



ANTERO RESOURCES CORPORATION

Location: Doddridge Co., WV
 Field: Doddridge
 Facility: Long Run Pad

Slot: Slot #06
 Well: Mossor Unit 3H
 Wellbore: Mossor Unit 3H PWB



API: 47-017-06779-0000
 BHI Job #: 8484753
 Rig: Frontier 22
 Duration: 04/05/2017-04/09/2017

Parameter	Value	Unit
Plot reference wellbore in Mossor Unit 3H PWP Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet	
True vertical depths are referenced to Frontier 22 (RKB)	* = Wellbore was transformed from a different geodetic datum	
Measured depths are referenced to Frontier 22 (RKB)	North Reference: Grid north	
Frontier 22 (RKB) to Mean Sea Level: 1045.5 feet	Scale: True distance	
Mean Sea Level to Mud line (A1 Slot: Slot #06): -1021 feet	Depth in feet	
Coordinates are in feet referenced to Slot	Created by: delbert on 2017-04-13	
	Database: WA_MPL_EternusUS_Dein	

Location Information

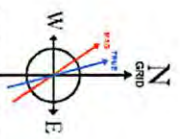
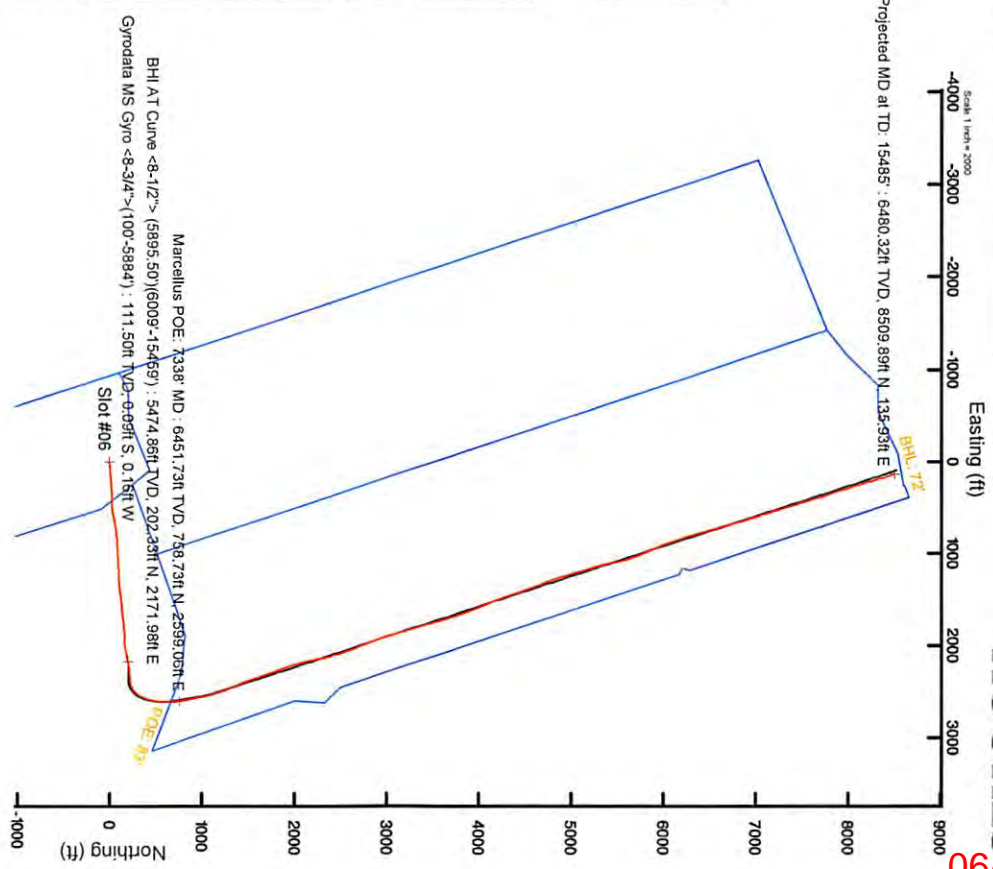
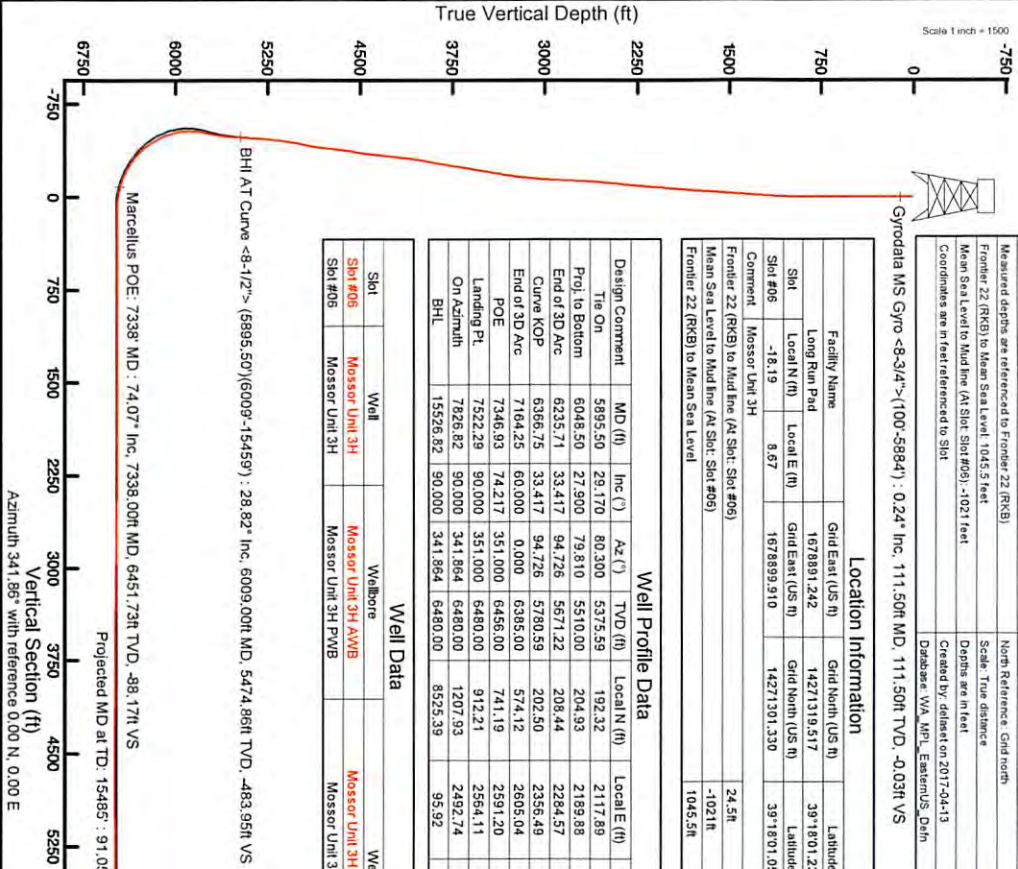
Property	Value	Unit
Facility Name	Grid East (US ft)	Grid North (US ft)
Long Run Pad	1678891.242	14271319.517
Local N (ft)	Local E (ft)	Grid East (US ft)
8.67	1678899.910	14271301.330
Latitude	Longitude	
39°18'01.050"N	80°51'50.280"W	
Frontier 22 (RKB) to Mud line (A1 Slot: Slot #06)	24.5ft	
Mean Sea Level to Mud line (A1 Slot: Slot #06)	-1021ft	
Frontier 22 (RKB) to Mean Sea Level	1045.5ft	

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (ft/100ft)	VS (ft)
Tri On	5895.50	29.170	80.300	5375.59	192.32	2117.89	0.00	-476.62
Proj. to Bottom	6048.50	27.900	79.810	5510.00	204.93	2189.88	0.84	-487.05
End of 3D Arc	6235.71	33.417	94.726	5671.22	208.44	2284.57	5.00	-513.20
Curve KOP	6366.75	33.417	94.726	5780.59	202.50	2356.49	0.00	-541.24
End of 3D Arc	7164.25	60.000	0.000	6385.00	574.12	2695.04	8.50	-265.46
POE	7346.93	74.217	351.000	6480.00	741.19	2591.20	9.00	-102.39
Landing Pt	7522.28	90.000	351.000	6480.00	912.21	2554.11	9.00	68.56
On Azimuth	7826.82	90.000	341.864	6480.00	1207.93	2492.74	3.00	371.80
BHL	15526.82	90.000	341.864	6480.00	8525.39	95.92	0.00	8071.81

Well Data

Slot	Well	Wellbore	Wellpath
Slot #06	Mossor Unit 3H	Mossor Unit 3H AWB	Mossor Unit 3H AWP Proj 15485
Slot #06	Mossor Unit 3H	Mossor Unit 3H PWB	Mossor Unit 3H PWP Rev-A.0



User specified (HGS&M) DP: 86.59' Field: 52983 RT
 Magnetic Grid North is 0.09 degrees East of True North
 To correct azimuth from True to Grid subtract 0.09 degrees
 To correct azimuth from Magnetic to Grid subtract 7.73 degrees



Actual Wellpath Report

Mossor Unit 3H AWP Proj: 15485
Page 1 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Mossor Unit 3H
Field	Doddridge	Wellbore	Mossor Unit 3H AWB
Facility	Long Run 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/Apr/2017 at 16:57
Convergence at slot	0.09° East	Database/Source file	WA_MPL_EasternUS_Defn/Mossor Unit 3H AWP_Proj_15485_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-18.19	8.67	1678899.91	14271301.33	39°18'01.050"N	80°51'50.280"W
Facility Reference Pt			1678891.24	14271319.52	39°18'01.230"N	80°51'50.390"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Frontier 22 (RKB) to Facility Vertical Datum	24.50ft
Horizontal Reference Pt	Slot	Frontier 22 (RKB) to Mean Sea Level	1045.50ft
Vertical Reference Pt	Frontier 22 (RKB)	Frontier 22 (RKB) to Mud Line at Slot (Slot #06)	24.50ft
MD Reference Pt	Frontier 22 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	341.86°



Actual Wellpath Report

Mossor Unit 3H AWP Proj: 15485
Page 2 of 10

RECEIVED
Office of Oil and Gas
APR 30 2018

WV Department of
Environmental Protection



06/01/2018

REFERENCE WELLPATH IDENTIFICATION		Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Mossor Unit 3H	Wellbore	Mossor Unit 3H AWB
Field	Doddridge	Facility	Long Run Pad		

MD	WELLPATH DATA (183 stations)		+ = Interpolated/extrapolated station		Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
	Inclination	Azimuth	TVD	Vert Sect										
0.00#	0.000	240.850	0.00	0.00	0.00	1678899.91	14271301.33	39°18'01.050"N	80°51'50.280"W	0.00	0.000	0.00	0.00	
24.50	0.000	240.850	24.50	0.00	0.00	1678899.91	14271301.33	39°18'01.050"N	80°51'50.280"W	0.00	0.000	0.00	0.00	
111.50	0.240	240.850	111.50	-0.03	-0.09	1678899.75	14271301.24	39°18'01.049"N	80°51'50.282"W	0.18	240.850	0.28	0.28	-136.95 Gyrodala MS Gyro <8-3/4"> (100'-5884')
211.50	0.070	316.170	211.50	-0.02	-0.15	1678899.53	14271301.18	39°18'01.049"N	80°51'50.285"W	0.41	249.108	0.23	-0.17	75.32
311.50	0.290	71.470	311.50	0.04	-0.02	1678899.72	14271301.31	39°18'01.050"N	80°51'50.282"W	0.19	263.216	0.33	0.22	115.30
411.50	0.190	75.110	411.50	0.03	0.10	1678900.12	14271301.43	39°18'01.051"N	80°51'50.277"W	0.24	64.720	0.10	-0.10	3.64
511.50	0.250	79.890	511.50	-0.01	0.18	1679000.50	14271301.51	39°18'01.052"N	80°51'50.253"W	0.62	72.840	0.06	0.06	4.78
611.50	1.070	94.970	611.49	-0.41	0.14	1678901.64	14271301.47	39°18'01.051"N	80°51'50.258"W	1.74	85.411	0.83	0.82	15.08
711.50	3.450	82.430	711.41	-1.33	0.45	1678905.55	14271301.78	39°18'01.054"N	80°51'50.208"W	5.67	85.397	2.42	2.38	-12.54
811.50	5.770	71.110	811.08	-1.81	2.48	1678913.29	14271303.81	39°18'01.074"N	80°51'50.110"W	13.61	79.510	2.48	2.32	-11.32
911.50	6.750	78.060	910.48	-2.38	5.32	1678923.79	14271306.65	39°18'01.102"N	80°51'49.976"W	24.48	77.442	1.24	0.98	6.95
1011.50	7.740	83.670	1009.68	-4.39	7.28	1678936.23	14271308.61	39°18'01.121"N	80°51'48.818"W	37.06	78.670	1.22	0.99	5.61
1111.50	9.980	86.030	1108.48	-7.89	8.62	1678951.56	14271309.95	39°18'01.135"N	80°51'48.623"W	62.39	80.526	2.27	2.24	2.36
1211.50	13.130	87.200	1206.44	-13.02	9.78	1678971.55	14271311.10	39°18'01.146"N	80°51'48.368"W	72.33	82.231	3.16	3.15	1.17
1311.50	14.900	86.330	1303.46	-19.24	11.16	1678995.72	14271312.48	39°18'01.159"N	80°51'48.061"W	96.49	83.361	1.78	1.77	-0.87
1411.50	16.840	85.090	1399.65	-25.77	13.22	1679022.97	14271314.54	39°18'01.179"N	80°51'48.714"W	123.82	83.871	1.97	1.94	-1.24
1511.50	17.540	86.000	1495.18	-32.76	15.51	1679052.42	14271316.83	39°18'01.201"N	80°51'48.339"W	153.36	84.196	0.75	0.70	0.91
1611.50	17.890	85.620	1590.44	-40.10	17.73	1679082.76	14271319.06	39°18'01.223"N	80°51'47.953"W	183.78	84.463	0.37	0.35	-0.38
1711.50	17.470	83.670	1685.72	-46.82	20.56	1679112.98	14271321.88	39°18'01.250"N	80°51'47.568"W	214.14	84.490	0.73	-0.42	-1.95
1811.50	17.650	85.330	1781.06	-53.43	23.45	1679143.00	14271324.77	39°18'01.278"N	80°51'47.186"W	244.31	84.492	0.53	0.18	1.66
1911.50	17.670	86.110	1876.34	-60.69	25.72	1679173.24	14271327.03	39°18'01.300"N	80°51'46.801"W	274.64	84.627	0.24	0.02	0.78
2011.50	19.630	88.040	1971.09	-69.11	27.32	1679205.16	14271328.64	39°18'01.316"N	80°51'46.395"W	306.59	84.888	2.05	1.96	1.93
2111.50	19.420	87.230	2066.34	-78.20	28.70	1679238.54	14271330.02	39°18'01.329"N	80°51'46.970"W	339.97	85.158	0.34	-0.21	-0.81
2211.50	17.340	86.160	2160.23	-86.29	30.50	1679270.00	14271331.82	39°18'01.346"N	80°51'46.570"W	371.49	85.291	2.11	-2.08	-1.07
2311.50	17.640	88.870	2255.61	-94.40	31.80	1679300.01	14271333.11	39°18'01.358"N	80°51'46.188"W	401.52	85.458	0.87	0.30	2.71
2411.50	18.230	88.490	2350.75	-103.31	32.51	1679330.78	14271333.82	39°18'01.365"N	80°51'46.796"W	432.27	85.687	0.60	0.59	-0.38
2511.50	17.770	88.680	2445.86	-112.20	33.27	1679361.66	14271334.59	39°18'01.372"N	80°51'44.403"W	463.13	85.880	0.46	-0.46	0.19
2611.50	17.340	88.680	2541.20	-120.93	33.97	1679391.80	14271335.28	39°18'01.378"N	80°51'44.020"W	493.26	86.052	0.43	-0.43	0.00
2711.50	16.000	84.980	2637.00	-128.37	35.51	1679420.42	14271336.83	39°18'01.393"N	80°51'43.656"W	521.93	86.098	1.71	-1.34	-3.70
2811.50	17.640	80.110	2732.72	-133.67	39.32	1679449.07	14271340.64	39°18'01.430"N	80°51'43.291"W	550.78	85.906	2.16	1.64	-4.87



Actual Wellpath Report

Mossor Unit 3H AWP Proj: 15485
Page 3 of 10



06/01/2018

REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Mossor Unit 3H
Field	Doddridge	Wellbore	Mossor Unit 3H AWB
Facility	Long Run Pad		

WELLPATH DATA (183 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	°	ft/100ft	ft/100ft	ft/100ft	
2911.50	19.740	78.890	2827.44	-137.91	45.18	580.88	1679480.55	14271346.49	39°18'01.488"N	80°51'42.890"W	582.63	85.582	2.14	2.10	-1.22	
3011.50	22.710	78.590	2920.65	-142.24	52.26	616.38	1679516.04	14271353.56	39°18'01.557"N	80°51'42.438"W	618.59	85.154	2.97	2.97	-0.30	
3111.50	26.500	80.690	3011.55	-147.93	59.69	657.33	1679556.98	14271360.99	39°18'01.630"N	80°51'41.917"W	660.04	84.812	3.89	3.79	2.10	
3211.50	28.910	81.320	3100.08	-155.33	66.94	703.25	1679602.88	14271368.25	39°18'01.701"N	80°51'41.333"W	706.43	84.562	2.43	2.41	0.63	
3311.50	31.590	82.300	3186.46	-164.05	74.10	753.11	1679652.72	14271375.40	39°18'01.771"N	80°51'40.699"W	756.75	84.380	2.73	2.68	0.98	
3411.50	33.020	84.380	3270.98	-174.71	80.28	806.19	1679705.77	14271381.58	39°18'01.831"N	80°51'40.023"W	810.17	84.313	1.81	1.43	2.08	
3511.50	34.020	87.590	3354.36	-188.20	84.13	861.26	1679760.82	14271385.42	39°18'01.869"N	80°51'39.323"W	865.36	84.421	2.03	1.00	3.21	
3611.50	34.110	86.440	3437.20	-202.84	87.04	917.19	1679816.73	14271388.34	39°18'01.891"N	80°51'38.611"W	921.31	84.579	0.65	0.09	-1.15	
3711.50	34.300	85.380	3519.90	-216.49	91.05	973.26	1679872.78	14271392.35	39°18'01.935"N	80°51'37.898"W	977.51	84.655	0.63	0.19	-1.06	
3811.50	32.960	87.600	3603.17	-230.45	94.46	1028.53	1679928.03	14271395.76	39°18'01.968"N	80°51'37.195"W	1032.86	84.753	1.82	-1.34	2.22	
3911.50	31.470	86.870	3687.77	-244.39	97.03	1081.78	1679981.25	14271398.32	39°18'01.993"N	80°51'36.518"W	1086.12	84.875	1.54	-1.49	-0.73	
4011.50	31.710	85.870	3772.55	-257.72	100.35	1134.05	1680033.51	14271401.64	39°18'02.025"N	80°51'35.852"W	1138.48	84.943	0.58	0.24	-1.00	
4111.50	32.090	87.950	3857.55	-271.44	103.19	1186.81	1680086.25	14271404.48	39°18'02.052"N	80°51'35.181"W	1191.29	85.031	1.16	0.38	2.08	
4211.50	33.060	88.870	3942.12	-286.78	104.68	1240.63	1680140.04	14271405.96	39°18'02.069"N	80°51'34.497"W	1245.04	85.177	1.09	0.97	0.92	
4311.50	31.790	86.450	4026.53	-301.40	106.85	1294.19	1680193.59	14271408.13	39°18'02.081"N	80°51'33.815"W	1298.60	85.280	1.82	-1.27	-2.42	
4411.50	29.460	83.730	4112.58	-313.09	111.16	1344.94	1680244.31	14271412.45	39°18'02.128"N	80°51'33.170"W	1349.52	85.275	2.71	-2.33	-2.72	
4511.50	31.090	83.550	4198.94	-323.38	116.75	1395.04	1680294.39	14271418.03	39°18'02.183"N	80°51'32.533"W	1399.92	85.216	1.63	1.63	-0.18	
4611.50	29.920	82.420	4285.10	-333.19	122.94	1445.42	1680344.75	14271424.22	39°18'02.243"N	80°51'31.891"W	1450.64	85.138	1.30	-1.17	-1.13	
4711.50	28.280	83.100	4372.47	-342.38	129.08	1493.66	1680392.97	14271430.35	39°18'02.303"N	80°51'31.277"W	1499.23	85.061	1.67	-1.64	0.68	
4811.50	29.760	84.620	4459.92	-352.48	134.25	1541.89	1680441.19	14271435.53	39°18'02.354"N	80°51'30.664"W	1547.73	85.024	1.65	1.48	1.52	
4911.50	32.530	86.810	4545.50	-364.90	138.07	1593.46	1680492.73	14271439.35	39°18'02.391"N	80°51'30.008"W	1599.43	85.048	2.99	2.77	2.19	
5011.50	32.750	84.740	4629.71	-377.86	142.05	1647.24	1680546.49	14271443.32	39°18'02.429"N	80°51'29.324"W	1653.35	85.071	1.14	0.22	-2.07	
5111.50	32.540	82.230	4713.91	-388.73	148.17	1700.83	1680600.05	14271449.44	39°18'02.489"N	80°51'28.642"W	1707.27	85.021	1.37	-0.21	-2.51	
5211.50	31.800	82.050	4798.56	-398.24	155.45	1753.57	1680652.78	14271456.71	39°18'02.560"N	80°51'27.971"W	1760.44	84.934	0.75	-0.74	-0.18	
5311.50	31.920	87.320	4883.51	-409.95	160.33	1806.08	1680705.27	14271461.59	39°18'02.607"N	80°51'27.303"W	1813.18	84.927	2.78	0.12	5.27	
5411.50	34.400	89.730	4967.22	-425.67	161.70	1860.75	1680759.91	14271462.96	39°18'02.620"N	80°51'26.607"W	1867.76	85.034	2.81	2.48	2.41	
5511.50	33.370	87.290	5050.24	-441.65	163.13	1916.47	1680815.61	14271464.39	39°18'02.633"N	80°51'25.898"W	1923.40	85.135	1.71	-1.03	-2.44	
5611.50	33.440	84.110	5133.73	-454.82	167.26	1971.36	1680870.48	14271468.52	39°18'02.673"N	80°51'25.200"W	1978.44	85.150	1.75	0.07	-3.18	
5711.50	32.500	80.250	5217.53	-464.58	174.84	2025.25	1680924.35	14271475.90	39°18'02.745"N	80°51'24.515"W	2032.76	85.072	2.30	-0.94	-3.86	
5811.50	30.710	78.110	5302.80	-471.28	184.45	2076.72	1680975.80	14271485.70	39°18'02.841"N	80°51'23.860"W	2084.89	84.924	2.11	-1.79	-2.14	



Actual Wellpath Report

Mossor Unit 3H AWP Proj: 15485
Page 4 of 10



06/01/2018

REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Mossor Unit 3H
Field	Doddridge	Wellbore	Mossor Unit 3H AWB
Facility	Long Run Pad		

WELLPATH DATA (183 stations) + = Interpolated/extrapolated station

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	D/S	Build Rate	Turn Rate	Comments
ft	°	°	ft	ft	ft	ft	ft	ft			ft	°	ft/100ft	ft/100ft		
5895.50	29.170	80.300	5375.59	-476.62	192.32	2117.78	1681016.95	14271493.57	39°18'02.919"N	80°51'23.336"W	2126.60	84.811	2.25	-1.83	2.61	
6009.00	28.820	78.710	5474.86	-483.95	202.33	2171.99	1681071.02	14271503.58	39°18'03.017"N	80°51'22.647"W	2181.38	84.678	0.75	-0.31	-1.40	BH AT Curve <-8-1/2"> (5895.50)-(6009--15459)
6056.00	28.550	77.900	5516.10	-486.48	206.91	2194.07	1681093.10	14271508.15	39°18'03.061"N	80°51'22.366"W	2203.81	84.613	1.01	-0.57	-1.72	
6104.00	27.390	78.790	5558.49	-489.02	211.46	2216.12	1681115.14	14271512.70	39°18'03.106"N	80°51'22.086"W	2226.18	84.549	2.57	-2.42	1.85	
6151.00	28.520	81.110	5600.00	-492.13	215.29	2237.81	1681136.82	14271516.54	39°18'03.144"N	80°51'21.810"W	2248.14	84.505	3.34	2.40	4.94	
6199.00	30.240	83.600	5641.83	-496.43	218.41	2261.15	1681160.15	14271519.65	39°18'03.174"N	80°51'21.513"W	2271.67	84.483	4.39	3.58	5.19	
6246.00	32.050	86.630	5682.06	-502.02	220.46	2285.36	1681184.35	14271521.71	39°18'03.194"N	80°51'21.205"W	2295.97	84.490	5.09	3.85	6.45	
6293.00	34.070	89.530	5721.45	-509.19	221.30	2310.98	1681209.96	14271522.55	39°18'03.202"N	80°51'20.879"W	2321.55	84.530	5.46	4.30	6.17	
6340.00	34.230	90.110	5760.34	-517.33	221.39	2337.36	1681236.34	14271522.63	39°18'03.202"N	80°51'20.543"W	2347.82	84.589	0.77	0.34	1.23	
6388.00	34.200	86.420	5800.04	-524.95	222.20	2364.53	1681263.29	14271523.45	39°18'03.210"N	80°51'20.200"W	2374.75	84.631	4.32	-0.06	-7.69	
6435.00	34.000	81.940	5838.97	-530.87	224.87	2390.53	1681289.48	14271526.11	39°18'03.236"N	80°51'19.867"W	2401.08	84.626	5.36	-0.43	-9.53	
6483.00	33.710	75.710	5878.84	-533.82	230.04	2416.73	1681315.67	14271531.28	39°18'03.287"N	80°51'19.534"W	2427.65	84.563	7.25	-0.60	-12.98	
6530.00	33.650	66.180	5917.98	-533.40	238.53	2441.30	1681340.23	14271539.76	39°18'03.370"N	80°51'19.221"W	2452.92	84.420	11.24	-0.13	-20.28	
6578.00	33.140	58.900	5958.07	-529.14	250.68	2464.71	1681363.63	14271551.91	39°18'03.490"N	80°51'18.923"W	2477.42	84.193	8.41	-1.06	-15.17	
6625.00	32.470	52.220	5997.59	-522.02	265.05	2485.69	1681384.60	14271566.27	39°18'03.632"N	80°51'18.656"W	2499.78	83.914	7.83	-1.43	-14.21	
6673.00	32.640	44.630	6038.06	-511.76	282.16	2504.97	1681403.88	14271583.38	39°18'03.800"N	80°51'18.410"W	2520.82	83.573	8.51	0.35	-15.81	
6720.00	34.410	37.020	6077.26	-498.37	301.80	2521.88	1681420.78	14271603.01	39°18'03.994"N	80°51'18.195"W	2539.88	83.176	9.70	3.77	-16.19	
6768.00	35.910	32.870	6116.51	-481.76	324.45	2537.69	1681436.59	14271625.65	39°18'04.218"N	80°51'17.993"W	2558.35	82.714	5.88	3.12	-8.65	
6815.00	38.430	29.150	6153.96	-463.17	348.79	2552.29	1681451.18	14271649.98	39°18'04.458"N	80°51'17.807"W	2576.01	82.218	7.18	5.36	-7.91	
6863.00	40.690	24.720	6190.97	-441.58	376.04	2566.11	1681464.99	14271677.22	39°18'04.727"N	80°51'17.630"W	2593.51	81.663	7.53	4.71	-9.23	
6910.00	42.750	19.530	6226.06	-417.71	405.01	2577.85	1681476.73	14271706.17	39°18'05.013"N	80°51'17.480"W	2609.47	81.071	8.55	4.38	-11.04	
6958.00	45.490	14.690	6260.53	-390.42	436.93	2587.84	1681486.52	14271738.09	39°18'05.329"N	80°51'17.328"W	2624.27	80.244	9.04	5.71	-10.08	
6970.00+	46.193	13.512	6268.89	-383.14	445.28	2589.74	1681488.61	14271746.43	39°18'05.414"N	80°51'17.328"W	2624.27	80.244	9.04	5.71	-10.08	
7005.00	48.310	10.230	6292.65	-360.88	470.43	2595.01	1681493.88	14271771.57	39°18'05.660"N	80°51'17.261"W	2637.31	79.725	9.16	6.05	-9.82	Middlesex: 6970' MD
7053.00	51.790	7.540	6323.47	-328.11	506.77	2600.67	1681499.54	14271807.90	39°18'06.019"N	80°51'17.188"W	2649.59	78.973	8.43	7.25	-5.60	
7100.00	55.880	5.070	6351.20	-293.57	544.48	2604.82	1681503.68	14271845.59	39°18'06.391"N	80°51'17.135"W	2661.11	78.194	9.68	8.70	-5.26	
7148.00	59.640	2.200	6376.80	-253.87	584.98	2607.37	1681506.23	14271886.08	39°18'06.792"N	80°51'17.101"W	2672.19	77.355	9.32	7.83	-5.98	
7178.00+	62.810	0.228	6391.42	-231.15	611.17	2607.92	1681506.78	14271912.26	39°18'07.051"N	80°51'17.094"W	2678.58	76.811	9.88	8.04	-6.57	Burket: 7178' MD
7195.00	63.430	359.150	6399.21	-216.77	626.28	2607.83	1681506.70	14271927.36	39°18'07.200"N	80°51'17.095"W	2681.98	76.496	9.88	8.11	-6.34	
7242.00+	66.700	357.210	6419.02	-175.87	688.87	2606.47	1681505.34	14271969.94	39°18'07.621"N	80°51'17.111"W	2690.93	75.607	7.90	6.96	-4.13	fully: 7242' MD



Actual Wellpath Report

Mossor Unit 3H AWP Proj: 15485
Page 5 of 10



06/01/2018

REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Mossor Unit 3H
Field	Doddridge	Wellbore	Mossor Unit 3H AWB
Facility	Long Run Pad		

WELLPATH DATA (183 stations) ± Interpolated/extrapolated station

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	ft	ft	°	°	ft	°	ft/100ft	ft/100ft	ft/100ft	
7243.00	66.770	357.170	6419.41	-174.98	659.79	2606.43	1681505.29	14271970.85	39°18'07.630"N	80°51'17.112"W	2691.11	75.588	7.90	6.98	-4.02	
7290.00	69.740	355.710	6436.83	-132.74	713.36	2603.71	1681502.58	14272014.40	39°18'08.061"N	80°51'17.145"W	2699.66	74.678	6.95	6.32	-3.11	
7309.00†	71.448	354.468	6443.14	-115.29	731.21	2602.18	1681501.04	14272032.25	39°18'08.237"N	80°51'17.164"W	2702.96	74.305	10.90	8.99	-6.53	Hamilton: 7309' MID
7338.00	74.070	352.620	6451.73	-88.17	758.73	2599.06	1681497.93	14272059.75	39°18'08.509"N	80°51'17.203"W	2707.54	73.726	10.90	9.04	-6.37	Marcellus POE: 7338' MID
7385.00	78.220	350.740	6462.99	-43.22	803.87	2592.45	1681491.32	14272104.87	39°18'08.955"N	80°51'17.287"W	2714.22	72.772	9.65	8.83	-4.00	
7433.00	83.520	350.110	6470.60	3.63	850.58	2584.57	1681483.44	14272151.57	39°18'09.417"N	80°51'17.386"W	2720.93	71.784	11.12	11.04	-1.31	
7480.00	85.630	349.790	6475.04	49.95	896.65	2576.40	1681475.28	14272197.62	39°18'09.873"N	80°51'17.489"W	2727.97	70.811	4.54	4.49	-0.88	
7529.00	89.820	349.390	6476.99	98.45	944.79	2567.56	1681466.44	14272225.75	39°18'10.349"N	80°51'17.600"W	2735.87	69.798	8.59	8.55	-0.82	
7624.00	90.430	348.580	6476.78	192.72	1038.04	2549.41	1681448.30	14272338.96	39°18'11.271"N	80°51'17.829"W	2752.64	67.845	1.07	0.64	-0.85	
7719.00	90.480	342.940	6476.02	287.46	1130.08	2526.05	1681424.95	14272430.96	39°18'12.181"N	80°51'18.125"W	2767.31	65.898	5.94	0.06	-5.94	
7814.00	90.480	339.870	6475.21	382.44	1220.11	2495.76	1681394.67	14272520.95	39°18'13.071"N	80°51'18.508"W	2778.04	63.947	3.23	0.00	-3.23	
7910.00	90.400	337.010	6474.46	478.25	1305.38	2460.49	1681359.41	14272610.19	39°18'13.954"N	80°51'18.955"W	2787.20	61.980	2.98	-0.09	-2.98	
8005.00	90.220	337.010	6473.95	572.91	1396.83	2423.38	1681322.32	14272697.60	39°18'14.819"N	80°51'19.425"W	2797.13	60.041	0.19	-0.19	0.00	
8099.00	89.600	339.130	6474.09	666.70	1484.03	2388.28	1681287.23	14272784.76	39°18'15.681"N	80°51'19.870"W	2811.80	58.144	2.35	-0.66	2.26	
8194.00	89.970	340.660	6474.45	761.64	1573.23	2355.63	1681254.69	14272873.93	39°18'16.563"N	80°51'20.284"W	2832.67	56.263	1.66	0.39	1.61	
8290.00	89.820	341.020	6474.63	857.63	1663.92	2324.12	1681223.10	14272964.58	39°18'17.460"N	80°51'20.683"W	2856.35	54.400	0.41	-0.16	0.38	
8384.00	89.750	339.190	6474.98	951.58	1752.30	2292.13	1681191.12	14273052.93	39°18'18.334"N	80°51'21.088"W	2885.21	52.603	1.95	-0.07	-1.95	
8479.00	89.850	340.240	6475.31	1046.51	1841.41	2259.20	1681158.20	14273142.00	39°18'19.215"N	80°51'21.505"W	2914.58	50.817	1.11	0.11	1.11	
8573.00	89.910	342.400	6475.51	1140.50	1930.45	2229.09	1681128.11	14273231.01	39°18'20.096"N	80°51'21.886"W	2948.81	49.107	2.30	0.06	2.30	
8667.00	89.850	343.350	6475.70	1234.48	2020.28	2201.41	1681100.44	14273320.80	39°18'20.984"N	80°51'22.236"W	2987.94	47.457	1.01	-0.06	1.01	
8761.00	89.940	346.190	6475.88	1328.35	2110.97	2176.72	1681075.76	14273411.46	39°18'21.881"N	80°51'22.549"W	3032.21	45.879	3.02	0.10	3.02	
8857.00	89.910	350.200	6476.00	1423.75	2204.92	2157.09	1681056.13	14273505.37	39°18'22.810"N	80°51'22.961"W	3084.59	44.372	4.18	-0.03	4.18	
8946.00	89.910	343.600	6476.40	1611.61	2389.55	2117.21	1681016.27	14273689.92	39°18'24.635"N	80°51'23.300"W	3192.57	41.542	5.41	0.06	-5.41	
9142.00	89.940	343.300	6476.52	1707.58	2481.57	2089.86	1680988.94	14273781.91	39°18'25.545"N	80°51'24.010"W	3244.34	40.102	0.31	0.03	-0.31	
9236.00	89.880	342.010	6476.67	1801.57	2571.30	2061.84	1680960.92	14273871.60	39°18'26.432"N	80°51'24.810"W	3295.87	38.725	1.37	-0.06	-1.37	
9330.00	90.310	337.780	6476.52	1895.49	2659.55	2039.53	1680928.63	14273959.81	39°18'27.305"N	80°51'24.410"W	3345.48	37.348	4.52	0.46	-4.50	
9425.00	90.120	337.310	6476.16	1990.22	2747.34	1993.25	1680892.36	14274047.57	39°18'28.174"N	80°51'24.870"W	3394.25	35.962	0.53	-0.20	-0.49	
9519.00	90.060	340.340	6476.01	2084.08	2834.99	1959.30	1680858.42	14274135.18	39°18'29.040"N	80°51'25.300"W	3446.16	34.649	3.22	-0.06	3.22	
9614.00	90.000	342.310	6475.96	2179.07	2924.98	1928.88	1680828.02	14274225.14	39°18'29.930"N	80°51'25.685"W	3503.73	33.403	2.07	-0.06	2.07	



Actual Wellpath Report

Mossor Unit 3H AWP Proj: 15485
Page 6 of 10

RECEIVED
Office of Oil and Gas

APR 30 2018

WV Department of
Environmental Protection



06/01/2018

REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Mossor Unit 3H
Area	Doddridge Co., WV	Well	Mossor Unit 3H
Field	Doddridge	Wellbore	Mossor Unit 3H AWB
Facility	Long Run Pad		

WELLPATH DATA (183 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	Build Rate ft/100ft	Turn Rate ft/100ft	Comments
9709.00	89.600	342.420	6476.29	2274.06	3015.52	1900.10	1680799.25	14274315.64	39°18'30.826"N	80°51'26.049"W	3564.23	32.215	0.44	-0.42	0.12	
9804.00	89.720	343.860	6476.86	2369.04	3106.43	1872.55	1680771.71	14274406.51	39°18'31.724"N	80°51'26.398"W	3627.17	31.081	1.52	0.13	1.52	
9898.00	89.660	343.770	6477.37	2462.98	3196.70	1846.35	1680745.52	14274486.75	39°18'32.617"N	80°51'26.730"W	3691.60	30.070	0.12	-0.06	-0.10	
9994.00	89.720	341.660	6477.88	2558.96	3288.36	1817.83	1680717.01	14274588.37	39°18'33.523"N	80°51'27.091"W	3757.37	28.934	2.20	0.06	-2.20	
10088.00	89.230	343.190	6478.75	2652.95	3377.97	1789.44	1680688.64	14274677.94	39°18'34.410"N	80°51'27.450"W	3822.66	27.912	1.71	-0.52	1.63	
10183.00	89.320	344.760	6479.95	2747.87	3469.26	1763.22	1680662.43	14274769.20	39°18'35.312"N	80°51'27.822"W	3891.62	26.942	1.66	0.09	1.65	
10278.00	89.380	344.740	6481.03	2842.75	3560.91	1738.24	1680637.45	14274860.82	39°18'36.219"N	80°51'28.098"W	3962.52	26.019	0.97	0.06	-0.02	
10373.00	89.350	342.930	6482.08	2937.68	3652.15	1711.79	1680611.01	14274952.01	39°18'37.121"N	80°51'28.432"W	4033.41	25.113	1.91	-0.03	-1.91	
10468.00	89.170	341.020	6483.31	3032.67	3742.47	1682.40	1680581.63	14275042.30	39°18'38.014"N	80°51'28.805"W	4103.24	24.206	2.02	-0.19	-2.01	
10563.00	89.200	340.540	6484.66	3127.64	3832.17	1651.13	1680550.38	14275131.96	39°18'38.901"N	80°51'29.201"W	4172.74	23.309	0.51	0.03	-0.51	
10658.00	89.320	340.680	6485.88	3222.61	3921.77	1619.59	1680518.85	14275221.53	39°18'39.787"N	80°51'29.600"W	4243.04	22.439	0.19	0.13	0.15	
10753.00	89.350	338.680	6486.99	3317.53	4010.85	1586.60	1680485.88	14275310.57	39°18'40.668"N	80°51'30.018"W	4313.26	21.583	2.11	0.03	-2.11	
10849.00	89.450	336.650	6487.99	3413.26	4099.64	1550.13	1680449.42	14275399.33	39°18'41.546"N	80°51'30.480"W	4382.91	20.712	2.12	0.10	-2.11	
10943.00	89.410	337.880	6488.93	3506.96	4186.33	1513.80	1680413.10	14275485.98	39°18'42.403"N	80°51'30.941"W	4451.62	19.880	1.31	-0.04	1.31	
11038.00	89.320	340.770	6489.98	3601.85	4275.20	1480.26	1680379.58	14275574.81	39°18'43.282"N	80°51'31.366"W	4524.21	19.098	3.04	-0.09	3.04	
11133.00	89.420	341.540	6491.02	3696.83	4365.10	1449.58	1680348.91	14275664.68	39°18'44.171"N	80°51'31.754"W	4599.50	18.371	0.82	0.11	0.81	
11228.00	89.820	341.620	6491.65	3791.83	4455.23	1419.56	1680318.91	14275754.77	39°18'45.063"N	80°51'32.134"W	4675.92	17.673	0.43	0.42	0.08	
11323.00	90.030	339.900	6491.78	3886.81	4544.92	1388.26	1680287.61	14275844.43	39°18'45.950"N	80°51'32.531"W	4752.21	16.985	1.82	-1.81	-1.81	
11418.00	89.820	338.170	6491.90	3981.69	4633.63	1354.27	1680253.64	14275933.10	39°18'46.827"N	80°51'32.961"W	4827.48	16.292	1.83	-0.22	-1.82	
11513.00	89.850	339.460	6492.18	4076.55	4722.20	1319.94	1680219.32	14276021.64	39°18'47.703"N	80°51'33.395"W	4903.21	15.617	1.36	0.03	1.36	
11608.00	89.910	340.890	6492.38	4171.51	4811.57	1287.72	1680187.12	14276110.97	39°18'48.587"N	80°51'33.805"W	4980.91	14.983	1.51	0.06	1.51	
11703.00	89.780	341.640	6492.63	4266.50	4901.54	1257.21	1680156.62	14276200.90	39°18'49.476"N	80°51'34.191"W	5060.20	14.386	0.80	-0.14	0.79	
11798.00	89.380	344.130	6493.49	4457.43	5084.40	1228.12	1680121.55	14276283.69	39°18'51.284"N	80°51'34.888"W	5224.58	13.828	2.05	0.14	2.04	
11894.00	89.480	344.210	6494.43	4552.35	5175.79	1176.21	1680087.65	14276375.05	39°18'52.188"N	80°51'35.216"W	5307.76	12.803	0.13	0.11	0.08	
11989.00	89.510	343.960	6495.27	4647.27	5267.15	1150.16	1680054.61	14276466.37	39°18'53.091"N	80°51'35.546"W	5391.26	12.318	0.27	0.03	-0.26	
12084.00	89.260	345.160	6496.29	4742.16	5358.71	1124.87	1680024.33	14276557.90	39°18'53.997"N	80°51'35.866"W	5475.50	11.835	1.29	-0.26	1.26	
12179.00	91.750	350.580	6496.46	4835.60	5450.57	1105.13	1680004.60	14276649.72	39°18'54.905"N	80°51'36.115"W	5561.47	11.462	6.34	2.65	5.77	
12368.00	90.340	346.220	6493.72	4929.94	5543.59	1086.03	1679985.51	14276742.70	39°18'55.825"N	80°51'36.365"W	5648.97	11.084	4.82	-1.48	-4.59	
12464.00	91.380	341.770	6492.28	5025.83	5635.83	1059.57	1679959.06	14276834.91	39°18'56.737"N	80°51'36.691"W	5734.57	10.648	4.76	1.08	-4.64	



Actual Wellpath Report

Mossor Unit 3H AWP Proj: 15485'
Page 7 of 10



06/01/2018

REFERENCE WELLPATH IDENTIFICATION									
Operator	ANTERO RESOURCES CORPORATION								
Area	Doddridge Co., WV								
Field	Doddridge								
Facility	Long Run Pad								
Slot	Slot #06								
Well	Mossor Unit 3H								
Wellbore	Mossor Unit 3H AWB								

WELLPATH DATA (183 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	Build Rate ft/100ft	Turn Rate ft/100ft	Comments
12559.00	91.200	339.290	6490.14	5120.78	5725.37	1027.92	1679927.42	14277024.41	39°18'57.622"N	80°51'37.092"W	5816.91	10.178	2.62	-0.19	-2.61	
12653.00	90.310	336.050	6488.91	5214.50	5812.30	992.21	1679891.73	14277111.30	39°18'58.482"N	80°51'37.545"W	5896.38	9.688	3.57	-0.95	-3.45	
12748.00	90.400	336.510	6488.32	5309.05	5899.27	954.00	1679853.53	14277198.24	39°18'59.342"N	80°51'38.029"W	5975.91	9.186	0.49	0.09	0.48	
12843.00	90.280	337.000	6487.75	5403.67	5986.56	916.51	1679816.05	14277285.49	39°19'00.205"N	80°51'38.504"W	6056.31	8.704	0.53	-0.13	0.52	
13039.00	90.310	340.710	6487.26	5499.52	6076.08	881.88	1679781.44	14277374.98	39°19'01.091"N	80°51'38.943"W	6139.74	8.258	3.86	0.03	3.86	
13033.00	89.970	341.720	6487.03	5593.52	6165.07	851.61	1679751.18	14277463.93	39°19'01.971"N	80°51'39.327"W	6223.61	7.865	1.13	-0.36	1.07	
13221.00	90.340	341.720	6486.78	5686.52	6253.38	822.44	1679722.02	14277552.20	39°19'02.844"N	80°51'39.696"W	6307.23	7.493	0.40	0.00	0.00	
13315.00	90.090	344.320	6486.32	5785.47	6343.85	793.47	1679683.07	14277642.64	39°19'03.799"N	80°51'40.063"W	6393.28	7.129	1.14	-0.29	1.11	
13410.00	89.970	344.820	6486.27	5870.36	6434.00	766.85	1679646.45	14277732.75	39°19'04.630"N	80°51'40.400"W	6479.53	6.797	1.65	0.03	1.65	
13504.00	89.970	342.920	6486.32	6064.30	6515.87	715.46	1679615.08	14277824.29	39°19'05.536"N	80°51'40.720"W	6567.57	6.483	0.54	-0.13	0.53	
13599.00	90.030	344.140	6486.32	6159.26	6706.97	688.53	1679568.16	14278005.61	39°19'07.329"N	80°51'41.391"W	6742.22	5.861	1.29	0.06	1.28	
13694.00	90.120	345.860	6486.20	6254.11	6798.73	663.94	1679533.58	14278097.34	39°19'08.237"N	80°51'41.702"W	6831.07	5.578	1.81	0.09	1.81	
13788.00	90.180	343.810	6485.95	6347.98	6889.45	639.35	1679539.00	14278188.02	39°19'09.134"N	80°51'42.013"W	6919.05	5.302	2.18	0.06	2.18	
13882.00	89.970	341.780	6485.83	6441.96	6979.24	611.55	1679511.21	14278277.77	39°19'10.021"N	80°51'42.365"W	7005.98	5.008	2.17	-0.22	-2.16	
13976.00	90.060	341.540	6485.80	6535.96	7068.46	581.97	1679481.65	14278366.96	39°19'10.904"N	80°51'42.740"W	7092.38	4.707	0.27	0.10	-0.26	
14071.00	89.940	342.810	6485.80	6630.96	7158.90	552.89	1679452.58	14278457.37	39°19'11.798"N	80°51'43.108"W	7180.22	4.416	1.34	-0.13	1.34	
14167.00	89.910	343.980	6485.93	6726.92	7250.90	525.46	1679425.16	14278549.32	39°19'12.708"N	80°51'43.455"W	7269.91	4.145	1.22	-0.03	1.22	
14261.00	90.060	342.900	6485.95	6820.88	7341.00	498.66	1679398.38	14278639.39	39°19'13.599"N	80°51'43.795"W	7357.91	3.886	1.16	0.16	-1.15	
14356.00	90.120	342.360	6485.80	6915.87	7431.66	470.30	1679370.03	14278730.02	39°19'14.495"N	80°51'44.154"W	7446.53	3.621	0.57	0.06	-0.57	
14449.00	90.430	343.160	6485.36	7008.86	7520.48	442.74	1679342.47	14278818.80	39°19'15.373"N	80°51'44.503"W	7533.50	3.369	0.92	0.33	0.86	
14545.00	90.310	343.110	6484.74	7104.84	7612.35	414.89	1679314.63	14278910.63	39°19'16.282"N	80°51'44.855"W	7623.65	3.120	0.14	-0.12	-0.05	
14640.00	90.340	342.450	6484.20	7199.82	7703.09	386.77	1679286.52	14279001.34	39°19'17.179"N	80°51'45.211"W	7712.79	2.874	0.70	0.03	-0.69	
14735.00	90.250	341.820	6483.71	7294.82	7793.51	357.62	1679257.39	14279091.72	39°19'18.073"N	80°51'45.580"W	7801.71	2.627	0.67	-0.09	-0.66	
14829.00	90.180	341.850	6483.36	7388.82	7882.82	328.32	1679228.10	14279181.00	39°19'18.956"N	80°51'45.952"W	7889.66	2.385	0.08	-0.07	-0.03	
14924.00	90.430	342.530	6482.85	7483.81	7973.27	299.26	1679199.05	14279271.41	39°19'19.851"N	80°51'46.320"W	7978.88	2.149	0.76	0.26	0.72	
15018.00	90.220	343.240	6482.32	7577.80	8063.10	271.60	1679171.40	14279361.21	39°19'20.759"N	80°51'46.670"W	8067.68	1.929	0.79	-0.22	0.76	
15111.00	89.350	343.260	6482.67	7670.77	8152.16	244.80	1679144.61	14279450.22	39°19'21.620"N	80°51'47.009"W	8155.83	1.720	0.94	-0.94	0.02	
15206.00	90.340	343.430	6482.92	7765.73	8243.17	217.67	1679117.39	14279541.20	39°19'22.520"N	80°51'47.354"W	8246.04	1.512	1.06	1.04	0.18	
15301.00	90.310	344.470	6482.39	7860.67	8334.46	191.31	1679091.74	14279632.46	39°19'23.422"N	80°51'47.686"W	8336.66	1.315	1.10	-0.03	1.09	



Actual Wellpath Report

Mossor Unit 3H AWP Proj: 15485
Page 8 of 10

RECEIVED
Office of Oil and Gas

APR 30 2018

WV Department of Environmental Protection



06/01/2018

REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Mossor Unit 3H
Field	Doddridge	Wellbore	Mossor Unit 3H AWB
Facility	Long Run Pad		

WELLPATH DATA (183 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)	
15396.00	90.550	342.200	6481.67	7955.63	8425.47	164.07	1679063.91	14279723.42	39°19'24.322"N	80°51'48.031"W	8427.06	1.116	2.40	0.25	-2.39	
15459.00	91.050	341.220	6480.79	8018.62	8485.28	144.30	1679044.15	14279783.21	39°19'24.914"N	80°51'48.282"W	8486.50	0.974	1.75	0.79	-1.56	
15485.00	91.050	341.220	6480.32	8044.61	8509.89	135.93	1679035.78	14279807.81	39°19'25.157"N	80°51'48.388"W	8510.97	0.915	0.00	0.00	0.00	Projected MD at TD: 15485'

HOLE & CASING SECTIONS - Ref Wellbore: Mossor Unit 3H AWB Ret Wellpath: Mossor Unit 3H AWP Proj: 15485'

String/Diameter	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	Start EW	End N/S	End EW
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
20in Conductor	24.50	64.50	40.00	24.50	64.50	0.00	0.00	-0.02	-0.03
17.5in Open Hole	64.50	541.50	477.00	64.50	541.50	-0.02	-0.03	0.19	0.78
13.375in Casing Surface	24.50	531.70	507.20	24.50	531.70	0.00	0.00	0.19	0.70
12.25in Open Hole	541.50	2614.80	2073.30	541.50	2544.35	0.19	0.78	33.99	493.07
9.625in Casing Intermediate	24.50	2614.80	2590.30	24.50	2544.35	0.00	0.00	33.99	493.07
8.75in Open Hole	2614.80	6048.50	3433.70	2544.35	5509.51	33.99	493.07	206.16	2190.56
8.5in Open Hole	6048.50	15485.00	9436.50	5509.51	6480.32	206.16	2190.56	8509.89	135.93
5.5in Casing Production	24.50	15485.00	15460.50	24.50	6480.32	0.00	0.00	8509.89	135.93



Actual Wellpath Report

Mossor Unit 3H AWP Proj: 15485
Page 9 of 10



06/01/2018

REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Mossor Unit 3H
Field	Doddridge	Wellbore	Mossor Unit 3H AWB
Facility	Long Run Pad		

TARGETS

Name	TVD (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Shape
Mossor Unit 3H POE-Rev-2	6456.00	741.19	2591.20	1681490.07	14272042.22	39°18'08.336"N	80°51'17.304"W	point
Mossor Unit 3H BHL-Rev-2	6480.00	8625.39	95.92	1678995.79	14279823.31	39°19'25.311"N	80°51'48.896"W	point
Mossor Unit 3H LP-Rev-1	6480.00	912.21	2564.11	1681462.99	14272213.17	39°18'10.027"N	80°51'17.645"W	point

WELLPATH COMPOSITION - Ref Wellbore: Mossor Unit 3H AWB Ref Wellpath: Mossor Unit 3H AWP Proj: 15485

Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	5895.50	Gyrodata standard - Drop gyro or Multi-shot	05 Gyrodata MS Gyro <8-3/4"> (100'-5884')	Mossor Unit 3H AWB
5895.50	15459.00	BHI AutoTrak Curve (Short)	06 BHI AT Curve <8-1/2"> (5895.50)(6009'-15459')	Mossor Unit 3H AWB
15459.00	15485.00	Blind Drilling (std)	Projection to bit	Mossor Unit 3H AWB



Actual Wellpath Report
 Mossor Unit 3H AWP Proj: 15485
 Page 10 of 10



06/01/2018

REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Mossor Unit 3H
Field	Doddridge	Wellbore	Mossor Unit 3H AWB
Facility	Long Run Pad		

COMMENTS
<p>Wellpath general comments</p> <p>API: 47-017-06779-0000</p> <p>BHJ Job #: 8484753</p> <p>Rig: Frontier 22</p> <p>Duration: 04/05/2017-04/09/2017</p> <p>Gyrodala MS Gyro <8-3/4">(100'-5884')</p> <p>BHJ AT Curve <8-1/2">(5895.50')(6009'-15459')</p> <p>Middlesex: 6970' MD</p> <p>Burket: 7178' MD</p> <p>Tully: 7242' MD</p> <p>Hamilton: 7309' MD</p> <p>Marcellus POE: 7338' MD</p> <p>Projected MD at TD: 15485'</p>