



ANTERO RESOURCES CORPORATION

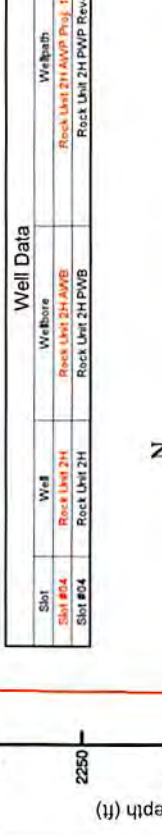


Location: Doddridge Co., WV
 Field: Doddridge
 Facility: Balli Pad
 Slot: Slot #04
 Well: Rock Unit 2H
 Wellbore: Rock Unit 2H PWB

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
Balli Pad	168440.110	14272033.240	80°50'39.126"W
Slot	Local E (ft)	Grid North (US ft)	Longitude
Slot #04	20.00	14272033.690	80°50'38.872"W
Comment	Rock Unit 2H	32ft	
Frontier 32 (RKB) to Mud line (At Slot: Slot #04)		-1135ft	
Mean Sea Level to Mud line (At Slot: Slot #04)		1167ft	
Frontier 32 (RKB) to Mean Sea Level			

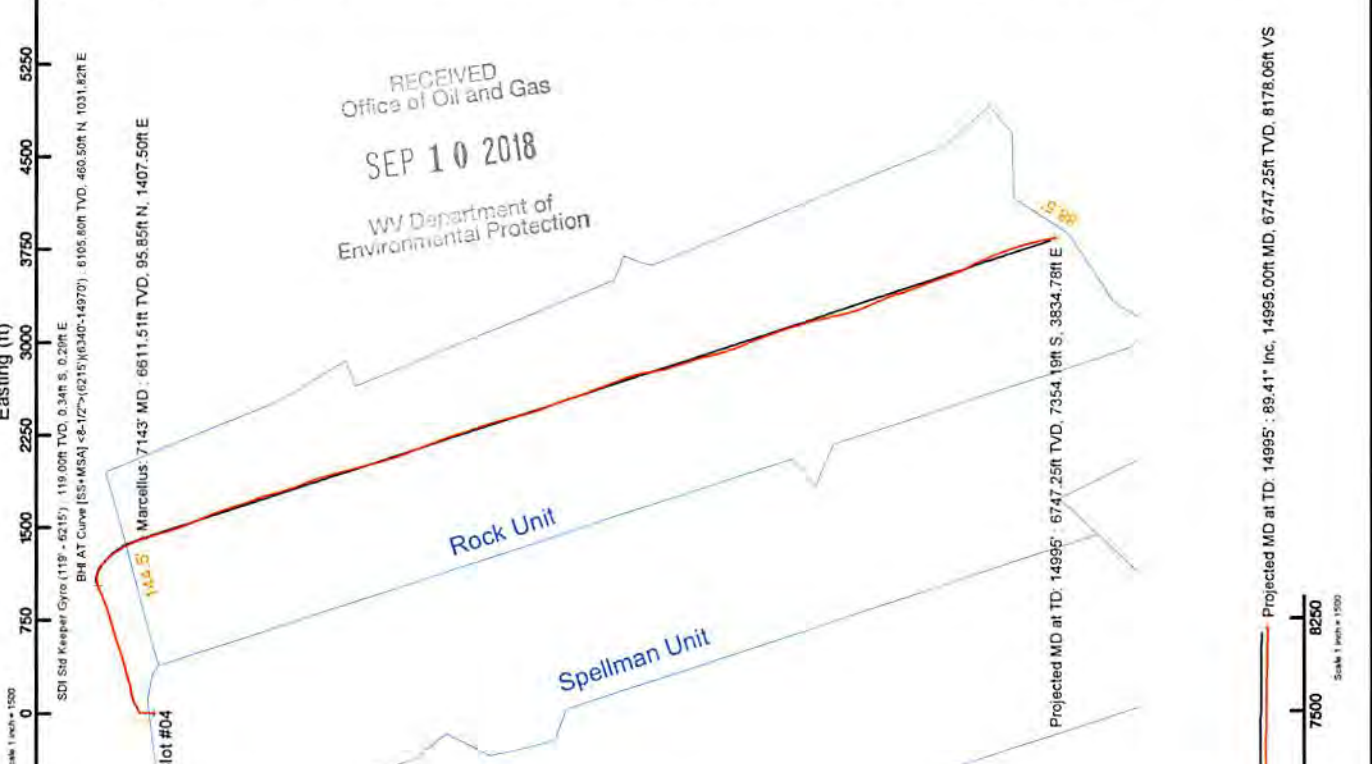
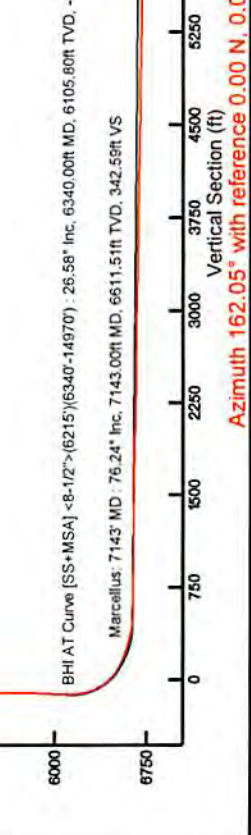
SDI Sid Keeper Gyro (119° - 62'15") : 0.59" Inc, 119.00ft MD, 119.00ft TVD, 0.41ft VS

Well Data			
Slot	Well	Wellbore	Wellbath
Slot #04	Rock Unit 2H	Rock Unit 2H AWB	Rock Unit 2H PWB Proj. 14995
Slot #04	Rock Unit 2H	Rock Unit 2H PWB	Rock Unit 2H PWB Rev-B-0



API: 47-017-06637-0000
 BHI Job #: 7957072
 Rig: Frontier 32
 Duration: 05.17.2016-05.19.2016

BOCM (1945.2 to 2017.2) Dip: 66.89° Field: 5209 A NT
 Magnetic North is 8.51 degrees West of True North (2015/12/01)
 The BHI AT Curve is based on the Easting and Northing coordinates of the wellbore.
 To convert azimuth from Magnetic to Grid subtract 8.51 degrees.



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Projected MD at TD: 14995' : 89.41" inc, 14995.00ft MD, 6747.25ft TVD, 8178.06ft VS
 Scale 1 inch = 1500
 Vertical Section (ft)
 Azimuth 162.05° with reference 0.00 N, 0.00 E



Antero Resources Corporation
 Doddridge County, West Virginia
 12/21/2018



Actual Wellpath Report

Rock Unit 2H AWP Proj: 14995'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Rock Unit 2H
Field	Doddridge	Wellbore	Rock Unit 2H AWB
Facility	Ball Pad		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Hareluk
Scale	0.999602	Report Generated	5/26/2016 at 12:26:19 PM
Convergence at slot	0.10° East	Database/Source file	WA_MPL_EASTERNUS_Defn/Rock_Unit_2H_AWP_Proj_14995_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.45	20.00	1684510.10	14272033.69	39°18'08.202"N	80°50'38.872"W
Facility Reference Pt			1684490.11	14272033.24	39°18'08.198"N	80°50'39.126"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Frontier 32 (RKB) to Facility Vertical Datum	32.00ft
Horizontal Reference Pt	Slot	Frontier 32 (RKB) to Mean Sea Level	1167.00ft
Vertical Reference Pt	Frontier 32 (RKB)	Frontier 32 (RKB) to Mud Line at Slot (Slot #04)	32.00ft
MD Reference Pt	Frontier 32 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	162.05°

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Actual Wellpath Report

Rock Unit 2H AWP Proj: 14995
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddrige Co., WV
Field	Doddrige
Facility	Balli Pad
Slot	Slot #04
Rock Unit	Rock Unit 2H
	Rock Unit 2H AWP

WELLPATH DATA (355 stations) † = Interpolated/extrapolated station												
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir
(m)	(°)	(°)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(°/100m)
0.007	0.000	139.840	0.00	0.00	0.00	0.00	1684510.10	14272033.69	39°18'08.202"N	80°50'38.872"W	0.00	0.00
32.00	0.000	139.840	32.00	0.00	0.00	0.00	1684510.10	14272033.69	39°18'08.202"N	80°50'38.872"W	0.00	0.00
119.00	0.590	139.840	119.00	0.41	-0.34	0.29	1684510.39	14272033.35	39°18'08.198"N	80°50'38.868"W	0.45	139.840
144.00	0.590	130.890	144.00	0.64	-0.52	0.47	1684510.57	14272033.17	39°18'08.197"N	80°50'38.866"W	0.70	138.210
169.00	0.570	137.160	169.00	0.87	-0.70	0.65	1684510.75	14272032.99	39°18'08.195"N	80°50'38.863"W	0.96	137.091
194.00	0.590	142.360	193.99	1.10	-0.89	0.81	1684510.91	14272032.80	39°18'08.193"N	80°50'38.861"W	1.21	137.658
219.00	0.510	146.870	218.99	1.33	-1.09	0.95	1684511.05	14272032.60	39°18'08.191"N	80°50'38.859"W	1.45	138.781
244.00	0.450	150.670	243.99	1.53	-1.27	1.06	1684511.16	14272032.42	39°18'08.189"N	80°50'38.858"W	1.65	140.024
269.00	0.300	156.380	268.99	1.69	-1.41	1.14	1684511.24	14272032.28	39°18'08.188"N	80°50'38.857"W	1.81	141.180
294.00	0.130	146.420	293.99	1.79	-1.50	1.18	1684511.28	14272032.19	39°18'08.187"N	80°50'38.857"W	1.91	141.774
319.00	0.060	181.130	318.99	1.83	-1.53	1.19	1684511.29	14272032.16	39°18'08.187"N	80°50'38.856"W	1.94	142.086
344.00	0.170	320.880	343.99	1.80	-1.52	1.17	1684511.27	14272032.17	39°18'08.187"N	80°50'38.857"W	1.92	142.356
369.00	0.290	363.240	368.99	1.71	-1.43	1.14	1684511.24	14272032.26	39°18'08.188"N	80°50'38.857"W	1.83	141.367
394.00	0.700	350.510	393.99	1.49	-1.21	1.11	1684511.21	14272032.48	39°18'08.190"N	80°50'38.857"W	1.64	137.603
419.00	1.200	368.840	418.99	1.09	-0.80	1.08	1684511.18	14272032.89	39°18'08.194"N	80°50'38.858"W	1.34	126.621
444.00	1.700	356.230	443.98	0.48	-0.17	1.05	1684511.15	14272033.52	39°18'08.200"N	80°50'38.858"W	1.06	99.138
469.00	2.060	361.920	468.97	-0.32	0.64	0.96	1684511.06	14272034.33	39°18'08.208"N	80°50'38.859"W	1.16	56.122
494.00	2.530	364.510	493.95	-1.30	1.64	0.84	1684510.94	14272035.33	39°18'08.218"N	80°50'38.861"W	1.84	27.285
519.00	2.910	363.950	518.92	-2.46	2.82	0.72	1684510.82	14272036.51	39°18'08.230"N	80°50'38.862"W	2.91	14.422
544.00	3.420	363.870	543.88	-3.81	4.19	0.58	1684510.68	14272037.88	39°18'08.243"N	80°50'38.864"W	4.23	7.854
569.00	3.860	355.080	568.83	-5.36	5.77	0.43	1684510.53	14272039.46	39°18'08.259"N	80°50'38.866"W	5.78	4.224
594.00	4.580	366.800	593.76	-7.14	7.60	0.30	1684510.40	14272041.29	39°18'08.277"N	80°50'38.868"W	7.61	2.245
619.00	5.100	358.620	618.67	-9.17	9.71	0.22	1684510.32	14272043.40	39°18'08.298"N	80°50'38.869"W	9.71	1.272
644.00	5.430	0.130	643.57	-11.36	12.01	0.19	1684510.29	14272045.69	39°18'08.321"N	80°50'38.869"W	12.01	0.914
669.00	5.880	1.610	668.44	-13.69	14.47	0.23	1684510.33	14272048.15	39°18'08.345"N	80°50'38.868"W	14.47	0.912
694.00	6.490	3.300	693.30	-16.22	17.16	0.35	1684510.45	14272050.84	39°18'08.371"N	80°50'38.867"W	17.16	1.160
719.00	6.560	2.730	718.14	-18.87	20.00	0.50	1684510.60	14272053.68	39°18'08.399"N	80°50'38.865"W	20.00	1.424
744.00	6.600	2.190	742.97	-21.55	22.86	0.62	1684510.72	14272056.54	39°18'08.428"N	80°50'38.863"W	22.87	1.553
769.00	6.720	1.890	767.80	-24.28	25.76	0.72	1684510.82	14272059.43	39°18'08.456"N	80°50'38.862"W	25.77	1.608
794.00	6.810	1.620	792.63	-27.05	28.70	0.81	1684510.91	14272062.38	39°18'08.485"N	80°50'38.861"W	28.71	1.623

SDI Sid Keeper Gyro (119 - 6215)

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Actual Wellpath Report
 Rock Unit 2H AWP Proj: 14995'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddrige Co., WV	Well	Rock Unit 2H
Field	Doddrige	Wellbore	Rock Unit 2H AWB
Facility	Balli Pad		

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
819.00	6.930	817.45	-29.87	31.69	0.90	1684511.00	14272065.37	39°18'08.515"N	80°50'38.859"W	31.70	1.631	1.631	0.49	
844.00	6.940	842.27	-32.71	34.71	0.99	1684511.09	14272068.38	39°18'08.545"N	80°50'38.858"W	34.72	1.627	1.627	0.22	
869.00	7.110	867.08	-35.61	37.76	1.03	1684511.13	14272071.44	39°18'08.575"N	80°50'38.858"W	37.78	1.569	1.569	0.81	
894.00	7.330	891.88	-38.59	40.90	1.04	1684511.14	14272074.58	39°18'08.606"N	80°50'38.857"W	40.92	1.459	1.459	0.94	
919.00	7.410	916.67	-41.65	44.11	1.03	1684511.13	14272077.78	39°18'08.638"N	80°50'38.858"W	44.12	1.332	1.332	0.33	
944.00	7.530	941.46	-44.75	47.36	1.01	1684511.11	14272081.03	39°18'08.670"N	80°50'38.858"W	47.37	1.218	1.218	0.48	
969.00	7.560	966.25	-47.88	50.64	0.97	1684511.07	14272084.31	39°18'08.702"N	80°50'38.858"W	50.65	1.100	1.100	0.34	
994.00	7.660	991.03	-51.04	53.95	0.94	1684511.04	14272087.62	39°18'08.735"N	80°50'38.858"W	53.96	0.994	0.994	0.48	
1019.00	8.470	1015.78	-54.33	57.46	1.06	1684511.16	14272091.12	39°18'08.770"N	80°50'38.857"W	57.47	1.056	1.056	4.13	
1044.00	8.570	1040.60	-57.74	61.14	1.40	1684511.49	14272094.81	39°18'08.806"N	80°50'38.852"W	61.16	1.307	1.307	1.27	
1069.00	6.360	1065.29	-60.80	64.37	1.43	1684511.53	14272098.04	39°18'08.838"N	80°50'38.852"W	64.39	1.273	1.273	1.12	
1094.00	5.630	349.850	-63.37	66.95	1.05	1684511.15	14272100.62	39°18'08.864"N	80°50'38.857"W	66.96	0.885	0.885	3.21	
1119.00	5.330	350.320	-65.74	69.31	0.64	1684510.73	14272102.97	39°18'08.887"N	80°50'38.862"W	69.31	0.525	0.525	1.21	
1144.00	8.570	1139.86	-68.49	72.27	0.86	1684510.96	14272105.93	39°18'08.916"N	80°50'38.859"W	72.27	0.678	0.678	16.72	
1169.00	5.030	364.330	-71.21	75.23	1.16	1684511.26	14272108.89	39°18'08.945"N	80°50'38.855"W	75.24	0.881	0.881	15.70	
1194.00	7.880	152.40	-73.78	78.04	1.49	1684511.59	14272111.69	39°18'08.973"N	80°50'38.851"W	78.05	1.097	1.097	13.93	
1219.00	5.220	1214.35	-76.28	80.83	1.99	1684512.09	14272114.48	39°18'09.001"N	80°50'38.844"W	80.85	1.413	1.413	12.07	
1244.00	4.630	1239.25	-78.30	82.97	2.06	1684512.16	14272116.63	39°18'09.022"N	80°50'38.844"W	83.00	1.422	1.422	2.42	
1269.00	4.330	1264.18	-80.14	84.92	2.12	1684512.22	14272118.58	39°18'09.041"N	80°50'38.843"W	84.95	1.431	1.431	1.33	
1294.00	3.970	1289.11	-81.82	86.73	2.23	1684512.33	14272120.38	39°18'09.059"N	80°50'38.841"W	86.76	1.475	1.475	1.51	
1319.00	3.570	1314.06	-83.34	88.37	2.35	1684512.45	14272122.02	39°18'09.075"N	80°50'38.840"W	88.40	1.525	1.525	1.60	
1344.00	3.330	1339.01	-84.75	89.87	2.42	1684512.52	14272123.52	39°18'09.090"N	80°50'38.839"W	89.90	1.545	1.545	1.16	
1369.00	3.170	1363.97	-86.09	91.29	2.46	1684512.56	14272124.94	39°18'09.104"N	80°50'38.838"W	91.32	1.542	1.542	0.64	
1394.00	2.960	1388.94	-87.34	92.62	2.52	1684512.52	14272126.27	39°18'09.117"N	80°50'38.837"W	92.66	1.560	1.560	1.02	
1419.00	2.610	1413.91	-88.46	93.83	2.62	1684512.72	14272127.48	39°18'09.129"N	80°50'38.836"W	93.87	1.602	1.602	1.42	
1444.00	2.350	1438.88	-89.44	94.91	2.74	1684512.84	14272128.56	39°18'09.140"N	80°50'38.835"W	94.95	1.652	1.652	1.06	
1469.00	2.050	1463.86	-90.32	95.86	2.84	1684512.94	14272129.51	39°18'09.149"N	80°50'38.833"W	95.90	1.699	1.699	1.20	
1494.00	1.820	1488.85	-91.10	96.70	2.91	1684513.00	14272130.35	39°18'09.158"N	80°50'38.832"W	96.75	1.721	1.721	1.05	
1519.00	1.610	1513.84	-91.80	97.45	2.94	1684513.04	14272131.10	39°18'09.165"N	80°50'38.832"W	97.50	1.726	1.726	0.84	
1544.00		1538.83	-92.46	98.16	2.99	1684513.09	14272131.81	39°18'09.172"N	80°50'38.831"W	98.21	1.743	1.743	0.42	

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Actual Wellpath Report

Rock Unit 2H AWP Proj: 14995
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddrige Co., WV	Well	Rock Unit 2H
Field	Doddrige	Wellbore	Rock Unit 2H AWB
Facility	Balli Pad		

WELLPATH DATA (355 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
1559.00	1.440	0.680	1563.82	-93.09	98.84	3.03	1684513.13	14272132.49	39°18'09.179"N	80°50'38.831"W	98.88	1.754	1.03	
1594.00	1.300	0.910	1588.81	-93.66	99.43	3.03	1684513.13	14272133.08	39°18'09.185"N	80°50'38.831"W	99.48	1.748	0.56	
1619.00	1.170	1.800	1613.81	-94.17	99.97	3.05	1684513.15	14272133.62	39°18'09.190"N	80°50'38.831"W	100.02	1.746	0.53	
1644.00	1.140	2.270	1638.80	-94.64	100.48	3.07	1684513.16	14272134.13	39°18'09.195"N	80°50'38.830"W	100.52	1.747	0.13	
1669.00	1.100	3.680	1663.80	-95.10	100.96	3.07	1684513.17	14272134.61	39°18'09.200"N	80°50'38.830"W	101.01	1.742	0.30	
1694.00	1.080	2.450	1688.79	-95.55	101.44	3.08	1684513.18	14272135.09	39°18'09.204"N	80°50'38.830"W	101.49	1.737	0.28	
1719.00	1.010	3.570	1713.79	-95.99	101.90	3.08	1684513.18	14272135.55	39°18'09.209"N	80°50'38.830"W	101.94	1.730	0.45	
1744.00	0.790	1.070	1738.79	-96.36	102.62	3.07	1684513.17	14272135.94	39°18'09.213"N	80°50'38.830"W	102.33	1.720	0.91	
1769.00	0.720	2.970	1763.78	-96.67	102.62	3.08	1684513.18	14272136.27	39°18'09.216"N	80°50'38.830"W	102.66	1.721	0.30	
1794.00	0.650	4.310	1788.78	-96.95	102.92	3.10	1684513.20	14272136.56	39°18'09.219"N	80°50'38.830"W	102.96	1.726	0.29	
1819.00	0.780	3.49	1813.78	-97.25	103.22	3.08	1684513.18	14272136.87	39°18'09.222"N	80°50'38.830"W	103.27	1.710	0.89	
1844.00	0.620	3.69	1838.78	-97.55	103.53	3.05	1684513.15	14272137.18	39°18'09.225"N	80°50'38.830"W	103.57	1.688	0.80	
1869.00	0.790	3.47	1863.78	-97.85	103.83	3.01	1684513.11	14272137.48	39°18'09.228"N	80°50'38.831"W	103.87	1.662	0.92	
1894.00	0.560	3.58	1888.77	-98.14	104.12	2.97	1684513.07	14272137.77	39°18'09.231"N	80°50'38.831"W	104.16	1.635	1.07	
1919.00	0.500	3.47	1913.77	-98.36	104.35	2.95	1684513.05	14272138.00	39°18'09.233"N	80°50'38.832"W	104.39	1.617	0.47	
1944.00	0.470	3.49	1938.77	-98.57	104.56	2.91	1684513.00	14272138.21	39°18'09.235"N	80°50'38.832"W	104.60	1.592	0.14	
1969.00	0.400	3.060	1963.77	-98.76	104.75	2.89	1684512.99	14272138.39	39°18'09.237"N	80°50'38.832"W	104.79	1.582	0.48	
1994.00	0.520	3.520	1988.77	-98.95	104.94	2.88	1684512.98	14272138.59	39°18'09.239"N	80°50'38.833"W	104.98	1.573	0.59	
2019.00	0.430	0.480	2013.77	-99.15	105.15	2.87	1684512.97	14272138.80	39°18'09.241"N	80°50'38.833"W	105.19	1.562	0.45	
2044.00	0.540	3.50	2038.77	-99.35	105.36	2.85	1684512.95	14272139.01	39°18'09.243"N	80°50'38.833"W	105.40	1.549	0.55	
2069.00	0.510	3.69	2063.77	-99.58	105.59	2.83	1684512.93	14272139.24	39°18'09.245"N	80°50'38.833"W	105.63	1.535	0.35	
2094.00	0.490	3.880	2088.77	-99.78	105.81	2.84	1684512.93	14272139.46	39°18'09.248"N	80°50'38.833"W	105.84	1.535	0.17	
2119.00	0.470	2.390	2113.77	-99.98	106.02	2.85	1684512.95	14272139.66	39°18'09.250"N	80°50'38.833"W	106.05	1.539	0.09	
2144.00	0.440	9.160	2138.76	-100.16	106.21	2.87	1684512.97	14272139.86	39°18'09.252"N	80°50'38.833"W	106.25	1.546	0.25	
2169.00	0.430	5.120	2163.76	-100.33	106.40	2.89	1684512.99	14272140.05	39°18'09.253"N	80°50'38.832"W	106.44	1.556	0.13	
2194.00	0.390	3.57	2188.76	-100.52	106.60	2.89	1684512.99	14272140.25	39°18'09.257"N	80°50'38.832"W	106.64	1.554	0.38	
2219.00	0.390	3.57	2213.76	-100.71	106.79	2.88	1684512.98	14272140.44	39°18'09.257"N	80°50'38.833"W	106.83	1.545	0.40	
2244.00	0.380	3.50	2238.76	-100.87	106.96	2.86	1684512.96	14272140.61	39°18'09.259"N	80°50'38.833"W	107.00	1.533	0.18	
2269.00	0.430	3.41	2263.76	-101.05	107.13	2.82	1684512.92	14272140.78	39°18'09.261"N	80°50'38.833"W	107.17	1.508	0.34	
2294.00	0.240	3.36	2288.76	-101.19	107.27	2.77	1684512.87	14272140.91	39°18'09.262"N	80°50'38.834"W	107.30	1.479	0.77	

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Actual Wellpath Report

Rock Unit 2H AWP Proj: 14995
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddrige Co., WV	Well	Rock Unit 2H
Field	Doddrige	Wellbore	Rock Unit 2H AWB
Facility	Balli Pad		

WELLPATH DATA (355 stations)														
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
2319.00	0.470	334.600	2313.76	-101.35	107.41	2.70	1684512.80	14272141.06	39°18'09.263"N	80°50'38.835"W	107.44	1.443	0.92	
2344.00	0.440	329.570	2338.76	-101.54	107.58	2.61	1684512.71	14272141.23	39°18'09.265"N	80°50'38.836"W	107.62	1.391	0.20	
2369.00	0.440	328.810	2363.76	-101.73	107.75	2.51	1684512.61	14272141.40	39°18'09.267"N	80°50'38.837"W	107.78	1.337	0.02	
2394.00	0.410	326.950	2388.76	-101.91	107.91	2.42	1684512.51	14272141.55	39°18'09.268"N	80°50'38.838"W	107.93	1.282	0.13	
2419.00	0.470	335.100	2413.76	-102.10	108.07	2.32	1684512.42	14272141.72	39°18'09.270"N	80°50'38.840"W	108.10	1.232	0.35	
2444.00	0.420	336.540	2438.76	-102.29	108.25	2.24	1684512.34	14272141.90	39°18'09.272"N	80°50'38.841"W	108.27	1.188	0.20	
2469.00	0.450	335.040	2463.76	-102.48	108.42	2.17	1684512.27	14272142.07	39°18'09.273"N	80°50'38.842"W	108.45	1.144	0.13	
2494.00	0.410	335.660	2488.76	-102.670	108.59	2.08	1684512.18	14272142.24	39°18'09.275"N	80°50'38.843"W	108.61	1.096	0.25	
2519.00	0.400	328.460	2513.75	-102.84	108.74	2.00	1684512.09	14272142.39	39°18'09.277"N	80°50'38.844"W	108.76	1.051	0.20	
2544.00	0.260	332.250	2538.75	-102.98	108.87	1.93	1684512.03	14272142.52	39°18'09.278"N	80°50'38.845"W	108.89	1.017	0.56	
2569.00	0.180	326.460	2563.75	-103.07	108.96	1.88	1684511.98	14272142.60	39°18'09.279"N	80°50'38.845"W	108.97	0.991	0.33	
2594.00	0.140	320.220	2588.75	-103.14	109.01	1.84	1684511.94	14272142.66	39°18'09.279"N	80°50'38.846"W	109.03	0.969	0.17	
2619.00	0.210	304.910	2613.75	-103.20	109.06	1.79	1684511.89	14272142.71	39°18'09.280"N	80°50'38.846"W	109.08	0.938	0.33	
2644.00	0.160	316.310	2638.75	-103.27	109.11	1.72	1684511.82	14272142.76	39°18'09.280"N	80°50'38.847"W	109.13	0.906	0.25	
2669.00	0.130	318.490	2663.75	-103.33	109.16	1.68	1684511.78	14272142.81	39°18'09.281"N	80°50'38.848"W	109.17	0.883	0.12	
2694.00	0.200	292.950	2688.75	-103.38	109.20	1.62	1684511.72	14272142.85	39°18'09.281"N	80°50'38.848"W	109.21	0.851	0.40	
2719.00	0.170	281.120	2713.75	-103.43	109.22	1.55	1684511.65	14272142.87	39°18'09.281"N	80°50'38.849"W	109.23	0.811	0.19	
2744.00	0.220	273.75	2738.75	-103.48	109.25	1.47	1684511.56	14272142.89	39°18'09.282"N	80°50'38.851"W	109.26	0.768	0.24	
2769.00	0.320	286.400	2763.75	-103.55	109.29	1.35	1684511.45	14272142.93	39°18'09.282"N	80°50'38.852"W	109.29	0.710	0.41	
2794.00	0.370	300.090	2788.75	-103.66	109.35	1.22	1684511.32	14272142.99	39°18'09.283"N	80°50'38.854"W	109.35	0.638	0.38	
2819.00	0.300	299.420	2813.75	-103.76	109.42	1.09	1684511.19	14272143.06	39°18'09.283"N	80°50'38.855"W	109.42	0.571	0.28	
2844.00	0.310	296.520	2838.75	-103.85	109.48	0.97	1684511.07	14272143.13	39°18'09.284"N	80°50'38.857"W	109.48	0.509	0.07	
2869.00	0.350	287.930	2863.75	-103.94	109.53	0.84	1684510.94	14272143.18	39°18'09.284"N	80°50'38.858"W	109.54	0.439	0.25	
2894.00	0.340	306.160	2888.75	-104.05	109.60	0.71	1684510.81	14272143.25	39°18'09.285"N	80°50'38.860"W	109.60	0.369	0.44	
2919.00	0.340	304.380	2913.75	-104.17	109.68	0.59	1684510.69	14272143.33	39°18'09.286"N	80°50'38.862"W	109.69	0.306	0.04	
2944.00	0.280	306.340	2938.75	-104.28	109.77	0.48	1684510.57	14272143.41	39°18'09.287"N	80°50'38.863"W	109.77	0.248	0.24	
2969.00	0.340	271.350	2963.75	-104.35	109.80	0.35	1684510.45	14272143.45	39°18'09.287"N	80°50'38.865"W	109.80	0.184	0.78	
2994.00	0.410	293.070	2988.75	-104.43	109.84	0.20	1684510.30	14272143.49	39°18'09.287"N	80°50'38.867"W	109.84	0.102	0.63	
3019.00	0.400	278.260	3013.75	-104.53	109.89	0.03	1684510.13	14272143.53	39°18'09.288"N	80°50'38.869"W	109.89	0.014	0.42	
3044.00	0.430	282.590	3038.75	-104.62	109.92	-0.16	1684509.95	14272143.57	39°18'09.288"N	80°50'38.871"W	109.92	359.921	0.17	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddrige Co., WV
Field	Doddrige
Facility	Balli Pad
Slot	Slot #04
Rock Unit 2H	Well
Rock Unit 2H AWB	Wellbore

WELLPATH DATA (355 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
3069.00	0.440	292.960	3063.75	-104.73	109.98	-0.33	1684509.77	14272143.62	39°18'09.289"N	80°50'38.873"W	109.98	359.827	0.32	
3084.00	0.350	273.340	3088.75	-104.82	110.02	-0.50	1684509.60	14272143.67	39°18'09.289"N	80°50'38.875"W	110.02	359.742	0.64	
3119.00	0.380	299.020	3113.75	-104.91	110.07	-0.64	1684509.46	14272143.71	39°18'09.290"N	80°50'38.877"W	110.07	359.664	0.66	
3144.00	0.440	289.920	3138.75	-105.03	110.14	-0.81	1684509.29	14272143.78	39°18'09.290"N	80°50'38.879"W	110.14	359.580	0.35	
3169.00	0.430	287.190	3163.74	-105.14	110.20	-0.99	1684509.11	14272143.84	39°18'09.291"N	80°50'38.882"W	110.20	359.487	0.09	
3194.00	0.400	310.310	3188.74	-105.27	110.28	-1.14	1684508.96	14272143.93	39°18'09.292"N	80°50'38.884"W	110.29	359.406	0.68	
3219.00	0.450	301.310	3213.74	-105.42	110.39	-1.29	1684508.81	14272144.04	39°18'09.293"N	80°50'38.886"W	110.40	359.329	0.33	
3244.00	0.300	314.050	3238.74	-105.56	110.49	-1.42	1684508.68	14272144.13	39°18'09.294"N	80°50'38.887"W	110.50	359.261	0.68	
3269.00	0.350	307.600	3263.74	-105.67	110.58	-1.53	1684508.57	14272144.22	39°18'09.295"N	80°50'38.889"W	110.59	359.206	0.25	
3294.00	0.340	297.190	3288.74	-105.78	110.66	-1.66	1684508.44	14272144.30	39°18'09.296"N	80°50'38.890"W	110.67	359.141	0.25	
3319.00	0.420	275.00	3313.74	-105.92	110.78	-1.72	1684508.38	14272144.43	39°18'09.297"N	80°50'38.891"W	110.80	359.110	1.67	
3344.00	1.600	338.74	3338.74	-106.20	111.15	-1.50	1684508.60	14272144.79	39°18'09.300"N	80°50'38.888"W	111.16	359.228	5.13	
3369.00	3.070	43.550	3363.72	-106.71	111.91	-0.82	1684509.28	14272145.55	39°18'09.308"N	80°50'38.879"W	111.91	359.581	5.93	
3394.00	4.180	43.650	3388.67	-107.47	113.05	0.27	1684510.37	14272146.70	39°18'09.319"N	80°50'38.866"W	113.05	0.137	4.44	
3419.00	6.010	3413.59	3413.59	-108.41	114.49	1.66	1684511.76	14272148.14	39°18'09.333"N	80°50'38.848"W	114.50	0.832	3.33	
3444.00	5.740	44.450	3438.48	-109.49	116.16	3.30	1684513.40	14272149.81	39°18'09.350"N	80°50'38.827"W	116.21	1.628	2.92	
3469.00	6.600	45.990	3463.33	-110.72	118.07	5.20	1684515.30	14272151.71	39°18'09.369"N	80°50'38.803"W	118.18	2.522	3.46	
3494.00	7.630	45.590	3488.14	-112.10	120.24	7.41	1684517.51	14272153.88	39°18'09.390"N	80°50'38.775"W	120.46	3.526	4.12	
3519.00	8.340	47.290	3512.89	-113.60	122.63	9.93	1684520.02	14272156.27	39°18'09.414"N	80°50'38.743"W	123.03	4.628	2.99	
3544.00	8.560	47.720	3537.62	-115.13	125.11	12.64	1684522.73	14272158.75	39°18'09.438"N	80°50'38.708"W	125.75	5.767	0.92	
3569.00	9.000	48.710	3562.33	-116.67	127.65	15.48	1684525.57	14272161.29	39°18'09.463"N	80°50'38.672"W	128.59	6.915	1.86	
3594.00	9.430	52.970	3587.01	-118.11	130.17	18.59	1684528.68	14272163.81	39°18'09.488"N	80°50'38.632"W	131.49	8.125	3.22	
3619.00	9.690	57.990	3611.66	-119.29	132.52	22.00	1684532.10	14272166.16	39°18'09.511"N	80°50'38.589"W	134.34	9.428	3.49	
3644.00	10.000	62.930	3636.29	-120.15	134.63	25.72	1684535.81	14272168.26	39°18'09.532"N	80°50'38.541"W	137.06	10.816	3.60	
3669.00	10.190	66.510	3660.91	-120.70	136.50	29.68	1684539.77	14272170.13	39°18'09.550"N	80°50'38.491"W	139.69	12.269	2.62	
3694.00	10.600	69.210	3685.50	-121.03	138.19	33.86	1684543.95	14272171.83	39°18'09.567"N	80°50'38.438"W	142.28	13.767	2.55	
3719.00	11.020	70.770	3710.05	-121.20	139.80	38.27	1684548.35	14272173.43	39°18'09.583"N	80°50'38.382"W	144.94	15.308	2.05	
3744.00	11.330	70.250	3734.58	-121.33	141.41	42.83	1684552.92	14272175.05	39°18'09.599"N	80°50'38.324"W	147.76	16.851	1.30	
3769.00	11.730	66.800	3759.07	-121.64	143.24	47.48	1684557.56	14272176.88	39°18'09.617"N	80°50'38.264"W	150.91	18.339	3.19	
3794.00	12.240	62.710	3783.59	-122.30	145.46	52.17	1684562.25	14272179.09	39°18'09.639"N	80°50'38.205"W	154.63	19.731	3.96	

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddrige Co., WV
Field	Doddrige
Facility	Balli Pad
Slot	Rock Unit 2H
Slot #04	Rock Unit 2H AWB

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
3819.00	12.790	3807.94	-123.34	148.08	56.91	1684566.99	14272181.72	39°18'09.665"N	80°50'38.144"W	158.64	21.022	3.62		
3844.00	13.360	3832.29	-124.67	161.05	61.72	1684571.80	14272184.68	39°18'09.694"N	80°50'38.083"W	163.17	22.227	2.88		
3869.00	13.980	3856.58	-126.17	154.24	66.70	1684576.77	14272187.87	39°18'09.725"N	80°50'38.020"W	168.04	23.386	2.49		
3894.00	14.760	3880.80	-127.76	157.59	71.92	1684581.99	14272191.22	39°18'09.758"N	80°50'37.953"W	173.23	24.531	3.20		
3919.00	15.540	3904.93	-129.34	161.05	77.47	1684587.54	14272194.68	39°18'09.792"N	80°50'37.883"W	178.71	25.689	3.38		
3944.00	16.310	3928.97	-130.84	164.54	83.37	1684593.44	14272198.17	39°18'09.827"N	80°50'37.807"W	184.46	26.872	3.40		
3969.00	17.160	3952.91	-132.12	167.94	89.72	1684599.78	14272201.57	39°18'09.860"N	80°50'37.727"W	190.40	28.111	5.17		
3994.00	17.800	3976.75	-133.05	171.13	96.51	1684606.57	14272204.75	39°18'09.892"N	80°50'37.640"W	196.47	29.422	4.32		
4019.00	18.210	4000.53	-133.68	174.10	103.65	1684613.70	14272207.72	39°18'09.921"N	80°50'37.549"W	202.62	30.766	3.03		
4044.00	18.380	4024.27	-134.00	176.81	111.01	1684621.06	14272210.43	39°18'09.948"N	80°50'37.456"W	208.77	32.121	3.48		
4069.00	18.940	4047.95	-134.01	179.30	118.61	1684628.66	14272212.91	39°18'09.972"N	80°50'37.359"W	214.98	33.486	3.04		
4094.00	19.890	4071.53	-133.81	181.66	126.57	1684636.62	14272215.28	39°18'09.995"N	80°50'37.257"W	221.41	34.867	4.25		
4119.00	20.120	4095.02	-133.42	183.92	134.82	1684644.87	14272217.54	39°18'10.017"N	80°50'37.152"W	228.04	36.244	1.76		
4144.00	20.430	4118.47	-132.83	186.02	143.23	1684653.27	14272219.64	39°18'10.038"N	80°50'37.045"W	234.77	37.694	2.28		
4169.00	20.830	4141.87	-132.00	187.94	151.82	1684661.86	14272221.56	39°18'10.057"N	80°50'36.936"W	241.60	38.932	2.72		
4194.00	21.020	4165.22	-130.86	189.59	160.60	1684670.63	14272223.20	39°18'10.073"N	80°50'36.824"W	248.46	40.268	3.47		
4219.00	21.580	4188.51	-129.42	190.97	169.57	1684679.60	14272224.59	39°18'10.086"N	80°50'36.710"W	255.39	41.603	2.91		
4244.00	22.310	4211.70	-127.82	192.29	178.82	1684688.85	14272225.90	39°18'10.099"N	80°50'36.593"W	262.59	42.922	2.93		
4269.00	22.760	4234.79	-126.20	193.66	188.30	1684698.33	14272227.28	39°18'10.113"N	80°50'36.472"W	270.12	44.196	1.94		
4294.00	23.920	4257.75	-124.72	195.27	198.08	1684708.10	14272228.88	39°18'10.128"N	80°50'36.348"W	278.15	45.408	5.36		
4319.00	24.680	4280.53	-123.41	197.17	208.19	1684718.20	14272230.78	39°18'10.147"N	80°50'36.219"W	286.74	46.557	3.38		
4344.00	25.160	4303.21	-122.34	199.38	218.48	1684728.50	14272232.99	39°18'10.169"N	80°50'36.088"W	295.78	47.617	3.98		
4369.00	25.730	4325.78	-121.57	201.95	228.91	1684738.92	14272235.56	39°18'10.194"N	80°50'35.955"W	305.26	48.581	3.19		
4394.00	25.830	4348.29	-120.97	204.73	239.42	1684749.43	14272238.33	39°18'10.221"N	80°50'35.821"W	315.02	49.467	1.33		
4419.00	25.900	4370.79	-120.52	207.65	249.93	1684759.93	14272241.26	39°18'10.250"N	80°50'35.688"W	324.94	50.279	1.36		
4444.00	25.840	4393.28	-120.17	210.68	260.41	1684770.41	14272244.29	39°18'10.280"N	80°50'35.554"W	334.96	51.026	0.69		
4469.00	25.840	4415.78	-119.89	213.77	270.86	1684780.85	14272247.37	39°18'10.310"N	80°50'35.421"W	345.05	51.719	0.49		
4494.00	26.050	4438.26	-119.64	216.90	281.34	1684791.33	14272250.50	39°18'10.341"N	80°50'35.288"W	355.24	52.369	0.87		
4519.00	26.380	4460.69	-119.41	220.08	291.92	1684801.90	14272253.68	39°18'10.372"N	80°50'35.153"W	365.58	52.986	1.32		
4544.00	26.270	4483.10	-119.21	223.31	302.52	1684812.50	14272256.91	39°18'10.404"N	80°50'35.018"W	376.01	53.566	0.76		

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Operator		ANTERO RESOURCES CORPORATION	
Area	Doddrige Co., WV	Well	Rock Unit 2H
Field	Doddrige	Wellbore	Rock Unit 2H AWB
Facility	Balli Pad	Slot	Slot #04

WELLPATH DATA (355 stations)												
MD	Inclination	Azimuth	TVD	Vent Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft/100ft)
4599.00	26.200	72.560	4505.52	-119.08	226.60	313.07	1684823.05	14272260.19	39°18'10.436"N	80°50'34.884"W	386.47	54.104
4594.00	25.940	73.120	4527.98	-118.93	229.84	323.57	1684833.54	14272263.44	39°18'10.468"N	80°50'34.750"W	396.89	54.613
4619.00	25.520	73.830	4550.50	-118.66	232.92	333.97	1684843.94	14272266.52	39°18'10.498"N	80°50'34.618"W	407.18	55.107
4644.00	25.440	74.280	4573.07	-118.28	235.88	344.32	1684854.28	14272269.48	39°18'10.527"N	80°50'34.486"W	417.36	55.586
4669.00	25.470	75.660	4595.64	-117.74	238.67	354.69	1684864.65	14272272.26	39°18'10.555"N	80°50'34.354"W	427.51	56.064
4694.00	25.370	75.840	4618.22	-117.04	241.31	365.09	1684875.05	14272274.90	39°18'10.581"N	80°50'34.222"W	437.63	56.537
4719.00	25.850	75.750	4640.77	-116.34	243.96	375.57	1684885.52	14272277.55	39°18'10.607"N	80°50'34.089"W	447.85	56.993
4744.00	25.860	75.630	4663.26	-115.65	246.65	386.13	1684896.08	14272280.24	39°18'10.633"N	80°50'33.954"W	458.19	57.430
4769.00	26.320	75.580	4685.72	-114.96	249.39	396.78	1684906.72	14272282.98	39°18'10.660"N	80°50'33.819"W	468.65	57.850
4794.00	26.740	75.570	4708.08	-114.28	252.17	407.60	1684917.53	14272285.76	39°18'10.687"N	80°50'33.681"W	479.30	58.256
4819.00	26.730	74.890	4730.41	-113.65	255.04	418.47	1684928.41	14272288.62	39°18'10.715"N	80°50'33.543"W	490.06	58.640
4844.00	26.830	74.470	4752.73	-113.14	258.01	429.34	1684939.26	14272291.65	39°18'10.745"N	80°50'33.404"W	500.90	58.996
4869.00	27.030	74.290	4775.02	-112.68	261.06	440.24	1684950.16	14272294.65	39°18'10.775"N	80°50'33.266"W	511.82	59.332
4894.00	26.790	74.180	4797.31	-112.25	264.13	451.13	1684961.05	14272297.72	39°18'10.805"N	80°50'33.127"W	522.77	59.651
4919.00	26.860	73.360	4819.62	-111.81	267.29	461.96	1684971.88	14272300.87	39°18'10.836"N	80°50'32.989"W	533.71	59.947
4944.00	27.560	72.130	4841.95	-111.77	270.63	472.71	1684982.62	14272303.21	39°18'10.869"N	80°50'32.852"W	544.70	60.209
4969.00	27.020	70.910	4864.25	-111.88	274.20	483.42	1684993.32	14272307.79	39°18'10.904"N	80°50'32.716"W	555.77	60.437
4994.00	27.020	69.800	4886.52	-112.21	278.02	494.11	1685004.01	14272311.60	39°18'10.941"N	80°50'32.580"W	566.96	60.635
5019.00	27.240	69.340	4908.77	-112.71	282.00	504.79	1685014.69	14272315.68	39°18'10.980"N	80°50'32.444"W	578.22	60.810
5044.00	27.230	69.210	4931.00	-113.26	286.05	515.50	1685025.39	14272319.63	39°18'11.020"N	80°50'32.308"W	589.54	60.974
5069.00	27.190	69.730	4953.23	-113.77	290.06	526.20	1685036.09	14272323.63	39°18'11.060"N	80°50'32.171"W	600.85	61.135
5094.00	26.980	70.350	4975.49	-114.17	293.95	536.90	1685046.78	14272327.52	39°18'11.106"N	80°50'32.035"W	612.10	61.300
5119.00	27.370	71.000	4997.73	-114.45	297.72	547.67	1685057.55	14272331.29	39°18'11.135"N	80°50'31.898"W	623.37	61.471
5144.00	27.770	72.050	5019.89	-114.55	301.39	558.65	1685068.52	14272334.96	39°18'11.171"N	80°50'31.758"W	634.76	61.653
5169.00	28.040	72.800	5041.99	-114.47	304.92	569.80	1685079.67	14272338.49	39°18'11.206"N	80°50'31.616"W	646.26	61.847
5194.00	28.350	73.210	5064.02	-114.28	308.37	581.10	1685090.97	14272341.94	39°18'11.240"N	80°50'31.473"W	657.85	62.046
5219.00	28.110	73.130	5086.05	-114.05	311.80	592.42	1685102.28	14272345.36	39°18'11.273"N	80°50'31.329"W	669.46	62.241
5244.00	27.670	72.870	5108.14	-113.85	315.22	603.60	1685113.46	14272348.78	39°18'11.307"N	80°50'31.186"W	680.95	62.425
5269.00	27.750	72.370	5130.28	-113.74	318.69	614.69	1685124.55	14272352.25	39°18'11.341"N	80°50'31.045"W	692.40	62.595
5294.00	27.480	72.820	5152.43	-113.63	322.16	625.75	1685135.60	14272355.72	39°18'11.375"N	80°50'30.904"W	703.81	62.759

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Rock Unit 2H
Field	Doddridge	Wellbore	Rock Unit 2H AWP
Facility	Balli Pad		

MD	Inclination	Azimuth	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(°)	(ft)	(ft)	(ft)	
5319.00	26.700	72.910	5174.69	-113.47	325.51	636.63	1685146.48	14272359.07	39°18'11.408"N	80°50'30.766"W	715.02	62.919	3.12
5344.00	26.380	73.130	5197.05	-113.28	328.77	647.31	1685167.16	14272362.33	39°18'11.440"N	80°50'30.630"W	726.02	63.074	1.34
5369.00	25.920	74.110	5219.49	-112.98	331.88	657.88	1685167.72	14272365.44	39°18'11.471"N	80°50'30.495"W	736.86	63.231	2.52
5394.00	25.180	75.610	5242.05	-112.45	334.70	668.29	1685178.12	14272368.25	39°18'11.498"N	80°50'30.363"W	747.42	63.397	3.93
5419.00	24.740	75.710	5264.71	-111.78	337.31	678.51	1685188.34	14272370.87	39°18'11.524"N	80°50'30.233"W	757.73	63.566	1.77
5444.00	24.770	75.850	5287.42	-111.10	339.88	688.66	1685198.48	14272373.44	39°18'11.549"N	80°50'30.104"W	767.97	63.732	0.26
5469.00	25.130	75.960	5310.08	-110.39	342.45	698.89	1685208.71	14272376.00	39°18'11.575"N	80°50'29.974"W	778.28	63.895	1.45
5494.00	24.780	75.480	5332.75	-109.72	345.05	709.11	1685218.93	14272378.61	39°18'11.600"N	80°50'29.843"W	788.61	64.052	1.63
5519.00	24.210	73.910	5355.50	-109.24	347.79	719.11	1685228.92	14272381.34	39°18'11.627"N	80°50'29.716"W	798.79	64.190	3.44
5544.00	24.050	72.570	5378.31	-109.03	350.74	728.89	1685238.70	14272384.29	39°18'11.656"N	80°50'29.592"W	808.89	64.304	2.28
5569.00	24.290	71.980	5401.12	-108.99	353.85	738.64	1685248.45	14272387.40	39°18'11.687"N	80°50'29.468"W	819.03	64.403	1.26
5594.00	24.220	71.010	5423.92	-109.09	357.11	748.38	1685258.18	14272390.66	39°18'11.719"N	80°50'29.344"W	829.22	64.490	1.62
5619.00	24.210	70.240	5446.72	-109.34	360.51	758.05	1685267.85	14272394.06	39°18'11.752"N	80°50'29.220"W	839.41	64.566	1.26
5644.00	24.450	70.060	5469.50	-109.69	364.01	767.74	1685277.53	14272397.56	39°18'11.786"N	80°50'29.097"W	849.67	64.633	1.00
5669.00	24.900	69.921	5492.21	-110.03	367.55	777.66	1685287.35	14272401.10	39°18'11.821"N	80°50'28.972"W	860.05	64.700	1.84
5694.00	25.030	70.920	5514.88	-110.29	371.06	787.51	1685297.30	14272404.60	39°18'11.856"N	80°50'28.846"W	870.55	64.771	1.20
5719.00	24.860	72.070	5537.55	-110.40	374.40	797.51	1685307.29	14272407.94	39°18'11.889"N	80°50'28.718"W	881.02	64.852	2.06
5744.00	24.600	73.560	5560.25	-110.26	377.49	807.50	1685317.28	14272411.03	39°18'11.919"N	80°50'28.591"W	891.38	64.945	2.70
5769.00	24.250	75.320	5583.02	-109.83	380.27	817.46	1685327.23	14272413.81	39°18'11.946"N	80°50'28.464"W	901.58	65.053	3.23
5794.00	23.610	74.780	5605.87	-109.30	382.88	827.26	1685337.02	14272416.42	39°18'11.972"N	80°50'28.340"W	911.66	65.164	2.71
5819.00	23.070	74.070	5628.82	-108.89	385.54	836.80	1685346.56	14272419.08	39°18'11.998"N	80°50'28.218"W	921.34	65.263	2.44
5844.00	23.520	73.800	5651.78	-108.56	388.28	846.30	1685356.06	14272421.81	39°18'12.025"N	80°50'28.097"W	931.12	65.356	1.85
5869.00	23.120	72.680	5674.74	-108.35	391.13	855.77	1685365.53	14272424.66	39°18'12.053"N	80°50'27.977"W	940.92	65.437	2.39
5894.00	22.140	70.410	5697.82	-108.44	394.17	864.90	1685374.65	14272427.70	39°18'12.083"N	80°50'27.861"W	950.48	65.499	5.25
5919.00	21.710	68.920	5721.01	-108.82	397.41	873.65	1685383.40	14272430.95	39°18'12.115"N	80°50'27.749"W	959.79	65.540	2.81
5944.00	21.990	67.930	5744.21	-109.41	400.84	882.30	1685392.05	14272434.37	39°18'12.148"N	80°50'27.639"W	969.09	65.567	1.85
5969.00	22.300	67.130	5767.37	-110.15	404.44	891.01	1685400.75	14272437.97	39°18'12.184"N	80°50'27.528"W	978.50	65.586	1.73
5994.00	22.330	66.910	5790.50	-110.99	408.14	899.75	1685409.49	14272441.67	39°18'12.220"N	80°50'27.417"W	987.99	65.600	0.36
6019.00	22.120	67.150	5813.64	-111.81	411.83	908.46	1685418.19	14272445.36	39°18'12.257"N	80°50'27.306"W	997.45	65.614	0.22
6044.00	22.130	66.950	5836.80	-112.64	415.51	917.13	1685426.86	14272449.03	39°18'12.293"N	80°50'27.196"W	1006.86	65.627	0.30

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Rock Unit 2H
Field	Doddridge	Wellbore	Rock Unit 2H AWP
Facility	Balli Pad		

WELLPATH DATA (355 stations) † = interpolated/extrapolated station												
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dis	DLS Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(N)	(W)	(ft)	(ft)
5069.00	66.760	5859.94	-13.49	419.22	925.82	1685435.54	14272452.74	93°18'12.329"N	80°50'27.085"W	1016.31	65.638	0.70
6094.00	22.930	66.890	8883.02	-14.37	423.00	934.65	1685444.38	93°18'12.367"N	80°50'26.973"W	1025.92	65.650	2.57
6119.00	23.440	66.940	9906.00	-15.25	426.86	943.71	1685453.43	93°18'12.405"N	80°50'26.857"W	1035.76	65.662	2.04
6144.00	24.050	66.880	9928.89	-16.15	430.81	952.97	1685462.68	93°18'12.443"N	80°50'26.739"W	1045.82	65.674	2.44
6169.00	24.620	66.900	9951.66	-17.08	434.85	962.44	1685472.16	93°18'12.483"N	80°50'26.619"W	1056.12	65.685	2.28
6194.00	25.100	67.000	9974.35	-18.01	438.97	972.11	1685481.82	93°18'12.524"N	80°50'26.496"W	1066.63	65.698	1.93
6215.00	25.270	67.030	9993.35	-18.79	442.46	980.34	1685490.05	93°18'12.558"N	80°50'26.391"W	1075.56	65.709	0.81
6240.00	26.580	74.170	1050.80	-20.09	460.50	1031.82	1685541.51	93°18'12.736"N	80°50'25.736"W	1129.92	65.949	2.71
6340.00	26.850	74.530	1134.46	-19.52	464.34	1045.53	1685555.22	93°18'12.773"N	80°50'25.561"W	1144.01	66.053	1.12
6418.00	26.520	78.820	6175.84	-17.91	468.98	1065.06	168574.74	93°18'12.819"N	80°50'25.313"W	1163.75	66.235	4.38
6466.00	26.730	90.770	6218.97	-13.23	470.84	1086.02	14272504.34	93°18'12.837"N	80°50'25.046"W	1183.69	66.561	11.23
6509.00	29.220	98.630	6256.96	-105.26	468.95	1106.05	1685615.70	93°18'12.818"N	80°50'24.791"W	1201.36	67.023	11.25
6562.00	32.330	111.440	6302.53	-90.26	461.60	1132.02	1685641.67	93°18'12.745"N	80°50'24.461"W	1222.52	67.816	12.80
6606.00	34.830	116.610	6339.19	-73.97	451.67	1154.22	1685663.85	93°18'12.646"N	80°50'24.179"W	1239.44	68.629	8.63
6657.00	38.730	120.820	6380.02	-61.73	436.95	1180.97	1685690.60	93°18'12.500"N	80°50'23.839"W	1259.21	69.696	9.20
6703.00	43.340	126.970	6414.71	-27.95	420.06	1205.98	1685715.60	93°18'12.333"N	80°50'23.521"W	1277.04	70.796	13.22
6714.00†	44.541	128.505	6422.63	-21.64	415.39	1212.02	1685721.63	93°18'12.287"N	80°50'23.444"W	1281.22	71.082	14.59
6752.00	48.830	133.340	6448.70	2.03	397.26	1232.86	1685742.47	93°18'12.107"N	80°50'23.180"W	1295.29	72.140	14.59
6800.00	54.050	138.530	6478.62	35.72	370.27	1258.90	1685768.49	93°18'11.840"N	80°50'22.849"W	1312.22	73.610	13.77
6849.00	59.070	142.680	6505.62	73.77	338.67	1284.80	1685794.38	93°18'11.527"N	80°50'22.520"W	1328.68	75.233	12.44
6894.00	63.840	146.560	6527.13	111.47	306.44	1307.65	1685817.22	93°18'11.208"N	80°50'22.230"W	1343.07	76.811	13.03
6941.00†	67.541	149.538	6546.48	153.02	270.10	1330.29	1685839.86	93°18'10.848"N	80°50'21.943"W	1357.44	78.523	9.76
6942.00	149.600	6546.86	153.93	269.30	1330.76	1685840.33	14272302.89	93°18'10.841"N	80°50'21.937"W	1357.74	78.560	9.76
6988.00	151.960	6563.32	196.04	231.82	1351.72	1685861.28	14272265.42	93°18'10.470"N	80°50'21.671"W	1371.45	80.268	7.76
7024.00†	154.213	6575.39	229.54	201.68	1367.07	1685876.62	14272235.19	93°18'10.171"N	80°50'21.477"W	1381.65	81.612	5.90
7038.00	155.090	6580.09	242.62	189.66	1372.71	1685882.27	14272223.28	93°18'10.053"N	80°50'21.405"W	1385.75	82.134	5.90
7077.00	159.250	6593.02	279.28	155.75	1386.99	1685896.53	14272189.38	93°18'09.717"N	80°50'21.224"W	1395.70	83.593	10.16
7132.00	162.360	6608.83	331.92	106.02	1404.28	1685913.82	14272139.67	93°18'09.225"N	80°50'21.006"W	1408.28	85.682	10.16
7143.00†	162.483	6611.51	342.59	95.85	1407.50	1685917.04	14272129.50	93°18'09.125"N	80°50'20.965"W	1410.76	86.104	5.43
7179.00	162.880	6619.49	377.69	62.34	1417.95	1685927.49	14272096.00	93°18'08.793"N	80°50'20.833"W	1419.32	87.483	5.43

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddrige Co., WV
Field	Doddrige
Facility	Balli Pad
Slot	Slot #04
Well	Rock Unit 2H
Wellbore	Rock Unit 2H AWP

WELLPATH DATA (355 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
7226.00	81.380	163.210	6627.84	423.93	18.10	1431.44	1685940.97	14272051.79	39°18'08.36"N	80°50'20.66"W	1431.55	89.275	6.91	
7270.00	83.580	163.890	6633.59	467.53	-23.73	1443.79	1685953.31	14272009.97	39°18'07.94"N	80°50'20.50"W	1443.98	90.942	5.23	
7319.00	89.390	164.290	6636.60	516.39	-70.75	1457.19	1685966.71	14271962.97	39°18'07.47"N	80°50'20.33"W	1458.91	92.779	11.89	
7415.00	89.570	161.470	6637.47	612.36	-162.48	1485.45	1685994.95	14271871.28	39°18'06.570"N	80°50'19.979"W	1494.31	96.242	2.94	
7510.00	89.540	159.460	6638.21	707.32	-252.00	1517.21	1686026.70	14271781.79	39°18'05.685"N	80°50'19.577"W	1538.00	98.431	2.12	
7605.00	89.480	157.120	6639.02	802.11	-340.25	1552.35	1686061.83	14271693.57	39°18'04.812"N	80°50'19.132"W	1589.20	102.363	2.46	
7701.00	89.540	157.250	6639.84	897.76	-428.74	1589.57	1686099.04	14271605.12	39°18'03.937"N	80°50'18.661"W	1646.38	105.095	0.15	
7796.00	89.450	158.850	6640.68	992.52	-516.85	1625.08	1686134.53	14271517.05	39°18'03.065"N	80°50'18.211"W	1705.29	107.643	1.69	
7891.00	89.520	161.190	6641.53	1087.45	-606.12	1667.54	1686166.97	14271427.81	39°18'02.182"N	80°50'17.800"W	1764.88	110.086	2.46	
7985.00	89.450	163.630	6642.38	1181.44	-695.71	1685.94	1686195.37	14271338.25	39°18'01.296"N	80°50'17.441"W	1823.85	112.424	2.60	
8080.00	89.850	158.880	6642.96	1276.40	-785.65	1716.46	1686225.87	14271248.36	39°18'00.407"N	80°50'17.055"W	1887.72	114.594	5.02	
8174.00	89.260	160.870	6643.69	1370.32	-873.90	1748.80	1686258.20	14271160.14	39°17'59.534"N	80°50'16.645"W	1954.99	116.552	2.21	
8269.00	89.420	164.960	6644.78	1465.28	-964.68	1776.70	1686286.09	14271069.39	39°17'58.636"N	80°50'16.293"W	2021.70	118.500	4.31	
8363.00	88.990	166.100	6646.09	1559.10	-1055.69	1800.19	1686309.57	14270978.42	39°17'57.736"N	80°50'15.996"W	2086.90	120.389	1.30	
8458.00	89.050	160.380	6647.71	1654.03	-1146.03	1827.57	1686336.94	14270887.54	39°17'56.837"N	80°50'15.650"W	2157.48	122.104	6.02	
8553.00	88.890	166.640	6649.42	1748.81	-1234.87	1862.36	1686371.71	14270799.21	39°17'55.963"N	80°50'15.209"W	2234.62	123.549	3.94	
8648.00	88.490	161.740	6651.59	1843.64	-1323.72	1896.09	1686405.43	14270710.50	39°17'55.086"N	80°50'14.782"W	2312.44	124.920	5.38	
8743.00	89.040	166.100	6653.64	1938.54	-1414.96	1922.39	1686431.72	14270619.30	39°17'54.183"N	80°50'14.450"W	2386.98	126.355	4.62	
8837.00	89.040	165.600	6655.22	2032.32	-1506.09	1945.36	1686454.69	14270528.20	39°17'53.282"N	80°50'14.159"W	2460.24	127.747	0.53	
8932.00	89.070	163.920	6656.78	2127.20	-1597.74	1970.33	1686479.64	14270436.59	39°17'52.376"N	80°50'13.844"W	2536.72	129.039	1.77	
9026.00	88.980	165.400	6658.38	2221.09	-1688.37	1995.19	1686504.50	14270345.99	39°17'51.480"N	80°50'13.530"W	2613.70	130.239	1.58	
9121.00	89.010	166.470	6660.05	2315.85	-1780.51	2018.28	1686527.57	14270253.89	39°17'50.569"N	80°50'13.238"W	2691.40	131.419	1.13	
9216.00	89.540	164.080	6661.25	2410.69	-1872.38	2042.42	1686551.70	14270162.06	39°17'49.660"N	80°50'12.933"W	2770.79	132.513	2.58	
9311.00	89.540	162.270	6662.02	2505.66	-1963.30	2069.92	1686579.19	14270071.17	39°17'48.761"N	80°50'12.586"W	2852.91	133.486	1.91	
9406.00	89.100	168.960	6663.14	2600.61	-2052.90	2101.44	1686610.70	14269981.61	39°17'47.875"N	80°50'12.187"W	2937.76	134.331	3.51	
9500.00	89.010	158.390	6664.69	2694.44	-2140.45	2135.62	1686644.87	14269894.10	39°17'47.009"N	80°50'11.754"W	3023.64	135.065	0.61	
9595.00	89.010	159.290	6666.33	2789.27	-2229.03	2169.91	1686679.14	14269805.55	39°17'46.133"N	80°50'11.320"W	3110.80	135.770	0.95	
9689.00	89.070	160.890	6667.91	2883.20	-2317.40	2201.91	1686711.13	14269717.22	39°17'45.259"N	80°50'10.915"W	3198.68	136.464	1.70	
9785.00	89.040	161.590	6669.49	2979.18	-2408.28	2232.78	1686741.99	14269626.37	39°17'44.360"N	80°50'10.524"W	3284.07	137.166	0.73	
9879.00	88.890	162.810	6671.19	3073.16	-2497.77	2261.51	1686770.71	14269536.82	39°17'43.475"N	80°50'10.161"W	3369.46	137.842	1.31	

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Actual Wellpath Report
 Rock Unit 2H AWP Proj: 14995
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddrige Co., WV
Field	Doddrige
Facility	Balli Pad
Slot	Slot #04
Well	Rock Unit 2H
	Rock Unit 2H AWB

WELLPATH DATA (355 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
9974.00	88.550	667.331	3168.12	-2587.80	2291.73	1688600.92	14269446.93	39°17'42.585"N	80°50'09.779"W	3456.69	138.472	2.90		
10068.00	89.040	667.529	3262.08	-2676.82	2321.84	1688631.01	14269357.94	39°17'41.704"N	80°50'09.398"W	3543.48	139.062	2.68		
10164.00	88.980	667.960	3358.06	-2768.49	2350.29	1688659.45	14269266.31	39°17'40.798"N	80°50'09.038"W	3631.58	139.671	0.43		
10268.00	89.070	667.880	3452.02	-2858.62	2376.91	1688686.06	14269176.21	39°17'39.907"N	80°50'08.701"W	3717.72	140.257	1.26		
10352.00	89.010	667.880	3545.76	-2949.81	2399.63	1688908.77	14269085.08	39°17'39.005"N	80°50'08.415"W	3802.57	140.872	3.98		
10447.00	89.380	668.146	3640.48	-3042.08	2422.12	1688931.25	14268992.82	39°17'38.092"N	80°50'08.131"W	3888.57	141.473	3.35		
10542.00	89.100	668.272	3735.44	-3132.60	2450.85	1688959.97	14268902.34	39°17'37.197"N	80°50'07.767"W	3977.42	141.961	4.91		
10637.00	89.040	668.260	3830.34	-3221.64	2483.93	1688993.04	14268813.34	39°17'36.317"N	80°50'07.349"W	4068.03	142.367	0.93		
10731.00	89.070	668.811	3924.29	-3310.22	2515.33	1687024.43	14268724.43	39°17'35.441"N	80°50'06.951"W	4157.45	142.770	2.77		
10826.00	89.010	668.400	4019.27	-3400.60	2544.54	1687053.62	14268634.45	39°17'34.547"N	80°50'06.582"W	4247.21	143.194	0.66		
10921.00	88.950	668.100	4114.24	-3490.51	2575.14	1687084.21	14268544.57	39°17'33.658"N	80°50'06.195"W	4337.63	143.582	2.52		
11017.00	89.350	669.510	4210.15	-3580.58	2608.35	1687117.41	14268454.55	39°17'32.767"N	80°50'05.774"W	4429.90	143.928	0.67		
11112.00	89.440	669.152	4305.07	-3669.69	2641.24	1687150.29	14268365.46	39°17'31.885"N	80°50'05.358"W	4521.37	144.256	0.49		
11207.00	89.320	669.255	4399.96	-3758.58	2674.74	1687183.77	14268276.61	39°17'31.006"N	80°50'04.934"W	4613.15	144.563	1.31		
11301.00	88.460	669.437	4493.85	-3848.65	2707.63	1687216.55	14268188.57	39°17'30.135"N	80°50'04.519"W	4703.98	144.860	2.03		
11396.00	88.580	669.830	4588.75	-3937.64	2734.60	1687243.61	14268097.63	39°17'29.235"N	80°50'04.177"W	4794.06	145.221	6.31		
11491.00	89.840	669.814	4683.07	-4030.77	2753.18	1687262.18	14268004.53	39°17'28.315"N	80°50'03.943"W	4881.30	145.665	5.00		
11586.00	90.240	669.807	4777.21	-4124.24	2770.11	1687279.10	14267911.10	39°17'27.390"N	80°50'03.730"W	4968.18	146.112	2.72		
11681.00	89.470	669.831	4871.99	-4216.19	2793.83	1687302.81	14267819.19	39°17'26.481"N	80°50'03.430"W	5057.83	146.470	6.21		
11776.00	88.240	670.211	4966.97	-4306.57	2823.01	1687331.98	14267728.84	39°17'25.587"N	80°50'03.061"W	5149.36	146.755	1.68		
11871.00	89.010	670.249	5061.93	-4397.20	2851.38	1687360.35	14267638.25	39°17'24.691"N	80°50'02.702"W	5240.78	147.038	2.28		
11965.00	89.200	670.396	5155.82	-4487.82	2876.28	1687385.23	14267547.66	39°17'23.795"N	80°50'02.388"W	5330.44	147.344	2.16		
12059.00	89.440	670.508	5249.65	-4578.78	2899.99	1687408.93	14267456.74	39°17'22.896"N	80°50'02.088"W	5419.88	147.652	0.61		
12154.00	89.190	670.260	5344.57	-4670.18	2925.86	1687434.79	14267365.38	39°17'21.992"N	80°50'01.761"W	5511.01	147.933	1.99		
12248.00	89.260	670.480	5438.51	-4758.94	2956.68	1687465.59	14267276.65	39°17'21.114"N	80°50'01.372"W	5602.63	148.148	5.12		
12343.00	89.100	670.884	5533.23	-4846.84	2992.68	1687501.59	14267188.79	39°17'20.244"N	80°50'00.916"W	5696.32	148.307	1.54		
12438.00	89.160	671.029	5627.99	-4935.00	3028.02	1687536.91	14267100.66	39°17'19.372"N	80°50'00.468"W	5789.92	148.468	2.43		
12534.00	89.130	671.172	5723.92	-5025.17	3060.94	1687569.82	14267010.53	39°17'18.481"N	80°50'00.052"W	5884.02	148.654	1.32		
12628.00	89.440	671.289	5817.90	-5114.16	3091.19	1687600.06	14266921.57	39°17'17.601"N	80°49'59.669"W	5975.79	148.850	1.41		
12723.00	89.560	671.372	5912.89	-5204.63	3120.15	1687629.00	14266831.14	39°17'16.706"N	80°49'59.303"W	6068.24	149.058	0.81		

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Actual Wellpath Report

Rock Unit 2H AWP Proj: 14995'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Rock Unit 2H
Field	Doddridge	Wellbore	Rock Unit 2H AWB
Facility	Balli Pad		

WELLPATH DATA (355 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]	Comments
12818.00	88.670	163.850	6715.19	6007.86	-5295.59	3147.54	1687656.38	14266740.22	39°17'15.806"N	80°49'58.957"W	6160.38	149.274	1.59	
12912.00	89.380	166.990	6716.79	6101.67	-5386.53	3171.20	1687680.03	14266649.31	39°17'14.907"N	80°49'58.658"W	6250.70	149.514	3.42	
13006.00	89.220	167.680	6717.94	6195.26	-5478.24	3191.81	1687700.63	14266557.64	39°17'14.000"N	80°49'58.398"W	6340.25	149.773	0.75	
13101.00	88.820	166.480	6719.56	6289.88	-5570.82	3213.04	1687721.86	14266465.10	39°17'13.085"N	80°49'58.130"W	6430.99	150.025	1.33	
13196.00	89.220	166.450	6721.19	6384.59	-5663.17	3235.27	1687744.08	14266372.79	39°17'12.172"N	80°49'57.850"W	6522.15	150.261	0.42	
13291.00	89.750	161.130	6722.04	6479.50	-5754.35	3261.78	1687770.58	14266281.64	39°17'11.270"N	80°49'57.515"W	6614.52	150.454	5.63	
13385.00	88.820	155.610	6723.21	6573.26	-5841.69	3296.42	1687805.20	14266194.33	39°17'10.406"N	80°49'57.076"W	6707.59	150.564	5.95	
13479.00	89.290	157.330	6724.76	6666.80	-5927.86	3333.94	1687842.70	14266108.20	39°17'09.554"N	80°49'56.601"W	6801.08	150.646	1.90	
13574.00	88.790	160.430	6726.36	6761.63	-6016.46	3368.16	1687876.91	14266019.64	39°17'08.677"N	80°49'56.168"W	6895.09	150.759	3.30	
13669.00	89.780	163.330	6727.54	6856.61	-6106.73	3397.70	1687906.44	14265929.40	39°17'07.785"N	80°49'55.794"W	6988.31	150.909	3.23	
13763.00	89.530	161.130	6728.11	6950.61	-6196.23	3426.39	1687935.12	14265839.93	39°17'06.900"N	80°49'55.432"W	7080.50	151.058	2.36	
13858.00	88.020	157.480	6730.14	7045.46	-6285.07	3459.94	1687968.66	14265751.14	39°17'06.021"N	80°49'55.007"W	7174.49	151.167	4.16	
13952.00	89.160	160.770	6732.45	7139.29	-6372.86	3493.42	1688002.12	14265663.38	39°17'05.153"N	80°49'54.583"W	7267.55	151.270	3.70	
14047.00	89.320	161.850	6733.71	7234.27	-6462.84	3523.86	1688032.55	14265573.44	39°17'04.263"N	80°49'54.198"W	7361.11	151.399	1.15	
14142.00	89.470	158.760	6734.72	7329.21	-6552.27	3555.87	1688064.55	14265484.04	39°17'03.378"N	80°49'53.793"W	7454.96	151.512	3.26	
14237.00	89.380	151.960	6735.67	7423.50	-6638.56	3595.45	1688104.12	14265397.78	39°17'02.525"N	80°49'53.292"W	7549.69	151.560	7.16	
14331.00	89.250	153.300	6736.80	7516.23	-6722.03	3638.66	1688147.31	14265314.35	39°17'01.699"N	80°49'52.744"W	7643.66	151.573	1.43	
14424.00	89.470	158.350	6737.83	7608.64	-6806.84	3676.74	1688185.37	14265229.57	39°17'00.860"N	80°49'52.262"W	7736.37	151.624	5.43	
14519.00	89.350	161.220	6738.81	7703.56	-6895.97	3709.56	1688218.17	14265140.47	39°16'59.978"N	80°49'51.847"W	7830.41	151.723	3.02	
14614.00	89.160	160.880	6740.05	7798.53	-6985.82	3740.40	1688249.01	14265050.66	39°16'59.090"N	80°49'51.457"W	7924.16	151.834	0.41	
14709.00	89.250	162.460	6741.37	7893.52	-7075.99	3770.28	1688278.87	14264960.53	39°16'58.198"N	80°49'51.079"W	8017.77	151.950	1.67	
14804.00	88.790	164.970	6742.99	7988.46	-7167.15	3796.91	1688305.49	14264869.40	39°16'57.296"N	80°49'50.742"W	8110.77	152.087	2.69	
14898.00	88.180	168.640	6745.48	8082.08	-7258.62	3818.36	1688326.93	14264777.97	39°16'56.392"N	80°49'50.472"W	8201.67	152.254	3.96	
14970.00	89.410	171.200	6746.99	8153.38	-7329.49	3830.95	1688339.52	14264707.13	39°16'55.691"N	80°49'50.313"W	8270.29	152.405	3.94	
14995.00	89.410	171.200	6747.25	8178.06	-7354.19	3834.78	1688343.35	14264682.44	39°16'55.447"N	80°49'50.265"W	8293.96	152.461	0.00	Projected MD at TD: 14995'

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Actual Wellpath Report

Rock Unit 2H AWP Proj: 14995'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Doddridge Co., WV	Well	Rock Unit 2H
Field	Doddridge	Wellbore	Rock Unit 2H AWB
Facility	Balli Pad		

HOLE & CASING SECTIONS - Ref Wellbore: Rock Unit 2H AWB Ref Wellpath: Rock Unit 2H AWP Proj: 14995'									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
20in Conductor	32.00	72.00	40.00	32.00	72.00	0.00	0.00	-0.07	0.06
13.375in Casing Surface	32.00	353.00	321.00	32.00	352.99	0.00	0.00	-1.49	1.16
9.625in Casing Intermediate	32.00	2546.00	2514.00	32.00	2540.75	0.00	0.00	108.88	1.93

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Rock Unit 2H POE Rev-1	6612.00	160.76	1390.67	1685900.21	14272194.38	39°18'09.767"N	80°50'21.178"W	point
Rock Unit 2H POE - Plat	6614.00	112.56	1406.28	1685915.82	14272146.20	39°18'09.290"N	80°50'20.980"W	point
Rock Unit 2H Landing Pt Rev-2	6633.00	28.68	1433.46	1685942.99	14272062.36	39°18'08.460"N	80°50'20.636"W	point
Rock Unit 2H BHL Rev-2	6700.40	-7318.53	3813.90	1688322.48	14264718.09	39°16'55.800"N	80°49'50.530"W	point
Rock Unit 2H 20' Hardline	6750.00	-3644.92	2623.68	1687132.73	14268390.22	39°17'32.131"N	80°50'05.581"W	rectangle

WELLPATH COMPOSITION - Ref Wellbore: Rock Unit 2H AWB Ref Wellpath: Rock Unit 2H AWP Proj: 14995'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.00	6215.00	SDI Keeper v1.04	01 SDI Std Keeper Gyro (100' - 6196')	Rock Unit 2H AWB
6215.00	14970.00	BHI AutoTrak Curve w/ Surcon (MagCAD, Short spacing)	02 BHI AT Curve [SS+MSA] <8-1/2">(6215')(6340'-14970')	Rock Unit 2H AWB
14970.00	14995.00	Blind Drilling (std)	Projection to bit	Rock Unit 2H AWB

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Rock Unit 2H AWP Proj: 14995'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION		Slot #04
Area	Doddridge Co., WV		Rock Unit 2H
Field	Doddridge		Rock Unit 2H AWB
Facility	Balli Pad		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
119.00	0.590	139.840	119.00	SDI Std Keeper Gyro (119' - 6215')
6340.00	26.580	74.170	6105.80	BHI AT Curve [SS+MSA] <8-1/2">(6215')(6340-14970')
6714.00	44.541	128.505	6422.63	Middlesex: 6714' MD
6941.00	67.541	149.538	6546.48	Burkett: 6941' MD
7024.00	70.396	154.213	6575.39	Tully: 7024' MD
7143.00	76.235	162.483	6611.51	Marcellus: 7143' MD
14995.00	89.410	171.200	6747.25	Projected MD at TD: 14995'

COMMENTS
<p>Wellpath general comments API: 47-017-06637-0000 BHI Job #: 7957072 Rig: Frontier 32 Duration: 05.17.2016-05.19.2016 SDI Std Keeper Gyro (119' - 6215') BHI AT Curve [SS+MSA] <8-1/2">(6215')(6340-14970') Middlesex: 6714' MD Burkett: 6941' MD Tully: 7024' MD Marcellus: 7143' MD Projected MD at TD: 14995'</p>

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