	-0.410	0.550	14278490.990	39°19'12.366"N	80°56'17.674"W	0.620	131.478	0.120		
312.00	0.150	143.650	312.000	0.610	-0.460	0.610	14278490.940	39°19'12.366"N	80°56'17.674"W	0.680	132.400	0.060		
337.00	0.170	134.220	337.000	0.680	-0.510	0.680	14278490.890	39°19'12.365"N	80°56'17.673"W	0.750	132.980	0.130		
362.00	0.180	142.710	362.000	0.750	-0.570	0.750	14278490.830	39°19'12.365"N	80°56'17.673"W	0.820	133.498	0.110		
387.00	0.180	138.160	387.000	0.820	-0.630	0.820	14278490.770	39°19'12.364"N	80°56'17.672"W	0.900	134.101	0.060		
412.00	0.200	134.880	412.000	0.900	-0.690	0.900	14278490.710	39°19'12.363"N	80°56'17.671"W	0.980	134.275	0.090		
437.00	0.150	149.330	437.000	0.970	-0.750	0.970	14278490.650	39°19'12.363"N	80°56'17.671"W	1.060	134.739	0.270		
462.00	0.160	137.280	462.000	1.040	-0.800	1.040	14278490.600	39°19'12.362"N	80°56'17.670"W	1.130	135.238	0.140		
487.00	0.160	149.760	487.000	1.110	-0.850	1.110	14278490.550	39°19'12.362"N	80°56'17.670"W	1.190	135.717	0.140		
512.00	0.100	123.530	512.000	1.160	-0.900	1.160	14278490.500	39°19'12.361"N	80°56'17.669"W	1.250	135.895	0.330		
537.00	0.150	106.250	537.000	1.200	-0.920	1.200	14278490.480	39°19'12.361"N	80°56'17.669"W	1.300	134.975	0.250		
562.00	0.160	99.670	562.000	1.240	-0.930	1.240	14278490.470	39°19'12.361"N	80°56'17.668"W	1.360	133.459	0.080		
587.00	0.140	89.920	587.000	1.270	-0.940	1.270	14278490.460	39°19'12.361"N	80°56'17.667"W	1.410	131.813	0.130		
612.00	0.110	73.660	612.000	1.280	-0.930	1.100	14278490.470	39°19'12.361"N	80°56'17.666"W	1.440	130.196	0.180		
637.00	0.170	75.370	637.000	1.290	-0.920	1.160	14278490.480	39°19'12.361"N	80°56'17.665"W	1.480	128.247	0.240		
662.00	0.150	78.130	662.000	1.300	-0.900	1.230	14278490.500	39°19'12.361"N	80°56'17.665"W	1.520	126.191	0.090		
687.00	0.160	70.210	687.000	1.300	-0.880	1.300	14278490.520	39°19'12.361"N	80°56'17.664"W	1.570	124.243	0.040		
712.00	0.150	68.570	712.000	1.310	-0.860	1.360	14278490.540	39°19'12.362"N	80°56'17.663"W	1.610	122.271	0.040		
737.00	0.190	65.440	737.000	1.300	-0.830	1.430	14278490.570	39°19'12.362"N	80°56'17.662"W	1.650	120.150	0.160		
762.00	0.170	55.040	762.000	1.290	-0.790	1.490	14278490.610	39°19'12.362"N	80°56'17.661"W	1.690	117.863	0.150		
787.00	0.180	64.730	787.000	1.280	-0.750	1.560	14278490.650	39°19'12.363"N	80°56'17.660"W	1.730	115.732	0.120		



# Actual Wellpath Report

Earnest Unit 2H AWP Proj: 15286  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Richie County, WV	Well	Earnest Unit 2H
Field	Richie	Wellbore	Earnest Unit 2H AWB
Facility	Zinn Pad		

WELLPATH DATA (349 stations)														
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
812.00	0.220	63.510	812.00	1.28	-0.71	1.64	1657883.74	14278490.69	39°19'12.363"N	80°56'17.659"W	1.79	113.538	0.16	
837.00	0.350	63.710	837.00	1.26	-0.65	1.74	1657883.84	14278490.75	39°19'12.364"N	80°56'17.658"W	1.86	110.370	0.55	
862.00	0.330	49.030	862.00	1.21	-0.56	1.66	1657883.96	14278490.85	39°19'12.365"N	80°56'17.657"W	1.94	106.619	0.14	
887.00	0.390	44.930	887.00	1.16	-0.45	1.97	1657884.07	14278490.95	39°19'12.366"N	80°56'17.655"W	2.02	102.775	0.26	
912.00	0.410	42.320	912.00	1.09	-0.32	2.09	1657884.19	14278491.08	39°19'12.367"N	80°56'17.654"W	2.12	98.720	0.11	
937.00	0.480	39.180	936.99	1.00	-0.17	2.22	1657884.32	14278491.23	39°19'12.368"N	80°56'17.652"W	2.23	94.478	0.30	
962.00	0.550	30.040	961.99	0.87	0.01	2.35	1657884.45	14278491.41	39°19'12.370"N	80°56'17.650"W	2.35	89.728	0.43	
987.00	0.630	26.220	986.99	0.73	0.22	2.48	1657884.58	14278491.67	39°19'12.372"N	80°56'17.649"W	2.49	84.984	0.31	
1012.00	0.830	1011.99	1011.99	0.57	0.47	2.67	1657884.77	14278491.87	39°19'12.375"N	80°56'17.646"W	2.71	80.117	0.96	
1037.00	1.480	42.700	1036.99	0.34	0.85	3.00	1657885.10	14278492.25	39°19'12.379"N	80°56'17.642"W	3.12	74.233	2.63	
1062.00	1.750	1061.98	1061.98	0.07	1.34	3.50	1657885.60	14278492.74	39°19'12.383"N	80°56'17.636"W	3.75	68.967	1.18	
1087.00	2.510	1086.96	1086.96	-0.19	1.92	4.22	1657886.32	14278493.22	39°19'12.389"N	80°56'17.626"W	4.64	65.558	3.26	
1112.00	2.810	1111.93	1111.93	-0.43	2.57	5.18	1657887.28	14278493.97	39°19'12.396"N	80°56'17.614"W	5.79	63.608	1.24	
1137.00	3.360	1136.89	1136.89	-0.69	3.30	6.31	1657888.41	14278494.70	39°19'12.403"N	80°56'17.600"W	7.12	62.362	2.21	
1162.00	3.880	1161.84	1161.84	-0.91	4.10	7.67	1657889.77	14278495.50	39°19'12.411"N	80°56'17.583"W	8.70	61.865	2.33	
1187.00	4.240	1186.78	1186.78	-1.11	4.94	9.23	1657891.33	14278496.34	39°19'12.419"N	80°56'17.563"W	10.47	61.839	1.44	
1212.00	4.760	1211.70	1211.70	-1.31	5.87	10.96	1657893.06	14278497.26	39°19'12.428"N	80°56'17.541"W	12.43	61.842	2.08	
1237.00	5.020	1236.61	1236.61	-1.53	6.87	12.84	1657894.94	14278498.26	39°19'12.438"N	80°56'17.517"W	14.56	61.868	1.05	
1262.00	5.190	1261.51	1261.51	-1.75	7.90	14.81	1657896.91	14278499.30	39°19'12.448"N	80°56'17.492"W	16.79	61.921	0.68	
1287.00	5.540	1286.40	1286.40	-1.99	9.00	16.87	1657898.97	14278500.40	39°19'12.459"N	80°56'17.465"W	19.13	61.917	1.44	
1312.00	5.660	1311.29	1311.29	-2.27	10.17	19.01	1657901.11	14278501.57	39°19'12.471"N	80°56'17.438"W	21.56	61.853	0.49	
1337.00	5.890	1336.16	1336.16	-2.59	11.41	21.21	1657903.30	14278502.80	39°19'12.483"N	80°56'17.410"W	24.08	61.719	1.07	
1362.00	5.990	1361.02	1361.02	-2.94	12.70	23.45	1657905.54	14278504.09	39°19'12.496"N	80°56'17.382"W	26.67	61.564	0.43	
1387.00	6.360	1385.88	1385.88	-3.31	14.04	25.78	1657907.87	14278505.43	39°19'12.509"N	80°56'17.352"W	29.35	61.426	1.50	
1412.00	7.230	1410.70	1410.70	-3.72	15.52	28.34	1657910.43	14278506.91	39°19'12.523"N	80°56'17.320"W	32.31	61.291	3.48	
1437.00	7.610	1435.49	1435.49	-4.16	17.14	31.13	1657913.22	14278508.53	39°19'12.539"N	80°56'17.284"W	35.64	61.173	1.53	
1462.00	8.130	1460.26	1460.26	-4.63	18.85	34.10	1657916.19	14278510.24	39°19'12.556"N	80°56'17.246"W	38.96	61.073	2.09	
1487.00	8.430	1485.00	1485.00	-5.11	20.63	37.23	1657919.31	14278512.02	39°19'12.574"N	80°56'17.208"W	42.56	61.006	1.20	
1512.00	8.640	1509.72	1509.72	-5.60	22.46	40.45	1657922.54	14278513.86	39°19'12.592"N	80°56'17.165"W	46.27	60.955	0.84	
1537.00	9.230	1534.42	1534.42	-6.16	24.43	43.80	1657925.88	14278515.82	39°19'12.611"N	80°56'17.123"W	50.16	60.850	2.54	



**Actual Wellpath Report**  
 Earnest Unit 2H AWP Proj: 15286  
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<b>REFERENCE WELLPATH IDENTIFICATION</b>	
Operator	ANTERO RESOURCES CORPORATION
Area	Richlie County, WV
Field	Richlie
Facility	Zinn Pad
Slot	Earnest Unit 2H AWP
Slot #05	Earnest Unit 2H

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
1562.00	9.560	1559.08	-6.83	26.57	47.28	1657929.36	14278517.96	39°19'12.632"N	80°56'17.078"W	54.23	60.667	1.44		
1587.00	9.930	1583.73	-7.63	28.87	50.80	1657932.88	14278520.26	39°19'12.655"N	80°56'17.034"W	58.43	60.393	1.86		
1612.00	10.120	1608.35	-8.60	31.35	54.35	1657936.43	14278522.74	39°19'12.680"N	80°56'16.988"W	62.74	59.626	1.51		
1637.00	10.410	1632.95	-9.67	33.97	57.96	1657940.03	14278525.35	39°19'12.705"N	80°56'16.943"W	67.18	59.220	1.25		
1662.00	10.590	1657.53	-10.82	36.69	61.60	1657943.68	14278528.08	39°19'12.732"N	80°56'16.896"W	71.70	59.220	1.01		
1687.00	10.850	1682.09	-12.05	39.52	65.30	1657947.37	14278530.90	39°19'12.760"N	80°56'16.849"W	76.33	58.819	1.05		
1712.00	11.160	1706.63	-13.32	42.43	69.08	1657951.15	14278533.81	39°19'12.789"N	80°56'16.801"W	81.07	58.441	1.26		
1737.00	11.210	1731.16	-14.62	45.39	72.92	1657954.99	14278536.77	39°19'12.818"N	80°56'16.752"W	85.89	58.088	0.25		
1762.00	11.130	1755.68	-15.86	48.30	76.79	1657958.86	14278539.68	39°19'12.847"N	80°56'16.703"W	90.72	57.833	1.11		
1787.00	11.940	1780.18	-17.14	51.31	80.78	1657962.85	14278542.69	39°19'12.877"N	80°56'16.652"W	95.70	57.580	3.49		
1812.00	12.220	1804.63	-18.54	54.50	84.93	1657967.00	14278545.88	39°19'12.908"N	80°56'16.599"W	100.91	57.311	1.17		
1837.00	12.970	1829.02	-19.97	57.80	89.27	1657971.33	14278549.18	39°19'12.941"N	80°56'16.544"W	106.35	57.077	3.01		
1862.00	13.110	1853.38	-21.41	61.19	93.78	1657975.84	14278552.56	39°19'12.974"N	80°56'16.486"W	111.97	56.876	0.66		
1887.00	14.100	1877.68	-22.90	64.71	98.49	1657980.55	14278556.08	39°19'13.009"N	80°56'16.426"W	117.84	56.696	3.86		
1912.00	14.540	1901.90	-24.35	68.32	103.51	1657985.57	14278559.69	39°19'13.045"N	80°56'16.363"W	124.02	56.576	2.63		
1937.00	14.530	1926.10	-25.67	71.84	108.70	1657990.76	14278563.21	39°19'13.079"N	80°56'16.297"W	130.30	56.538	1.12		
1962.00	14.960	1950.28	-26.92	75.35	114.01	1657996.06	14278566.72	39°19'13.114"N	80°56'16.229"W	136.66	56.537	1.75		
1987.00	15.650	1974.39	-28.22	78.98	118.52	1658001.57	14278570.35	39°19'13.150"N	80°56'16.159"W	143.26	56.541	2.76		
2012.00	16.080	1998.44	-29.55	82.74	125.23	1658007.28	14278574.10	39°19'13.187"N	80°56'16.086"W	150.09	56.547	1.74		
2037.00	16.800	2022.42	-30.93	86.63	131.14	1658013.18	14278577.99	39°19'13.225"N	80°56'16.011"W	157.17	56.551	2.90		
2062.00	17.390	2046.31	-32.38	90.69	137.26	1658019.31	14278582.05	39°19'13.266"N	80°56'15.933"W	164.52	56.548	2.36		
2087.00	17.870	2070.14	-33.91	94.89	143.56	1658025.60	14278586.26	39°19'13.307"N	80°56'15.853"W	172.09	56.535	1.97		
2112.00	18.740	2093.87	-35.56	99.31	150.05	1658032.09	14278590.67	39°19'13.351"N	80°56'15.770"W	179.94	56.503	3.55		
2137.00	19.430	2117.50	-37.34	103.96	156.78	1658038.81	14278595.31	39°19'13.397"N	80°56'15.685"W	188.11	56.452	2.81		
2162.00	20.230	2141.01	-39.29	108.87	163.69	1658045.72	14278600.22	39°19'13.445"N	80°56'15.597"W	196.59	56.373	3.48		
2187.00	20.560	2164.45	-41.42	114.02	170.71	1658052.74	14278605.38	39°19'13.496"N	80°56'15.507"W	205.29	56.259	1.73		
2212.00	20.130	2187.89	-43.72	119.31	177.61	1658059.64	14278610.66	39°19'13.548"N	80°56'15.419"W	213.96	56.109	2.66		
2237.00	19.750	2211.39	-46.12	124.61	184.29	1658066.31	14278615.96	39°19'13.600"N	80°56'15.334"W	222.46	55.935	1.67		
2262.00	19.480	2234.94	-48.55	129.88	190.81	1658072.84	14278621.23	39°19'13.653"N	80°56'15.251"W	230.82	55.757	1.30		
2287.00	19.430	2258.51	-51.01	135.16	197.26	1658079.28	14278626.50	39°19'13.705"N	80°56'15.169"W	239.12	55.582	0.26		



**Actual Wellpath Report**  
 Earnest Unit 2H AWP Proj: 15286



**REFERENCE WELLPATH IDENTIFICATION**

Operator	ANTERO RESOURCES CORPORATION
Area	Richlie County, WV
Field	Richlie
Facility	Zinn Pad
Well	Earnest Unit 2H
Slot	Earnest Unit 2H AWP
Slot #05	

**WELLPATH DATA (349 stations)**

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
2312.00	19.440	2282.09	-53.49	140.44	203.68	1658085.70	14278631.78	39°19'13.75"N	80°56'15.08"W	247.41	55.415	0.11		
2337.00	19.580	2305.65	-55.96	145.73	210.14	1658092.16	14278637.07	39°18'13.809"N	80°56'15.005"W	255.73	55.260	0.61		
2362.00	19.660	2329.19	-58.40	151.03	216.71	1658098.72	14278642.37	39°19'13.861"N	80°56'14.922"W	264.14	55.127	1.44		
2387.00	20.460	2352.65	-60.75	156.32	223.50	1658105.51	14278647.66	39°19'13.914"N	80°56'14.835"W	272.74	55.030	2.87		
2412.00	20.880	2376.05	-63.00	161.61	230.56	1658112.57	14278652.95	39°19'13.966"N	80°56'14.745"W	281.56	54.971	2.12		
2437.00	21.160	2399.38	-65.18	166.91	237.80	1658119.80	14278658.24	39°19'14.018"N	80°56'14.653"W	290.53	54.935	1.26		
2462.00	21.210	2422.69	-67.34	172.21	245.12	1658127.12	14278663.54	39°19'14.071"N	80°56'14.560"W	299.56	54.910	0.29		
2487.00	21.270	2445.99	-69.49	177.51	252.46	1658134.46	14278668.84	39°19'14.123"N	80°56'14.466"W	308.62	54.888	0.24		
2512.01	20.930	2469.33	-71.61	182.77	259.77	1658141.76	14278674.10	39°19'14.175"N	80°56'14.373"W	317.62	54.870	1.37		
2537.01	20.300	2492.73	-73.68	187.91	266.92	1658148.91	14278679.23	39°19'14.226"N	80°56'14.282"W	326.42	54.855	2.52		
2562.01	19.510	2516.23	-75.69	192.88	273.82	1658155.81	14278684.21	39°19'14.275"N	80°56'14.194"W	334.94	54.838	3.18		
2587.01	18.910	2539.84	-77.69	197.74	280.46	1658162.45	14278689.06	39°19'14.323"N	80°56'14.110"W	343.16	54.814	2.49		
2612.01	18.510	2563.52	-79.73	202.54	286.88	1658168.87	14278693.86	39°19'14.370"N	80°56'14.028"W	351.18	54.777	1.88		
2637.01	18.420	2587.23	-81.87	207.39	293.14	1658175.12	14278698.71	39°19'14.418"N	80°56'13.949"W	359.09	54.721	1.45		
2662.01	18.390	2610.95	-84.10	212.31	299.32	1658181.30	14278703.62	39°19'14.467"N	80°56'13.870"W	366.97	54.652	0.56		
2687.01	18.770	2634.65	-86.43	217.33	305.50	1658187.47	14278708.65	39°19'14.516"N	80°56'13.791"W	374.92	54.571	1.81		
2712.01	19.250	2658.29	-88.92	222.56	311.74	1658193.72	14278713.87	39°19'14.568"N	80°56'13.712"W	383.03	54.476	2.17		
2737.01	19.470	2681.87	-91.52	227.93	318.05	1658200.03	14278719.24	39°19'14.621"N	80°56'13.631"W	391.29	54.373	0.95		
2762.01	20.240	2705.39	-94.21	233.45	324.51	1658206.48	14278724.75	39°19'14.675"N	80°56'13.549"W	399.75	54.269	3.08		
2787.01	20.830	2728.80	-96.93	239.11	331.21	1658213.17	14278730.41	39°19'14.731"N	80°56'13.464"W	408.50	54.174	2.49		
2812.01	21.340	2752.12	-99.63	244.83	338.14	1658220.11	14278736.13	39°19'14.788"N	80°56'13.376"W	417.47	54.083	2.29		
2837.01	21.580	2775.39	-102.30	250.60	345.24	1658227.20	14278741.90	39°19'14.845"N	80°56'13.285"W	426.60	54.025	1.02		
2862.01	21.660	2798.63	-104.96	256.38	352.41	1658234.37	14278747.68	39°19'14.902"N	80°56'13.194"W	435.80	53.964	0.39		
2887.01	21.630	2821.87	-107.56	262.12	359.63	1658241.59	14278753.41	39°19'14.958"N	80°56'13.102"W	445.02	53.914	1.11		
2912.01	21.670	2845.11	-110.08	267.79	366.90	1658248.85	14278759.09	39°19'15.014"N	80°56'13.008"W	454.24	53.875	0.29		
2937.01	21.570	2868.35	-112.61	273.47	374.16	1658256.11	14278764.76	39°19'15.070"N	80°56'12.917"W	463.44	53.837	0.53		
2962.01	21.260	2891.62	-115.13	279.11	381.33	1658263.28	14278770.40	39°19'15.126"N	80°56'12.826"W	472.56	53.799	1.24		
2987.01	21.390	2914.91	-117.66	284.73	388.48	1658270.42	14278776.02	39°19'15.182"N	80°56'12.735"W	481.65	53.761	0.54		
3012.01	21.460	2938.18	-120.17	290.37	395.66	1658277.61	14278781.65	39°19'15.237"N	80°56'12.643"W	490.78	53.726	0.61		
3037.01	21.550	2961.44	-122.63	295.97	402.92	1658284.86	14278787.25	39°19'15.293"N	80°56'12.551"W	499.94	53.701	0.78		



### Actual Wellpath Report

Earnest Unit 2H AWP Proj: 15286  
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#### REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Ritchie County, WV	Well	Earnest Unit 2H
Field	Ritchie	Wellbore	Earnest Unit 2H AWP
Facility	Zinn Pad		

#### WELLPATH DATA (349 stations)

MD	Inclination	Azimuth	TVD	Vert Sact	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
3062.01	21.610	2984.69	-124.99	301.49	410.27	1658292.20	14278792.77	39°19'15.347"N	80°56'12.457"W	509.13	53.689	1.39		
3087.01	21.740	3007.92	-127.21	306.92	417.74	1658299.67	14278798.20	39°19'15.401"N	80°56'12.362"W	518.37	53.694	1.57		
3112.01	21.690	3031.15	-129.27	312.23	425.31	1658307.24	14278803.50	39°19'15.453"N	80°56'12.266"W	527.61	53.717	1.51		
3137.01	21.540	3054.39	-131.14	317.35	432.97	1658314.89	14278808.62	39°19'15.504"N	80°56'12.168"W	536.81	53.760	2.16		
3162.01	21.600	3077.64	-132.85	322.33	440.69	1658322.61	14278813.60	39°19'15.553"N	80°56'12.070"W	545.99	53.817	0.77		
3187.01	21.490	3100.89	-134.51	327.27	448.43	1658330.35	14278818.54	39°19'15.602"N	80°56'11.972"W	555.15	53.878	0.46		
3212.01	21.460	3124.16	-136.17	332.19	456.14	1658338.06	14278823.46	39°19'15.650"N	80°56'11.873"W	564.29	53.936	0.24		
3237.01	21.990	3147.43	-137.88	337.15	463.81	1658345.73	14278828.42	39°19'15.699"N	80°56'11.776"W	573.40	53.986	0.85		
3262.01	21.640	3170.69	-139.76	342.26	471.42	1658353.33	14278833.53	39°19'15.750"N	80°56'11.679"W	582.57	54.019	2.34		
3287.01	21.820	3193.91	-141.80	347.55	479.02	1658360.93	14278838.81	39°19'15.802"N	80°56'11.582"W	591.82	54.037	1.00		
3312.01	21.820	3217.12	-143.88	352.88	486.63	1658368.53	14278844.14	39°19'15.855"N	80°56'11.485"W	601.11	54.052	0.16		
3337.01	21.870	3240.32	-145.90	358.18	494.28	1658376.18	14278849.44	39°19'15.907"N	80°56'11.388"W	610.41	54.071	0.86		
3362.01	21.440	3263.56	-147.83	363.36	501.91	1658383.81	14278854.61	39°19'15.958"N	80°56'11.291"W	619.63	54.097	1.87		
3387.01	20.950	3286.87	-149.71	368.43	509.39	1658391.29	14278859.68	39°19'16.008"N	80°56'11.195"W	628.67	54.123	2.03		
3412.01	20.650	3310.24	-151.62	373.46	516.71	1658398.60	14278864.71	39°19'16.058"N	80°56'11.102"W	637.64	54.142	1.41		
3437.01	20.620	3333.64	-153.63	378.55	523.90	1658405.79	14278869.80	39°19'16.108"N	80°56'11.011"W	646.35	54.150	1.40		
3462.01	20.920	3357.01	-155.84	383.82	531.02	1658412.91	14278875.07	39°19'16.160"N	80°56'10.920"W	655.21	54.141	2.33		
3487.01	20.400	3380.36	-158.24	389.28	538.09	1658419.97	14278880.53	39°19'16.214"N	80°56'10.830"W	664.14	54.116	1.42		
3512.01	21.180	3403.69	-160.77	394.87	545.13	1658427.01	14278886.11	39°19'16.269"N	80°56'10.741"W	673.12	54.082	1.18		
3537.01	21.240	3427.00	-163.36	400.63	552.18	1658434.06	14278891.77	39°19'16.325"N	80°56'10.651"W	682.15	54.044	0.36		
3562.01	20.990	3450.32	-165.98	406.20	559.18	1658441.05	14278897.44	39°19'16.381"N	80°56'10.562"W	691.14	54.004	1.13		
3587.01	20.400	3473.71	-168.63	411.82	565.99	1658447.86	14278903.06	39°19'16.437"N	80°56'10.475"W	699.96	53.960	2.51		
3612.01	20.360	3497.14	-171.27	417.39	572.68	1658454.55	14278908.62	39°19'16.492"N	80°56'10.390"W	708.65	53.914	0.26		
3637.01	20.330	3520.58	-173.83	422.89	579.41	1658461.28	14278914.12	39°19'16.546"N	80°56'10.304"W	717.33	53.876	1.11		
3662.01	20.200	3544.04	-176.30	428.30	586.18	1658468.04	14278919.53	39°19'16.598"N	80°56'10.218"W	725.98	53.846	0.84		
3687.01	20.360	3567.49	-178.72	433.67	592.97	1658474.84	14278924.90	39°19'16.652"N	80°56'10.131"W	734.64	53.820	0.68		
3712.01	20.220	3590.93	-181.08	439.00	599.82	1658481.67	14278930.22	39°19'16.705"N	80°56'10.044"W	743.30	53.800	1.09		
3737.01	20.220	3614.39	-183.36	444.25	606.68	1658488.54	14278935.47	39°19'16.757"N	80°56'09.957"W	751.94	53.786	0.47		
3762.01	20.370	3637.84	-185.61	449.48	613.59	1658495.45	14278940.70	39°19'16.808"N	80°56'09.869"W	760.61	53.776	0.67		
3787.01	20.330	3661.28	-187.84	454.71	620.54	1658502.39	14278945.93	39°19'16.860"N	80°56'09.780"W	769.30	53.767	0.17		



**Actual Wellpath Report**  
 Earnest Unit 2H AWP Proj: 15286  
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**REFERENCE WELLPATH IDENTIFICATION**

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Ritchie County, WV	Well	Earnest Unit 2H
Field	Ritchie	Wellbore	Earnest Unit 2H AWB
Facility	Zinn Pad		

**WELLPATH DATA (349 stations)**

MD	Inclination	Azimuth	TVD	Vert Sact	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
3912.01	20.090	52.910	3684.74	-190.07	459.91	627.43	1658509.28	14278951.13	39°19'16.911"N	80°56'09.693"W	777.94	777.94	53.758	0.97
3937.01	19.630	52.300	3708.25	-192.31	465.07	634.18	1658516.02	14278956.28	39°19'16.962"N	80°56'09.607"W	786.43	786.43	53.746	2.02
3862.01	18.910	51.440	3731.85	-194.58	470.16	640.67	1658522.51	14278961.37	39°19'17.013"N	80°56'09.524"W	794.68	794.68	53.726	3.10
3887.01	18.650	50.860	3755.52	-196.90	475.21	646.94	1658528.78	14278966.42	39°19'17.063"N	80°56'09.444"W	802.72	802.72	53.701	1.28
3912.01	18.660	50.710	3779.21	-199.26	480.27	653.13	1658534.97	14278971.47	39°19'17.112"N	80°56'09.365"W	810.70	810.70	53.672	0.20
3937.01	18.630	50.660	3802.80	-201.62	485.33	659.32	1658541.15	14278976.54	39°19'17.162"N	80°56'09.287"W	818.69	818.69	53.643	0.14
3962.01	18.690	50.670	3826.58	-203.99	490.40	665.50	1658547.34	14278981.60	39°19'17.213"N	80°56'09.208"W	826.67	826.67	53.614	0.24
3987.01	18.650	51.240	3850.25	-206.34	495.47	671.75	1658553.58	14278986.67	39°19'17.263"N	80°56'09.128"W	834.71	834.71	53.588	0.97
4012.01	18.660	51.590	3873.91	-208.64	500.52	678.08	1658559.91	14278991.72	39°19'17.312"N	80°56'09.048"W	842.80	842.80	53.567	0.63
4037.01	18.910	51.850	3897.55	-210.90	505.55	684.45	1658566.28	14278996.74	39°19'17.362"N	80°56'08.967"W	850.91	850.91	53.550	0.39
4062.01	18.720	52.150	3921.22	-213.10	510.51	690.80	1658572.63	14279001.71	39°19'17.411"N	80°56'08.886"W	858.97	858.97	53.535	0.85
4087.01	18.710	52.530	3944.89	-215.26	515.41	697.15	1658578.97	14279006.60	39°19'17.460"N	80°56'08.805"W	866.99	866.99	53.524	0.49
4112.01	18.400	52.960	3968.60	-217.34	520.23	703.49	1658585.30	14279011.42	39°19'17.507"N	80°56'08.724"W	874.95	874.95	53.517	1.36
4137.01	18.950	54.080	3992.28	-219.32	524.99	709.92	1658591.74	14279016.17	39°19'17.554"N	80°56'08.642"W	882.95	882.95	53.517	2.63
4162.01	18.690	54.590	4015.85	-221.14	529.61	716.50	1658598.31	14279020.80	39°19'17.600"N	80°56'08.559"W	890.99	890.99	53.530	2.52
4187.01	19.000	55.890	4039.62	-222.83	534.14	723.16	1658604.97	14279025.33	39°19'17.644"N	80°56'08.474"W	899.04	899.04	53.550	1.66
4212.01	19.160	55.980	4063.24	-224.52	538.72	729.93	1658611.74	14279029.90	39°19'17.690"N	80°56'08.388"W	907.21	907.21	53.571	0.65
4237.01	19.330	55.930	4086.85	-226.23	543.33	736.76	1658618.57	14279034.51	39°19'17.735"N	80°56'08.301"W	915.44	915.44	53.593	0.68
4262.01	19.910	55.560	4110.39	-227.99	548.06	743.70	1658625.50	14279039.24	39°19'17.782"N	80°56'08.212"W	923.83	923.83	53.612	2.37
4287.01	19.680	53.880	4133.92	-229.82	552.95	750.61	1658632.41	14279044.12	39°19'17.830"N	80°56'08.124"W	932.29	932.29	53.622	2.45
4312.01	20.050	52.560	4157.43	-232.08	558.03	757.41	1658639.21	14279049.21	39°19'17.880"N	80°56'08.038"W	940.79	940.79	53.619	2.33
4337.01	20.000	51.330	4180.92	-234.43	563.31	764.15	1658645.95	14279054.48	39°19'17.932"N	80°56'07.952"W	949.34	949.34	53.604	1.70
4362.01	19.990	50.800	4204.41	-236.90	568.68	770.80	1658652.59	14279059.85	39°19'17.986"N	80°56'07.867"W	957.88	957.88	53.581	0.73
4387.01	20.190	50.670	4227.89	-239.44	574.12	777.45	1658659.24	14279065.29	39°19'18.039"N	80°56'07.783"W	966.46	966.46	53.556	0.82
4412.01	20.190	50.590	4251.35	-242.00	579.59	784.12	1658666.91	14279070.76	39°19'18.093"N	80°56'07.698"W	975.08	975.08	53.530	0.17
4437.01	20.350	50.470	4274.81	-244.59	585.10	790.81	1658672.59	14279076.26	39°19'18.148"N	80°56'07.613"W	983.73	983.73	53.503	0.66
4462.01	20.830	50.840	4298.21	-247.19	590.67	797.61	1658679.39	14279081.83	39°19'18.203"N	80°56'07.526"W	992.51	992.51	53.478	1.99
4487.01	20.790	51.100	4321.58	-249.78	596.26	804.51	1658686.28	14279087.42	39°19'18.258"N	80°56'07.438"W	1001.38	1001.38	53.456	0.40
4512.01	20.690	51.540	4344.96	-252.31	601.80	811.42	1658693.19	14279092.95	39°19'18.313"N	80°56'07.350"W	1010.23	1010.23	53.437	0.74
4537.01	20.760	52.020	4368.34	-254.76	607.27	818.37	1658700.14	14279098.43	39°19'18.367"N	80°56'07.262"W	1019.07	1019.07	53.423	0.73





### Actual Wellpath Report

Earnest Unit 2H AWP Proj: 15286

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Richlie County, WV	Well	Earnest Unit 2H
Field	Richlie	Wellbore	Earnest Unit 2H AWP
Facility	Zinn Pad		

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
4562.01	20.730	4391.72	-257.17	612.71	825.36	1658707.12	14279103.86	39°19'18.420"N	80°56'07.173"W	1027.92	53.411	0.24		
4587.01	20.960	4415.08	-259.58	618.16	832.38	1658714.15	14279109.32	39°19'18.474"N	80°56'07.083"W	1036.82	53.401	0.92		
4612.01	21.370	4438.40	-262.03	623.70	839.51	1658721.28	14279114.85	39°19'18.529"N	80°56'06.993"W	1045.84	53.390	1.64		
4637.01	21.700	4461.68	-264.50	629.29	846.71	1658728.47	14279120.43	39°19'18.584"N	80°56'06.901"W	1054.95	53.380	0.06		
4662.01	21.150	4484.98	-266.97	634.85	853.86	1658735.62	14279126.00	39°19'18.639"N	80°56'06.810"W	1064.01	53.369	0.89		
4687.01	21.570	4508.26	-269.47	640.47	861.03	1658742.79	14279131.61	39°19'18.694"N	80°56'06.719"W	1073.11	53.357	1.72		
4712.01	21.490	4531.51	-271.91	646.05	868.31	1658750.06	14279137.19	39°19'18.750"N	80°56'06.626"W	1082.29	53.350	1.99		
4737.01	21.280	4554.79	-274.14	651.45	875.68	1658757.31	14279142.59	39°19'18.803"N	80°56'06.532"W	1091.42	53.353	1.75		
4762.01	21.290	4578.07	-276.19	656.69	883.12	1658764.86	14279147.83	39°19'18.855"N	80°56'06.438"W	1100.52	53.365	1.63		
4787.01	21.190	4601.37	-278.00	661.71	890.65	1658772.40	14279152.84	39°19'18.904"N	80°56'06.342"W	1109.56	53.390	2.80		
4812.01	21.530	4624.66	-279.64	666.60	898.34	1658780.08	14279157.73	39°19'18.952"N	80°56'06.244"W	1118.64	53.423	1.48		
4837.01	21.900	4647.88	-281.25	671.51	906.17	1658787.91	14279162.64	39°19'19.001"N	80°56'06.144"W	1127.86	53.460	1.59		
4862.01	21.810	4671.09	-282.81	676.41	914.09	1658795.82	14279167.53	39°19'19.049"N	80°56'06.043"W	1137.14	53.499	0.51		
4887.01	22.120	4694.27	-284.36	681.31	922.05	1658803.78	14279172.44	39°19'19.098"N	80°56'05.942"W	1146.45	53.539	1.24		
4912.01	21.910	4717.45	-285.95	686.26	930.00	1658811.73	14279177.39	39°19'19.147"N	80°56'05.841"W	1155.80	53.576	1.17		
4937.01	21.880	4740.65	-287.65	691.28	937.86	1658819.58	14279182.40	39°19'19.196"N	80°56'05.741"W	1165.10	53.607	1.18		
4962.01	21.220	4763.86	-289.45	696.38	945.62	1658827.34	14279187.50	39°19'19.246"N	80°56'05.642"W	1174.37	53.631	1.22		
4987.01	21.390	4787.11	-291.35	701.52	953.23	1658834.95	14279192.64	39°19'19.297"N	80°56'05.545"W	1183.65	53.649	1.73		
5012.01	20.990	4810.42	-293.38	706.71	960.63	1658842.34	14279197.83	39°19'19.348"N	80°56'05.451"W	1192.58	53.659	2.50		
5037.01	20.410	4833.81	-295.54	711.94	967.75	1658849.46	14279203.05	39°19'19.400"N	80°56'05.360"W	1201.42	53.660	2.72		
5062.01	20.060	4857.26	-297.79	717.17	974.64	1658856.35	14279208.28	39°19'19.452"N	80°56'05.272"W	1210.06	53.653	1.86		
5087.01	20.170	4880.74	-300.12	722.44	981.43	1658863.13	14279213.55	39°19'19.504"N	80°56'05.186"W	1218.66	53.643	0.69		
5112.01	20.470	4904.18	-302.50	727.78	988.27	1658869.98	14279218.89	39°19'19.556"N	80°56'05.099"W	1227.33	53.632	1.23		
5137.01	20.550	4927.60	-304.84	733.13	995.21	1658876.91	14279224.24	39°19'19.609"N	80°56'05.010"W	1236.09	53.622	0.67		
5162.01	20.900	4950.98	-307.08	738.43	1002.29	1658883.99	14279229.53	39°19'19.662"N	80°56'04.920"W	1244.94	53.619	2.23		
5187.01	20.960	4974.33	-309.23	743.68	1009.52	1658891.21	14279234.78	39°19'19.713"N	80°56'04.828"W	1253.87	53.622	0.77		
5212.01	20.560	4997.71	-311.17	748.72	1016.80	1658898.49	14279239.82	39°19'19.763"N	80°56'04.736"W	1262.72	53.634	3.21		
5237.01	20.280	5021.14	-312.80	753.46	1024.13	1658905.82	14279244.55	39°19'19.810"N	80°56'04.642"W	1271.43	53.658	2.70		
5262.01	20.220	5044.59	-314.28	758.04	1031.47	1658913.15	14279249.13	39°19'19.855"N	80°56'04.549"W	1280.06	53.687	0.24		
5287.01	20.190	5068.05	-315.80	762.65	1038.77	1658920.45	14279253.74	39°19'19.901"N	80°56'04.456"W	1288.67	53.715	0.89		



**Actual Wellpath Report**  
 Earnest Unit 2H AWP Proj: 15286  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Ritchie County, WV	Well	Earnest Unit 2H
Field	Ritchie	Wellbore	Earnest Unit 2H AWP
Facility	Zinn Pad		

WELLPATH DATA (349 stations)													
MD	Inclination	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	Comments	
5312.01	20.320	56.280	5091.51	-317.46	767.38	1046.01	1658927.69	14279258.47	39°19'19.947"N	80°56'04.364"W	1297.31	53.735	1.65
5337.01	19.866	55.120	5114.99	-319.28	772.22	1053.11	1658934.79	14279263.31	39°19'19.995"N	80°56'04.273"W	1305.89	53.748	2.43
5362.01	19.820	54.380	5138.50	-321.21	777.11	1060.04	1658941.71	14279268.20	39°19'20.044"N	80°56'04.185"W	1314.38	53.755	1.02
5387.01	19.740	53.870	5162.03	-323.22	782.07	1066.89	1658948.56	14279273.16	39°19'20.092"N	80°56'04.098"W	1322.84	53.757	0.76
5412.01	19.830	54.370	5185.55	-325.24	787.03	1073.75	1658955.42	14279278.12	39°19'20.141"N	80°56'04.011"W	1331.30	53.759	0.77
5437.01	19.720	54.990	5209.08	-327.17	791.92	1080.65	1658962.32	14279283.00	39°19'20.190"N	80°56'03.923"W	1339.76	53.765	0.95
5462.01	19.866	55.400	5232.60	-329.03	796.75	1087.60	1658969.26	14279287.83	39°19'20.237"N	80°56'03.834"W	1348.22	53.774	0.79
5487.01	19.580	55.390	5256.13	-330.86	801.54	1094.54	1658976.20	14279292.62	39°19'20.285"N	80°56'03.746"W	1356.65	53.784	1.12
5512.01	19.600	54.980	5279.69	-332.70	806.33	1101.43	1658983.08	14279297.41	39°19'20.332"N	80°56'03.658"W	1365.03	53.793	0.56
5537.01	19.520	53.840	5303.24	-334.66	811.20	1108.23	1658989.89	14279302.27	39°19'20.380"N	80°56'03.572"W	1373.40	53.797	1.56
5562.01	19.050	53.040	5326.84	-336.72	816.12	1114.86	1658996.52	14279307.19	39°19'20.429"N	80°56'03.487"W	1381.66	53.795	2.16
5587.01	19.096	52.260	5350.47	-338.87	821.07	1121.36	1659003.01	14279312.14	39°19'20.478"N	80°56'03.405"W	1389.82	53.788	1.03
5612.01	18.730	51.630	5374.12	-341.09	826.07	1127.74	1659009.38	14279317.14	39°19'20.527"N	80°56'03.323"W	1397.92	53.777	1.66
5637.01	19.020	51.720	5397.78	-343.35	831.08	1134.08	1659015.73	14279322.15	39°19'20.576"N	80°56'03.243"W	1406.00	53.765	1.17
5662.01	19.250	51.940	5421.39	-345.62	836.15	1140.63	1659022.17	14279327.21	39°19'20.626"N	80°56'03.160"W	1414.19	53.754	1.00
5687.01	19.430	52.460	5444.98	-347.86	841.22	1147.07	1659028.71	14279332.29	39°19'20.677"N	80°56'03.077"W	1422.47	53.745	0.97
5712.01	19.490	52.890	5468.55	-350.05	846.27	1153.69	1659035.33	14279337.33	39°19'20.726"N	80°56'02.993"W	1430.80	53.739	0.62
5737.01	19.820	53.200	5492.10	-352.21	851.33	1160.41	1659042.05	14279342.39	39°19'20.776"N	80°56'02.907"W	1439.21	53.735	1.38
5762.01	19.870	53.440	5515.61	-354.34	856.40	1167.22	1659048.85	14279347.45	39°19'20.826"N	80°56'02.821"W	1447.69	53.732	0.38
5787.01	20.200	54.210	5539.10	-356.42	861.46	1174.13	1659055.76	14279352.51	39°19'20.876"N	80°56'02.733"W	1456.26	53.733	1.69
5812.01	20.610	54.560	5562.53	-358.46	866.53	1181.22	1659062.84	14279357.58	39°19'20.926"N	80°56'02.642"W	1464.97	53.737	1.71
5837.01	20.830	54.790	5585.91	-360.48	871.64	1188.44	1659070.06	14279362.69	39°19'20.977"N	80°56'02.551"W	1473.82	53.742	0.94
5862.01	21.320	54.250	5609.24	-362.56	876.86	1195.76	1659077.38	14279367.91	39°19'21.028"N	80°56'02.457"W	1482.81	53.747	2.11
5938.00	21.640	50.350	5679.96	-370.05	893.87	1217.76	1659099.37	14279384.91	39°19'21.196"N	80°56'02.177"W	1510.61	53.720	1.93
6037.00	21.690	45.630	5771.97	-382.49	918.32	1244.89	1659126.49	14279409.35	39°19'21.438"N	80°56'01.832"W	1546.95	53.585	1.76
6084.00	20.620	53.630	5815.81	-387.82	929.30	1257.77	1659139.36	14279420.33	39°19'21.546"N	80°56'01.668"W	1563.83	53.541	8.55
6131.00	19.800	69.880	5859.95	-389.59	936.95	1271.82	1659153.51	14279427.98	39°19'21.622"N	80°56'01.488"W	1579.76	53.623	12.03
6178.00	18.460	78.030	5904.36	-388.00	941.24	1286.67	1659168.26	14279432.26	39°19'21.664"N	80°56'01.300"W	1594.19	53.814	6.35
6226.00	18.160	95.290	5949.97	-383.22	942.12	1301.57	1659183.14	14279433.14	39°19'21.673"N	80°56'01.110"W	1606.76	54.102	11.28
6273.00	19.060	115.650	5994.56	-374.16	938.12	1315.79	1659197.36	14279429.14	39°19'21.633"N	80°56'00.929"W	1615.98	54.512	13.89



# Actual Wellpath Report

Ernest Unit 2H AWP Proj: 15286  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Richlie County, WV	Well	Ernest Unit 2H
Field	Richlie	Wellbore	Ernest Unit 2H AWB
Facility	Zinn Pad		

WELLPATH DATA (349 stations) † = interpolated/extrapolated station														
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
6320.00	20.830	126.030	6038.75	-361.38	1329.47	1659211.04	14279420.91	39°19'21.551"N	80°56'00.55"W	1622.40	55.030	L1		
6367.00	24.000	128.810	6082.20	-345.93	918.97	1343.68	1659225.25	39°19'21.444"N	80°56'00.575"W	1627.88	55.631	L1		
6414.00	28.120	129.920	6124.41	-327.78	905.87	1359.63	1659241.19	39°19'21.314"N	80°56'00.372"W	1633.77	56.326	L1		
6462.00	32.640	132.910	6165.81	-306.05	889.79	1377.80	1659259.35	39°19'21.165"N	80°56'00.141"W	1640.14	57.146	L1		
6508.00	36.170	136.090	6204.58	-281.68	871.16	1396.71	1659278.25	39°19'21.155"N	80°55'59.900"W	1648.12	58.047	L1		
6555.00	40.580	139.970	6240.64	-254.82	849.81	1415.76	1659297.29	39°19'20.760"N	80°55'59.658"W	1651.28	59.023	L1		
6588.00†	43.540	142.745	6263.66	-234.91	833.68	1428.71	1659310.24	39°19'20.600"N	80°55'59.493"W	1654.16	59.736	L1	Middlesex: 6586 MD	
6603.00	45.190	144.140	6275.81	-223.40	824.13	1435.79	1659317.31	39°19'20.506"N	80°55'59.403"W	1655.50	60.144	L1		
6650.00	49.470	147.720	6307.67	-189.61	795.50	1455.11	1659336.63	39°19'20.222"N	80°55'59.158"W	1658.36	61.335	L1		
6697.00	54.330	151.080	6336.66	-163.04	763.67	1473.90	1659355.40	39°19'19.908"N	80°55'58.819"W	1659.99	62.610	L1		
6745.00	58.670	153.390	6363.15	-133.23	728.25	1492.52	1659374.02	39°19'19.357"N	80°55'58.683"W	1660.71	63.991	L1		
6758.00†	59.831	153.675	6369.80	-102.09	718.25	1497.50	1659378.99	39°19'19.459"N	80°55'58.419"W	1660.84	64.376	L1	Burkelt 6758 MD	
6792.00	62.870	154.390	6386.10	-72.32	691.43	1510.56	1659392.05	39°19'19.193"N	80°55'58.453"W	1661.28	65.405	L1		
6822.00†	65.741	154.856	6399.10	-45.33	667.01	1522.14	1659403.63	39°19'18.952"N	80°55'58.306"W	1661.87	66.337	L1	Tully: 6822 MD	
6841.00	67.560	154.608	6408.63	-27.91	651.20	1529.51	1659411.00	39°19'18.796"N	80°55'58.213"W	1662.37	66.838	L1		
6886.00	73.240	156.850	6421.72	14.44	612.48	1546.74	1659428.22	39°19'18.413"N	80°55'57.994"W	1663.59	68.397	L1		
6893.00†	74.086	157.182	6423.69	21.15	606.30	1549.36	1659430.84	39°19'18.352"N	80°55'57.960"W	1663.77	68.629	L1	Marcellus: 6893 MD	
6936.00	79.290	159.170	6433.59	62.98	567.47	1659446.38	14279058.64	39°19'17.968"N	80°55'57.763"W	1664.62	70.068	L1		
6980.00	84.110	160.830	6439.94	106.48	526.57	1659471.25	14279017.75	39°19'17.663"N	80°55'57.574"W	1665.23	71.566	L1		
7030.00	89.600	161.110	6442.68	156.31	479.39	1659477.52	14278970.59	39°19'17.087"N	80°55'57.367"W	1666.50	73.282	L1		
7075.00	89.140	161.090	6443.18	201.24	436.82	1610.64	1659492.09	39°19'16.676"N	80°55'57.182"W	1668.82	74.826	L1		
7169.00	89.290	160.880	6444.47	295.13	348.23	1642.03	1659523.47	39°19'15.800"N	80°55'56.784"W	1678.55	78.027	L1		
7263.00	90.150	161.050	6444.93	389.03	259.64	1673.46	1659554.89	39°19'14.925"N	80°55'56.385"W	1693.49	81.181	L1		
7358.00	90.400	158.710	6444.47	483.97	170.44	1706.14	1659587.55	39°19'14.043"N	80°55'55.970"W	1714.63	84.295	L1		
7452.00	89.820	156.420	6444.29	577.95	83.89	1742.77	1659624.17	39°19'13.187"N	80°55'55.505"W	1744.78	87.244	L1		
7546.00	89.910	152.670	6444.51	671.72	-0.62	1783.90	1659665.29	39°19'12.351"N	80°55'54.982"W	1783.90	90.020	L1		
7641.00	89.860	153.210	6444.71	766.37	-86.22	1827.12	1659708.49	39°19'11.515"N	80°55'54.433"W	1829.11	92.671	L1		
7735.00	90.250	153.950	6444.63	860.10	-169.40	1868.94	1659750.29	39°19'10.683"N	80°55'53.901"W	1876.61	95.179	L1		
7830.00	89.780	156.070	6444.60	954.97	-255.51	1909.08	1659790.41	39°19'09.831"N	80°55'53.392"W	1926.10	97.623	L1		
7924.00	89.820	157.780	6444.93	1048.96	-341.98	1945.82	1659827.23	39°19'08.876"N	80°55'52.924"W	1975.74	99.968	L1		



# Actual Wellpath Report

Earnest Unit 2H AWP Proj: 15286



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Richlie County, WV	Well	Earnest Unit 2H
Field	Richlie	Wellbore	Earnest Unit 2H AWB
Facility	Zinn Pad		

WELLPATH DATA (349 stations)														
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
8019.00	90.090	158.730	6445.01	-430.52	1980.34	1659861.64	14278061.05	39°19'08.10"N	80°55'52.48"W	2028.59	102.265	171	2.07	
813.00	90.890	158.690	6444.20	-1237.91	2013.70	1659894.99	14277973.21	39°18'07.23"N	80°55'52.06"W	2079.36	104.436	171	1.40	
8208.00	90.150	159.190	6443.34	1332.89	-607.04	1659929.11	14277884.60	39°19'06.35"N	80°55'51.62"W	2135.92	106.512	171	0.94	
8302.00	89.940	160.150	6443.27	1426.84	-695.19	1659961.76	14277796.49	39°19'05.48"N	80°55'51.21"W	2193.57	108.477	171	1.05	
8397.00	90.490	162.450	6442.91	-1521.67	-785.17	1659992.20	14277706.55	39°19'04.59"N	80°55'50.82"W	2252.24	110.403	171	2.49	
8491.00	90.520	160.580	6442.08	1615.47	-874.31	1660021.99	14277617.44	39°19'03.71"N	80°55'50.45"W	2312.41	112.216	171	1.99	
8586.00	91.110	156.690	6440.73	1710.44	-962.75	1660056.58	14277529.03	39°19'02.83"N	80°55'50.01"W	2378.87	113.873	171	4.14	
8680.00	89.880	160.430	6439.92	1804.41	-1048.99	1660093.95	14277442.83	39°19'01.86"N	80°55'49.53"W	2448.80	115.364	171	1.34	
8775.00	90.030	158.170	6439.99	1899.40	-1136.63	1660130.60	14277355.23	39°19'01.12"N	80°55'49.07"W	2520.26	116.808	171	1.84	
8869.00	90.550	160.890	6439.62	1993.35	-1224.68	1660163.45	14277267.21	39°19'00.24"N	80°55'48.65"W	2590.10	118.218	171	2.95	
8964.00	90.280	160.660	6438.83	2088.24	-1314.33	1660194.88	14277177.60	39°18'59.36"N	80°55'48.25"W	2660.96	119.599	171	0.53	
9058.00	89.690	159.690	6438.85	2182.17	-1402.70	1660226.90	14277089.26	39°18'58.48"N	80°55'47.84"W	2733.14	120.878	171	1.03	
9153.00	89.970	160.760	6439.13	2277.09	-1492.10	1660259.03	14276999.90	39°18'57.60"N	80°55'47.43"W	2807.25	122.108	171	1.16	
9247.00	89.970	159.280	6439.18	2371.02	-1580.44	1660291.13	14276911.60	39°18'56.73"N	80°55'47.03"W	2881.99	123.256	171	1.57	
9342.00	90.770	161.660	6438.67	2465.98	-1667.82	1660328.32	14276824.25	39°18'55.86"N	80°55'46.59"W	2961.49	124.276	171	5.01	
9436.00	90.400	151.660	6437.61	2559.64	-1751.65	1660370.79	14276740.45	39°18'55.03"N	80°55'46.09"W	3044.15	125.129	171	3.14	
9530.00	91.570	151.100	6435.99	2653.01	-1834.15	1660415.79	14276657.99	39°18'54.24"N	80°55'45.44"W	3128.72	125.890	171	1.38	
9625.00	90.000	153.120	6434.69	2747.51	-1918.10	1660460.20	14276574.07	39°18'53.39"N	80°55'44.88"W	3214.20	126.638	171	2.69	
9719.00	88.740	157.190	6435.73	2841.38	-2003.38	1660499.67	14276488.83	39°18'52.55"N	80°55'44.38"W	3297.08	127.418	171	4.53	
9814.00	89.510	160.820	6437.18	2936.33	-2082.04	1660533.69	14276400.20	39°18'51.67"N	80°55'43.94"W	3378.34	128.261	171	3.91	
9908.00	89.970	163.300	6437.60	3030.07	-2181.46	1660562.63	14276310.81	39°18'50.79"N	80°55'43.58"W	3456.85	129.128	171	2.68	
10002.00	90.340	164.640	6437.35	3123.64	-2271.81	1660588.57	14276220.51	39°18'49.89"N	80°55'43.25"W	3534.40	129.999	171	1.48	
10097.00	90.430	157.270	6436.71	3218.34	-2361.54	1660619.54	14276130.81	39°18'49.01"N	80°55'42.85"W	3616.14	130.772	171	7.76	
10191.00	90.280	153.430	6436.13	3312.23	-2446.96	1660658.72	14276045.42	39°18'48.16"N	80°55'42.36"W	3701.81	131.377	171	4.09	
10286.00	90.370	151.680	6435.59	3406.81	-2531.26	1660702.48	14275961.15	39°18'47.33"N	80°55'41.80"W	3780.55	131.896	171	1.84	
10380.00	90.430	150.900	6434.93	3500.18	-2613.70	1660747.62	14275878.75	39°18'46.51"N	80°55'41.23"W	3879.34	132.357	171	0.83	
10475.00	90.460	153.350	6434.19	3594.69	-2697.67	1660792.01	14275794.81	39°18'45.68"N	80°55'40.66"W	3968.86	132.821	171	2.58	
10569.00	90.620	160.470	6433.31	3688.61	-2784.08	1660828.84	14275708.44	39°18'44.83"N	80°55'40.19"W	4054.79	133.363	171	7.58	
10664.00	90.580	158.280	6432.31	3783.57	-2872.98	1660862.28	14275619.57	39°18'43.95"N	80°55'39.77"W	4140.37	133.939	171	2.31	
10758.00	90.520	159.760	6431.41	3877.54	-2960.75	1660895.92	14275531.84	39°18'43.08"N	80°55'39.34"W	4225.69	134.479	171	1.56	



## Actual Wellpath Report

Earnest Unit 2H AWP Proj: 15286  
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Operator	ANTERO RESOURCES CORPORATION		
Area	Well	Wellbore	Wellbore
Field	Wellbore		
Facility	Zinn Pad		

WELLPATH DATA (349 stations)												
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]
10853.00	90.800	6430.32	3972.27	-3051.06	3044.40	1660925.28	14275441.56	39°18'42.192"N	80°55'38.974"W	4310.14	135.063	4.70
10947.00	91.230	163.380	6428.65	-4065.76	-3141.31	3070.62	1660951.49	39°18'41.300"N	80°55'38.642"W	4392.78	136.652	1.00
11041.00	91.720	161.120	6426.23	-4159.45	-3230.80	3099.26	1660980.12	39°18'40.415"N	80°55'38.278"W	4477.00	136.190	2.46
11136.00	90.550	160.350	6424.35	-4254.31	-3320.46	3130.60	1661011.44	39°18'39.529"N	80°55'37.880"W	4563.57	136.686	1.47
11230.00	89.880	160.430	6424.00	-4348.22	-3409.01	3162.15	1661042.98	39°18'38.653"N	80°55'37.480"W	4649.79	137.151	0.72
11324.00	90.180	164.500	6423.95	-4441.91	-3498.62	3190.46	1661071.28	39°18'37.767"N	80°55'37.121"W	4734.92	137.638	4.34
11419.00	90.680	168.280	6423.23	-4535.84	-3590.94	3212.81	1661093.62	39°18'36.855"N	80°55'36.837"W	4818.40	138.181	4.01
11513.00	90.490	161.080	6422.27	-4629.12	-3681.53	3237.63	1661118.43	39°18'35.959"N	80°55'36.523"W	4902.65	138.671	7.66
11608.00	91.600	152.820	6420.54	-4724.01	-3768.86	3274.79	1661155.57	39°18'35.096"N	80°55'36.051"W	4992.85	139.012	8.77
11703.00	89.660	150.180	6419.49	-4818.40	-3852.33	3320.11	1661200.88	39°18'34.270"N	80°55'35.475"W	5085.62	139.244	3.46
11797.00	90.550	153.400	6419.32	-4911.85	-3935.15	3364.54	1661245.29	39°18'33.452"N	80°55'34.911"W	5177.40	139.470	3.55
11891.00	90.280	158.960	6418.64	-5005.77	-4021.11	3402.48	1661283.22	39°18'32.602"N	80°55'34.429"W	5267.47	139.764	5.92
11986.00	90.860	160.030	6417.69	-5100.72	-4110.08	3435.76	1661316.48	39°18'31.722"N	80°55'34.006"W	5356.98	140.107	1.28
12080.00	91.320	152.310	6415.90	-5194.59	-4195.99	3473.70	1661354.41	39°18'30.873"N	80°55'33.525"W	5447.29	140.380	8.23
12174.00	89.940	158.120	6414.87	-5288.14	-4279.20	3517.41	1661398.10	39°18'30.050"N	80°55'33.296"W	5539.29	140.581	1.47
12269.00	90.120	158.100	6414.82	-5382.99	-4365.39	3557.26	1661437.93	39°18'29.198"N	80°55'32.463"W	5631.23	140.824	6.14
12363.00	90.650	159.630	6414.19	-5476.97	-4453.06	3591.15	1661471.81	39°18'28.331"N	80°55'32.033"W	5720.68	141.116	1.72
12458.00	91.290	158.460	6412.58	-5571.93	-4541.77	3625.12	1661505.77	39°18'27.454"N	80°55'31.602"W	5811.12	141.404	1.40
12552.00	89.690	154.020	6411.77	-5665.87	-4627.77	3662.98	1661543.61	39°18'26.603"N	80°55'31.121"W	5902.01	141.638	5.02
12647.00	89.080	154.500	6412.79	-5760.67	-4713.34	3704.24	1661584.85	39°18'25.757"N	80°55'30.597"W	5994.74	141.836	0.82
12741.00	88.950	157.610	6414.41	-5854.59	-4799.22	3742.38	1661622.98	39°18'24.908"N	80°55'30.113"W	6085.88	142.053	3.31
12836.00	89.480	157.790	6415.71	-5949.58	-4887.11	3778.42	1661659.01	39°18'24.039"N	80°55'29.655"W	6177.41	142.291	0.59
12930.00	89.540	154.850	6416.52	-6043.53	-4973.18	3816.17	1661696.74	39°18'23.188"N	80°55'29.176"W	6268.63	142.499	3.13
13025.00	88.860	155.820	6417.84	-6138.43	-5059.51	3855.81	1661736.36	39°18'22.335"N	80°55'28.673"W	6361.28	142.689	1.25
13119.00	88.920	158.040	6419.66	-6232.39	-5146.28	3891.88	1661772.41	39°18'21.477"N	80°55'28.215"W	6452.20	142.902	3.43
13213.00	88.950	160.340	6421.41	-6326.33	-5234.42	3924.50	1661805.02	39°18'20.605"N	80°55'27.801"W	6542.23	143.139	1.38
13308.00	89.260	169.280	6422.90	-6421.26	-5323.57	3957.28	1661837.79	39°18'19.724"N	80°55'27.384"W	6633.28	143.375	1.16
13402.00	89.630	158.470	6423.81	-6515.25	-5411.25	3991.16	1661871.66	39°18'18.857"N	80°55'26.964"W	6723.91	143.589	0.95
13497.00	90.060	158.640	6424.06	-6610.24	-5499.67	4025.89	1661906.37	39°18'17.983"N	80°55'26.514"W	6815.73	143.795	0.49
13591.00	88.890	158.170	6424.92	-6704.23	-5587.07	4060.48	1661940.95	39°18'17.119"N	80°55'26.074"W	6906.72	143.992	1.34



# Actual Wellpath Report

Earnest Unit 2H AWP Proj: 15286

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Richlie County, WV	Well	Earnest Unit 2H
Field	Richlie	Wellbore	Earnest Unit 2H AWP
Facility	Zinn Pad		

## WELLPATH DATA (349 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
13686.00	89.320	158.120	6426.41	6799.22	-5675.23	4095.85	1661976.30	14272818.45	39°18'16.24"N	80°55'25.62"W	6998.87	144.182	0.46	
13780.00	89.290	157.150	6427.55	6893.21	-5762.15	4131.61	1662012.05	14272731.57	39°18'15.38"N	80°55'25.17"W	7090.31	144.358	1.03	
13875.00	89.570	155.760	6428.49	6988.17	-5849.23	4169.56	1662049.98	14272644.52	39°18'14.52"N	80°55'24.69"W	7183.23	144.517	1.49	
13969.00	89.170	154.500	6429.53	7082.05	-5934.51	4209.09	1662089.50	14272559.27	39°18'13.68"N	80°55'24.18"W	7275.63	144.654	1.41	
14064.00	88.280	156.380	6431.64	7176.94	-6020.89	4248.56	1662128.95	14272472.93	39°18'12.82"N	80°55'23.66"W	7368.95	144.792	2.19	
14158.00	88.890	158.780	6433.96	7270.90	-6107.75	4284.40	1662164.78	14272386.10	39°18'11.97"N	80°55'23.23"W	7460.61	144.952	2.63	
14253.00	89.510	159.890	6435.29	7365.86	-6196.63	4317.92	1662198.28	14272297.26	39°18'11.09"N	80°55'22.80"W	7552.66	145.131	1.34	
14348.00	89.510	160.870	6436.10	7460.76	-6286.11	4349.82	1662230.17	14272207.18	39°18'10.20"N	80°55'22.40"W	7644.35	145.318	1.03	
14442.00	89.690	163.160	6436.76	7554.51	-6375.51	4378.84	1662259.18	14272118.46	39°18'09.33"N	80°55'22.03"W	7734.42	145.518	2.44	
14537.00	90.000	161.550	6437.01	7649.22	-6466.03	4407.63	1662287.96	14272027.96	39°18'08.42"N	80°55'21.66"W	7825.39	145.719	1.73	
14631.00	90.060	156.740	6436.97	7743.17	-6553.85	4441.09	1662321.40	14271940.18	39°18'07.560"N	80°55'21.24"W	7916.83	145.877	5.12	
14725.00	89.660	150.910	6437.20	7836.89	-6638.17	4482.53	1662362.83	14271855.89	39°18'06.726"N	80°55'20.71"W	8009.90	145.970	6.22	
14820.00	88.710	149.930	6438.55	7931.07	-6720.78	4529.42	1662409.71	14271773.32	39°18'05.910"N	80°55'20.12"W	8104.60	146.022	1.44	
14914.00	89.570	158.750	6439.96	8024.79	-6805.42	4570.08	1662450.35	14271688.72	39°18'05.073"N	80°55'19.605"W	8197.52	146.117	9.43	
15009.00	89.690	160.520	6440.57	8119.74	-6894.47	4603.14	1662483.39	14271599.70	39°18'04.192"N	80°55'18.186"W	8289.91	146.271	1.87	
15103.00	89.780	162.550	6441.01	8213.54	-6983.63	4632.91	1662513.15	14271510.58	39°18'03.311"N	80°55'18.808"W	8380.63	146.440	2.16	
15197.00	89.820	162.720	6441.34	8307.22	-7073.34	4660.97	1662541.19	14271420.90	39°18'02.424"N	80°55'18.452"W	8470.94	146.617	0.19	
15261.00	90.430	160.490	6441.20	8371.08	-7134.07	4681.16	1662561.38	14271360.20	39°18'01.823"N	80°55'18.196"W	8532.77	146.728	3.61	
15286.00	90.430	160.490	6441.01	8396.06	-7157.63	4689.51	1662569.73	14271336.64	39°18'01.591"N	80°55'18.090"W	8557.06	146.768	0.00	Projected MD @ TD: 15286

HOLE & CASING SECTIONS - Ret Wellbore: Earnest Unit 2H AWP									
Ret Wellpath: Earnest Unit 2H AWP Proj: 15286									
String/Diameter	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	End N/S	Start EW	End EW
20in Conductor	25.00	65.00	40.00	25.00	65.00	0.00	0.00	0.00	0.02
13.375in Casing Surface	25.00	630.00	605.00	25.00	630.00	0.00	0.00	0.00	1.14
9.625in Casing Intermediate	25.00	2574.00	2549.00	25.00	2527.54	0.00	0.00	0.00	277.04



## Actual Wellpath Report

Earnest Unit 2H AWP Proj: 15286'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Ritchie County, WV	Well	Earnest Unit 2H
Field	Ritchie	Wellbore	Earnest Unit 2H AWB
Facility	Zinn Pad		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Earnest Unit 2H POE Rev-1	6419.00	619.56	1535.19	1659416.68	14279110.71	39°19'18.483"N	80°55'58.141"W	point
Earnest Unit 2H BHL Rev-1	6443.00	-7139.47	4686.28	1662566.50	14271354.80	39°18'01.770"N	80°55'18.131"W	point
Earnest Unit 2H LP Rev-1	6443.00	481.07	1591.44	1659472.90	14278972.27	39°19'17.114"N	80°55'57.426"W	point

WELLPATH COMPOSITION - Ref Wellbore: Earnest Unit 2H AWB Ref Wellpath: Earnest Unit 2H AWP Proj: 15286'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	5862.01	SDI Keeper v1.04	01 SDI Gyro Std Keeper (100' - 5850.01')	Earnest Unit 2H AWB
5862.01	15261.00	BHI AutoTrak Curve (Short)	02 BHI AT Curve <8-1/2">(5862.01')(5938'-15261')	Earnest Unit 2H AWB
15261.00	15286.00	Blind Drilling (std)	Projection to bit	Earnest Unit 2H AWB



## Actual Wellpath Report

Earnest Unit 2H AWP Proj: 15286'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Ritchie County, WV	Well	Earnest Unit 2H
Field	Ritchie	Wellbore	Earnest Unit 2H AWB
Facility	Zinn Pad		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
112.00	0.180	124.940	112.00	SDI Gyro Std Keeper (112' - 5862.01')	
5938.00	21.640	50.350	5679.96	BHI AT Curve <8-1/2">(5862.01')(5938'-15261')	
6586.00	43.540	142.745	6263.66	Middlesex: 6586' MD	
6758.00	59.831	153.675	6369.80	Burkett: 6758' MD	
6822.00	65.741	154.856	6399.10	Tully: 6822' MD	
6893.00	74.086	157.182	6423.69	Marcellus: 6893' MD	
15286.00	90.430	160.490	6441.01	Projected MD @ TD: 15286'	

COMMENTS
<p>Wellpath general comments                      API: 47-085-10276-0000                      BHI Job #: 7973826                      Rig: Patterson 343                      Duration: 05.25.2016-05.28.2016                      SDI Gyro Std Keeper (112' - 5862.01')                      BHI AT Curve &lt;8-1/2"&gt;(5862.01')(5938'-15261')                      Middlesex: 6586' MD                      Burkett: 6758' MD                      Tully: 6822' MD                      Marcellus: 6893' MD                      Projected MD @ TD: 15286'</p>