



ANTERO RESOURCES CORPORATION

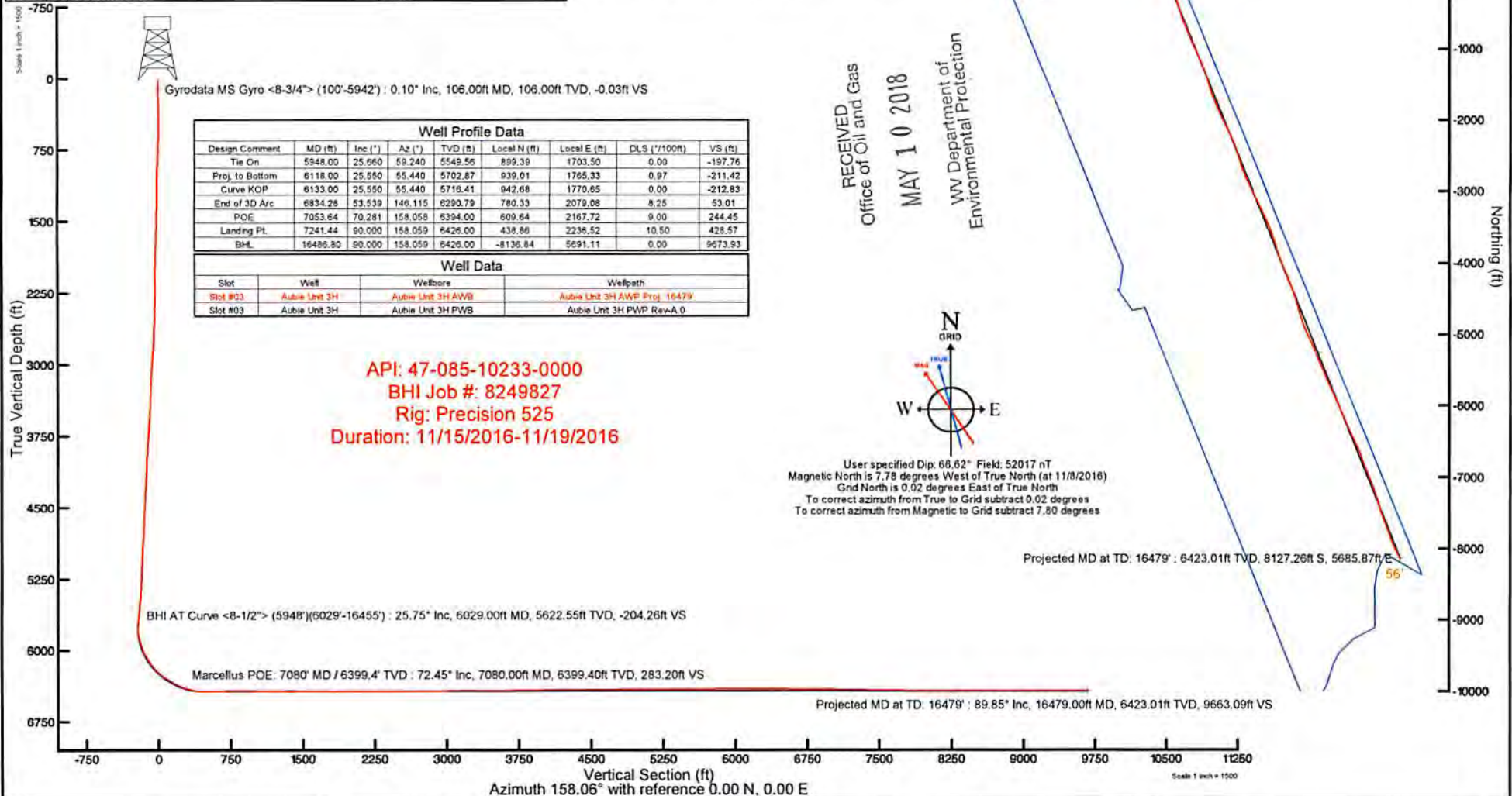
Location: Ritchie County, WV
 Field: Ritchie
 Facility: Kelly Pad

Slot: Slot #03
 Well: Aubie Unit 3H
 Wellbore: Aubie Unit 3H PWB



Plot reference wellpath is Aubie Unit 3H PWB Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
The vertical depths are referenced to PD 525 (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to PD 525 (RKB)	North Reference: Grid north
PD 525 (RKB) to Mean Sea Level: 1148 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot #03): -1127 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: edh/anyar on 2016-12-04
	Database: WVA_MPL_EASTERNUS_DWH

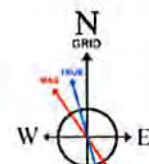
Location Information							
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
Kelly Pad		1650927.295	14276358.660	39°18'51.320"N	80°57'46.220"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Slot #03	0.00	0.00	1650927.295	14276358.660	39°18'51.320"N	80°57'46.220"W	
Comment: Aubie Unit 3H						15ft	
PD 525 (RKB) to Mud line (At Slot: Slot #03)						-1127ft	
PD 525 (RKB) to Mean Sea Level						1148ft	



Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	5948.00	25.660	59.240	5549.56	899.39	1703.50	0.00	-197.76
Proj. to Bottom	6118.00	25.550	55.440	5702.87	939.01	1765.33	0.97	-211.42
Curve KOP	6133.00	25.550	55.440	5716.41	942.68	1770.65	0.00	-212.83
End of 3D Arc	6834.28	53.539	146.115	6290.79	780.33	2079.08	8.25	53.01
POE	7053.64	70.281	158.058	6394.00	609.64	2167.72	9.00	244.45
Landing Pt.	7241.44	90.000	158.059	6426.00	438.86	2236.52	10.50	428.57
BHL	16486.80	90.000	158.059	6426.00	-8136.84	5691.11	0.00	9673.93

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #03	Aubie Unit 3H	Aubie Unit 3H AWP	Aubie Unit 3H AWP Proj. 16479
Slot #03	Aubie Unit 3H	Aubie Unit 3H PWB	Aubie Unit 3H PWB Rev-A.0

API: 47-085-10233-0000
 BHI Job #: 8249827
 Rig: Precision 525
 Duration: 11/15/2016-11/19/2016



User specified Dip: 66.62° Field: 52017 nT
 Magnetic North is 7.78 degrees West of True North (at 11/8/2016)
 Grid North is 0.02 degrees East of True North
 To correct azimuth from True to Grid subtract 0.02 degrees
 To correct azimuth from Magnetic to Grid subtract 7.80 degrees

Projected MD at TD: 16479' : 89.85° Inc, 16479.00ft MD, 6423.01ft TVD, 9663.09ft VS



Actual Wellpath Report

Aubie Unit 3H AWP Proj: 16479'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Ritchie County, WV	Well	Aubie Unit 3H
Field	Ritchie	Wellbore	Aubie Unit 3H AWB
Facility	Kelly Pad		

REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Edsaryar
Scale	0.999600	Report Generated	12/4/2016 at 2:30:56 PM
Convergence at slot	0.03° East	Database/Source file	WA_MPL_EASTERNUS_Defn/Aubie_Unit_3H_AWP_Proj__16479_.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	1650927.30	14276358.66	39°18'51.320"N	80°57'46.220"W
Facility Reference Pt			1650927.30	14276358.66	39°18'51.320"N	80°57'46.220"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM

Calculation method	Minimum curvature	PD 525 (RKB) to Facility Vertical Datum	19.00ft
Horizontal Reference Pt	Slot	PD 525 (RKB) to Mean Sea Level	1146.00ft
Vertical Reference Pt	PD 525 (RKB)	PD 525 (RKB) to Mud Line at Slot (Slot #03)	19.00ft
MD Reference Pt	PD 525 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	158.06°



Actual Wellpath Report
 Aubie Unit 3H AWP Proj: 16479'
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Operator		ANTERO RESOURCES CORPORATION	
Area	Ritchie County, WV	Field	Ritchie
Facility	Kelly Pad	Slot	Aubie Unit 3H
		Slot #03	Aubie Unit 3H AWP

WELLPATH DATA (199 stations) † = interpolated/extrapolated station													
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure	Dist	
(m)	(°)	(°)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	1650927.29	14276358.66	39°18'51.320"N	80°57'46.220"W	0.00	0.00	
19.00	0.00	0.00	19.00	0.00	0.00	0.00	1650927.29	14276358.66	39°18'51.320"N	80°57'46.220"W	0.00	0.00	
106.00	0.10	0.00	271.540	-0.03	-0.03	0.00	1650927.22	14276358.66	39°18'51.320"N	80°57'46.221"W	0.08	271.540	
206.00	0.630	0.29	108.510	206.00	0.29	-0.17	0.36	1650927.65	14276358.49	39°18'51.318"N	80°57'46.215"W	0.40	115.408
306.00	0.090	0.71	122.400	306.00	0.71	-0.39	0.95	1650928.24	14276358.27	39°18'51.315"N	80°57'46.208"W	1.02	112.240
406.00	0.090	0.85	406.00	406.00	0.85	-0.48	1.07	1650928.37	14276358.18	39°18'51.315"N	80°57'46.206"W	1.17	114.068
506.00	0.190	1.08	148.750	506.00	1.08	-0.67	1.22	1650928.51	14276357.99	39°18'51.313"N	80°57'46.204"W	1.39	118.831
606.00	1.220	0.88	48.230	605.99	0.88	-0.10	2.10	1650929.39	14276358.56	39°18'51.319"N	80°57'46.193"W	2.10	92.825
706.00	3.770	-1.25	705.89	3.28	3.28	4.80	1650932.10	14276361.94	39°18'51.352"N	80°57'46.159"W	5.82	55.647	
806.00	6.010	-5.03	45.500	805.52	-5.03	10.45	1650937.74	14276368.29	39°18'51.415"N	80°57'46.087"W	14.21	47.331	
906.00	7.020	904.87	52.220	904.87	-8.71	17.04	1650946.30	14276375.70	39°18'51.488"N	80°57'45.978"W	25.53	48.124	
1006.00	7.770	1004.04	59.500	1004.04	-11.38	24.22	1650956.95	14276382.87	39°18'51.559"N	80°57'45.842"W	38.29	50.773	
1106.00	9.680	1102.88	64.710	1102.88	-12.88	31.24	1650970.37	14276389.89	39°18'51.629"N	80°57'45.672"W	53.23	54.059	
1206.00	11.670	1201.15	67.300	1201.15	-13.50	38.74	1650987.30	14276397.38	39°18'51.703"N	80°57'45.456"W	71.44	57.165	
1306.00	13.730	1298.69	67.260	1298.69	-13.80	47.23	1651007.57	14276405.87	39°18'51.786"N	80°57'45.198"W	93.16	59.540	
1406.00	16.440	1395.24	64.900	1395.24	-14.75	57.82	1651031.22	14276416.46	39°18'51.891"N	80°57'44.896"W	119.05	60.944	
1506.00	17.230	1490.95	62.750	1490.95	-16.90	70.60	1651057.29	14276429.24	39°18'52.017"N	80°57'44.565"W	147.98	61.502	
1606.00	18.040	1586.25	63.250	1586.25	-19.57	84.35	1651084.27	14276442.98	39°18'52.153"N	80°57'44.222"W	178.26	61.758	
1706.00	18.350	1681.25	62.150	1681.25	-22.49	98.68	1651112.01	14276457.30	39°18'52.295"N	80°57'43.868"W	209.48	61.898	
1806.00	17.510	1776.40	58.230	1776.40	-26.68	113.95	1651138.71	14276472.57	39°18'52.445"N	80°57'43.529"W	240.24	61.685	
1906.00	18.150	1871.60	60.820	1871.60	-31.21	129.47	1651165.09	14276488.08	39°18'52.599"N	80°57'43.193"W	270.63	61.443	
2006.00	18.670	1966.48	62.850	1966.48	-34.62	144.37	1651192.92	14276502.97	39°18'52.746"N	80°57'42.838"W	302.41	61.486	
2106.00	19.650	2060.94	65.850	2060.94	-36.73	158.55	1651222.49	14276517.15	39°18'52.886"N	80°57'42.462"W	335.18	61.769	
2206.00	19.450	2155.18	68.260	2155.18	-37.32	171.59	1651252.28	14276530.19	39°18'53.015"N	80°57'42.070"W	368.51	62.248	
2306.00	16.710	2250.23	66.920	2250.23	-37.54	183.40	1651281.97	14276541.99	39°18'53.131"N	80°57'41.705"W	399.41	62.666	
2406.00	16.250	2346.13	63.950	2346.13	-38.83	195.18	1651307.76	14276553.76	39°18'53.248"N	80°57'41.376"W	427.74	62.851	
2506.00	17.600	2441.79	63.690	2441.79	-40.99	208.03	1651333.87	14276566.60	39°18'53.374"N	80°57'41.044"W	456.85	62.913	
2606.00	17.300	2537.19	63.470	2537.19	-43.33	221.37	1651360.71	14276579.94	39°18'53.506"N	80°57'40.702"W	486.83	62.954	
2706.00	18.170	2632.44	64.620	2632.44	-45.46	234.69	1651388.09	14276593.26	39°18'53.638"N	80°57'40.354"W	517.29	63.019	
2806.00	19.700	2727.02	63.000	2727.02	-47.88	249.03	1651417.19	14276607.59	39°18'53.779"N	80°57'39.983"W	549.73	63.064	

† = interpolated/extrapolated station



Actual Wellpath Report

Aubie Unit 3H AWP Proj: 16479



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Ritchie County, WV	Well	Aubie Unit 3H
Field	Ritchie	Wellbore	Aubie Unit 3H AWB
Facility	Kelly Pad		

WELLPATH DATA (199 stations) † = interpolated/extrapolated station									
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Station
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

5906.00	26.300	5511.80	-194.96	889.99	1687.68	1652614.30	14277248.29	39°19'00.109"N	80°57'24.742"W	1907.97	62.195	1.92	-1.89	-0.73
5948.00	25.660	59.240	-197.76	899.39	1703.50	1652630.11	14277257.69	39°19'00.202"N	80°57'24.541"W	1926.35	62.168	1.53	-1.52	-0.24
6029.00	25.750	55.570	-204.26	918.31	1733.09	1652659.68	14277276.60	39°19'00.389"N	80°57'24.164"W	1961.34	62.082	1.97	0.11	-4.53
6094.00	24.950	52.650	-210.95	934.61	1755.63	1652682.22	14277292.89	39°19'00.550"N	80°57'23.877"W	1988.90	61.971	2.28	-1.23	-4.49
6119.00	25.280	52.330	-213.80	941.07	1764.05	1652690.63	14277299.53	39°19'00.613"N	80°57'23.770"W	1999.37	61.921	1.43	-1.28	-1.28
6164.00	24.770	62.840	-217.27	951.25	1780.05	1652706.63	14277309.53	39°19'00.714"N	80°57'23.567"W	2018.28	61.880	9.93	-1.13	23.36
6209.00	24.070	76.480	-216.78	957.70	1797.37	1652723.95	14277315.98	39°19'00.778"N	80°57'23.346"W	2036.60	61.950	12.60	-1.56	30.31
6254.00	25.070	89.250	-211.99	959.97	1815.84	1652742.41	14277318.25	39°19'00.800"N	80°57'23.111"W	2053.98	62.136	11.98	2.22	28.38
6298.00	26.550	96.660	-203.94	958.99	1834.94	1652761.50	14277317.27	39°19'00.790"N	80°57'22.868"W	2070.43	62.407	7.87	3.36	16.36
6343.00	27.970	100.120	-193.55	956.01	1855.32	1652781.87	14277314.28	39°19'00.761"N	80°57'22.609"W	2087.15	62.739	4.89	3.16	8.16
6388.00	29.070	105.180	-181.35	951.29	1876.27	1652802.81	14277309.57	39°19'00.714"N	80°57'22.342"W	2103.65	63.114	5.90	2.44	11.24
6433.00	30.260	111.780	-166.91	944.22	1897.35	1652823.89	14277302.50	39°19'00.644"N	80°57'22.074"W	2119.32	63.543	7.72	2.64	14.67
6478.00	31.390	117.130	-150.22	934.66	1918.32	1652844.84	14277292.95	39°19'00.549"N	80°57'21.808"W	2133.90	64.023	6.59	2.51	11.89
6523.00	33.640	122.770	-131.18	922.57	1939.24	1652865.75	14277280.86	39°19'00.430"N	80°57'21.541"W	2147.50	64.558	8.39	5.00	12.53
6567.00	35.960	127.440	-110.11	908.11	1959.75	1652886.26	14277266.41	39°19'00.287"N	80°57'21.281"W	2159.93	65.138	8.03	5.27	10.61
6612.00	38.340	132.770	-86.11	890.60	1980.49	1652906.99	14277248.90	39°19'00.114"N	80°57'21.017"W	2171.52	65.787	8.89	5.29	11.84
6657.00	40.070	136.460	-60.02	870.62	2000.72	1652927.21	14277228.93	39°18'59.916"N	80°57'20.760"W	2181.94	66.484	6.45	3.84	8.20
6702.00	43.640	140.250	-31.76	848.17	2020.64	1652947.12	14277208.49	39°18'59.694"N	80°57'20.506"W	2191.43	67.230	9.72	7.93	8.42
6746.00	47.560	144.230	-1.52	823.31	2039.85	1652966.32	14277181.64	39°18'59.448"N	80°57'20.262"W	2199.73	68.020	11.00	8.91	9.05
6769.00†	49.873	146.347	6247.93	15.33	809.10	2049.68	1652976.15	39°18'59.308"N	80°57'20.137"W	2203.60	68.459	12.21	10.06	9.20
6791.00	52.120	148.240	6261.77	32.13	794.71	2058.91	1652985.38	39°18'59.165"N	80°57'20.020"W	2206.97	68.894	12.21	10.21	8.61
6836.00	55.530	150.340	6288.33	68.02	763.48	2077.45	1653003.91	39°18'58.857"N	80°57'19.784"W	2213.30	69.821	8.46	7.58	4.67
6881.00	57.530	150.900	6313.15	105.24	730.77	2095.86	1653022.31	39°18'58.533"N	80°57'19.550"W	2219.61	70.778	4.56	4.44	1.24
6926.00	59.590	151.160	6336.62	143.35	697.18	2114.46	1653040.90	39°18'58.201"N	80°57'19.314"W	2226.43	71.751	4.50	4.58	0.58
6960.00†	62.090	151.975	6353.18	172.84	671.08	2128.59	1653055.03	39°18'57.943"N	80°57'19.134"W	2231.87	72.502	7.65	7.35	2.40
6971.00	62.900	152.230	6358.26	182.55	662.45	2133.15	1653069.59	39°18'57.858"N	80°57'19.076"W	2233.65	72.748	7.65	7.36	2.32
6997.00	62.900	155.150	6376.95	222.25	626.75	2150.79	1653077.22	39°18'57.505"N	80°57'18.852"W	2240.25	73.754	10.76	8.93	6.64
7015.00	66.830	155.150	6376.95	222.25	626.75	2150.79	1653077.22	39°18'57.505"N	80°57'18.852"W	2240.25	73.754	10.76	8.93	6.64
7022.00†	67.479	155.580	6379.67	228.70	620.89	2153.48	1653079.91	39°18'57.447"N	80°57'18.818"W	2241.20	73.917	10.86	9.27	6.15
7060.00	71.020	157.850	6393.13	264.21	588.25	2167.51	1653093.94	39°18'57.124"N	80°57'18.639"W	2245.92	74.816	10.86	9.32	5.97
7080.00†	72.449	158.658	6399.40	283.20	570.61	2174.55	1653100.97	39°18'56.950"N	80°57'18.550"W	2248.17	75.297	8.11	7.15	4.04

† = interpolated/extrapolated station

MD Inclination Azimuth TVD Vert Sect North East Grid East Grid North Station

(ft) (°) (°) (ft) (ft) (ft) (ft) (ft) (ft) (ft)

Closeure Dist Closure Dir DLS Build Rate Turn Rate Comments

(ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)



Actual Wellpath Report

Aubie Unit 3H AWP Proj: 16479'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Ritche County, WV	Well	Aubie Unit 3H
Field	Ritchie	Wellbore	Aubie Unit 3H AWB
Facility	Kelly Pad		

WELLPATH DATA (199 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]	
7105.00	74.240	159.650	6406.57	307.15	548.23	2183.07	1653109.49	14276906.67	39°18'56.729"N	80°57'18.441"W	2250.86	75.903	8.11	7.16	3.97	
7150.00	78.210	161.220	6417.28	350.81	507.05	2197.70	1653124.11	14276865.51	39°18'56.322"N	80°57'18.256"W	2255.43	77.008	9.45	8.82	3.49	
7195.00	82.930	161.520	6424.65	395.11	465.00	2211.88	1653138.28	14276823.47	39°18'55.906"N	80°57'18.075"W	2260.22	78.128	10.51	10.49	0.67	
7239.00	88.580	162.550	6427.91	438.87	423.28	2225.40	1653151.80	14276781.77	39°18'55.494"N	80°57'17.904"W	2265.30	79.231	13.05	12.84	2.34	
7284.00	90.090	161.800	6428.43	483.75	380.44	2239.18	1653165.57	14276738.95	39°18'55.070"N	80°57'17.729"W	2271.26	80.357	3.75	3.36	-1.67	
7374.00	91.480	160.150	6427.20	573.62	295.37	2268.51	1653194.89	14276653.91	39°18'54.229"N	80°57'17.356"W	2287.66	82.582	2.40	1.54	-1.83	
7463.00	92.280	156.520	6424.28	662.55	212.72	2301.34	1653227.71	14276571.29	39°18'53.412"N	80°57'16.939"W	2311.15	84.719	4.17	0.90	-4.08	
7553.00	91.020	152.550	6421.68	752.33	131.51	2340.01	1653266.37	14276490.12	39°18'52.609"N	80°57'16.447"W	2343.71	86.783	4.63	-1.40	-4.41	
7643.00	89.380	149.750	6421.37	841.66	52.69	2383.44	1653309.77	14276411.33	39°18'51.830"N	80°57'15.895"W	2384.02	88.734	3.61	-1.82	-3.11	
7732.00	89.290	151.220	6422.40	929.87	-24.75	2427.28	1653353.60	14276333.92	39°18'51.064"N	80°57'15.338"W	2427.40	90.584	1.65	-0.10	1.65	
7822.00	88.920	153.760	6423.81	1019.43	-104.56	2468.84	1653395.14	14276254.15	39°18'50.275"N	80°57'14.810"W	2471.05	92.425	2.85	-0.41	2.82	
7912.00	88.680	157.970	6425.69	1109.32	-186.65	2505.62	1653431.91	14276172.08	39°18'49.464"N	80°57'14.342"W	2512.57	94.260	4.68	-0.27	4.68	
8001.00	89.320	160.130	6427.25	1198.29	-269.75	2537.44	1653463.71	14276089.02	39°18'48.642"N	80°57'13.938"W	2551.74	96.068	2.53	0.72	2.43	
8091.00	89.350	162.620	6428.29	1288.13	-355.03	2566.18	1653492.44	14276003.78	39°18'47.799"N	80°57'13.573"W	2590.62	97.877	2.77	0.03	2.77	
8181.00	90.120	163.060	6428.71	1377.81	-441.02	2592.73	1653518.98	14275917.82	39°18'46.949"N	80°57'13.236"W	2629.97	99.653	0.99	0.86	0.49	
8271.00	91.570	162.300	6427.38	1467.51	-526.92	2619.52	1653545.76	14275831.95	39°18'46.100"N	80°57'12.895"W	2671.99	101.373	1.82	1.61	-0.84	
8361.00	91.260	158.500	6425.16	1557.39	-611.67	2649.70	1653575.93	14275747.24	39°18'45.262"N	80°57'12.512"W	2719.38	102.999	4.23	-0.34	-4.22	
8450.00	89.420	158.040	6424.63	1646.38	-694.34	2682.65	1653608.86	14275664.60	39°18'44.445"N	80°57'12.093"W	2771.05	104.511	2.13	-2.07	-0.52	
8540.00	90.340	159.450	6424.82	1736.37	-778.21	2715.27	1653641.48	14275580.76	39°18'43.616"N	80°57'11.679"W	2824.59	105.993	1.87	1.02	1.57	
8630.00	90.060	156.290	6424.50	1826.36	-861.57	2749.17	1653675.36	14275497.43	39°18'42.792"N	80°57'11.248"W	2881.01	107.401	3.52	-0.31	-3.51	
8719.00	89.660	154.880	6424.72	1915.27	-942.61	2785.96	1653712.13	14275416.43	39°18'41.991"N	80°57'10.781"W	2941.10	108.693	1.65	-0.45	-1.58	
8809.00	89.230	155.800	6425.59	2005.17	-1024.40	2823.51	1653749.67	14275334.67	39°18'41.182"N	80°57'10.303"W	3003.59	109.941	1.13	-0.48	1.02	
8898.00	88.800	156.520	6427.12	2094.11	-1105.79	2859.47	1653785.62	14275253.31	39°18'40.378"N	80°57'09.846"W	3065.84	111.142	0.94	-0.48	0.81	
8988.00	89.690	158.270	6428.31	2184.09	-1188.87	2894.06	1653820.19	14275170.27	39°18'39.556"N	80°57'09.407"W	3128.74	112.333	2.18	0.99	1.94	
9078.00	90.060	159.070	6428.51	2274.08	-1272.70	2926.80	1653852.92	14275086.47	39°18'38.727"N	80°57'08.991"W	3191.54	113.502	0.98	0.41	0.89	
9167.00	90.150	156.770	6428.34	2363.07	-1355.17	2960.25	1653886.36	14275004.04	39°18'37.912"N	80°57'08.566"W	3255.70	114.598	2.59	0.10	-2.58	
9257.00	91.290	165.270	6427.21	2452.86	-1440.19	2989.49	1653915.59	14274919.05	39°18'37.072"N	80°57'08.194"W	3318.31	115.722	9.53	1.27	9.44	
9347.00	90.280	164.610	6425.98	2542.21	-1527.09	3012.88	1653938.96	14274832.19	39°18'36.213"N	80°57'07.898"W	3377.78	116.878	1.34	-1.12	-0.73	
9436.00	90.430	160.640	6425.42	2630.90	-1612.01	3039.45	1653965.52	14274747.30	39°18'35.373"N	80°57'07.560"W	3440.47	117.940	4.46	0.17	-4.46	
9526.00	90.340	158.620	6424.82	2720.86	-1696.37	3070.77	1653996.83	14274662.97	39°18'34.539"N	80°57'07.162"W	3508.18	118.917	2.25	-0.10	-2.24	



Actual Wellpath Report

Aubie Unit 3H AWP Proj: 16479'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Ritchie County, WV	Well	Aubie Unit 3H
Field	Ritchie	Wellbore	Aubie Unit 3H AWB
Facility	Kelly Pad		

WELLPATH DATA (199 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 [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
9616.00	90.220	157.480	6424.38	2810.86	-1779.85	3104.41	1654030.46	14274579.53	39°18'33.714"N	80°57'06.735"W	3578.44	119.827	1.27	-0.13	-1.27	
9705.00	90.250	157.020	6424.01	2899.85	-1861.92	3138.83	1654064.86	14274497.49	39°18'32.903"N	80°57'06.297"W	3649.52	120.676	0.52	0.03	-0.52	
9795.00	90.220	154.750	6423.65	2989.78	-1944.06	3175.60	1654101.62	14274415.38	39°18'32.091"N	80°57'05.830"W	3723.41	121.474	2.52	-0.03	-2.52	
9885.00	90.250	152.510	6423.28	3079.50	-2024.69	3215.57	1654141.57	14274334.78	39°18'31.294"N	80°57'05.322"W	3799.90	122.197	2.49	0.03	-2.49	
9974.00	90.180	153.100	6422.94	3168.13	-2103.85	3256.24	1654182.23	14274255.66	39°18'30.511"N	80°57'04.805"W	3876.77	122.866	0.67	-0.08	0.66	
10064.00	90.250	154.990	6422.60	3257.90	-2184.77	3295.63	1654221.60	14274174.77	39°18'29.711"N	80°57'04.305"W	3954.04	123.542	2.10	0.08	2.10	
10153.00	90.220	156.980	6422.24	3346.84	-2266.06	3331.85	1654257.81	14274093.51	39°18'28.907"N	80°57'03.845"W	4029.42	124.220	2.24	-0.03	2.24	
10243.00	90.180	158.770	6421.93	3436.83	-2349.43	3365.75	1654291.69	14274010.18	39°18'28.083"N	80°57'03.414"W	4104.64	124.917	1.99	-0.04	1.99	
10333.00	90.620	161.960	6421.30	3526.75	-2434.18	3395.98	1654321.91	14273925.46	39°18'27.245"N	80°57'03.030"W	4178.27	125.632	3.58	0.49	3.54	
10422.00	91.020	164.570	6420.02	3615.36	-2519.40	3421.61	1654347.53	14273840.28	39°18'26.403"N	80°57'02.705"W	4249.09	126.365	2.97	0.45	2.93	
10512.00	91.080	163.610	6418.37	3704.85	-2605.93	3446.27	1654372.18	14273753.77	39°18'25.547"N	80°57'02.391"W	4320.61	127.095	1.07	0.07	-1.07	
10601.00	90.740	158.200	6416.96	3793.70	-2689.99	3475.37	1654401.27	14273669.75	39°18'24.717"N	80°57'02.022"W	4394.80	127.740	6.09	-0.38	-6.08	
10691.00	90.830	156.900	6415.73	3883.68	-2773.16	3509.74	1654435.62	14273586.61	39°18'23.894"N	80°57'01.585"W	4473.11	128.313	1.45	0.10	-1.44	
10780.00	91.170	155.040	6414.17	3972.61	-2854.43	3545.97	1654471.84	14273505.37	39°18'23.091"N	80°57'01.125"W	4552.11	128.833	2.12	0.38	-2.09	
10869.00	91.080	154.180	6412.43	4061.43	-2934.82	3584.13	1654509.98	14273425.02	39°18'22.296"N	80°57'00.640"W	4632.40	129.312	0.97	-0.10	-0.97	
10959.00	90.340	152.880	6411.31	4151.14	-3015.38	3624.24	1654550.08	14273344.49	39°18'21.500"N	80°57'00.130"W	4714.62	129.761	1.66	-0.82	-1.44	
11048.00	90.180	153.590	6410.91	4239.82	-3094.84	3664.32	1654590.14	14273265.06	39°18'20.714"N	80°56'59.621"W	4796.38	130.184	0.82	-0.18	0.80	
11138.00	90.310	153.100	6410.52	4329.51	-3175.28	3704.69	1654630.50	14273184.66	39°18'19.919"N	80°56'59.108"W	4879.25	130.600	0.56	0.14	-0.54	
11227.00	90.150	154.070	6410.16	4418.24	-3254.98	3744.29	1654670.08	14273104.99	39°18'19.131"N	80°56'58.605"W	4961.31	131.001	1.10	-0.18	1.09	
11317.00	90.340	155.250	6409.78	4508.08	-3336.32	3782.80	1654708.58	14273023.68	39°18'18.327"N	80°56'58.115"W	5043.87	131.411	1.33	0.21	1.31	
11406.00	90.220	155.360	6409.34	4596.97	-3417.18	3819.99	1654745.75	14272942.85	39°18'17.527"N	80°56'57.643"W	5125.37	131.814	0.18	-0.13	0.12	
11496.00	90.250	157.460	6408.98	4686.93	-3499.65	3856.00	1654781.75	14272860.41	39°18'16.712"N	80°56'57.185"W	5207.33	132.226	2.33	0.03	2.33	
11586.00	90.250	159.730	6408.58	4776.92	-3583.44	3888.84	1654814.58	14272776.66	39°18'15.884"N	80°56'56.768"W	5288.11	132.660	2.52	0.00	2.52	
11675.00	90.180	162.120	6408.25	4865.80	-3667.55	3917.93	1654843.65	14272692.59	39°18'15.052"N	80°56'56.399"W	5366.66	133.109	2.69	-0.08	2.69	
11765.00	90.400	163.790	6407.79	4955.47	-3753.59	3944.31	1654870.02	14272606.58	39°18'14.202"N	80°56'56.064"W	5444.90	133.581	1.87	0.24	1.86	
11855.00	90.280	162.320	6407.26	5045.12	-3839.68	3970.54	1654896.24	14272520.53	39°18'13.351"N	80°56'55.731"W	5523.43	134.040	1.64	-0.13	-1.63	
11944.00	90.430	159.860	6406.71	5133.99	-3923.87	3999.38	1654925.07	14272436.37	39°18'12.518"N	80°56'55.364"W	5602.83	134.454	2.77	0.17	-2.76	
12034.00	90.370	157.850	6406.08	5223.98	-4007.80	4031.84	1654957.52	14272352.47	39°18'11.689"N	80°56'54.952"W	5684.91	134.829	2.23	-0.07	-2.23	
12123.00	90.340	156.740	6405.53	5312.96	-4089.90	4066.19	1654991.85	14272270.40	39°18'10.877"N	80°56'54.516"W	5767.25	135.167	1.25	-0.03	-1.25	
12213.00	90.150	158.100	6405.14	5402.96	-4173.00	4100.75	1655026.40	14272187.34	39°18'10.055"N	80°56'54.077"W	5850.65	135.500	1.53	-0.21	1.51	



Actual Wellpath Report

Aubie Unit 3H AWP Proj: 16479'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Ritchie County, WV	Well	Aubie Unit 3H
Field	Ritchie	Wellbore	Aubie Unit 3H AWB
Facility	Kelly Pad		

WELLPATH DATA (199 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]	
12302.00	90.310	160.460	6404.79	5491.93	-4256.23	4132.23	1655057.87	14272104.14	39°18'09.233"N	80°56'53.677"W	5932.19	135.847	2.66	0.18	2.65	
12392.00	90.280	161.920	6404.32	5581.79	-4341.42	4161.25	1655086.88	14272018.98	39°18'08.390"N	80°56'53.308"W	6013.65	136.214	1.62	-0.03	1.62	
12481.00	90.120	160.870	6404.01	5670.64	-4425.77	4189.65	1655115.26	14271934.67	39°18'07.557"N	80°56'52.948"W	6094.31	136.570	1.19	-0.18	-1.18	
12571.00	90.340	160.810	6403.65	5760.53	-4510.79	4219.19	1655144.78	14271849.69	39°18'06.716"N	80°56'52.573"W	6176.46	136.913	0.25	0.24	-0.07	
12661.00	91.080	165.200	6402.53	5850.17	-4596.83	4245.48	1655171.07	14271763.68	39°18'05.866"N	80°56'52.239"W	6257.39	137.275	4.95	0.82	4.88	
12750.00	90.340	163.350	6401.43	5938.63	-4682.48	4269.60	1655195.18	14271678.06	39°18'05.019"N	80°56'51.932"W	6336.81	137.641	2.24	-0.83	-2.08	
12839.00	89.910	161.560	6401.24	6027.37	-4767.34	4296.43	1655222.00	14271593.24	39°18'04.180"N	80°56'51.592"W	6417.70	137.974	2.07	-0.48	-2.01	
12929.00	89.940	159.180	6401.35	6117.29	-4852.10	4326.66	1655252.22	14271508.51	39°18'03.342"N	80°56'51.208"W	6500.99	138.276	2.64	0.03	-2.64	
13019.00	89.820	157.050	6401.54	6207.28	-4935.61	4360.21	1655285.75	14271425.03	39°18'02.517"N	80°56'50.782"W	6585.72	138.542	2.37	-0.13	-2.37	
13109.00	89.660	155.430	6401.95	6297.23	-5017.98	4396.47	1655321.99	14271342.70	39°18'01.702"N	80°56'50.321"W	6671.51	138.777	1.81	-0.18	-1.80	
13198.00	89.630	155.280	6402.50	6386.13	-5098.87	4433.58	1655359.09	14271261.84	39°18'00.903"N	80°56'49.850"W	6756.86	138.992	0.17	-0.03	-0.17	
13288.00	89.660	156.270	6403.06	6476.06	-5180.94	4470.51	1655396.00	14271179.80	39°18'00.091"N	80°56'49.381"W	6843.07	139.210	1.10	0.03	1.10	
13378.00	89.630	157.990	6403.62	6566.04	-5263.86	4505.48	1655430.97	14271096.91	39°17'59.271"N	80°56'48.936"W	6928.75	139.439	1.91	-0.03	1.91	
13467.00	89.750	158.580	6404.10	6655.04	-5346.55	4538.41	1655463.88	14271014.26	39°17'58.454"N	80°56'48.518"W	7013.04	139.674	0.68	0.13	0.66	
13557.00	89.690	155.990	6404.54	6745.02	-5429.56	4573.16	1655498.62	14270931.28	39°17'57.633"N	80°56'48.077"W	7098.87	139.894	2.88	-0.07	-2.88	
13647.00	89.140	155.600	6405.46	6834.95	-5511.64	4610.06	1655535.50	14270849.23	39°17'56.822"N	80°56'47.608"W	7185.46	140.090	0.75	-0.61	-0.43	
13736.00	89.080	157.480	6406.84	6923.90	-5593.27	4645.48	1655570.91	14270767.64	39°17'56.015"N	80°56'47.158"W	7270.85	140.289	2.11	-0.07	2.11	
13826.00	89.050	155.370	6408.31	7013.85	-5675.74	4681.47	1655606.89	14270685.20	39°17'55.199"N	80°56'46.701"W	7357.33	140.483	2.34	-0.03	-2.34	
13916.00	89.080	154.770	6409.78	7103.71	-5757.35	4719.40	1655644.80	14270603.63	39°17'54.393"N	80°56'46.219"W	7444.45	140.658	0.67	0.03	-0.67	
14005.00	89.170	155.600	6411.14	7192.59	-5838.12	4756.75	1655682.13	14270522.89	39°17'53.594"N	80°56'45.744"W	7530.63	140.828	0.94	0.10	0.93	
14095.00	89.170	156.600	6412.44	7282.52	-5920.39	4793.21	1655718.58	14270440.65	39°17'52.781"N	80°56'45.281"W	7617.47	141.006	1.11	0.00	1.11	
14185.00	89.140	156.190	6413.77	7372.48	-6002.85	4829.24	1655754.60	14270358.22	39°17'51.966"N	80°56'44.824"W	7704.27	141.184	0.46	-0.03	-0.46	
14275.00	89.230	155.180	6415.05	7462.39	-6084.86	4866.30	1655791.64	14270276.25	39°17'51.155"N	80°56'44.353"W	7791.43	141.349	1.13	0.10	-1.12	
14364.00	89.140	155.420	6416.32	7551.28	-6165.71	4903.48	1655828.81	14270195.43	39°17'50.355"N	80°56'43.880"W	7877.82	141.505	0.29	-0.10	0.27	
14454.00	89.170	158.240	6417.64	7641.24	-6248.43	4938.89	1655864.20	14270112.74	39°17'49.538"N	80°56'43.431"W	7964.64	141.676	3.13	0.03	3.13	
14544.00	89.750	156.400	6418.49	7731.22	-6331.47	4973.59	1655898.88	14270029.74	39°17'48.717"N	80°56'42.990"W	8051.34	141.849	2.14	0.64	-2.04	
14633.00	89.660	154.150	6418.95	7820.11	-6412.30	5010.81	1655936.09	14269948.94	39°17'47.918"N	80°56'42.517"W	8137.92	141.995	2.53	-0.10	-2.53	
14723.00	89.540	153.340	6419.58	7909.85	-6493.01	5050.62	1655975.89	14269868.26	39°17'47.120"N	80°56'42.011"W	8226.06	142.122	0.91	-0.13	-0.90	
14812.00	89.750	156.220	6420.13	7998.69	-6573.52	5088.54	1656013.79	14269787.78	39°17'46.324"N	80°56'41.530"W	8312.90	142.257	3.24	0.24	3.24	
14902.00	89.850	159.520	6420.44	8088.68	-6656.88	5122.44	1656047.68	14269704.46	39°17'45.500"N	80°56'41.099"W	8399.61	142.422	3.67	0.11	3.67	



Actual Wellpath Report
 Aubie Unit 3H AWP Proj: 16479
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Operator	ANTERO RESOURCES CORPORATION
Area	Ritchie County, WV
Field	Ritchie
Facility	Kelly Pad
Well	Aubie Unit 3H
Slot	Aubie Unit 3H AWP
Slot #03	

WELLPATH DATA (199 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)	(ft)	(ft)	(ft/100ft)	(ft/100ft)	(ft/100ft)	
14991.00	89.850	159.260	6420.68	8177.66	-6740.18	6153.77	1656078.99	14269621.19	39°17'44.67"N	80°56'40.70"W	8484.77	142.597	0.00	0.29	-0.29	
15081.00	89.880	158.590	6420.89	8267.65	-6824.16	6186.13	1656111.34	14269537.24	39°17'43.84"N	80°56'40.29"W	8571.18	142.766	0.75	0.03	-0.74	
15171.00	89.880	158.010	6421.08	8357.64	-6907.78	6219.41	1656144.60	14269453.66	39°17'43.01"N	80°56'39.86"W	8657.92	142.926	0.64	0.00	-0.64	
15260.00	89.940	157.510	6421.22	8446.64	-6990.16	6253.09	1656178.28	14269371.31	39°17'42.20"N	80°56'39.44"W	8743.99	143.075	0.57	0.07	-0.56	
15350.00	89.880	158.450	6421.36	8536.64	-7073.69	6286.84	1656212.01	14269287.91	39°17'41.380"N	80°56'39.01"W	8830.99	143.225	1.05	-0.07	1.04	
15441.00	89.910	159.460	6421.52	8627.63	-7158.52	6319.51	1656244.67	14269203.02	39°17'40.540"N	80°56'38.59"W	8918.61	143.384	1.11	0.03	1.11	
15531.00	89.290	161.750	6422.15	8717.53	-7243.41	6349.40	1656274.54	14269118.17	39°17'39.701"N	80°56'38.21"W	9004.61	143.553	2.64	-0.69	2.54	
15620.00	89.910	164.330	6422.77	8806.19	-7328.53	6375.36	1656300.49	14269033.08	39°17'38.860"N	80°56'37.887"W	9088.55	143.741	2.98	0.70	2.90	
15710.00	90.000	164.850	6422.85	8895.60	-7415.29	6399.27	1656324.40	14268946.35	39°17'38.002"N	80°56'37.584"W	9172.71	143.941	0.59	0.10	0.58	
15799.00	90.400	162.210	6422.53	8964.19	-7500.63	6424.50	1656349.62	14268861.04	39°17'37.158"N	80°56'37.264"W	9256.60	144.125	3.00	0.46	-2.97	
15889.00	90.060	158.300	6422.17	9074.10	-7585.32	6454.90	1656380.00	14268776.39	39°17'36.321"N	80°56'36.878"W	9343.07	144.279	4.36	-0.38	-4.34	
15979.00	89.850	159.530	6422.24	9164.09	-7669.29	6487.28	1656412.37	14268692.45	39°17'35.491"N	80°56'36.467"W	9430.18	144.417	1.39	-0.23	1.37	
16068.00	89.970	160.530	6422.38	9253.04	-7752.94	6517.67	1656442.75	14268608.83	39°17'34.664"N	80°56'36.081"W	9515.92	144.561	1.13	0.13	1.12	
16158.00	89.940	158.810	6422.45	9343.00	-7837.33	6548.94	1656474.01	14268524.48	39°17'33.830"N	80°56'35.684"W	9602.84	144.701	1.91	-0.03	-1.91	
16248.00	89.910	157.670	6422.57	9433.00	-7920.92	6582.30	1656507.36	14268440.93	39°17'33.003"N	80°56'35.260"W	9690.36	144.826	1.27	-0.03	-1.27	
16337.00	89.910	153.210	6422.71	9521.88	-8001.84	6619.29	1656544.32	14268360.03	39°17'32.203"N	80°56'34.790"W	9777.83	144.922	5.01	0.00	-5.01	
16427.00	89.880	151.420	6422.88	9611.42	-8081.54	6661.10	1656586.12	14268280.37	39°17'31.415"N	80°56'34.259"W	9867.08	144.989	1.99	-0.03	-1.99	
16479.00	89.850	151.600	6422.94	9639.24	-8106.15	6674.46	1656599.47	14268255.77	39°17'31.172"N	80°56'34.089"W	9894.90	145.007	0.65	-0.11	0.64	Projected MD at TD: 16479'
16479.00	89.850	151.600	6423.01	9663.09	-8127.26	6685.87	1656610.88	14268234.67	39°17'30.963"N	80°56'33.944"W	9918.74	145.023	0.00	0.00	0.00	

20in Conductor	19.00	59.00	40.00	19.00	59.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
String/Diameter	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	End N/S	Start E/W	End E/W	End N/S	End E/W	End N/S	End E/W	End N/S	End E/W	End N/S
13.375in Casing Surface	19.00	501.00	482.00	19.00	501.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.625in Casing Intermediate	19.00	2528.00	2509.00	19.00	2528.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20in Conductor	19.00	59.00	40.00	19.00	59.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	19.00	501.00	482.00	19.00	501.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.625in Casing Intermediate	19.00	2528.00	2509.00	19.00	2528.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Actual Wellpath Report

Aubie Unit 3H AWP Proj: 16479'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Ritchie County, WV	Well	Aubie Unit 3H
Field	Ritchie	Wellbore	Aubie Unit 3H AWB
Facility	Kelly Pad		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Aubie Unit 3H POE Rev-1	6394.00	609.64	2167.72	1653094.15	14276968.05	39°18'57.336"N	80°57'18.636"W	point
Aubie Unit 3H BHL Plat	6426.00	-8099.27	5675.98	1656600.99	14268262.64	39°17'31.240"N	80°56'34.070"W	point
Aubie Unit 3H BHL Rev-1	6426.00	-8136.84	5691.11	1656616.12	14268225.09	39°17'30.869"N	80°56'33.878"W	point
Aubie Unit 3H LP Rev-1	6426.00	438.86	2236.52	1653162.92	14276797.34	39°18'55.647"N	80°57'17.762"W	point
Aubie Unit 3H 20' L/R Hard Line	6600.00	-3848.99	3963.81	1654889.52	14272511.22	39°18'13.259"N	80°56'55.816"W	rectangle

WELLPATH COMPOSITION - Ref Wellbore: Aubie Unit 3H AWB Ref Wellpath: Aubie Unit 3H AWP Proj: 16479'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
19.00	5948.00	Gyrodata standard - Drop gyro or Multi-shot	03_Gyrodata MS Gyro <8-3/4"> (100'-5942')	Aubie Unit 3H AWB	
5948.00	16455.00	BHI AutoTrak Curve (Axial)	04_BHI AT Curve <8-1/2"> (5948')(6029'-16455')	Aubie Unit 3H AWB	
16455.00	16479.00	Blind Drilling (std)	Projection to bit	Aubie Unit 3H AWB	



Actual Wellpath Report

Aubie Unit 3H AWP Proj: 16479'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Ritchie County, WV	Well	Aubie Unit 3H
Field	Ritchie	Wellbore	Aubie Unit 3H AWB
Facility	Kelly Pad		

COMMENTS
<p>Wellpath general comments API: 47-085-10233-0000 BHI Job #: 8249827 Rig: Precision 525 Duration: 11/15/2016-11/19/2016 Gyrodata MS Gyro <8-3/4"> (100'-5942') BHI AT Curve <8-1/2"> (5948')(6029'-16455') Middlesex: 6769' MD Burkett: 6960' MD Tully: 7022' MD Marcellus POE: 7080' MD Projected MD at TD: 16479'</p>