



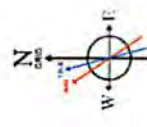
ANTERO RESOURCES CORPORATION
 Location: Doddridge Co., WV
 Field: Doddridge
 Facility: Ball Pad
 Slot: Slot #05
 Well: Rock Unit 1H
 Wellbore: Rock Unit 1H PWB

Plot reference wellbore is Rock Unit 1H PWB Rev A.0
 Grid System: NAD83 UTM Zone 17 North, US feet
 True vertical depths are referenced to Frontier 32 (RKB)
 Measured depths are referenced to Frontier 32 (RKB)
 Frontier 32 (RKB) to Mean Sea Level: 1167 feet
 Mean Sea Level to Mud line (At Slot, Slot #05): -1135 feet
 Coordinates are in feet referenced to Slot

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
Ball Pad	1884490.110	1427203.240	80°50'39.126"W
Local N (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
Slot	1884500.110	1427203.460	80°50'38.999"W
Slot #05	0.22	10.00	
Comment	Rock Unit 1H		
Frontier 32 (RKB) to Mud line (At Slot, Slot #05)		32R	
Mean Sea Level to Mud line (At Slot, Slot #05)		-1135ft	
Frontier 32 (RKB) to Mean Sea Level		1167ft	

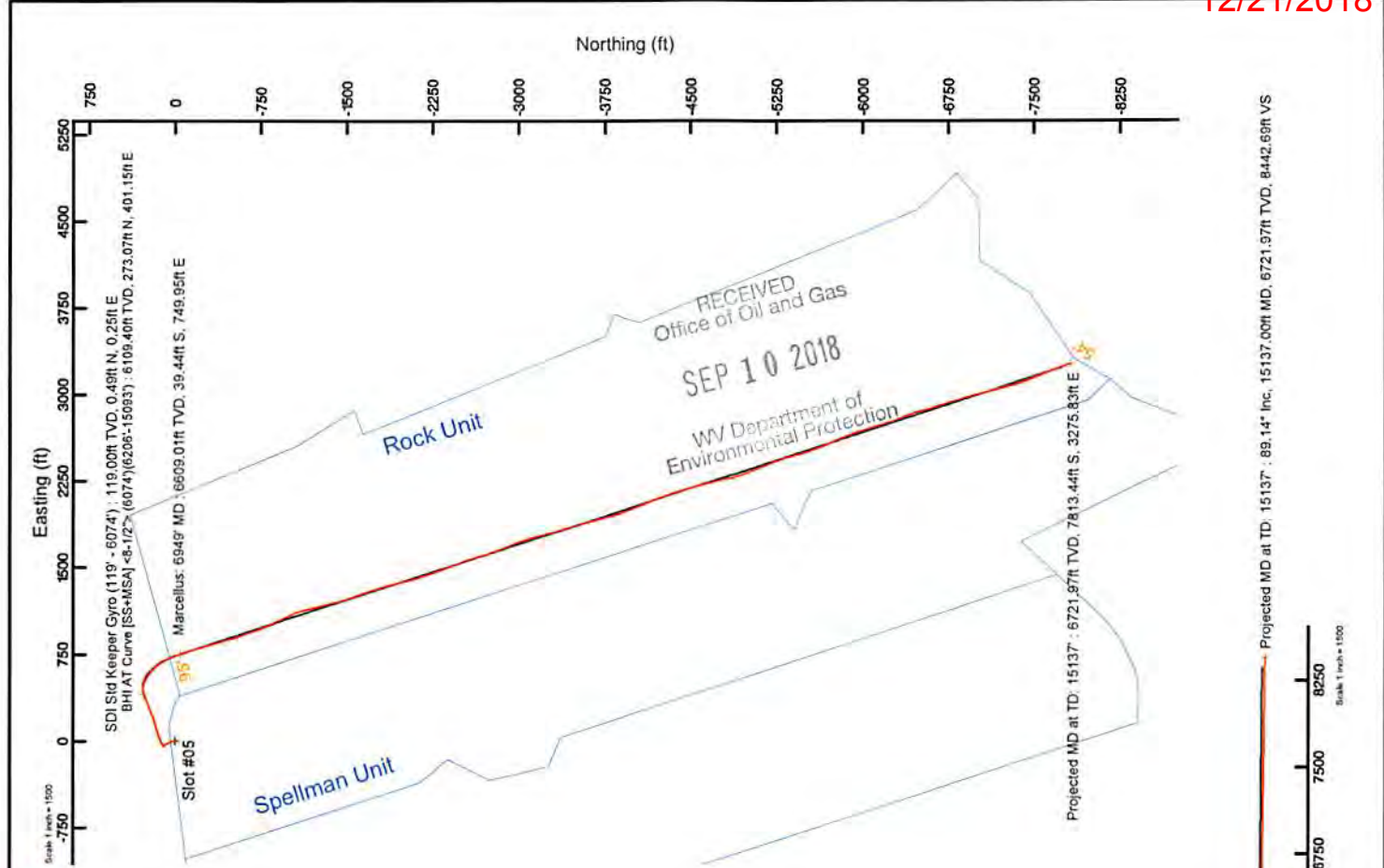
SDI Sid Keeper Gyro (119° -6074') : 0.73° Inc, 119.00ft MD, 119.00ft TVD, -0.39ft VS

Well Data			
Slot	Wellbore	Wellpath	
Slot #05	Rock Unit 1H PWB	Rock Unit 1H PWB Proj. 9/13/17	
Slot #05	Rock Unit 1H	Rock Unit 1H PWB	Rock Unit 1H PWB Rev A.0



ROOM (1945.5 to 2017.25) Dip: 66.89° From: 5209.4 ft
 Magnetic North is 8.51 degrees West of True North (N=532016)
 To convert azimuth from True to Grid subtract 0.10 degrees
 To convert azimuth from Magnetic to Grid subtract 8.61 degrees

API: 47-017-06636-0000
 BHI Job #: 7970336
 Rig: Frontier 32
 Duration: 05.12.2016-05.25.2016

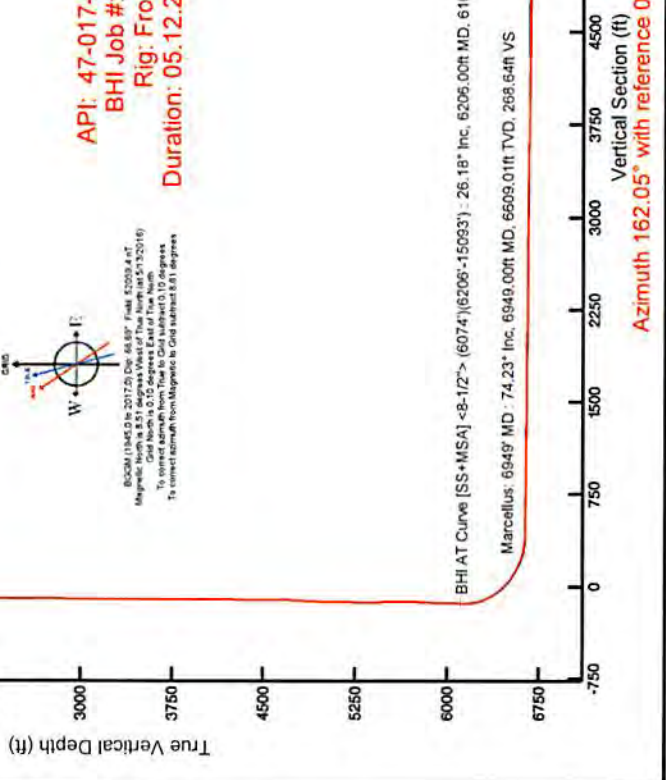


SDI Sid Keeper Gyro (119° -6074') : 119.00ft TVD, 0.49ft N, 0.25ft E
 BHI AT Curve [SS+MSA] <8-1/2> (6074') (6206-15093) : 6109.40ft TVD, 273.07ft N, 401.15ft E
 Marcellus: 6949' MD : 6609.01ft TVD, 39.44ft S, 749.95ft E
 Slot #05
 Projected MD at TD: 15137' : 6721.97ft TVD, 7813.44ft S, 3275.83ft E

Spellman Unit
 Rock Unit

Projected MD at TD: 15137' : 6721.97ft TVD, 7813.44ft S, 3275.83ft E

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Azimuth 162.05° with reference 0.00 N, 0.00 E

Scale 1 inch = 1000

Vertical Section (ft)

Scale 1 inch = 1000



Actual Wellpath Report

Rock Unit 1H AWP Proj: 15137'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Rock Unit 1H
Field	Doddridge	Wellbore	Rock Unit 1H AWB
Facility	Balli 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 11:04:22 AM
Convergence at slot	0.10° East	Database/Source file	WA_MPL_EASTERNUS_Defn/Rock_Unit_1H_AWP_Proj_15137_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.22	10.00	1684500.11	14272033.46	39°18'08.200"N	80°50'38.999"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 #05)	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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Rock Unit 1H AWP Proj: 15137'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddrige Co., WV	Well	Rock Unit 1H
Field	Doddrige	Wellbore	Rock Unit 1H AWB
Facility	Bailli Pad		

WELLPATH DATA (352 stations) † = Interpolated/extrapolated station

MD	Inclination	Azimuth	TVD	Vert 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	
0.00	0.00	27.000	0.00	0.00	0.00	0.00	1684500.11	14272033.46	39°18'08.200"N	80°50'38.999"W	0.00	0.00	0.00	
32.00	0.00	27.000	32.00	0.00	0.00	0.00	1684500.11	14272033.46	39°18'08.200"N	80°50'38.999"W	0.00	0.00	0.00	
119.00	0.730	27.000	119.00	-0.39	0.49	0.25	1684500.36	14272033.95	39°18'08.205"N	80°50'38.995"W	0.55	27.000	0.84	SDI Sid Keeper Gyro (119 - 6074)
144.00	0.760	25.560	144.00	-0.63	0.79	0.40	1684500.51	14272034.24	39°18'08.208"N	80°50'38.994"W	0.88	26.728	0.14	
169.00	0.750	29.250	168.99	-0.86	1.08	0.55	1684500.66	14272034.54	39°18'08.210"N	80°50'38.992"W	1.21	26.909	0.20	
194.00	0.790	28.090	193.99	-1.09	1.37	0.71	1684500.82	14272034.83	39°18'08.213"N	80°50'38.990"W	1.54	27.289	0.17	
219.00	0.670	26.540	218.99	-1.31	1.66	0.85	1684500.96	14272035.11	39°18'08.216"N	80°50'38.988"W	1.86	27.304	0.49	
244.00	0.520	28.399	243.99	-1.50	1.89	0.97	1684501.08	14272035.35	39°18'08.218"N	80°50'38.986"W	2.12	27.309	0.57	
269.00	0.560	18.720	268.99	-1.67	2.11	1.07	1684501.18	14272035.56	39°18'08.221"N	80°50'38.985"W	2.36	26.918	0.39	
294.00	0.550	24.300	293.98	-1.86	2.33	1.16	1684501.27	14272035.79	39°18'08.223"N	80°50'38.984"W	2.60	26.414	0.22	
319.00	0.580	24.470	318.98	-2.04	2.55	1.26	1684501.37	14272036.01	39°18'08.225"N	80°50'38.983"W	2.85	26.238	0.12	
344.00	0.610	25.480	343.98	-2.23	2.79	1.37	1684501.48	14272036.25	39°18'08.227"N	80°50'38.981"W	3.11	26.134	0.13	
369.00	0.560	22.690	368.98	-2.42	3.02	1.47	1684501.58	14272036.48	39°18'08.230"N	80°50'38.980"W	3.36	25.986	0.27	
394.00	0.840	13.500	393.98	-2.67	3.31	1.56	1684501.67	14272036.77	39°18'08.232"N	80°50'38.979"W	3.66	25.257	1.24	
419.00	1.310	6.740	418.98	-3.08	3.77	1.64	1684501.75	14272037.23	39°18'08.237"N	80°50'38.978"W	4.11	23.472	1.94	
444.00	2.060	1.930	443.96	-3.77	4.50	1.69	1684501.80	14272037.96	39°18'08.244"N	80°50'38.977"W	4.81	20.525	3.05	
469.00	2.660	358.570	468.94	-4.74	5.53	1.69	1684501.80	14272038.99	39°18'08.254"N	80°50'38.977"W	5.79	16.956	2.46	
494.00	3.390	354.730	493.91	-6.02	6.95	1.60	1684501.71	14272040.31	39°18'08.267"N	80°50'38.978"W	7.04	13.188	3.03	
519.00	4.010	353.360	518.86	-7.60	8.45	1.44	1684501.55	14272041.91	39°18'08.283"N	80°50'38.980"W	8.58	9.639	2.50	
544.00	4.500	352.230	543.79	-9.42	10.29	1.20	1684501.31	14272043.75	39°18'08.301"N	80°50'38.983"W	10.36	6.661	1.99	
569.00	4.940	352.460	568.70	-11.45	12.33	0.93	1684501.04	14272045.79	39°18'08.322"N	80°50'38.987"W	12.37	4.305	1.76	
594.00	5.440	353.530	593.60	-13.67	14.58	0.65	1684500.76	14272048.03	39°18'08.344"N	80°50'38.990"W	14.59	2.567	2.04	
619.00	5.590	353.320	618.48	-16.02	16.96	0.38	1684500.49	14272050.42	39°18'08.367"N	80°50'38.993"W	16.97	1.278	0.61	
644.00	5.760	351.720	643.36	-18.45	19.42	0.06	1684500.17	14272052.87	39°18'08.392"N	80°50'38.998"W	19.42	0.165	0.93	
669.00	6.060	349.610	668.23	-21.00	21.95	-0.36	1684499.75	14272055.41	39°18'08.417"N	80°50'39.003"W	21.96	359.054	1.48	
694.00	6.500	345.980	693.08	-23.72	24.63	-0.94	1684499.17	14272058.08	39°18'08.443"N	80°50'39.010"W	24.64	357.806	2.37	
719.00	6.820	343.010	717.91	-26.61	27.42	-1.72	1684498.39	14272060.87	39°18'08.471"N	80°50'39.020"W	27.47	356.410	1.88	
744.00	7.120	339.300	742.72	-29.66	30.29	-2.70	1684497.41	14272063.73	39°18'08.499"N	80°50'39.032"W	30.41	354.903	2.16	
769.00	7.440	336.690	767.52	-32.80	33.22	-3.89	1684496.22	14272066.67	39°18'08.528"N	80°50'39.047"W	33.45	353.323	1.84	
794.00	7.670	333.890	792.31	-36.07	36.21	-5.26	1684494.85	14272069.65	39°18'08.558"N	80°50'39.065"W	36.59	351.728	1.74	

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddrige Co., WV
Field	Doddrige
Facility	Balli Pad
Slot	Slot #05
Well	Rock Unit 1H
Wellbore	Rock Unit 1H AWP

WELLPATH DATA (352 stations)

MD	Inclination	Azimuth	TVD	Vent Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
819.00	7.850	333.370	817.08	-39.41	39.23	-6.76	1684493.35	14272072.68	39°18'08.588"N	80°50'39.084"W	39.81	350.218	0.77	
844.00	7.920	333.440	841.84	-42.80	42.30	-8.30	1684491.81	14272075.74	39°18'08.618"N	80°50'39.103"W	43.10	348.899	0.28	
869.00	7.950	333.250	866.60	-46.21	45.38	-9.85	1684490.27	14272078.82	39°18'08.648"N	80°50'39.123"W	46.44	347.757	0.16	
894.00	8.020	333.090	891.36	-49.64	48.48	-11.41	1684488.70	14272081.92	39°18'08.679"N	80°50'39.143"W	49.81	346.751	0.29	
919.00	7.800	333.260	916.12	-53.04	51.55	-12.97	1684487.15	14272084.99	39°18'08.709"N	80°50'39.162"W	53.16	345.881	0.88	
944.00	7.070	334.270	940.91	-56.24	54.45	-14.40	1684485.72	14272087.89	39°18'08.738"N	80°50'39.181"W	56.32	345.189	2.97	
969.00	6.510	334.770	965.74	-59.17	57.12	-15.67	1684484.45	14272090.56	39°18'08.765"N	80°50'39.197"W	59.23	344.659	2.25	
994.00	6.200	334.390	990.58	-61.91	59.62	-16.86	1684483.26	14272093.03	39°18'08.789"N	80°50'39.212"W	61.96	344.211	1.25	
1019.00	5.920	333.990	1015.44	-64.53	62.00	-18.01	1684482.11	14272095.43	39°18'08.813"N	80°50'39.226"W	64.56	343.804	1.13	
1044.00	5.550	333.150	1040.32	-67.00	64.23	-19.12	1684481.00	14272097.67	39°18'08.835"N	80°50'39.240"W	67.02	343.425	1.52	
1069.00	5.290	332.930	1065.21	-69.33	66.34	-20.19	1684479.93	14272099.77	39°18'08.856"N	80°50'39.254"W	69.34	343.073	1.04	
1094.00	5.010	332.650	1090.10	-71.55	68.33	-21.22	1684478.90	14272101.77	39°18'08.876"N	80°50'39.267"W	71.55	342.751	1.13	
1119.00	4.660	332.130	1115.02	-73.63	70.20	-22.20	1684477.92	14272103.64	39°18'08.894"N	80°50'39.279"W	73.63	342.454	1.33	
1144.00	4.390	332.350	1139.94	-75.58	71.95	-23.12	1684477.00	14272105.38	39°18'08.911"N	80°50'39.291"W	75.58	342.188	1.16	
1169.00	4.140	332.080	1164.87	-77.41	73.66	-23.98	1684476.14	14272107.03	39°18'08.928"N	80°50'39.302"W	77.41	341.950	1.00	
1194.00	3.820	331.960	1189.81	-79.12	75.13	-24.80	1684475.32	14272108.56	39°18'08.943"N	80°50'39.312"W	79.12	341.734	1.28	
1219.00	3.570	332.020	1214.76	-80.70	76.55	-25.55	1684474.57	14272109.98	39°18'08.957"N	80°50'39.322"W	80.71	341.540	1.00	
1244.00	3.280	332.750	1239.71	-82.17	77.88	-26.25	1684473.87	14272111.30	39°18'08.970"N	80°50'39.331"W	82.18	341.374	1.17	
1269.00	3.040	333.700	1264.67	-83.54	79.11	-26.87	1684473.25	14272112.53	39°18'08.982"N	80°50'39.339"W	83.54	341.240	0.98	
1294.00	2.780	335.190	1289.64	-84.79	80.25	-27.42	1684472.70	14272113.68	39°18'08.993"N	80°50'39.346"W	84.80	341.138	1.08	
1319.00	2.570	334.530	1314.61	-85.95	81.31	-27.91	1684472.21	14272114.73	39°18'09.004"N	80°50'39.352"W	85.96	341.053	0.85	
1344.00	2.190	334.900	1339.59	-86.98	82.25	-28.36	1684471.77	14272115.67	39°18'09.013"N	80°50'39.358"W	87.00	340.977	1.52	
1369.00	2.000	335.300	1364.57	-87.89	83.07	-28.74	1684471.38	14272116.50	39°18'09.021"N	80°50'39.362"W	87.91	340.916	0.75	
1394.00	1.840	335.640	1389.56	-88.72	83.84	-29.09	1684471.03	14272117.26	39°18'09.029"N	80°50'39.367"W	88.74	340.865	0.64	
1419.00	1.640	335.620	1414.55	-89.47	84.53	-29.40	1684470.72	14272117.95	39°18'09.036"N	80°50'39.371"W	89.50	340.820	0.80	
1444.00	1.430	335.200	1439.54	-90.14	85.14	-29.68	1684470.44	14272118.56	39°18'09.042"N	80°50'39.374"W	90.16	340.780	0.84	
1469.00	1.260	334.500	1464.53	-90.72	85.67	-29.93	1684470.19	14272119.09	39°18'09.047"N	80°50'39.378"W	90.75	340.742	0.68	
1494.00	1.140	331.950	1489.53	-91.24	86.14	-30.16	1684469.96	14272119.56	39°18'09.052"N	80°50'39.381"W	91.26	340.700	0.53	
1519.00	1.050	330.250	1514.52	-91.71	86.55	-30.40	1684469.73	14272119.98	39°18'09.056"N	80°50'39.383"W	91.74	340.650	0.38	
1544.00	0.990	330.050	1539.52	-92.14	86.94	-30.62	1684469.51	14272120.37	39°18'09.060"N	80°50'39.386"W	92.17	340.600	0.24	

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Rock Unit 1H
Field	Doddridge	Wellbore	Rock Unit 1H AWB
Facility	Balli Pad		

WELLPATH DATA (352 stations)														
MD	Inclination	Azimuth	TVD	Vert 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	ft	
1569.00	0.940	330.270	1564.52	-92.56	87.31	-30.83	1684469.30	14272120.73	39°18'09.063"N	80°50'39.389"W	92.59	340.552	0.20	
1594.00	0.840	329.570	1589.51	-92.94	87.64	-31.02	1684469.10	14272121.07	39°18'09.067"N	80°50'39.391"W	92.87	340.508	0.40	
1619.00	0.840	329.400	1614.51	-93.29	87.66	-31.21	1684468.92	14272121.38	39°18'09.070"N	80°50'39.394"W	93.33	340.465	0.01	
1644.00	0.820	328.340	1639.51	-93.65	88.27	-31.39	1684468.73	14272121.69	39°18'09.073"N	80°50'39.396"W	93.68	340.421	0.10	
1669.00	0.720	325.320	1664.51	-93.97	88.55	-31.58	1684468.55	14272121.97	39°18'09.075"N	80°50'39.398"W	94.01	340.373	0.43	
1694.00	0.750	324.220	1689.50	-94.28	88.81	-31.76	1684468.36	14272122.23	39°18'09.078"N	80°50'39.401"W	94.32	340.321	0.13	
1719.00	0.670	328.400	1714.50	-94.57	89.07	-31.93	1684468.19	14272122.49	39°18'09.081"N	80°50'39.403"W	94.62	340.275	0.38	
1744.00	0.570	323.790	1739.50	-94.83	89.29	-32.08	1684468.04	14272122.72	39°18'09.083"N	80°50'39.405"W	94.88	340.235	0.45	
1769.00	0.540	317.070	1764.50	-95.06	89.48	-32.24	1684467.88	14272122.99	39°18'09.085"N	80°50'39.407"W	95.11	340.186	0.29	
1794.00	0.500	320.040	1789.50	-95.27	89.65	-32.39	1684467.73	14272123.07	39°18'09.086"N	80°50'39.409"W	95.32	340.136	0.19	
1819.00	0.320	319.880	1814.50	-95.43	89.79	-32.50	1684467.62	14272123.21	39°18'09.088"N	80°50'39.410"W	95.49	340.099	0.72	
1844.00	0.280	317.000	1839.50	-95.55	89.88	-32.59	1684467.53	14272123.31	39°18'09.089"N	80°50'39.411"W	95.61	340.070	0.17	
1869.00	0.330	318.370	1864.50	-95.67	89.98	-32.68	1684467.44	14272123.41	39°18'09.090"N	80°50'39.412"W	95.73	340.040	0.20	
1894.00	0.330	315.880	1889.50	-95.80	90.09	-32.78	1684467.35	14272123.51	39°18'09.091"N	80°50'39.414"W	95.87	340.006	0.06	
1919.00	0.310	312.470	1914.50	-95.93	90.19	-32.88	1684467.25	14272123.61	39°18'09.092"N	80°50'39.415"W	95.99	339.970	0.11	
1944.00	0.370	306.940	1939.49	-96.05	90.28	-32.99	1684467.13	14272123.70	39°18'09.093"N	80°50'39.416"W	96.12	339.925	0.27	
1969.00	0.300	312.990	1964.49	-96.18	90.37	-33.10	1684467.02	14272123.80	39°18'09.094"N	80°50'39.418"W	96.25	339.881	0.31	
1994.00	0.300	312.360	1989.49	-96.29	90.46	-33.20	1684466.92	14272123.89	39°18'09.094"N	80°50'39.419"W	96.36	339.846	0.01	
2019.00	0.330	313.860	2014.49	-96.41	90.56	-33.30	1684466.82	14272123.98	39°18'09.095"N	80°50'39.420"W	96.48	339.809	0.12	
2044.00	0.290	313.800	2039.49	-96.53	90.65	-33.40	1684466.72	14272124.07	39°18'09.096"N	80°50'39.422"W	96.61	339.774	0.16	
2069.00	0.300	306.810	2064.49	-96.64	90.73	-33.50	1684466.63	14272124.16	39°18'09.097"N	80°50'39.423"W	96.72	339.737	0.15	
2094.00	0.320	308.960	2089.49	-96.75	90.82	-33.60	1684466.52	14272124.24	39°18'09.098"N	80°50'39.424"W	96.83	339.694	0.09	
2119.00	0.330	306.240	2114.49	-96.87	90.90	-33.72	1684466.41	14272124.33	39°18'09.099"N	80°50'39.426"W	96.95	339.650	0.07	
2144.00	0.300	311.850	2139.49	-96.98	90.99	-33.82	1684466.30	14272124.41	39°18'09.100"N	80°50'39.427"W	97.07	339.608	0.17	
2169.00	0.210	299.230	2164.49	-97.07	91.05	-33.91	1684466.21	14272124.48	39°18'09.100"N	80°50'39.428"W	97.16	339.573	0.42	
2194.00	0.170	312.300	2189.49	-97.14	91.10	-33.98	1684466.14	14272124.52	39°18'09.101"N	80°50'39.429"W	97.23	339.545	0.23	
2219.00	0.110	278.170	2214.49	-97.18	91.13	-34.03	1684466.09	14272124.55	39°18'09.101"N	80°50'39.430"W	97.28	339.523	0.40	
2244.00	0.100	279.150	2239.49	-97.20	91.14	-34.08	1684466.05	14272124.56	39°18'09.101"N	80°50'39.430"W	97.30	339.500	0.04	
2269.00	0.100	286.550	2264.49	-97.22	91.15	-34.12	1684466.01	14272124.57	39°18'09.101"N	80°50'39.431"W	97.32	339.478	0.05	
2294.00	0.130	280.880	2289.49	-97.25	91.16	-34.17	1684465.96	14272124.58	39°18'09.101"N	80°50'39.431"W	97.35	339.454	0.13	

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Actual Wellpath Report

Rock Unit 1H AWP Proj: 15137

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Rock Unit 1H
Field	Doddridge	Wellbore	Rock Unit 1H AWB
Facility	Balli Pad		

WELLPATH DATA (352 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
2319.00	0.130	276.900	2314.49	-97.28	91.17	-34.22	1684465.90	14272124.59	39°18'09.101"N	80°50'39.432"W	97.38	339.425	0.04	
2344.00	0.120	290.160	2339.49	-97.30	91.18	-34.28	1684465.85	14272124.60	39°18'09.102"N	80°50'39.433"W	97.41	339.398	0.12	
2369.00	0.050	149.190	2364.49	-97.31	91.18	-34.29	1684465.83	14272124.60	39°18'09.102"N	80°50'39.433"W	97.41	339.388	0.65	
2394.00	0.070	283.870	2389.49	-97.31	91.17	-34.30	1684465.82	14272124.60	39°18'09.101"N	80°50'39.433"W	97.41	339.381	0.44	
2419.00	0.100	33.030	2414.49	-97.33	91.19	-34.31	1684465.82	14272124.62	39°18'09.102"N	80°50'39.433"W	97.43	339.384	0.56	
2444.00	0.120	359.480	2439.49	-97.37	91.24	-34.29	1684465.83	14272124.66	39°18'09.102"N	80°50'39.433"W	97.47	339.400	0.27	
2469.00	0.150	333.820	2464.49	-97.42	91.29	-34.31	1684465.81	14272124.72	39°18'09.103"N	80°50'39.433"W	97.53	339.403	0.27	
2494.00	0.180	326.540	2489.49	-97.50	91.36	-34.35	1684465.78	14272124.78	39°18'09.103"N	80°50'39.434"W	97.60	339.396	0.15	
2519.00	0.250	320.950	2514.49	-97.58	91.43	-34.40	1684465.72	14272124.86	39°18'09.104"N	80°50'39.434"W	97.69	339.381	0.29	
2544.00	0.250	315.810	2539.49	-97.68	91.51	-34.47	1684465.65	14272124.94	39°18'09.105"N	80°50'39.435"W	97.79	339.358	0.09	
2569.00	0.250	316.500	2564.49	-97.78	91.59	-34.55	1684465.57	14272125.02	39°18'09.106"N	80°50'39.436"W	97.89	339.333	0.01	
2594.00	0.280	317.640	2589.49	-97.89	91.68	-34.63	1684465.50	14272125.10	39°18'09.106"N	80°50'39.437"W	98.00	339.307	0.12	
2619.00	0.300	325.080	2614.49	-98.00	91.78	-34.71	1684465.42	14272125.20	39°18'09.107"N	80°50'39.438"W	98.12	339.285	0.17	
2644.00	0.330	306.120	2639.49	-98.13	91.87	-34.80	1684465.32	14272125.29	39°18'09.108"N	80°50'39.439"W	98.24	339.252	0.43	
2669.00	0.320	314.690	2664.49	-98.25	91.96	-34.91	1684465.21	14272125.39	39°18'09.109"N	80°50'39.441"W	98.37	339.213	0.20	
2694.00	0.300	319.880	2689.49	-98.37	92.06	-35.00	1684465.12	14272125.49	39°18'09.110"N	80°50'39.442"W	98.49	339.183	0.14	
2719.00	0.320	306.080	2714.49	-98.49	92.15	-35.10	1684465.02	14272125.58	39°18'09.111"N	80°50'39.443"W	98.61	339.148	0.31	
2744.00	0.340	316.040	2739.49	-98.61	92.25	-35.21	1684464.92	14272125.67	39°18'09.112"N	80°50'39.445"W	98.74	339.109	0.24	
2769.00	0.280	315.030	2764.49	-98.73	92.34	-35.30	1684464.82	14272125.77	39°18'09.113"N	80°50'39.446"W	98.86	339.078	0.24	
2794.00	0.350	308.670	2789.49	-98.85	92.44	-35.41	1684464.72	14272125.86	39°18'09.114"N	80°50'39.447"W	98.98	339.041	0.31	
2819.00	0.350	317.460	2814.49	-98.98	92.54	-35.52	1684464.61	14272125.96	39°18'09.115"N	80°50'39.448"W	99.12	339.003	0.21	
2844.00	0.330	312.590	2839.49	-99.11	92.64	-35.62	1684464.50	14272126.07	39°18'09.116"N	80°50'39.450"W	99.26	338.968	0.14	
2869.00	0.360	318.490	2864.49	-99.25	92.75	-35.73	1684464.40	14272126.18	39°18'09.117"N	80°50'39.451"W	99.40	338.934	0.19	
2894.00	0.370	316.580	2889.49	-99.39	92.87	-35.83	1684464.29	14272126.29	39°18'09.118"N	80°50'39.452"W	99.54	338.900	0.06	
2919.00	0.360	311.340	2914.48	-99.53	92.98	-35.95	1684464.18	14272126.40	39°18'09.119"N	80°50'39.454"W	99.69	338.862	0.14	
2944.00	0.300	319.460	2939.48	-99.66	93.08	-36.05	1684464.07	14272126.50	39°18'09.120"N	80°50'39.455"W	99.82	338.829	0.30	
2969.00	0.260	315.090	2964.48	-99.77	93.17	-36.13	1684463.99	14272126.59	39°18'09.121"N	80°50'39.456"W	99.93	338.803	0.18	
2994.00	0.220	329.090	2989.48	-99.87	93.25	-36.20	1684463.93	14272126.68	39°18'09.122"N	80°50'39.457"W	100.03	338.785	0.28	
3019.00	0.250	311.960	3014.48	-99.96	93.33	-36.26	1684463.86	14272126.75	39°18'09.123"N	80°50'39.458"W	100.13	338.767	0.30	
3044.00	0.190	321.350	3039.48	-100.05	93.40	-36.33	1684463.80	14272126.82	39°18'09.124"N	80°50'39.459"W	100.22	338.746	0.28	

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Balli Pad
Slot	Slot #05
Rock Unit 1H	Rock Unit 1H
Rock Unit 1H AWP	Rock Unit 1H AWP

WELLPATH DATA (352 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
3069.00	0.190	311.600	3064.48	-100.12	93.46	-36.39	1684463.74	14272126.88	39°18'09.124"N	80°50'39.459"W	100.29	338.728	0.13	
3094.00	0.200	323.160	3089.48	-100.20	93.52	-36.44	1684463.68	14272126.94	39°18'09.125"N	80°50'39.460"W	100.37	338.710	0.16	
3119.00	0.280	303.760	3114.48	-100.29	93.59	-36.52	1684463.60	14272127.01	39°18'09.125"N	80°50'39.461"W	100.46	338.684	0.45	
3144.00	0.240	313.890	3139.48	-100.38	93.66	-36.61	1684463.52	14272127.08	39°18'09.126"N	80°50'39.462"W	100.56	338.651	0.24	
3169.00	0.320	307.140	3164.48	-100.49	93.74	-36.70	1684463.42	14272127.16	39°18'09.127"N	80°50'39.463"W	100.67	338.618	0.35	
3194.00	0.180	309.340	3189.48	-100.58	93.81	-36.79	1684463.34	14272127.23	39°18'09.128"N	80°50'39.465"W	100.76	338.586	0.56	
3219.00	0.270	305.050	3214.48	-100.66	93.87	-36.87	1684463.26	14272127.29	39°18'09.128"N	80°50'39.466"W	100.85	338.557	0.37	
3244.00	0.230	298.080	3239.48	-100.74	93.92	-36.96	1684463.17	14272127.34	39°18'09.129"N	80°50'39.467"W	100.93	338.520	0.20	
3269.00	0.260	291.680	3264.48	-100.81	93.97	-37.06	1684463.07	14272127.39	39°18'09.129"N	80°50'39.468"W	101.01	338.478	0.16	
3294.00	0.270	289.820	3289.48	-100.89	94.01	-37.16	1684462.96	14272127.43	39°18'09.130"N	80°50'39.469"W	101.09	338.429	0.05	
3319.00	0.250	277.330	3314.48	-100.95	94.03	-37.27	1684462.85	14272127.46	39°18'09.130"N	80°50'39.471"W	101.15	338.377	0.24	
3344.00	0.170	265.160	3339.48	-100.98	94.04	-37.37	1684462.76	14272127.46	39°18'09.130"N	80°50'39.472"W	101.19	338.330	0.36	
3369.00	0.250	293.100	3364.48	-101.02	94.06	-37.45	1684462.67	14272127.48	39°18'09.130"N	80°50'39.473"W	101.24	338.288	0.51	
3394.00	0.220	270.940	3389.48	-101.07	94.08	-37.55	1684462.57	14272127.50	39°18'09.130"N	80°50'39.474"W	101.30	338.241	0.38	
3419.00	0.270	279.900	3414.48	-101.12	94.09	-37.66	1684462.47	14272127.51	39°18'09.130"N	80°50'39.476"W	101.35	338.188	0.25	
3444.00	0.270	290.450	3439.48	-101.18	94.12	-37.77	1684462.36	14272127.54	39°18'09.131"N	80°50'39.477"W	101.42	338.135	0.20	
3469.00	0.250	290.000	3464.48	-101.25	94.16	-37.88	1684462.25	14272127.58	39°18'09.131"N	80°50'39.478"W	101.49	338.088	0.08	
3494.00	0.260	283.280	3489.48	-101.31	94.19	-37.98	1684462.14	14272127.61	39°18'09.131"N	80°50'39.480"W	101.56	338.040	0.12	
3519.00	0.320	282.770	3514.48	-101.38	94.22	-38.10	1684462.02	14272127.64	39°18'09.132"N	80°50'39.481"W	101.63	337.982	0.28	
3544.00	0.290	299.930	3539.48	-101.46	94.27	-38.22	1684461.90	14272127.69	39°18'09.132"N	80°50'39.483"W	101.72	337.928	0.38	
3569.00	0.310	296.770	3564.48	-101.55	94.33	-38.34	1684461.79	14272127.75	39°18'09.133"N	80°50'39.484"W	101.82	337.881	0.10	
3594.00	0.320	301.790	3589.48	-101.65	94.40	-38.46	1684461.67	14272127.82	39°18'09.133"N	80°50'39.486"W	101.93	337.833	0.12	
3619.00	0.310	294.340	3614.48	-101.75	94.46	-38.58	1684461.55	14272127.88	39°18'09.134"N	80°50'39.487"W	102.04	337.784	0.17	
3644.00	0.320	299.110	3639.48	-101.85	94.52	-38.70	1684461.42	14272127.94	39°18'09.135"N	80°50'39.489"W	102.14	337.733	0.11	
3669.00	0.330	299.290	3664.48	-101.95	94.59	-38.83	1684461.30	14272128.01	39°18'09.135"N	80°50'39.491"W	102.25	337.684	0.04	
3694.00	0.340	303.810	3689.48	-102.06	94.67	-38.95	1684461.17	14272128.09	39°18'09.136"N	80°50'39.492"W	102.37	337.635	0.11	
3719.00	0.320	303.170	3714.48	-102.18	94.75	-39.07	1684461.05	14272128.17	39°18'09.137"N	80°50'39.494"W	102.49	337.590	0.08	
3744.00	0.330	296.110	3739.48	-102.28	94.82	-39.19	1684460.93	14272128.24	39°18'09.138"N	80°50'39.495"W	102.60	337.542	0.16	
3769.00	0.320	290.010	3764.48	-102.37	94.87	-39.32	1684460.80	14272128.30	39°18'09.138"N	80°50'39.497"W	102.70	337.486	0.14	
3794.00	0.370	299.520	3789.47	-102.48	94.94	-39.46	1684460.67	14272128.36	39°18'09.139"N	80°50'39.499"W	102.81	337.430	0.30	

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Rock Unit 1H
Field	Doddridge	Wellbore	Rock Unit 1H AWP
Facility	Balli Pad		

WELLPATH DATA (352 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
3819.00	0.340	294.440	3814.47	-102.59	95.01	-39.60	1684460.53	14272128.43	39°18'09.139"N	80°50'39.500"W	102.93	337.374	0.17	
3844.00	0.380	291.510	3839.47	-102.69	95.07	-39.74	1684460.38	14272128.49	39°18'09.140"N	80°50'39.502"W	103.04	337.313	0.18	
3894.00	0.270	288.860	3889.47	-102.86	95.17	-40.01	1684460.12	14272128.59	39°18'09.141"N	80°50'39.505"W	103.23	337.199	0.20	
3919.00	0.300	288.970	3914.47	-102.94	95.21	-40.12	1684460.00	14272128.63	39°18'09.141"N	80°50'39.507"W	103.32	337.148	0.12	
3944.00	0.300	294.920	3939.47	-103.02	95.26	-40.24	1684459.88	14272128.68	39°18'09.142"N	80°50'39.509"W	103.41	337.097	0.12	
3969.00	0.290	295.210	3964.47	-103.11	95.31	-40.36	1684459.76	14272128.73	39°18'09.142"N	80°50'39.510"W	103.51	337.049	0.04	
3994.00	0.330	299.850	3989.47	-103.21	95.37	-40.48	1684459.64	14272128.79	39°18'09.143"N	80°50'39.512"W	103.61	337.001	0.18	
4019.00	0.290	292.830	4014.47	-103.30	95.43	-40.60	1684459.52	14272128.85	39°18'09.144"N	80°50'39.513"W	103.71	336.952	0.21	
4044.00	0.300	301.130	4039.47	-103.39	95.49	-40.72	1684459.41	14272128.91	39°18'09.144"N	80°50'39.515"W	103.81	336.906	0.18	
4069.00	0.270	303.790	4064.47	-103.49	95.56	-40.82	1684459.30	14272128.98	39°18'09.145"N	80°50'39.516"W	103.91	336.868	0.13	
4094.00	0.370	293.830	4089.47	-103.59	95.62	-40.95	1684459.18	14272129.04	39°18'09.146"N	80°50'39.517"W	104.02	336.820	0.46	
4119.00	0.350	292.880	4114.47	-103.69	95.69	-41.09	1684459.04	14272129.11	39°18'09.146"N	80°50'39.519"W	104.13	336.760	0.08	
4144.00	0.400	295.620	4139.47	-103.80	95.75	-41.24	1684458.89	14272129.17	39°18'09.147"N	80°50'39.521"W	104.26	336.700	0.21	
4169.00	0.450	294.920	4164.47	-103.93	95.83	-41.41	1684458.72	14272129.25	39°18'09.148"N	80°50'39.523"W	104.39	336.632	0.20	
4194.00	0.350	300.150	4189.47	-104.05	95.91	-41.56	1684458.57	14272129.33	39°18'09.148"N	80°50'39.525"W	104.53	336.571	0.43	
4219.00	0.410	288.710	4214.47	-104.16	95.98	-41.71	1684458.41	14272129.40	39°18'09.149"N	80°50'39.527"W	104.65	336.509	0.43	
4244.00	0.300	293.020	4239.47	-104.25	96.03	-41.86	1684458.27	14272129.45	39°18'09.150"N	80°50'39.529"W	104.75	336.447	0.47	
4269.00	0.490	292.920	4264.47	-104.37	96.09	-42.02	1684458.11	14272129.52	39°18'09.150"N	80°50'39.531"W	104.88	336.382	0.76	
4294.00	0.350	296.000	4289.47	-104.49	96.17	-42.18	1684457.94	14272129.59	39°18'09.151"N	80°50'39.533"W	105.01	336.315	0.57	
4319.00	0.360	305.440	4314.46	-104.60	96.25	-42.32	1684457.81	14272129.67	39°18'09.152"N	80°50'39.535"W	105.14	336.266	0.24	
4344.00	0.390	301.460	4339.46	-104.73	96.34	-42.45	1684457.67	14272129.76	39°18'09.153"N	80°50'39.537"W	105.28	336.218	0.16	
4369.00	0.510	296.250	4364.46	-104.87	96.43	-42.63	1684457.50	14272129.85	39°18'09.154"N	80°50'39.539"W	105.43	336.153	0.51	
4394.00	0.440	309.870	4389.46	-105.03	96.54	-42.80	1684457.33	14272129.96	39°18'09.155"N	80°50'39.541"W	105.60	336.091	0.53	
4419.00	0.570	302.320	4414.46	-105.21	96.67	-42.98	1684457.15	14272130.08	39°18'09.156"N	80°50'39.543"W	105.79	336.031	0.58	
4444.00	0.490	317.780	4439.46	-105.40	96.82	-43.16	1684456.97	14272130.24	39°18'09.157"N	80°50'39.546"W	106.00	335.975	0.65	
4469.00	0.560	317.030	4464.46	-105.61	96.98	-43.31	1684456.82	14272130.41	39°18'09.159"N	80°50'39.547"W	106.22	335.936	0.28	
4494.00	0.770	295.610	4489.46	-105.84	97.15	-43.55	1684456.58	14272130.57	39°18'09.161"N	80°50'39.550"W	106.46	335.856	1.29	
4519.00	0.650	301.650	4514.46	-106.06	97.29	-43.82	1684456.31	14272130.71	39°18'09.162"N	80°50'39.554"W	106.71	335.755	0.57	
4544.00	0.670	304.140	4539.45	-106.29	97.45	-44.06	1684456.07	14272130.87	39°18'09.164"N	80°50'39.557"W	106.95	335.671	0.14	

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Balli Pad
Slot	Rock Unit 1H
Slot #05	Rock Unit 1H AWP

WELLPATH DATA (352 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
4569.00	0.710	307.400	4564.45	-106.53	97.63	-44.30	1684455.82	14272131.05	39°18'09.165"N	80°50'39.560"W	107.21	335.591	0.22	
4594.00	0.770	313.450	4589.45	-106.80	97.84	-44.55	1684455.58	14272131.26	39°18'09.167"N	80°50'39.563"W	107.50	335.519	0.39	
4619.00	0.630	308.280	4614.45	-107.06	98.04	-44.78	1684455.35	14272131.46	39°18'09.169"N	80°50'39.566"W	107.78	335.452	0.61	
4644.00	0.610	324.230	4639.45	-107.31	98.23	-44.96	1684455.16	14272131.65	39°18'09.171"N	80°50'39.568"W	108.03	335.405	0.69	
4669.00	1.510	32.020	4664.44	-107.64	98.62	-44.87	1684455.26	14272132.04	39°18'09.175"N	80°50'39.567"W	108.34	335.536	6.59	
4694.00	2.550	41.080	4669.43	-108.14	99.32	-44.33	1684455.80	14272132.74	39°18'09.182"N	80°50'39.560"W	108.76	335.948	4.34	
4719.00	4.030	4714.39	4714.39	-108.82	100.35	-43.34	1684456.79	14272133.77	39°18'09.192"N	80°50'39.548"W	109.31	336.644	6.00	
4744.00	5.480	4739.30	4739.30	-109.71	101.77	-41.83	1684458.30	14272135.19	39°18'09.206"N	80°50'39.528"W	110.03	337.658	5.85	
4769.00	6.300	49.020	4764.16	-110.74	103.48	-39.89	1684460.23	14272136.90	39°18'09.223"N	80°50'39.504"W	110.91	338.918	3.64	
4794.00	6.930	49.350	4789.00	-111.87	105.38	-37.70	1684462.42	14272138.79	39°18'09.242"N	80°50'39.476"W	111.92	340.315	2.21	
4819.00	7.540	49.880	4813.80	-113.07	107.42	-35.30	1684464.82	14272140.83	39°18'09.262"N	80°50'39.445"W	113.07	341.807	2.45	
4844.00	8.330	51.100	4838.56	-114.33	109.61	-32.64	1684467.49	14272143.03	39°18'09.284"N	80°50'39.411"W	114.37	343.418	3.23	
4869.00	8.940	53.670	4863.27	-115.59	111.90	-29.66	1684470.46	14272145.31	39°18'09.306"N	80°50'39.374"W	115.76	345.153	2.89	
4894.00	9.230	54.610	4887.96	-116.81	114.21	-26.46	1684473.66	14272147.62	39°18'09.329"N	80°50'39.333"W	117.24	346.954	1.30	
4919.00	9.400	55.830	4912.63	-117.99	116.53	-23.15	1684476.97	14272149.95	38°18'09.352"N	80°50'39.291"W	118.81	348.764	0.84	
4944.00	9.540	55.830	4937.29	-119.15	118.85	-19.75	1684480.36	14272152.26	39°18'09.375"N	80°50'39.247"W	120.48	350.564	0.67	
4969.00	9.550	58.700	4961.94	-120.21	121.09	-16.27	1684483.85	14272154.50	39°18'09.397"N	80°50'39.203"W	122.18	352.350	1.84	
4994.00	9.810	62.900	4986.59	-121.03	123.14	-12.60	1684487.52	14272156.55	39°18'09.417"N	80°50'39.156"W	123.78	354.159	3.01	
5019.00	10.100	66.330	5011.21	-121.58	124.99	-8.69	1684491.42	14272158.40	39°18'09.435"N	80°50'39.107"W	125.29	356.021	2.64	
5044.00	10.490	67.510	5035.81	-121.98	126.74	-4.68	1684495.53	14272160.15	39°18'09.452"N	80°50'39.054"W	126.82	357.929	1.77	
5069.00	10.900	69.200	5060.37	-122.28	128.46	-0.25	1684499.86	14272161.86	39°18'09.469"N	80°50'38.999"W	128.46	359.887	2.36	
5094.00	11.550	70.080	5084.89	-122.49	130.15	4.33	1684504.44	14272163.56	39°18'09.486"N	80°50'38.941"W	130.23	1.905	2.34	
5119.00	12.170	70.370	5109.36	-122.65	131.89	9.16	1684509.27	14272165.30	39°18'09.503"N	80°50'38.879"W	132.21	3.974	2.49	
5144.00	12.690	69.690	5133.77	-122.84	133.73	14.22	1684514.32	14272167.14	39°18'09.521"N	80°50'38.815"W	134.48	6.070	2.16	
5169.00	13.210	69.110	5158.13	-123.10	135.70	19.46	1684519.57	14272169.11	39°18'09.541"N	80°50'38.748"W	137.09	8.163	2.14	
5194.00	13.890	68.300	5182.44	-123.44	137.83	24.92	1684525.02	14272171.24	39°18'09.562"N	80°50'38.679"W	140.07	10.249	2.82	
5219.00	14.680	68.050	5206.66	-123.86	140.12	30.65	1684530.75	14272173.53	39°18'09.584"N	80°50'38.606"W	143.44	12.337	3.17	
5244.00	15.460	67.850	5230.80	-124.32	142.56	36.67	1684536.77	14272175.97	39°18'09.608"N	80°50'38.529"W	147.21	14.426	3.13	
5269.00	16.720	68.470	5254.83	-124.79	145.14	43.10	1684543.20	14272178.54	39°18'09.634"N	80°50'38.447"W	151.41	16.540	5.09	
5294.00	17.490	69.310	5278.72	-125.20	147.79	49.96	1684550.05	14272181.19	39°18'09.660"N	80°50'38.360"W	156.01	18.679	3.23	

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Balli Pad
Slot	Rock Unit 1H AWP
Slot #05	Rock Unit 1H

WELLPATH DATA (352 stations)

MD	Inclination	Azimuth	TVD	Vent Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
5319.00	18.070	69.970	5302.53	-125.52	150.44	57.12	1684557.21	14272183.84	39°18'09.666"N	80°50'38.266"W	160.92	20.791	2.46	
5344.00	18.690	71.960	5326.25	-125.66	153.01	64.57	1684564.66	14272186.41	39°18'09.711"N	80°50'38.174"W	166.08	22.880	3.53	
5369.00	19.050	72.850	5349.91	-125.61	155.46	72.28	1684572.36	14272188.85	39°18'09.735"N	80°50'38.076"W	171.44	24.936	1.84	
5394.00	19.390	73.700	5373.51	-125.44	157.82	80.16	1684580.24	14272191.22	39°18'09.758"N	80°50'37.975"W	177.01	26.927	1.76	
5418.00	19.670	74.950	5397.07	-125.10	160.08	88.21	1684588.28	14272193.48	39°18'09.780"N	80°50'37.873"W	182.77	28.856	2.01	
5444.00	20.060	74.860	5420.59	-124.68	162.29	96.41	1684596.48	14272195.69	39°18'09.802"N	80°50'37.769"W	188.77	30.712	1.56	
5469.00	20.610	74.130	5444.03	-124.31	164.62	104.78	1684604.85	14272198.01	39°18'09.825"N	80°50'37.662"W	195.13	32.477	2.42	
5494.00	21.280	73.840	5467.38	-124.01	167.08	113.37	1684613.44	14272200.47	39°18'09.849"N	80°50'37.553"W	201.91	34.158	2.71	
5519.00	21.780	73.790	5490.63	-123.73	169.64	122.18	1684622.24	14272203.03	39°18'09.874"N	80°50'37.441"W	209.06	35.763	2.00	
5544.00	22.420	73.560	5513.80	-123.46	172.28	131.21	1684631.27	14272205.67	39°18'09.900"N	80°50'37.326"W	216.66	37.292	2.58	
5569.00	22.910	73.640	5536.86	-123.20	175.00	140.45	1684640.50	14272208.39	39°18'09.927"N	80°50'37.208"W	224.39	38.749	1.96	
5594.00	23.290	73.840	5559.86	-122.91	177.75	149.87	1684649.92	14272211.14	39°18'09.954"N	80°50'37.088"W	232.50	40.135	1.55	
5619.00	23.730	73.940	5582.78	-122.59	180.52	159.45	1684659.49	14272213.90	39°18'09.981"N	80°50'36.966"W	240.85	41.454	1.77	
5644.00	24.250	73.950	5605.63	-122.25	183.33	169.21	1684669.26	14272216.71	39°18'10.009"N	80°50'36.842"W	249.48	42.708	2.08	
5669.00	24.650	72.840	5628.38	-121.94	186.21	179.15	1684679.19	14272219.60	39°18'10.037"N	80°50'36.716"W	258.40	43.893	1.67	
5694.00	24.970	72.840	5651.10	-121.72	189.22	189.14	1684689.17	14272222.60	39°18'10.067"N	80°50'36.589"W	267.54	44.988	1.39	
5719.00	24.930	72.470	5673.80	-121.61	192.34	199.15	1684699.18	14272225.73	39°18'10.097"N	80°50'36.461"W	276.87	45.996	1.21	
5744.00	25.240	71.360	5696.44	-121.63	195.63	209.22	1684709.25	14272229.02	39°18'10.130"N	80°50'36.333"W	286.44	46.922	2.25	
5769.00	25.120	69.260	5719.06	-121.95	199.22	219.24	1684719.26	14272232.60	39°18'10.165"N	80°50'36.205"W	296.23	47.739	3.61	
5794.00	25.120	66.730	5741.70	-122.71	203.19	229.08	1684729.09	14272236.57	39°18'10.204"N	80°50'36.080"W	306.21	48.426	4.30	
5819.00	25.480	66.220	5764.30	-123.74	207.46	238.87	1684738.89	14272240.84	39°18'10.246"N	80°50'35.955"W	316.38	49.026	1.68	
5844.00	25.910	66.110	5786.83	-124.85	211.84	248.79	1684748.80	14272245.21	39°18'10.289"N	80°50'35.829"W	326.76	49.586	1.73	
5869.00	26.160	65.540	5809.29	-126.05	216.33	258.80	1684758.80	14272249.71	39°18'10.333"N	80°50'35.702"W	337.31	50.107	1.41	
5894.00	26.570	65.760	5831.69	-127.28	220.91	268.91	1684768.91	14272254.28	39°18'10.379"N	80°50'35.573"W	348.01	50.597	1.69	
5919.00	26.520	67.170	5854.06	-128.37	225.37	279.15	1684779.15	14272258.74	39°18'10.422"N	80°50'35.443"W	358.77	51.085	2.53	
5944.00	26.480	67.870	5876.43	-129.25	229.64	289.46	1684789.46	14272263.00	39°18'10.464"N	80°50'35.311"W	369.49	51.574	1.26	
5969.00	26.630	68.960	5898.79	-129.96	233.75	299.85	1684799.84	14272267.11	39°18'10.505"N	80°50'35.179"W	380.20	52.062	2.04	
5994.00	26.820	70.050	5921.12	-130.46	237.68	310.38	1684810.37	14272271.05	39°18'10.544"N	80°50'35.045"W	390.94	52.556	2.10	
6019.00	27.380	70.130	5943.38	-130.85	241.66	321.09	1684821.07	14272274.92	39°18'10.582"N	80°50'34.909"W	401.81	53.045	2.24	
6044.00	27.920	69.690	5965.52	-131.28	245.55	331.99	1684831.96	14272278.81	39°18'10.621"N	80°50'34.770"W	412.93	53.512	2.31	

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #05
Area	Doddridge Co., WV		Well	Rock Unit 1H
Field	Doddridge		Wellbore	Rock Unit 1H AWB
Facility	Balli Pad			

WELLPATH DATA (352 stations) † = interpolated/extrapolated station														
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Comments
6069.00	28.180	69.380	5987.59	-131.80	249.66	343.00	1684842.97	14272283.02	39°18'10.661"N	80°50'34.630"W	424.24	53.951	1.19	
6074.00	28.220	69.320	5991.99	-131.91	250.49	345.21	1684845.18	14272283.85	39°18'10.670"N	80°50'34.602"W	426.52	54.035	0.98	
6206.00	26.180	66.620	6109.40	-136.15	273.07	401.15	1684901.10	14272306.42	39°18'10.892"N	80°50'33.890"W	485.27	55.756	1.81	BHI AT Curve [SS+MSA] <8-1/2"> (6074')(6206'-15093')
6237.00	26.020	69.330	6137.24	-137.12	278.18	413.79	1684913.73	14272311.53	39°18'10.942"N	80°50'33.729"W	498.60	56.087	3.88	
6280.00	26.830	79.860	6175.76	-136.25	283.22	432.17	1684932.11	14272316.57	39°18'10.992"N	80°50'33.495"W	516.71	56.761	11.05	
6325.00	28.710	93.010	6215.62	-131.00	284.45	452.98	1684952.91	14272317.79	39°18'11.003"N	80°50'33.230"W	534.89	57.874	14.21	
6375.00	31.350	104.520	6258.94	-119.71	280.55	477.59	1684977.51	14272313.90	39°18'10.964"N	80°50'32.917"W	553.90	59.569	12.65	
6422.00	34.070	111.700	6298.50	-104.73	272.61	501.67	1685001.58	14272305.96	39°18'10.886"N	80°50'32.611"W	570.96	61.480	10.07	
6470.00	36.770	117.390	6337.62	-85.93	261.03	526.93	1685026.83	14272294.38	39°18'10.771"N	80°50'32.290"W	588.04	63.648	8.87	
6517.00	40.030	121.470	6374.45	-64.43	246.66	552.33	1685052.22	14272280.02	39°18'10.628"N	80°50'31.967"W	604.90	65.935	8.78	
6564.00	43.720	126.260	6409.45	-39.76	229.15	578.33	1685078.21	14272262.52	39°18'10.455"N	80°50'31.637"W	622.07	68.385	10.38	
6580.00†	45.018	128.522	6420.89	-30.56	222.36	587.22	1685087.09	14272255.73	39°18'10.387"N	80°50'31.524"W	627.91	69.260	12.79	Middlesex: 6580' MD
6611.00	47.650	132.620	6442.30	-11.44	207.77	604.23	1685104.10	14272241.14	39°18'10.243"N	80°50'31.308"W	638.95	71.024	12.79	
6658.00	50.620	137.490	6473.06	20.23	182.60	629.30	1685129.16	14272215.99	39°18'09.994"N	80°50'30.989"W	655.26	73.819	10.06	
6705.00	53.740	141.680	6501.88	54.53	154.33	653.34	1685153.18	14272187.73	39°18'09.714"N	80°50'30.684"W	671.32	76.709	9.68	
6753.00	57.510	146.090	6528.99	92.16	122.32	676.65	1685176.48	14272155.73	39°18'09.397"N	80°50'30.389"W	687.61	79.753	10.91	
6783.00†	60.117	149.430	6544.52	117.03	100.62	690.32	1685190.16	14272134.04	39°18'09.182"N	80°50'30.215"W	697.62	81.707	12.89	Burkett: 6783' MD
6801.00	61.720	151.350	6553.27	132.43	86.94	698.09	1685197.92	14272120.37	39°18'09.047"N	80°50'30.116"W	703.49	82.901	12.89	
6845.00†	65.507	155.731	6572.83	171.40	51.66	715.62	1685215.45	14272085.10	39°18'08.698"N	80°50'29.894"W	717.49	85.871	12.39	Tully: 6845' MD
6848.00	65.770	156.020	6574.07	174.12	49.17	716.74	1685216.56	14272082.61	39°18'08.673"N	80°50'29.880"W	718.43	86.076	12.39	
6894.00	69.140	159.670	6591.71	216.47	9.83	732.74	1685232.56	14272043.28	39°18'08.284"N	80°50'29.677"W	732.81	89.232	10.36	
6943.00	73.620	161.590	6607.35	262.88	-33.97	748.13	1685247.94	14271999.50	39°18'07.851"N	80°50'29.483"W	748.90	92.600	9.87	
6949.00†	74.227	161.615	6609.01	268.64	-39.44	749.95	1685249.76	14271994.04	39°18'07.797"N	80°50'29.460"W	750.98	93.010	10.13	Marcellus: 6949' MD
6991.00	78.480	161.790	6618.92	309.45	-78.18	762.76	1685262.56	14271955.31	39°18'07.414"N	80°50'29.298"W	766.75	95.852	10.13	
7038.00	84.460	162.430	6625.89	355.91	-122.39	777.03	1685276.83	14271911.11	39°18'06.977"N	80°50'29.117"W	786.61	98.952	12.79	
7085.00	89.520	163.330	6628.35	402.82	-167.24	790.84	1685290.63	14271866.29	39°18'06.533"N	80°50'28.942"W	808.33	101.940	10.93	
7133.00	89.490	163.440	6628.77	450.81	-213.23	804.56	1685304.35	14271820.32	39°18'06.078"N	80°50'28.769"W	832.34	104.844	0.24	
7228.00	89.620	163.800	6629.51	545.77	-304.37	831.35	1685331.13	14271729.21	39°18'05.177"N	80°50'28.430"W	885.32	110.108	0.40	
7322.00	88.970	164.280	6630.66	639.70	-394.74	857.20	1685356.96	14271638.88	39°18'04.284"N	80°50'28.103"W	943.72	114.726	0.86	
7417.00	89.490	163.870	6631.94	734.64	-486.09	883.26	1685383.02	14271547.57	39°18'03.380"N	80°50'27.774"W	1008.18	118.825	0.70	

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Actual Wellpath Report

Rock Unit 1H AWP Proj: 15137

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Balli Pad
Slot	Slot #05
Well	Rock Unit 1H
Wellbore	Rock Unit 1H AWP

WELLPATH DATA (352 stations)

MD	Inclination	Azimuth	TVD	Vent Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
7512.00	89.370	162.070	6632.88	829.61	-576.91	911.08	1685410.83	14271456.78	39°18'02.482"N	80°50'27.422"W	1078.38	122.343	1.90	
7608.00	89.830	160.280	6633.55	925.60	-667.77	942.06	1685441.79	14271365.96	39°18'01.584"N	80°50'27.030"W	1154.72	125.331	1.93	
7702.00	90.380	158.280	6633.38	1019.48	-755.69	975.31	1685475.03	14271278.08	39°18'00.714"N	80°50'26.609"W	1233.81	127.769	2.21	
7796.00	88.940	155.540	6633.94	1113.09	-842.14	1012.17	1685511.88	14271191.65	39°17'59.859"N	80°50'26.142"W	1316.70	129.761	3.29	
7890.00	88.000	154.710	6635.63	1206.39	-927.41	1051.70	1685551.39	14271106.42	39°17'59.015"N	80°50'25.641"W	1402.20	131.406	0.89	
7985.00	88.810	155.180	6637.45	1300.64	-1013.45	1091.93	1685591.60	14271020.41	39°17'58.164"N	80°50'25.131"W	1489.76	132.865	0.53	
8080.00	89.400	163.280	6638.93	1395.44	-1102.19	1125.58	1685625.24	14270931.71	39°17'57.287"N	80°50'24.705"W	1575.36	134.398	8.55	
8176.00	89.730	167.190	6639.66	1491.27	-1195.00	1150.04	1685649.70	14270838.93	39°17'56.396"N	80°50'24.396"W	1658.50	136.098	4.09	
8270.00	90.350	167.730	6639.60	1584.85	-1288.76	1170.45	1685670.10	14270747.21	39°17'55.462"N	80°50'24.139"W	1739.46	137.710	0.87	
8364.00	90.100	164.620	6639.23	1678.59	-1378.02	1192.91	1685692.55	14270655.99	39°17'54.559"N	80°50'23.855"W	1822.63	139.118	3.32	
8459.00	89.430	162.660	6639.62	1773.54	-1469.22	1219.51	1685719.13	14270564.83	39°17'53.657"N	80°50'23.519"W	1909.40	140.306	1.98	
8555.00	90.440	160.920	6639.72	1869.54	-1560.46	1249.35	1685748.96	14270473.63	39°17'52.755"N	80°50'23.141"W	1998.98	141.318	2.28	
8650.00	89.480	159.490	6639.79	1964.49	-1649.84	1281.52	1685781.12	14270384.28	39°17'51.871"N	80°50'22.734"W	2089.08	142.162	1.81	
8746.00	89.300	163.430	6640.81	2060.46	-1740.84	1312.04	1685811.62	14270293.32	39°17'50.971"N	80°50'22.348"W	2179.90	142.995	4.11	
8841.00	89.480	165.480	6641.82	2155.36	-1832.35	1337.50	1685837.07	14270201.84	39°17'50.066"N	80°50'22.026"W	2268.57	143.873	2.17	
8936.00	89.480	165.640	6642.69	2250.18	-1924.35	1361.18	1685860.75	14270109.88	39°17'49.157"N	80°50'21.727"W	2357.10	144.726	0.17	
9032.00	89.850	165.370	6643.25	2346.00	-2017.29	1385.21	1685884.77	14270016.98	39°17'48.238"N	80°50'21.423"W	2447.09	145.524	0.48	
9127.00	90.190	162.940	6643.22	2440.93	-2108.67	1411.15	1685910.69	14269925.63	39°17'47.334"N	80°50'21.095"W	2537.29	146.209	2.58	
9222.00	89.850	160.840	6643.18	2535.93	-2198.96	1440.68	1685940.21	14269835.38	39°17'46.441"N	80°50'20.722"W	2628.87	146.769	2.24	
9317.00	89.760	160.790	6643.51	2630.90	-2288.68	1471.90	1685971.42	14269745.69	39°17'45.554"N	80°50'20.327"W	2721.13	147.254	0.11	
9411.00	89.640	159.040	6644.00	2724.83	-2376.96	1504.17	1686003.68	14269657.45	39°17'44.681"N	80°50'19.918"W	2812.92	147.674	1.87	
9506.00	88.500	161.830	6647.44	2913.57	-2553.86	1570.55	1686070.03	14269480.62	39°17'42.931"N	80°50'19.078"W	2998.13	148.410	3.62	
9695.00	89.110	163.000	6649.42	3008.55	-2644.40	1599.24	1686098.71	14269390.12	39°17'42.036"N	80°50'18.715"W	3090.37	148.836	1.39	
9790.00	90.410	162.350	6649.82	3103.54	-2735.08	1627.53	1686126.99	14269299.47	39°17'41.139"N	80°50'18.357"W	3182.69	149.245	1.53	
9885.00	89.790	159.180	6649.65	3198.50	-2824.77	1658.82	1686158.27	14269209.82	39°17'40.252"N	80°50'17.961"W	3275.82	149.577	3.40	
9980.00	88.770	158.000	6650.85	3293.32	-2913.20	1693.50	1686192.93	14269121.42	39°17'39.377"N	80°50'17.522"W	3369.67	149.830	1.64	
10074.00	88.770	159.350	6652.87	3387.13	-3000.74	1727.67	1686227.09	14269033.91	39°17'38.511"N	80°50'17.090"W	3462.56	150.069	1.44	
10169.00	88.710	161.630	6654.95	3482.07	-3090.26	1759.39	1686258.80	14268944.43	39°17'37.626"N	80°50'16.688"W	3556.01	150.346	2.40	
10264.00	88.800	165.720	6657.02	3576.99	-3181.39	1786.08	1686285.48	14268853.34	39°17'36.725"N	80°50'16.351"W	3648.47	150.689	4.31	

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Operator	ANTERO RESOURCES CORPORATION
Area	Doddrige Co., WV
Field	Doddrige
Facility	Balli Pad
Slot	Rock Unit 1H AWP
Slot #05	Well
	Rock Unit 1H

WELLPATH DATA (352 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
10358.00	89.330	166.560	6658.55	3670.73	-3272.64	1808.60	1688307.98	14268762.13	39°17'35.823"N	80°50'16.067"W	3739.14	151.073	1.06	
10454.00	89.400	163.360	6658.78	3766.60	-3366.34	1833.50	1686332.88	14268669.47	39°17'34.906"N	80°50'15.752"W	3832.39	151.418	3.51	
10548.00	89.110	161.520	6659.18	3860.59	-3454.95	1861.86	1686361.23	14268579.89	39°17'34.020"N	80°50'15.393"W	3924.69	151.680	2.39	
10642.00	88.800	164.230	6660.90	3954.55	-3544.76	1889.53	1686388.89	14268480.12	39°17'33.132"N	80°50'15.043"W	4016.92	151.940	2.90	
10737.00	89.140	167.230	6662.60	4049.33	-3636.80	1912.94	1686412.29	14268398.11	39°17'32.221"N	80°50'14.748"W	4109.22	152.256	3.18	
10832.00	89.330	167.290	6663.87	4143.93	-3729.46	1933.89	1686433.23	14268305.49	39°17'31.305"N	80°50'14.483"W	4201.05	152.591	0.21	
10926.00	89.230	162.970	6665.05	4237.76	-3820.28	1958.01	1686457.33	14268214.71	39°17'30.407"N	80°50'14.179"W	4292.82	152.864	4.60	
11021.00	89.450	160.280	6666.15	4332.75	-3910.42	1987.95	1686487.27	14268124.60	39°17'29.516"N	80°50'13.800"W	4386.72	153.052	2.84	
11116.00	89.330	158.770	6667.16	4427.65	-3999.41	2021.18	1686520.46	14268035.65	39°17'28.636"N	80°50'13.379"W	4481.12	153.189	1.59	
11211.00	89.110	157.960	6668.46	4522.44	-4087.71	2056.20	1686555.49	14267947.38	39°17'27.762"N	80°50'12.936"W	4575.73	153.297	0.88	
11305.00	89.230	159.460	6669.82	4616.27	-4175.29	2090.33	1686589.60	14267859.84	39°17'26.896"N	80°50'12.504"W	4669.31	153.405	1.60	
11400.00	88.620	159.540	6671.60	4711.16	-4264.25	2123.59	1686622.85	14267770.91	39°17'26.016"N	80°50'12.083"W	4763.77	153.527	0.65	
11494.00	89.050	163.690	6673.51	4805.11	-4353.42	2153.22	1686652.47	14267681.78	39°17'25.134"N	80°50'11.708"W	4856.81	153.683	4.44	
11589.00	89.630	164.080	6674.60	4900.06	-4444.68	2179.59	1686678.83	14267590.56	39°17'24.232"N	80°50'11.375"W	4950.33	153.877	0.74	
11684.00	89.080	162.550	6675.67	4995.03	-4535.67	2206.86	1686706.09	14267493.60	39°17'23.332"N	80°50'11.030"W	5044.06	154.054	1.71	
11778.00	88.620	165.250	6677.56	5088.95	-4625.96	2232.92	1686732.14	14267409.35	39°17'22.439"N	80°50'10.701"W	5136.67	154.234	2.91	
11872.00	89.230	167.410	6679.32	5182.66	-4717.27	2255.13	1686754.34	14267318.07	39°17'21.536"N	80°50'10.420"W	5228.60	154.449	2.39	
11967.00	89.260	166.760	6680.58	5277.29	-4809.86	2276.36	1686775.56	14267225.52	39°17'20.621"N	80°50'10.152"W	5321.33	154.673	0.68	
12062.00	89.260	163.310	6681.80	5372.14	-4901.62	2300.89	1686800.08	14267133.80	39°17'19.713"N	80°50'09.843"W	5414.79	154.854	3.63	
12157.00	89.540	159.830	6682.80	5467.11	-4991.72	2330.92	1686830.10	14267043.73	39°17'18.822"N	80°50'09.463"W	5509.13	154.969	3.67	
12251.00	89.910	156.750	6683.25	5560.90	-5079.04	2365.69	1686864.85	14266956.45	39°17'17.959"N	80°50'09.023"W	5602.96	155.025	3.30	
12441.00	88.000	159.890	6686.47	5750.38	-5255.24	2436.61	1686893.75	14266870.32	39°17'17.101"N	80°50'08.563"W	5696.88	155.082	1.41	
12535.00	88.340	164.860	6689.48	5844.30	-5344.76	2465.05	1686964.18	14266690.84	39°17'16.331"N	80°50'07.765"W	5885.82	155.240	5.30	
12629.00	89.850	165.080	6690.96	5938.17	-5435.53	2489.42	1686988.54	14266600.10	39°17'15.433"N	80°50'07.457"W	5978.48	155.393	1.62	
12724.00	90.990	161.480	6690.27	6033.12	-5526.49	2516.75	1687015.85	14266509.18	39°17'14.534"N	80°50'07.112"W	6072.57	155.516	3.97	
12819.00	89.020	158.350	6690.26	6128.04	-5615.70	2549.37	1687048.46	14266420.01	39°17'13.651"N	80°50'06.699"W	6167.28	155.583	3.89	
12913.00	89.260	157.050	6691.67	6221.76	-5702.66	2585.03	1687084.11	14266333.08	39°17'12.791"N	80°50'06.247"W	6261.21	155.615	1.41	
13008.00	89.080	156.590	6693.05	6316.35	-5789.98	2622.42	1687121.48	14266245.80	39°17'11.927"N	80°50'05.774"W	6356.17	155.633	0.52	
13103.00	89.170	158.510	6694.50	6411.04	-5877.77	2658.69	1687157.74	14266158.04	39°17'11.059"N	80°50'05.315"W	6451.11	155.661	2.02	

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Actual Wellpath Report

Rock Unit 1H AWP Proj: 15137'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #05
Area	Doddridge Co., WV		Well	Rock Unit 1H
Field	Doddridge		Wellbore	Rock Unit 1H AWP
Facility	Balli Pad			

WELLPATH DATA (352 stations)

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist. (ft)	Closure Dir. (°)	DLS (1/100ft)	Comments
13197.00	89.140	162.450	6695.88	6504.98	-5966.34	2690.09	1687189.13	14266069.51	39°17'09.183"N	80°50'04.917"W	6544.75	155.730	4.19	
13292.00	89.260	163.560	6697.21	6599.96	-6057.18	2717.86	1687216.88	14265978.71	39°17'08.285"N	80°50'04.566"W	6638.99	155.834	1.18	
13387.00	89.290	163.340	6698.41	6694.92	-6148.23	2744.92	1687243.93	14265887.68	39°17'07.384"N	80°50'04.224"W	6733.15	155.941	0.23	
13481.00	90.450	163.050	6698.62	6788.90	-6238.22	2772.09	1687271.09	14265797.74	39°17'06.494"N	80°50'03.881"W	6826.41	156.041	1.28	
13576.00	87.910	155.810	6699.97	6883.72	-6327.09	2805.44	1687304.43	14265708.90	39°17'05.615"N	80°50'03.459"W	6921.16	156.087	8.08	
13671.00	89.110	160.660	6702.44	6978.45	-6415.26	2840.63	1687339.60	14265620.76	39°17'04.743"N	80°50'03.013"W	7016.03	156.117	5.28	
13765.00	89.230	164.660	6703.80	7072.41	-6504.97	2868.62	1687367.58	14265531.09	39°17'03.856"N	80°50'02.659"W	7109.40	156.203	4.24	
13860.00	89.540	164.830	6704.82	7167.30	-6596.61	2893.61	1687392.57	14265439.48	39°17'02.950"N	80°50'02.344"W	7203.35	156.315	0.37	
13955.00	88.950	162.050	6706.08	7262.26	-6687.66	2920.68	1687419.62	14265348.47	39°17'02.050"N	80°50'02.002"W	7297.61	156.408	2.98	
14050.00	89.170	163.780	6707.63	7357.23	-6778.45	2948.57	1687447.51	14265257.72	39°17'01.152"N	80°50'01.649"W	7391.99	156.491	1.83	
14144.00	89.200	163.900	6708.97	7451.17	-6868.73	2974.73	1687473.65	14265167.48	39°17'00.259"N	80°50'01.318"W	7485.22	156.583	0.13	
14240.00	89.170	164.400	6710.34	7547.10	-6961.07	3000.95	1687499.86	14265075.17	39°16'59.346"N	80°50'00.987"W	7580.38	156.679	0.52	
14334.00	89.510	165.560	6711.42	7640.97	-7051.85	3025.31	1687524.21	14264984.43	39°16'58.448"N	80°50'00.680"W	7673.40	156.780	1.29	
14430.00	88.890	164.870	6712.76	7736.81	-7144.66	3049.80	1687548.70	14264891.65	39°16'57.530"N	80°50'00.370"W	7768.37	156.884	0.97	
14526.00	89.260	167.070	6714.31	7832.57	-7237.78	3073.07	1687571.96	14264798.57	39°16'56.610"N	80°50'00.076"W	7863.16	156.985	2.32	
14620.00	89.690	164.550	6715.17	7926.35	-7328.90	3096.11	1687594.98	14264707.49	39°16'55.709"N	80°49'59.786"W	7956.05	157.098	2.71	
14714.00	88.770	159.160	6716.44	8020.31	-7418.19	3125.36	1687624.22	14264618.24	39°16'54.825"N	80°49'59.416"W	8049.68	157.154	5.83	
14809.00	89.450	158.390	6717.91	8115.14	-7506.73	3159.75	1687658.59	14264529.73	39°16'53.950"N	80°49'58.981"W	8144.63	157.173	1.08	
14903.00	89.140	158.740	6719.07	8208.96	-7594.23	3194.10	1687692.93	14264442.27	39°16'53.084"N	80°49'58.546"W	8238.60	157.189	0.50	
14997.00	89.510	158.630	6720.17	8302.79	-7681.79	3228.26	1687727.08	14264354.74	39°16'52.218"N	80°49'58.113"W	8332.66	157.205	0.41	
15093.00	89.140	160.920	6721.31	8398.70	-7771.86	3261.44	1687760.25	14264264.71	39°16'51.327"N	80°49'57.693"W	8428.45	157.235	2.42	
15137.00	89.140	160.920	6721.97	8442.69	-7813.44	3275.83	1687774.63	14264223.15	39°16'50.916"N	80°49'57.512"W	8472.36	157.254	0.00	Projected MD at TD: 15137'

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Actual Wellpath Report

Rock Unit 1H AWP Proj: 15137'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Rock Unit 1H
Field	Doddridge	Wellbore	Rock Unit 1H AWB
Facility	Balli Pad		

HOLE & CASING SECTIONS - Ref Wellbore: Rock Unit 1H AWB Ref Wellpath: Rock Unit 1H AWP Proj: 15137'									
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	0.10	0.05
13.375in Casing Surface	32.00	394.00	362.00	32.00	393.98	0.00	0.00	3.31	1.56
9.625in Casing Intermediate	32.00	2552.00	2520.00	32.00	2547.49	0.00	0.00	91.54	-34.50

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Rock Unit 1H POE Rev-1	6607.00	-19.78	744.41	1685244.23	14272013.69	39°18'07.992"N	80°50'29.530"W	point
Rock Unit 1H LP Rev-1	6628.00	-149.10	786.31	1685286.11	14271884.42	39°18'06.713"N	80°50'28.999"W	point
Rock Unit 1H BHL Rev-1	6697.64	-7740.27	3245.93	1687744.74	14264296.29	39°16'51.640"N	80°49'57.890"W	point

WELLPATH COMPOSITION - Ref Wellbore: Rock Unit 1H AWB Ref Wellpath: Rock Unit 1H AWP Proj: 15137'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.00	6074.00	SDI Keeper v1.04	01 SDI Std Keeper Gyro (100' - 6055')	Rock Unit 1H AWB
6074.00	15093.00	BHI AutoTrak Curve w/ Surcon (MagCAD, Short spacing)	02 BHI AT Curve [SS+MSA] <8-1/2"> (6074')(6206'-15093')	Rock Unit 1H AWB
15093.00	15137.00	Blind Drilling (std)	Projection to bit	Rock Unit 1H AWB

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Actual Wellpath Report

Rock Unit 1H AWP Proj: 15137'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Rock Unit 1H
Field	Doddridge	Wellbore	Rock Unit 1H AWP
Facility	Balli Pad		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
119.00	0.730	27.000	119.00	SDI Std Keeper Gyro (119' - 6074')	
6206.00	26.180	66.620	6109.40	BHI AT Curve [SS+MSA] <8-1/2"> (6074')(6206'-15093')	
6580.00	45.018	128.522	6420.89	Middlesex: 6580' MD	
6783.00	60.117	149.430	6544.52	Burkett: 6783' MD	
6845.00	65.507	155.731	6572.83	Tully: 6845' MD	
6949.00	74.227	161.615	6609.01	Marcellus: 6949' MD	
15137.00	89.140	160.920	6721.97	Projected MD at TD: 15137'	

COMMENTS
<p>Wellpath general comments API: 47-017-06636-0000 BHI Job #: 7970336 Rig: Frontier 32 Duration: 05.12.2016-05.25.2016 SDI Std Keeper Gyro (119' - 6074') BHI AT Curve [SS+MSA] <8-1/2"> (6074')(6206'-15093') Middlesex: 6580' MD Burkett: 6783' MD Tully: 6845' MD Marcellus: 6949' MD Projected MD at TD: 15137'</p>

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