

ANTERO RESOURCES CORPORATION
 Location: Doddridge Co., WV
 Field: Doddridge
 Facility: Balli Pad
 Slot: Slot #08
 Well: Boulder Unit 2H
 Wellbore: Boulder Unit 2H PWB



API: 47-017-06799-0000
 BHI Job #: 8577898
 Rig: Frontier 32
 Duration: 06/06/2017-06/08/2017

PHI reference wellbore: Boulder Unit 2H PWB Rev-A-0	Grid System: MWD27, UTM, Zone 17 North, US feet
True vertical depths are referenced to Frontier 32 (RKB)	** Wellbore was transferred from a different geographic datum
Measured depths are referenced to Frontier 32 (RKB)	North Reference: Grid north
Frontier 32 (RKB) to Mean Sea Level: 1157 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot Slot #08): -1135 feet	Depth are in feet
Coordinates are in feet referenced to Slot	Created by: deborah on 2017-06-13
	Database: MS_MPL_Enterprise_Datb

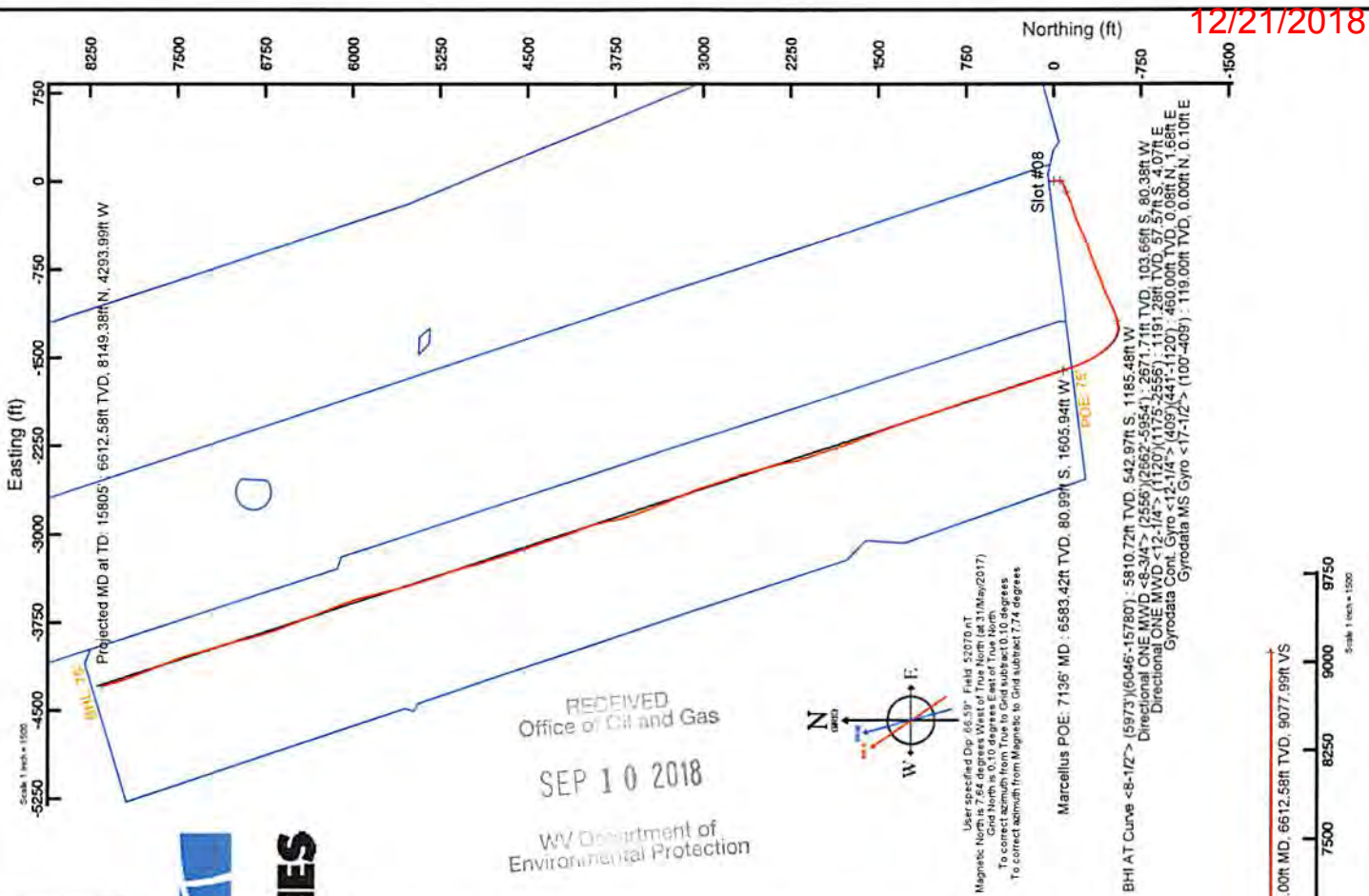
Gyrodata MS Gyro <17-1/2> (100-409) : 0.13° Inc, 119.00ft MD, 119.00ft TVD, -0.03ft VS
 Gyrodata Cont. Gyro <12-1/4> (409)(441-1120) : 0.34° Inc, 460.00ft MD, 460.00ft TVD, -0.44ft VS

Directional ONE MWD <12-1/4> (1120)(1175-2556) : 4.40° Inc, 1194.00ft MD, 1191.26ft TVD, -56.01ft VS
 Directional ONE MWD <8-3/4> (2556)(2662-5954) : 6.51° Inc, 2681.00ft MD, 2671.71ft TVD, -73.71ft VS

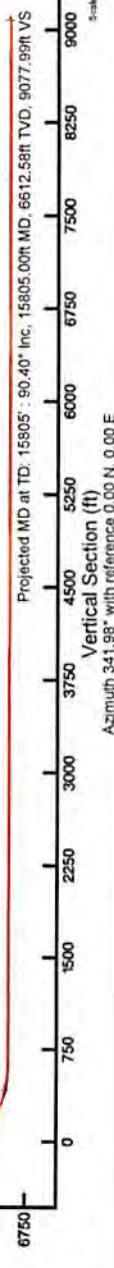
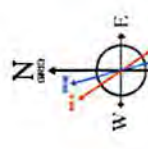
Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Balli Pad	1684490.110	14272033.240	39°18'08.198"N	80°50'39.126"W	
Slot	Local N (ft)	Local E (ft)	Grid North (US ft)	Grid East (US ft)	Longitude
Slot #08	1.36	69.64	1684559.725	14272034.599	80°50'39.240"W
Comment	Boulder Unit 2H				
Frontier 32 (RKB) to Mud line (At Slot: Slot #08)	32ft				
Mean Sea Level to Mud line (At Slot: Slot #08)	-1135ft				
Frontier 32 (RKB) to Mean Sea Level	1167ft				

Well Profile Data						
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)
The On	5731.00	18.850	252.720	5741.41	-535.09	-1163.63
Proj to Bottom	6056.00	18.850	252.720	5819.96	-544.05	-1189.23
Curve KOP	6135.50	18.850	252.720	5895.20	-551.68	-1213.76
End of 3D Arc	6371.18	27.011	290.660	6113.21	-544.05	-1300.79
POE	7113.42	74.685	341.977	6585.00	-104.15	-1596.15
Landing PL	7293.83	90.000	341.975	6609.00	65.37	-1651.31
BHL	15826.41	90.000	341.975	6609.00	8179.18	-4291.57
						8105.57

Well Data		
Slot	Well	Wellbore
Slot #08	Boulder Unit 2H	Boulder Unit 2H AWP
Slot #03	Boulder Unit 2H	Boulder Unit 2H PWB
		Boulder Unit 2H AWP Proj: 15805
		Boulder Unit 2H PWB Rev-A-0



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Actual Wellpath Report

Boulder Unit 2H AWP Proj: 15805'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Doddridge Co., WV	Well	Boulder Unit 2H
Field	Doddridge	Wellbore	Boulder Unit 2H 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	Delaset
Scale	0.999602	Report Generated	13/Jun/2017 at 14:11
Convergence at slot	0.10° East	Database/Source file	WA_MPL_EasternUS_Defn/Boulder_Unit_2H_AWP_Proj_15805_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	1.36	69.64	1684559.73	14272034.60	39°18'08.210"N	80°50'38.240"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 #08)	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	341.98°

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Actual Wellpath Report

Boulder Unit 2H AWP Proj; 15805'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Doddridge Co., WV	Well	Boulder Unit 2H
Field	Doddridge	Wellbore	Boulder Unit 2H AWB
Facility	Balli Pad		

WELLPATH DATA (218 stations)																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)			(ft)	(°)	("/100ft)	("/100ft)	("/100ft)	
1888.00	1.410	148.790	1885.08	-64.26	-67.20	1.15	1684560.87	14271967.42	39°18'07.546"N	80°50'38.227"W	67.21	179.021	0.55	0.46	-13.32	
1952.00	1.120	155.590	1949.06	-65.65	-68.45	1.81	1684561.54	14271966.18	39°18'07.533"N	80°50'38.218"W	68.47	178.481	0.51	-0.45	10.62	
2015.00	1.750	239.560	2012.04	-66.47	-69.50	1.24	1684560.96	14271965.13	39°18'07.523"N	80°50'38.226"W	69.51	178.978	3.14	1.00	133.29	
2078.00	4.180	255.180	2074.96	-66.55	-70.57	-1.81	1684557.92	14271964.06	39°18'07.513"N	80°50'38.265"W	70.59	181.469	4.03	3.86	24.79	
2141.00	6.380	257.420	2137.69	-66.09	-71.92	-7.45	1684552.28	14271962.71	39°18'07.499"N	80°50'38.336"W	72.30	185.911	3.51	3.49	3.56	
2204.00	7.450	254.570	2200.23	-65.57	-73.77	-14.80	1684544.93	14271960.86	39°18'07.481"N	80°50'38.430"W	75.24	191.344	1.78	1.70	-4.52	
2267.00	7.740	248.510	2262.67	-65.64	-76.41	-22.68	1684537.05	14271958.22	39°18'07.455"N	80°50'38.530"W	79.71	196.535	1.35	0.46	-9.62	
2330.00	8.170	243.700	2325.07	-66.55	-79.95	-30.65	1684529.09	14271954.68	39°18'07.420"N	80°50'38.632"W	85.62	200.973	1.26	0.68	-7.63	
2393.00	8.540	242.720	2387.40	-67.94	-84.08	-38.82	1684520.92	14271950.56	39°18'07.380"N	80°50'38.736"W	92.60	204.782	0.63	0.59	-1.56	
2456.00	9.480	245.570	2449.62	-69.28	-88.37	-47.70	1684512.05	14271946.27	39°18'07.337"N	80°50'38.849"W	100.42	208.359	1.65	1.49	4.52	
2519.00	9.260	244.870	2511.78	-70.48	-92.66	-57.01	1684502.74	14271941.97	39°18'07.295"N	80°50'38.967"W	108.80	211.601	0.39	-0.35	-1.11	
2575.00	9.580	245.140	2567.03	-71.59	-96.54	-65.32	1684494.43	14271938.10	39°18'07.257"N	80°50'39.073"W	116.56	214.083	0.58	0.57	0.48	
2681.00	8.510	244.150	2671.71	-73.71	-103.66	-80.38	1684479.38	14271930.98	39°18'07.187"N	80°50'39.265"W	131.18	217.789	1.02	-1.01	-0.93	Directional ONE MWD <8-3/4"> (2556')(2662'-5954')
2750.00	7.960	242.350	2740.00	-75.21	-108.11	-89.21	1684470.55	14271926.53	39°18'07.143"N	80°50'39.377"W	140.16	219.528	0.88	-0.80	-2.51	
2813.00	9.790	246.930	2802.24	-76.41	-112.23	-98.00	1684461.77	14271922.41	39°18'07.102"N	80°50'39.489"W	148.99	221.127	3.11	2.90	7.27	
2876.00	11.640	249.950	2864.14	-77.11	-116.51	-108.90	1684450.87	14271918.14	39°18'07.060"N	80°50'39.628"W	159.48	223.066	3.07	2.94	4.79	
2939.00	13.960	248.570	2925.57	-77.78	-121.47	-121.94	1684437.83	14271913.18	39°18'07.012"N	80°50'39.794"W	172.12	225.113	3.71	3.68	-2.19	
3002.00	16.360	249.220	2986.37	-78.66	-127.39	-137.32	1684422.46	14271907.26	39°18'06.953"N	80°50'39.990"W	187.31	227.147	3.82	3.81	1.03	
3066.00	17.130	249.630	3047.66	-79.48	-133.87	-154.58	1684405.21	14271900.78	39°18'06.890"N	80°50'40.209"W	204.49	229.107	1.22	1.20	0.64	
3129.00	16.300	247.980	3108.00	-80.48	-140.41	-171.47	1684388.32	14271894.24	39°18'06.825"N	80°50'40.424"W	221.63	230.687	1.52	-1.32	-2.62	
3192.00	17.330	247.640	3168.30	-81.81	-147.30	-188.35	1684371.45	14271887.36	39°18'06.757"N	80°50'40.639"W	239.10	231.973	1.64	1.63	-0.54	
3255.00	18.390	251.520	3228.27	-82.60	-154.02	-206.45	1684353.36	14271880.64	39°18'06.691"N	80°50'40.870"W	257.57	233.276	2.53	1.68	6.16	
3318.00	20.360	252.830	3287.70	-82.51	-160.40	-226.35	1684333.47	14271874.26	39°18'06.628"N	80°50'41.123"W	277.42	234.676	3.20	3.13	2.08	
3381.00	22.120	252.280	3346.41	-82.29	-167.25	-248.12	1684311.70	14271867.42	39°18'06.561"N	80°50'41.400"W	299.23	236.017	2.81	2.79	-0.87	
3444.00	23.370	252.050	3404.51	-82.21	-174.71	-271.31	1684288.53	14271859.98	39°18'06.488"N	80°50'41.695"W	322.69	237.220	1.99	1.98	-0.37	
3507.00	24.230	250.620	3462.16	-82.50	-182.85	-295.39	1684264.45	14271851.82	39°18'06.408"N	80°50'42.002"W	347.40	238.242	1.64	1.37	-2.27	
3570.00	23.720	249.670	3519.72	-83.32	-191.54	-319.47	1684240.39	14271843.13	39°18'06.322"N	80°50'42.308"W	372.49	239.054	1.02	-0.81	-1.51	
3633.00	22.640	248.120	3577.64	-84.65	-200.47	-342.60	1684217.26	14271834.21	39°18'06.234"N	80°50'42.603"W	396.94	239.667	1.97	-1.71	-2.46	
3696.00	24.220	246.710	3635.44	-86.65	-210.09	-365.73	1684194.15	14271824.59	39°18'06.140"N	80°50'42.897"W	421.78	240.124	2.66	2.51	-2.24	
3760.00	23.950	245.970	3693.87	-89.22	-220.57	-389.65	1684170.23	14271814.11	39°18'06.037"N	80°50'43.201"W	447.75	240.486	0.63	-0.42	-1.16	

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Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Bailli Pad
Slot	Slot #08
Well	Boulder Unit 2H
Wellbore	Boulder Unit 2H AWB

WELLPATH DATA (218 stations)												
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir
ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
3823.00	23.450	3751.55	-92.01	-231.01	-412.72	1684147.17	14271803.68	39°18'05.934"N	80°50'43.495"W	472.97	240.763	0.89
3886.00	23.150	3809.42	-95.12	-241.62	-435.27	1684124.63	14271793.08	39°18'05.829"N	80°50'43.782"W	497.83	240.965	0.82
3949.00	23.870	3867.62	-98.60	-252.32	-456.88	1684103.03	14271782.38	39°18'05.724"N	80°50'44.057"W	521.92	241.090	2.17
4012.00	19.970	3926.46	-101.38	-261.86	-477.24	1684082.68	14271772.85	39°18'05.630"N	80°50'44.317"W	544.36	241.247	3.74
4075.00	19.960	3965.68	-103.33	-270.34	-497.01	1684062.91	14271764.37	39°18'05.547"N	80°50'44.568"W	565.77	241.457	0.16
4138.00	19.390	4045.00	-105.55	-278.97	-516.38	1684043.55	14271755.74	39°18'05.461"N	80°50'44.815"W	586.92	241.620	1.15
4201.00	19.870	4104.34	-107.04	-286.92	-535.98	1684023.96	14271747.80	39°18'05.383"N	80°50'45.064"W	607.94	241.839	2.89
4264.00	20.890	4163.40	-107.09	-293.75	-556.82	1683910.13	14271740.96	39°18'05.316"N	80°50'45.329"W	629.55	242.186	2.15
4328.00	22.780	4222.81	-106.98	-301.01	-579.48	1683980.47	14271733.71	39°18'05.245"N	80°50'45.618"W	653.00	242.551	3.10
4391.00	24.350	4280.55	-107.23	-309.04	-603.36	1683966.61	14271725.69	39°18'05.166"N	80°50'45.922"W	677.90	242.879	2.49
4454.00	22.840	4338.28	-107.51	-317.10	-627.25	1683932.73	14271717.63	39°18'05.087"N	80°50'46.226"W	702.85	243.182	2.40
4517.00	21.390	4396.65	-108.20	-325.09	-649.57	1683910.41	14271709.63	39°18'05.008"N	80°50'46.510"W	726.38	243.413	2.65
4580.00	23.190	4454.94	-109.36	-333.58	-671.91	1683888.08	14271701.15	39°18'04.924"N	80°50'46.794"W	750.16	243.597	2.86
4643.00	23.590	4512.76	-110.55	-342.44	-695.30	1683864.70	14271692.30	39°18'04.837"N	80°50'47.092"W	775.05	243.780	0.64
4707.00	22.310	4571.69	-112.22	-351.73	-718.46	1683841.56	14271683.01	39°18'04.746"N	80°50'47.387"W	799.93	243.915	2.45
4775.00	23.430	4634.35	-114.43	-361.97	-742.82	1683817.20	14271672.77	39°18'04.645"N	80°50'47.697"W	826.32	244.020	1.67
4838.00	23.870	4692.05	-116.13	-371.39	-766.27	1683793.77	14271663.35	39°18'04.552"N	80°50'47.995"W	851.53	244.141	1.12
4901.00	22.410	4749.99	-118.22	-381.00	-789.07	1683770.97	14271653.75	39°18'04.458"N	80°50'48.286"W	876.24	244.226	3.13
4964.00	22.390	4808.23	-120.75	-390.79	-810.99	1683749.06	14271643.96	39°18'04.361"N	80°50'48.565"W	900.24	244.272	0.63
5027.00	22.890	4866.38	-122.83	-400.25	-833.32	1683726.74	14271634.50	39°18'04.268"N	80°50'48.849"W	924.46	244.344	1.07
5090.00	24.520	4924.06	-124.17	-409.34	-856.95	1683703.11	14271625.42	39°18'04.179"N	80°50'49.150"W	949.70	244.468	3.08
5154.00	25.860	4981.97	-124.60	-418.19	-882.72	1683677.35	14271616.58	39°18'04.092"N	80°50'49.478"W	976.77	244.651	2.38
5216.00	25.500	5037.85	-125.24	-427.10	-908.07	1683652.01	14271607.67	39°18'04.004"N	80°50'49.801"W	1003.50	244.811	1.84
5279.00	24.600	5094.92	-126.97	-436.98	-932.85	1683627.25	14271597.79	39°18'03.907"N	80°50'50.116"W	1030.12	244.900	2.09
5343.00	23.140	5153.45	-129.94	-447.76	-956.38	1683603.72	14271587.02	39°18'03.801"N	80°50'50.416"W	1056.01	244.912	3.18
5405.00	21.500	5210.80	-133.04	-457.93	-977.62	1683582.50	14271576.85	39°18'03.700"N	80°50'50.686"W	1079.55	244.901	2.84
5469.00	21.870	5270.27	-135.62	-467.66	-999.17	1683560.95	14271567.13	39°18'03.605"N	80°50'50.960"W	1103.20	244.918	0.75
5531.00	23.620	5327.45	-138.19	-477.47	-1021.04	1683539.09	14271557.32	39°18'03.508"N	80°50'51.239"W	1127.16	244.938	2.84
5594.00	23.430	5385.21	-141.57	-488.39	-1043.69	1683516.46	14271546.41	39°18'03.401"N	80°50'51.527"W	1152.30	244.923	1.69
5658.00	21.110	5444.44	-144.99	-499.06	-1065.46	1683494.69	14271535.73	39°18'03.295"N	80°50'51.804"W	1176.55	244.901	3.81



Actual Wellpath Report

Boulder Unit 2H AWP Proj: 15805'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Doddridge Co., WV	Well	Boulder Unit 2H
Field	Doddridge	Wellbore	Boulder Unit 2H AWB
Facility	Balli Pad		

WELLPATH DATA (218 stations) † = Interpolated/extrapolated station																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Bullid Rate	Turn Rate	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)			(ft)	(°)	("/100ft)	("/100ft)	("/100ft)	
5721.00	19.750	250.160	5503.48	-146.72	-507.49	-1085.75	1683474.41	14271527.31	39°18'03.212"N	80°50'52.062"W	1198.50	244.948	3.62	-2.16	8.35	
5784.00	19.750	251.520	5562.77	-147.15	-514.48	-1105.86	1683454.31	14271520.33	39°18'03.144"N	80°50'52.318"W	1219.67	245.051	0.73	0.00	2.16	
5847.00	19.190	249.200	5622.17	-147.73	-521.53	-1125.63	1683434.54	14271513.28	39°18'03.074"N	80°50'52.570"W	1240.58	245.141	1.52	-0.89	-3.68	
5910.00	18.690	247.100	5681.76	-149.10	-529.13	-1144.61	1683415.57	14271505.68	39°18'02.999"N	80°50'52.812"W	1261.00	245.190	1.34	-0.79	-3.33	
5973.00	18.850	252.720	5741.41	-149.82	-536.09	-1163.63	1683396.56	14271498.73	39°18'02.931"N	80°50'53.054"W	1281.18	245.264	2.88	0.25	8.92	
6046.00	17.740	252.320	5810.72	-149.60	-542.97	-1185.48	1683374.71	14271491.85	39°18'02.863"N	80°50'53.332"W	1303.91	245.392	1.53	-1.52	-0.55	BHI AT Curve <8-1/2"> (5973')(6046'-15780')
6094.00	18.660	252.560	5856.32	-149.48	-547.49	-1199.78	1683360.43	14271487.33	39°18'02.819"N	80°50'53.514"W	1318.79	245.472	1.92	1.92	0.50	
6141.00	19.210	256.950	5900.78	-148.74	-551.49	-1214.48	1683345.73	14271483.33	39°18'02.780"N	80°50'53.701"W	1333.83	245.578	3.25	1.17	9.34	
6189.00	20.000	268.710	5946.01	-145.69	-553.46	-1230.39	1683329.83	14271481.36	39°18'02.760"N	80°50'53.903"W	1349.14	245.781	8.37	1.65	24.50	
6236.00	21.370	277.640	5989.99	-139.67	-552.50	-1246.92	1683313.31	14271482.32	39°18'02.770"N	80°50'54.114"W	1363.84	246.102	7.31	2.91	19.00	
6284.00	22.980	292.100	6034.45	-131.18	-549.37	-1264.75	1683295.48	14271485.45	39°18'02.801"N	80°50'54.340"W	1378.91	246.521	4.85	3.35	9.29	
6331.00	25.060	285.420	6077.38	-121.08	-544.80	-1283.32	1683276.92	14271490.02	39°18'02.847"N	80°50'54.576"W	1394.17	246.998	5.28	4.43	7.06	
6379.00	27.430	291.700	6120.43	-108.41	-538.01	-1303.40	1683256.85	14271496.81	39°18'02.914"N	80°50'54.832"W	1410.07	247.570	7.60	4.94	13.08	
6426.00	29.600	298.740	6161.74	-93.03	-528.42	-1323.64	1683236.61	14271506.39	39°18'03.009"N	80°50'55.089"W	1425.22	248.237	8.50	4.62	14.98	
6473.00	31.490	304.920	6202.23	-74.78	-515.81	-1343.89	1683216.37	14271519.00	39°18'03.134"N	80°50'55.346"W	1439.48	249.002	7.79	4.02	13.15	
6520.00	33.600	309.730	6241.85	-53.98	-500.46	-1363.96	1683196.31	14271534.33	39°18'03.286"N	80°50'55.601"W	1452.88	249.851	7.10	4.49	10.23	
6567.00	36.100	313.200	6280.42	-30.83	-482.67	-1384.06	1683176.21	14271552.12	39°18'03.463"N	80°50'55.857"W	1465.81	250.775	6.79	5.32	7.38	
6614.00	38.670	316.110	6317.77	-5.48	-462.60	-1404.34	1683155.94	14271572.18	39°18'03.661"N	80°50'56.114"W	1478.57	251.768	6.63	5.47	6.19	
6663.00	41.780	318.940	6355.18	23.32	-439.26	-1425.68	1683134.61	14271595.52	39°18'03.892"N	80°50'56.385"W	1491.82	252.876	7.36	6.35	5.78	
6710.00	44.560	321.180	6389.45	53.15	-414.60	-1446.31	1683113.99	14271620.17	39°18'04.137"N	80°50'56.647"W	1504.56	254.005	6.75	5.91	4.77	
6725.00†	45.783	322.367	6400.03	63.14	-406.24	-1452.89	1683107.41	14271628.52	39°18'04.219"N	80°50'56.731"W	1508.62	254.379	9.90	8.15	7.91	Middlesex: 6725' MD
6757.00	48.430	324.740	6421.81	85.38	-387.38	-1466.81	1683093.50	14271647.38	39°18'04.406"N	80°50'56.907"W	1517.10	255.206	9.90	8.27	7.42	
6804.00	52.250	328.710	6451.81	120.28	-357.13	-1486.62	1683073.70	14271677.62	39°18'04.705"N	80°50'57.159"W	1528.91	256.492	10.41	8.13	8.45	
6852.00	56.220	332.420	6479.86	158.44	-323.21	-1505.72	1683054.60	14271711.52	39°18'05.041"N	80°50'57.401"W	1540.02	257.885	10.38	8.27	7.73	
6899.00	60.320	334.760	6504.58	197.98	-287.41	-1523.48	1683036.85	14271747.31	39°18'05.395"N	80°50'57.628"W	1550.35	259.317	9.70	8.72	4.98	
6935.00†	63.761	335.965	6521.45	229.56	-258.51	-1536.73	1683023.61	14271776.20	39°18'05.681"N	80°50'57.794"W	1558.32	260.451	10.00	9.56	3.35	Burket: 6935' MD
6947.00	64.910	336.350	6526.65	240.32	-248.61	-1541.10	1683019.24	14271786.08	39°18'05.779"N	80°50'57.849"W	1561.03	260.836	10.00	9.58	3.21	
6994.00	68.990	337.690	6545.05	283.40	-208.80	-1557.98	1683002.37	14271825.88	39°18'06.172"N	80°50'58.063"W	1571.91	262.367	9.07	8.68	2.85	
7019.00†	70.994	338.518	6553.60	306.83	-187.01	-1566.73	1682993.62	14271847.66	39°18'06.388"N	80°50'58.174"W	1577.86	263.193	8.60	8.01	3.31	Tully: 7019' MD
7041.00	72.760	339.230	6560.45	327.71	-167.51	-1574.27	1682986.08	14271867.16	39°18'06.581"N	80°50'58.269"W	1583.16	263.926	8.60	8.03	3.24	

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Actual Wellpath Report

Boulder Unit 2H AWP Proj: 15805

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Doddrige Co., WV	Well	Boulder Unit 2H
Field	Doddrige	Wellbore	Boulder Unit 2H AWB
Facility	Balli Pad		

WELLPATH DATA (218 Stations) † = Interpolated/xtrapolated station												
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir
(m)	(°)	(°)	(m)	(m)	(m)	(m)	(US M)	(US M)	(°)	(°)	(m)	(°)
7088.00	78.120	339.690	6573.05	372.94	-125.11	-1590.15	1682970.21	14271909.54	39°18'07.00"N	80°50'58.47"W	1595.07	7.21
7135.00	78.880	340.910	6583.23	418.80	-81.92	-1605.62	1682954.75	14271952.71	39°18'07.42"N	80°50'58.66"W	1607.70	6.40
7136.00†	78.901	340.840	6583.42	419.78	-80.99	-1605.94	1682954.43	14271953.64	39°18'07.436"N	80°50'58.670"W	1607.98	3.56
7182.00	79.850	342.300	6591.90	464.99	-38.09	-1620.19	1682940.18	14271996.53	39°18'07.861"N	80°50'58.851"W	1620.64	2.97
7230.00	82.130	342.650	6599.42	512.39	7.11	-1634.51	1682925.87	14272041.70	39°18'08.308"N	80°50'59.022"W	1634.52	2.96
7277.00	87.720	341.740	6603.57	559.19	51.65	-1648.85	1682911.53	14272086.23	39°18'08.748"N	80°50'59.214"W	1649.66	4.75
7325.00	90.060	341.990	6604.50	607.17	97.25	-1663.79	1682896.60	14272131.81	39°18'09.199"N	80°50'59.403"W	1666.63	4.78
7350.00	90.060	341.990	6604.50	607.17	97.25	-1663.79	1682896.60	14272131.81	39°18'09.199"N	80°50'59.403"W	1666.63	4.78
7420.00	89.970	342.120	6604.48	702.17	187.40	-1693.77	1682866.63	14272221.92	39°18'10.091"N	80°50'59.782"W	1704.10	4.78
7516.00	90.090	342.050	6604.43	798.17	278.51	-1724.02	1682836.40	14272312.99	39°18'10.992"N	80°51'00.165"W	1746.37	4.87
7611.00	89.780	342.040	6604.53	893.17	368.98	-1753.30	1682807.12	14272403.33	39°18'11.885"N	80°51'00.536"W	1791.69	4.87
7706.00	90.000	342.510	6604.72	988.17	459.37	-1782.22	1682778.21	14272493.79	39°18'12.780"N	80°51'00.902"W	1840.47	4.87
7801.00	89.850	343.170	6604.84	1083.16	550.14	-1810.25	1682750.20	14272584.52	39°18'13.678"N	80°51'01.256"W	1892.00	4.99
7895.00	90.120	345.240	6604.87	1177.08	640.59	-1835.84	1682724.62	14272674.93	39°18'14.572"N	80°51'01.580"W	1944.39	4.99
7989.00	89.970	342.590	6604.79	1366.00	820.82	-1892.50	1682667.98	14272855.09	39°18'16.354"N	80°51'02.297"W	2062.84	2.20
8084.00	90.000	339.800	6604.78	1366.00	820.82	-1892.50	1682667.98	14272855.09	39°18'16.354"N	80°51'02.297"W	2062.84	2.20
8178.00	89.940	340.570	6604.82	1459.95	909.25	-1924.36	1682636.13	14272943.49	39°18'17.229"N	80°51'02.700"W	2128.36	2.20
8273.00	89.690	342.400	6605.12	1554.94	999.33	-1954.53	1682605.98	14273033.53	39°18'18.120"N	80°51'03.082"W	2195.19	2.20
8368.00	89.940	343.340	6605.43	1649.93	1090.11	-1982.51	1682578.01	14273124.28	39°18'19.017"N	80°51'03.436"W	2262.45	2.20
8463.00	89.940	340.970	6605.53	1744.92	1180.54	-2011.62	1682548.91	14273214.66	39°18'19.912"N	80°51'03.805"W	2332.44	2.20
8558.00	89.940	339.880	6605.63	1839.89	1270.05	-2043.45	1682517.09	14273304.14	39°18'20.797"N	80°51'04.208"W	2405.97	2.20
8653.00	89.970	341.050	6605.70	1934.85	1359.58	-2075.21	1682485.34	14273393.63	39°18'21.682"N	80°51'04.610"W	2480.92	2.20
8748.00	89.910	338.610	6605.85	2124.71	1537.96	-2140.60	1682419.98	14273571.94	39°18'23.446"N	80°51'05.438"W	2635.81	2.20
8843.00	89.910	338.610	6605.85	2124.71	1537.96	-2140.60	1682419.98	14273571.94	39°18'23.446"N	80°51'05.438"W	2635.81	2.20
8938.00	89.880	337.770	6606.03	2219.50	1626.16	-2175.89	1682384.70	14273660.10	39°18'24.319"N	80°51'05.885"W	2716.41	2.20
9032.00	89.940	339.370	6606.18	2313.33	1713.65	-2210.24	1682350.37	14273747.57	39°18'25.184"N	80°51'06.320"W	2796.74	2.20
9128.00	89.940	341.910	6606.28	2409.30	1804.22	-2242.06	1682318.56	14273838.10	39°18'26.080"N	80°51'06.723"W	2877.85	2.20
9223.00	90.000	342.580	6606.33	2504.29	1894.69	-2271.03	1682289.60	14273928.53	39°18'26.974"N	80°51'07.090"W	2957.60	2.20
9319.00	90.000	341.520	6606.33	2600.29	1986.02	-2300.61	1682260.03	14274019.82	39°18'27.877"N	80°51'07.464"W	3039.26	2.20
9414.00	89.970	340.800	6606.35	2695.28	2075.93	-2331.29	1682229.36	14274109.70	39°18'28.767"N	80°51'07.853"W	3121.60	2.20
9510.00	90.000	343.730	6606.38	2791.27	2167.36	-2360.53	1682200.14	14274201.09	39°18'29.671"N	80°51'08.223"W	3204.61	2.20

Marcellus POE: 7136° MD

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Closure Dir (1/1000)

Closure Dist (m)



**BAKER
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Actual Wellpath Report

Boulder Unit 2H AWP Proj: 15805

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WY
Field	Doddridge
Facility	Ballii Pad
Slot	Slot #08
Well	Boulder Unit 2H
Wellbore	Boulder Unit 2H AWP

WELLPATH DATA (218 stations)

MD	Inclination	Azimuth	TVD	Vent Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
(m)	(°)	(°)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(°)	(m)	(m)	(m)	
9604.00	90.000	349.170	6606.38	2884.95	2258.70	-2382.55	1682178.13	14274292.40	39°18'30.574"N	80°51'08.501"W	3283.03	313.472	5.79	0.00	5.79	
9698.00	90.060	348.350	6606.33	2978.29	2350.90	-2400.87	1682159.82	14274384.56	39°18'31.485"N	80°51'08.732"W	3360.19	314.398	0.87	0.06	-0.87	
9793.00	90.060	343.220	6606.23	3073.05	2442.96	-2424.19	1682136.50	14274476.58	39°18'32.396"N	80°51'09.027"W	3441.62	316.221	5.40	0.00	-5.40	
9887.00	90.000	344.300	6606.18	3167.00	2533.21	-2450.48	1682110.23	14274566.80	39°18'33.288"N	80°51'09.359"W	3524.48	315.951	1.15	-0.06	1.15	
9983.00	90.030	345.030	6606.15	3262.90	2625.79	-2475.87	1682084.85	14274659.34	39°18'34.204"N	80°51'09.681"W	3608.97	316.683	0.76	0.03	0.76	
10077.00	90.090	342.050	6606.05	3356.85	2715.93	-2502.50	1682058.23	14274749.44	39°18'35.095"N	80°51'10.017"W	3693.07	317.342	3.17	0.06	-3.17	
10172.00	89.720	340.770	6606.21	3451.85	2805.97	-2532.78	1682027.96	14274839.45	39°18'35.985"N	80°51'10.401"W	3780.01	317.929	1.40	-0.39	-1.35	
10266.00	89.780	341.520	6606.62	3545.83	2894.92	-2563.16	1681997.59	14274928.37	39°18'36.865"N	80°51'10.786"W	3866.57	318.478	0.80	0.06	0.80	
10361.00	89.720	341.960	6607.04	3640.83	2985.14	-2592.93	1681967.84	14275018.54	39°18'37.757"N	80°51'11.162"W	3954.03	319.022	0.47	-0.06	0.46	
10456.00	89.780	339.300	6607.45	3735.80	3074.75	-2624.43	1681936.34	14275108.12	39°18'38.643"N	80°51'11.561"W	4042.49	319.518	2.80	0.06	-2.80	
10550.00	89.720	337.120	6607.86	3829.59	3162.03	-2659.32	1681901.47	14275195.36	39°18'39.506"N	80°51'12.003"W	4131.64	319.936	2.32	-0.06	-2.32	
10645.00	89.750	337.970	6608.30	3924.30	3249.83	-2695.61	1681865.20	14275283.13	39°18'40.375"N	80°51'12.463"W	4222.28	320.326	0.90	0.03	0.89	
10739.00	89.750	337.300	6608.71	4018.03	3336.75	-2731.37	1681829.44	14275370.02	39°18'41.235"N	80°51'12.916"W	4312.11	320.697	0.71	0.00	-0.71	
10833.00	89.600	338.510	6609.24	4111.79	3423.85	-2766.73	1681794.10	14275457.08	39°18'42.096"N	80°51'13.364"W	4401.99	321.059	1.30	-0.16	1.29	
10928.00	89.660	339.300	6609.86	4206.65	3512.48	-2800.92	1681758.92	14275545.67	39°18'42.972"N	80°51'13.798"W	4492.51	321.430	0.83	0.06	0.83	
11023.00	89.420	342.850	6610.62	4301.62	3602.33	-2831.73	1681729.13	14275635.48	39°18'43.861"N	80°51'14.188"W	4582.08	321.830	3.75	-0.25	3.74	
11118.00	89.690	345.290	6611.36	4396.54	3693.67	-2857.80	1681703.07	14275726.79	39°18'44.764"N	80°51'14.518"W	4670.14	322.271	2.58	0.28	2.57	
11213.00	89.660	348.360	6611.90	4491.19	3786.15	-2879.45	1681681.43	14275819.24	39°18'45.679"N	80°51'14.791"W	4756.70	322.746	3.23	-0.03	3.23	
11308.00	90.120	348.570	6612.08	4585.58	3879.24	-2898.44	1681662.44	14275912.28	39°18'46.599"N	80°51'15.031"W	4842.46	323.234	0.53	0.48	0.22	
11403.00	89.720	341.160	6612.21	4680.40	3970.88	-2923.23	1681637.66	14276003.89	39°18'47.505"N	80°51'15.344"W	4930.84	323.641	7.81	-0.42	-7.80	
11498.00	89.660	338.250	6612.73	4775.31	4059.97	-2956.18	1681604.73	14276092.94	39°18'48.386"N	80°51'15.762"W	5022.18	323.941	3.06	-0.06	-3.06	
11592.00	89.600	340.350	6613.33	4869.20	4147.89	-2989.40	1681571.52	14276180.83	39°18'49.256"N	80°51'16.183"W	5112.88	324.220	2.23	-0.06	2.23	
11687.00	89.780	341.620	6613.85	4964.18	4237.71	-3020.35	1681540.58	14276270.61	39°18'50.144"N	80°51'16.575"W	5203.91	324.521	1.35	0.19	1.34	
11781.00	89.850	341.720	6614.15	5058.18	4326.94	-3049.92	1681511.03	14276359.80	39°18'51.026"N	80°51'16.949"W	5293.80	324.821	0.13	0.07	0.11	
11876.00	89.880	340.790	6614.37	5153.17	4416.89	-3080.44	1681480.51	14276449.73	39°18'51.916"N	80°51'17.335"W	5384.99	325.107	0.98	0.03	-0.98	
11971.00	89.630	341.670	6614.78	5248.15	4506.57	-3111.80	1681449.17	14276539.37	39°18'52.803"N	80°51'17.732"W	5476.54	325.375	0.29	-0.26	-0.13	
12065.00	89.720	341.030	6615.31	5342.13	4595.37	-3142.63	1681418.35	14276628.13	39°18'53.681"N	80°51'18.123"W	5567.18	325.633	0.99	0.10	0.38	
12169.00	89.750	342.090	6615.75	5436.12	4684.54	-3172.36	1681388.63	14276717.27	39°18'54.563"N	80°51'18.499"W	5657.63	325.894	1.13	0.03	1.13	
12255.00	89.720	342.640	6616.19	5532.12	4776.03	-3201.45	1681359.56	14276808.72	39°18'55.467"N	80°51'18.868"W	5749.76	326.165	0.57	-0.03	0.57	
12349.00	89.660	343.910	6616.70	5626.09	4866.05	-3228.50	1681332.52	14276898.70	39°18'56.357"N	80°51'19.210"W	5839.66	326.437	1.35	-0.06	1.35	

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Boulder Unit 2H AWP Proj: 15805

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Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WY
Field	Doddridge
Facility	Baill Pad
Slot	Boulder Unit 2H
Slot #08	Boulder Unit 2H AWB

WELLPATH DATA (218 stations)

MD	Inclination	Azimuth	TVD	Vent Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
12445.00	90.310	346.350	6616.73	5721.94	4958.82	-3253.13	1681307.89	14276991.44	39°18'57.275"N	80°51'19.521"W	5930.67	326.734	2.63	0.68	2.54	
12540.00	90.310	344.440	6616.21	5816.77	5050.75	-3277.08	1681283.95	14277083.33	39°18'58.184"N	80°51'19.824"W	6020.74	327.023	2.01	0.00	-2.01	
12634.00	89.850	342.200	6616.08	5910.73	5140.79	-3304.06	1681256.98	14277173.33	39°18'59.074"N	80°51'20.166"W	6111.02	327.271	2.43	-0.49	-2.38	
12728.00	90.740	337.940	6615.60	6004.66	5229.14	-3336.10	1681224.96	14277261.64	39°18'59.948"N	80°51'20.572"W	6202.69	327.463	4.63	0.95	-4.53	
12822.00	90.180	341.420	6614.94	6098.58	5317.27	-3368.73	1681192.34	14277349.74	39°19'00.819"N	80°51'20.985"W	6294.58	327.644	3.75	-0.60	3.70	
12918.00	90.310	344.190	6614.43	6194.54	5408.97	-3397.11	1681163.97	14277441.41	39°19'01.726"N	80°51'21.344"W	6387.28	327.869	2.89	0.14	-2.89	
13013.00	90.150	342.980	6614.05	6289.50	5500.09	-3423.96	1681137.14	14277532.49	39°19'02.627"N	80°51'21.684"W	6478.77	328.097	1.28	-0.17	-1.27	
13108.00	90.150	343.900	6613.80	6384.47	5591.15	-3451.03	1681110.07	14277623.52	39°19'03.528"N	80°51'22.027"W	6570.43	328.316	0.97	0.00	0.97	
13203.00	90.150	346.270	6613.55	6479.33	5682.95	-3475.48	1681085.63	14277715.27	39°19'04.435"N	80°51'22.336"W	6661.44	328.552	2.49	0.00	2.49	
13298.00	89.850	347.170	6613.55	6574.00	5775.40	-3497.30	1681063.82	14277807.69	39°19'05.350"N	80°51'22.612"W	6751.77	328.803	1.00	-0.32	0.95	
13393.00	89.940	345.410	6613.73	6668.73	5867.69	-3519.82	1681041.31	14277899.95	39°19'06.262"N	80°51'22.896"W	6842.44	329.042	1.86	0.09	-1.85	
13488.00	90.000	342.820	6613.78	6763.65	5959.06	-3545.82	1681015.32	14277991.27	39°19'07.165"N	80°51'23.225"W	6934.20	329.246	2.73	0.06	-2.73	
13583.00	89.780	339.940	6613.96	6858.64	6049.08	-3576.15	1680985.01	14278081.26	39°19'08.056"N	80°51'23.609"W	7027.10	329.409	3.04	-0.23	-3.03	
13679.00	89.720	338.500	6614.38	6954.52	6138.83	-3610.21	1680950.96	14278170.97	39°19'08.943"N	80°51'24.041"W	7121.71	329.540	1.50	-0.06	-1.50	
13773.00	89.940	338.510	6614.68	7048.35	6226.26	-3644.65	1680918.53	14278258.40	39°19'09.808"N	80°51'24.477"W	7214.58	329.657	0.23	0.23	0.01	
13868.00	90.120	339.290	6614.61	7143.16	6314.16	-3679.62	1680881.57	14278346.69	39°19'10.662"N	80°51'24.921"W	7308.49	329.770	0.30	0.19	-0.23	
13964.00	89.940	339.230	6614.56	7239.01	6404.10	-3714.40	1680846.81	14278436.13	39°19'11.567"N	80°51'25.361"W	7403.32	329.886	1.00	-0.19	0.98	
14058.00	90.030	338.220	6614.58	7332.86	6491.69	-3748.51	1680812.72	14278523.69	39°19'12.433"N	80°51'25.793"W	7496.22	329.997	1.08	0.10	-1.07	
14153.00	90.660	338.020	6614.51	7427.69	6580.15	-3783.14	1680778.10	14278612.12	39°19'13.308"N	80°51'26.232"W	7590.16	330.104	0.84	0.03	0.84	
14248.00	90.150	341.140	6614.33	7522.64	6689.46	-3815.50	1680745.75	14278701.39	39°19'14.191"N	80°51'26.642"W	7683.73	330.227	2.23	0.09	2.23	
14344.00	90.050	342.050	6614.16	7618.63	6760.55	-3845.81	1680715.45	14278792.45	39°19'15.092"N	80°51'27.026"W	7777.87	330.366	0.95	-0.09	0.95	
14439.00	90.030	345.170	6614.08	7713.58	6851.68	-3872.62	1680688.66	14278883.54	39°19'15.993"N	80°51'27.365"W	7870.36	330.525	3.28	-0.03	3.28	
14533.00	90.150	346.460	6613.93	7807.37	6942.81	-3895.65	1680665.63	14278974.63	39°19'16.894"N	80°51'27.657"W	7961.07	330.703	1.38	0.13	1.37	
14629.00	89.880	344.620	6613.91	7903.18	7035.76	-3919.62	1680641.67	14279067.55	39°19'17.813"N	80°51'27.960"W	8053.91	330.878	1.94	-0.28	-1.92	
14724.00	89.720	342.690	6614.24	7998.13	7126.92	-3946.35	1680614.95	14279158.67	39°19'18.714"N	80°51'28.298"W	8146.58	331.026	2.04	-0.17	-2.03	
14819.00	89.880	342.740	6614.57	8093.13	7217.63	-3974.58	1680586.73	14279249.34	39°19'19.611"N	80°51'28.656"W	8239.63	331.159	0.18	0.17	0.05	
14914.00	89.880	343.990	6614.77	8188.10	7308.65	-4001.78	1680559.55	14279340.33	39°19'20.511"N	80°51'29.000"W	8332.50	331.298	1.32	0.00	1.32	
15009.00	89.780	343.630	6615.05	8283.05	7399.88	-4028.26	1680533.07	14279431.52	39°19'21.414"N	80°51'29.335"W	8426.27	331.438	0.39	-0.11	-0.38	
15103.00	89.850	340.640	6615.36	8377.04	7489.34	-4057.10	1680504.25	14279520.94	39°19'22.298"N	80°51'29.700"W	8517.64	331.555	3.18	0.07	-3.18	
15198.00	90.120	339.100	6615.38	8471.97	7578.53	-4089.79	1680471.57	14279610.10	39°19'23.180"N	80°51'30.114"W	8611.65	331.646	1.65	0.28	-1.62	



Actual Wellpath Report

Boulder Unit 2H AWP Proj: 15805'
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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Balli Pad
Slot	Slot #08
Well	Boulder Unit 2H
Wellbore	Boulder Unit 2H AWB

WELLPATH DATA (218 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 (P/100ft)	Build Rate (P/100ft)	Turn Rate (P/100ft)	Comments
15292.00	90.220	337.690	6615.10	8565.78	7665.93	-4124.40	1680436.97	14279697.46	39°19'24.045"N	80°51'30.553"W	8705.01	331.719	1.50	0.11	-1.50	
15387.00	90.250	337.900	6614.71	8660.53	7753.88	-4160.30	1680401.08	14279765.38	39°19'24.914"N	80°51'31.008"W	8799.48	331.784	0.22	0.03	0.22	
15482.00	90.310	338.000	6614.29	8755.29	7841.93	-4195.97	1680365.43	14279873.39	39°19'25.785"N	80°51'31.460"W	8893.93	331.850	0.12	0.06	0.11	
15577.00	90.280	340.010	6613.76	8850.16	7930.62	-4230.00	1680331.41	14279962.05	39°19'26.662"N	80°51'31.891"W	8988.19	331.926	2.12	-0.03	2.12	
15672.00	90.280	345.070	6613.30	8945.12	8021.21	-4258.50	1680302.93	14280052.60	39°19'27.558"N	80°51'32.252"W	9081.55	332.036	5.33	0.00	5.33	
15765.00	90.280	344.370	6612.84	9039.01	8111.89	-4283.27	1680278.17	14280143.24	39°19'28.455"N	80°51'32.566"W	9173.28	332.165	0.74	0.00	-0.74	
15780.00	90.400	343.970	6612.75	9053.00	8125.36	-4287.09	1680274.35	14280156.71	39°19'28.588"N	80°51'32.614"W	9186.98	332.183	2.98	0.88	-2.88	
15805.00	90.400	343.970	6612.58	9077.99	8149.38	-4293.99	1680267.45	14280180.72	39°19'28.825"N	80°51'32.701"W	9211.45	332.215	0.00	0.00	0.00	Projected MD at TD: 15805'

HOLE & CASING SECTIONS - Ref Wellbore: Boulder Unit 2H AWB Ref Wellpath: Boulder Unit 2H AWP Proj: 15805'											
String/Diameter	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start N/S (ft)	End N/S (ft)	Start E/W (ft)	End E/W (ft)	End N/S (ft)	End E/W (ft)
20in Conductor	32.00	72.00	40.00	32.00	72.00	0.00	0.00	0.00	0.00	0.00	0.02
17.5in Open Hole	72.00	449.00	377.00	72.00	449.00	0.00	0.00	0.02	0.06	0.06	1.61
13.375in Casing Surface	32.00	449.00	417.00	32.00	449.00	0.00	0.00	0.00	0.06	0.06	1.61
12.25in Open Hole	449.00	2645.00	2196.00	449.00	2636.12	0.06	0.06	1.61	-101.31	-101.31	-75.48
9.625in Casing Intermediate	32.00	2645.00	2613.00	32.00	2636.12	0.00	0.00	0.00	-101.31	-101.31	-75.48
8.75in Open Hole	2645.00	6056.00	3411.00	2636.12	5820.24	-101.31	-101.31	-75.48	-543.89	-543.89	-1188.40
8.5in Open Hole	6056.00	15805.00	9749.00	5820.24	6612.58	-543.89	-543.89	-1188.40	8149.38	8149.38	-4293.99
5.5in Casing Production	32.00	15805.00	15773.00	32.00	6612.58	0.00	0.00	0.00	8149.38	8149.38	-4293.99

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Boulder Unit 2H AWP Proj: 15805'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Doddridge Co., WV	Well	Boulder Unit 2H
Field	Doddridge	Wellbore	Boulder Unit 2H AWB
Facility	Balli Pad		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Boulder Unit 2H POE - Rev-2	6585.00	-104.15	-1596.15	1682964.21	14271930.49	39°18'07.207"N	80°50'58.546"W	point
Boulder Unit 2H BHL - Rev-1	6609.00	8179.18	-4291.57	1680269.87	14280210.51	39°19'29.120"N	80°51'32.670"W	point
Boulder Unit 2H LP Rev-1	6609.00	65.37	-1651.31	1682909.07	14272099.94	39°18'08.884"N	80°50'59.245"W	point

WELLPATH COMPOSITION - Ref Wellbore: Boulder Unit 2H AWB Ref Wellpath: Boulder Unit 2H AWP Proj: 15805'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.00	428.00	Gyrodata standard - Drop gyro or Multi-shot	01 Gyrodata MS Gyro <17-1/2">(100'-409')	Boulder Unit 2H AWB
428.00	1139.00	Gyrodata standard - Continuous gyro	02 Gyrodata Cont. Gyro <12-1/4"> (409')(441'-1120')	Boulder Unit 2H AWB
1139.00	2575.00	ISCWSA MWD, Rev. 4 (Standard)	03 Directional ONE MWD<12-1/4">(1120')(1175'-2556')	Boulder Unit 2H AWB
2575.00	5973.00	ISCWSA MWD, Rev. 4 (Standard)	04 Directional ONE MWD <8-3/4">(2556')(2662'-5954')	Boulder Unit 2H AWB
5973.00	15780.00	BHI AutoTrak Curve (Short)	05 BHI AT Curve <8-1/2">(5973')(6046'-15780')	Boulder Unit 2H AWB
15780.00	15805.00	Blind Drilling (std)	Projection to bit	Boulder Unit 2H AWB

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Boulder Unit 2H AWP Proj: 15805'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Doddridge Co., WV	Well	Boulder Unit 2H
Field	Doddridge	Wellbore	Boulder Unit 2H AWB
Facility	Balli Pad		

COMMENTS
<p>Wellpath general comments API: 47-017-06799-0000 BHI Job #: 8577898 Rig: Frontier 32 Duration: 06/06/2017-06/08/2017 Gyrodatta MS Gyro <17-1/2"> (100'-409') Gyrodatta Cont. Gyro <12-1/4"> (409')(441'-1120') Directional ONE MWD <12-1/4"> (1120')(1175'-2556') Directional ONE MWD <8-3/4"> (2556')(2662'-5954') BHI AT Curve <8-1/2"> (5973')(6046'-15780') Middlesex: 6725' MD Burket: 6935' MD Tully: 7019' MD Marcellus POE: 7136' MD Projected MD at TD: 15805'</p>

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