



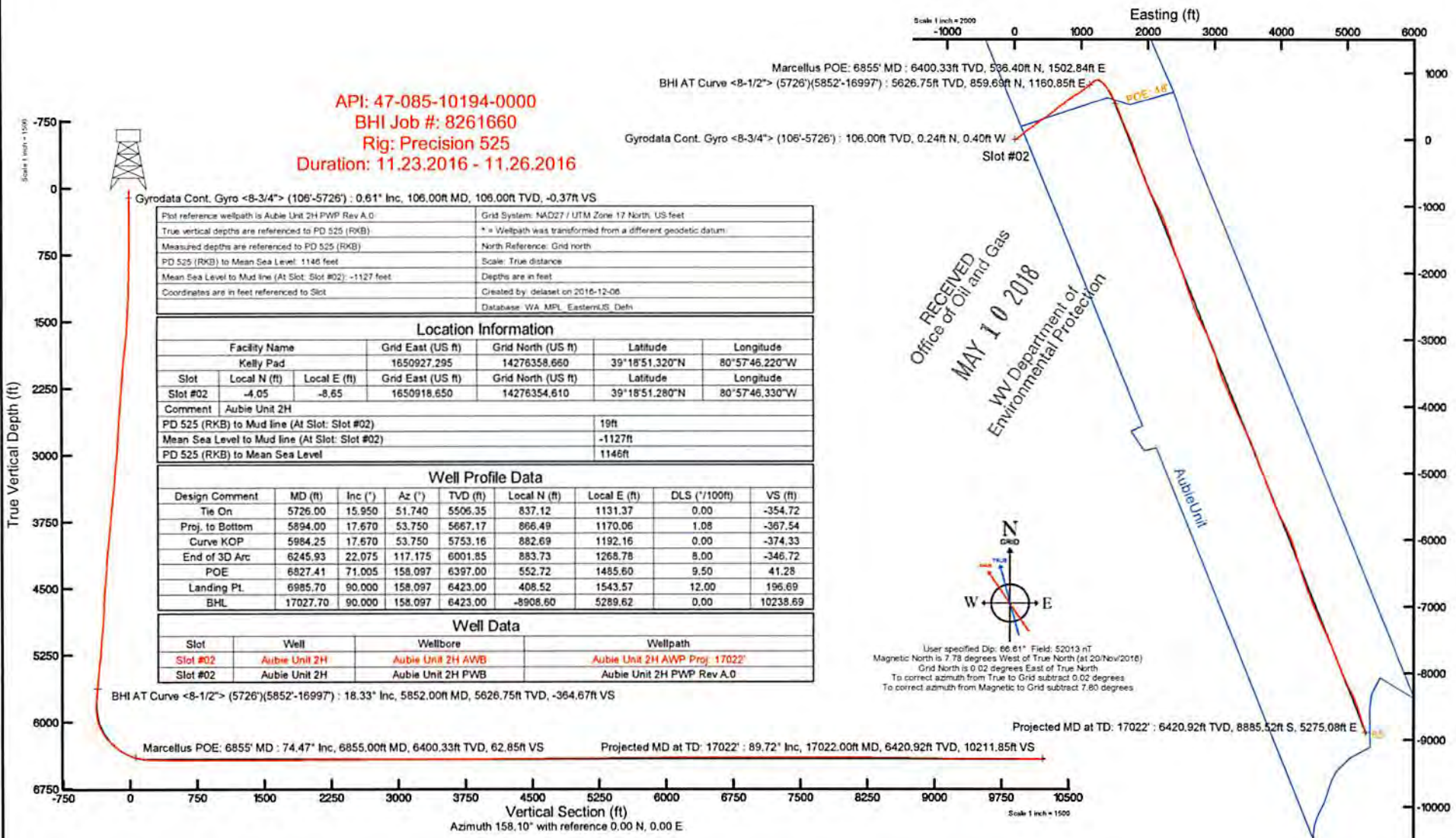
# ANTERO RESOURCES CORPORATION

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

Slot: Slot #02  
 Well: Aubie Unit 2H  
 Wellbore: Aubie Unit 2H PWB



API: 47-085-10194-0000  
 BHI Job #: 8261660  
 Rig: Precision 525  
 Duration: 11.23.2016 - 11.26.2016



Gyrodata Cont. Gyro <8-3/4"> (106'-5726') : 0.61" Inc, 106.00ft MD, 106.00ft TVD, -0.37ft VS	
Plot reference wellpath is Aubie Unit 2H PWP Rev A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True 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: 1146 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot #02): -1127 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: delaset on 2016-12-06
	Database: WA MPL EasternUS Deth

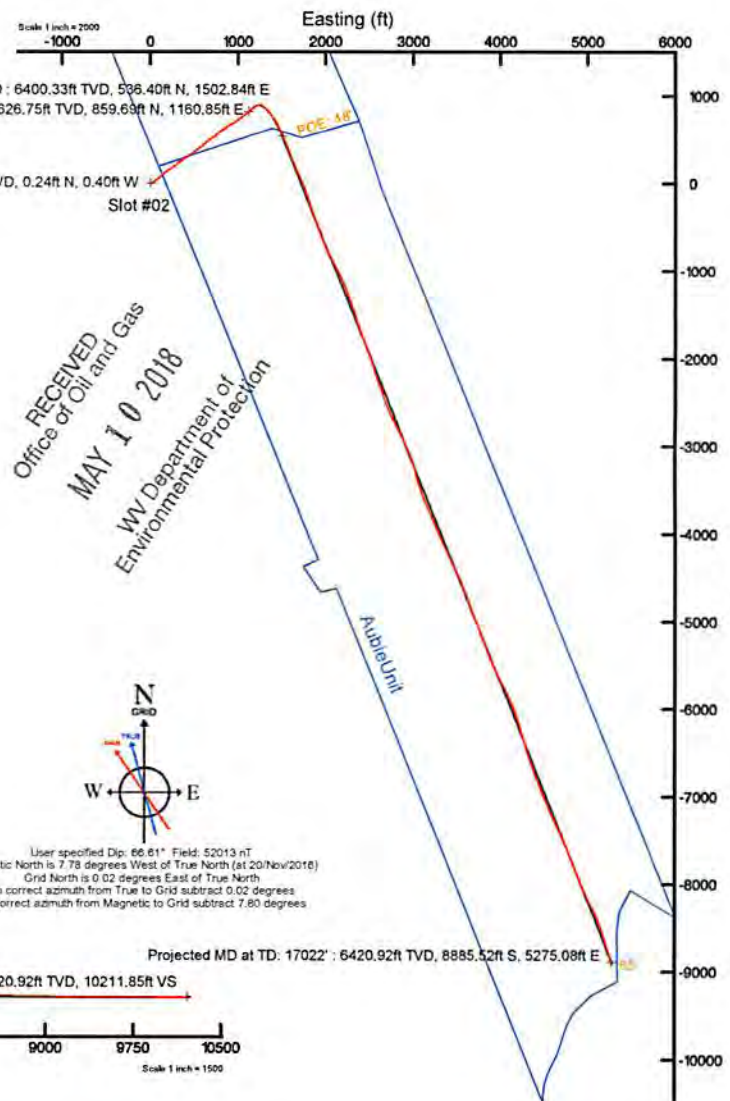
Location Information						
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Kelly Pad		1650927.295	14276358.660	39°18'51.320"N	80°57'46.220"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot #02	-4.05	-8.65	1650918.650	14276354.610	39°18'51.280"N	80°57'46.330"W
Comment: Aubie Unit 2H						
PD 525 (RKB) to Mud line (At Slot: Slot #02)		19ft				
Mean Sea Level to Mud line (At Slot: Slot #02)		-1127ft				
PD 525 (RKB) to Mean Sea Level		1146ft				

Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (")	TVD (ft)	Local N (ft)	Local E (ft)	DLS ("/100ft)	VS (ft)
Tie On	5726.00	15.950	51.740	5506.35	837.12	1131.37	0.00	-354.72
Proj. to Bottom	5894.00	17.670	53.750	5667.17	866.49	1170.06	1.08	-367.54
Curve KOP	5984.25	17.670	53.750	5753.16	882.69	1192.16	0.00	-374.33
End of 3D Arc	6245.93	22.075	117.175	6001.85	883.73	1268.78	8.00	-346.72
POE	6827.41	71.005	158.097	6397.00	552.72	1485.60	9.50	41.28
Landing PL	6985.70	90.000	158.097	6423.00	408.52	1543.57	12.00	196.69
BHL	17027.70	90.000	158.097	6423.00	-8908.60	5289.62	0.00	10238.69

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #02	Aubie Unit 2H	Aubie Unit 2H AWB	Aubie Unit 2H AWP Proj. 17022'
Slot #02	Aubie Unit 2H	Aubie Unit 2H PWB	Aubie Unit 2H PWP Rev A.0

BHI AT Curve <8-1/2"> (5726')(5852'-16997') : 18.33" Inc, 5852.00ft MD, 5626.75ft TVD, -364.67ft VS

Marcellus POE: 6855' MD : 74.47" Inc, 6855.00ft MD, 6400.33ft TVD, 62.85ft VS      Projected MD at TD: 17022' : 89.72" Inc, 17022.00ft MD, 6420.92ft TVD, 10211.85ft VS



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User specified Dip: 66.61° Field: 52013 nT  
 Magnetic North is 7.73 degrees West of True North (at 20/Nov/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



# Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022'  
Page 1 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Ritchie County, WV	Well	Aubie Unit 2H
Field	Ritchie	Wellbore	Aubie Unit 2H 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	Delaset
Scale	0.999600	Report Generated	06/Dec/2016 at 16:57
Convergence at slot	0.03° East	Database/Source file	WA_MPL_EasternUS_Defn/Aubie_Unit_2H_AWP_Proj_17022_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4.05	-8.65	1650918.65	14276354.61	39°18'51.280"N	80°57'46.330"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 #02)	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	158.10°





# Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022'  
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09/07/2018

REFERENCE WELLPATH IDENTIFICATION									
Operator	ANTERO RESOURCES CORPORATION								
Area	Ritchie County, WV								
Field	Ritchie								
Facility	Kelly Pad								
Operator	Slot								
Area	Well								
Field	Wellbore								
Facility	Aubie Unit 2H AWP								

WELLPATH DATA (203 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	US ft	US ft			ft	°	°/100ft	°/100ft	°/100ft	
0.00	0.000	300.720	0.00	0.00	0.00	0.00	1650918.65	14276354.61	39°18'51.280"N	80°57'46.330"W	0.00	0.000	0.00	0.00	0.00	
19.00	0.000	300.720	19.00	0.00	0.00	-0.40	1650918.65	14276354.61	39°18'51.282"N	80°57'46.330"W	0.00	0.000	0.00	0.00	0.00	
106.00	0.610	300.720	106.00	-0.37	0.24	-0.40	1650918.25	14276354.85	39°18'51.282"N	80°57'46.335"W	0.46	300.720	0.70	0.70	-68.14	Synodonta Cont. Gyro <8.3/4"> (106:5726')
206.00	0.120	260.240	206.00	-0.81	0.49	-0.96	1650917.69	14276355.10	39°18'51.285"N	80°57'46.342"W	1.08	297.102	0.52	-0.49	-40.48	
306.00	0.040	289.110	306.00	-0.86	0.48	-1.10	1650917.56	14276355.09	39°18'51.285"N	80°57'46.344"W	1.20	293.882	0.09	-0.08	28.87	
406.00	0.030	298.480	406.00	-0.90	0.51	-1.15	1650917.50	14276355.12	39°18'51.285"N	80°57'46.345"W	1.26	293.826	0.01	-0.01	9.37	
506.00	0.350	243.970	506.00	-0.90	0.39	-1.45	1650917.20	14276355.00	39°18'51.284"N	80°57'46.348"W	1.50	284.950	0.33	0.32	-54.51	
606.00	0.300	243.540	606.00	-0.86	0.24	-1.96	1650916.69	14276354.75	39°18'51.281"N	80°57'46.355"W	1.96	273.978	0.05	-0.05	-0.43	
706.00	0.280	28.050	706.00	-0.99	0.24	-2.08	1650916.57	14276354.85	39°18'51.282"N	80°57'46.356"W	2.09	276.458	0.55	-0.02	144.51	
806.00	2.880	48.770	806.00	-1.98	2.11	-0.07	1650918.58	14276356.72	39°18'51.301"N	80°57'46.331"W	2.11	358.035	2.62	2.60	20.72	
906.00	5.380	53.480	906.00	-4.00	6.55	5.59	1650924.23	14276356.16	39°18'51.345"N	80°57'46.259"W	8.61	40.442	2.52	2.50	4.71	
1006.00	6.810	59.470	1006.00	-6.07	12.36	14.46	1650933.10	14276366.96	39°18'51.402"N	80°57'46.146"W	19.02	49.489	1.56	1.43	5.99	
1106.00	7.500	59.550	1106.00	-7.93	18.67	25.19	1650943.83	14276373.28	39°18'51.464"N	80°57'46.009"W	31.36	53.453	0.69	0.69	0.08	
1206.00	7.790	56.820	1206.00	-10.23	25.69	36.49	1650955.13	14276380.29	39°18'51.534"N	80°57'45.866"W	44.63	54.854	0.46	0.29	-2.73	
1306.00	8.820	51.620	1306.00	-13.73	34.18	48.17	1650966.81	14276388.76	39°18'51.617"N	80°57'45.717"W	59.06	54.660	1.27	1.03	-5.20	
1406.00	9.400	51.870	1406.00	-18.18	43.96	60.61	1650979.23	14276398.55	39°18'51.714"N	80°57'45.558"W	74.87	54.045	0.58	0.58	0.25	
1506.00	11.470	54.780	1499.48	-22.78	54.74	75.16	1650993.78	14276409.33	39°18'51.821"N	80°57'45.374"W	92.98	53.932	2.14	2.07	2.91	
1606.00	13.880	55.620	1597.03	-27.64	67.25	93.18	1651011.79	14276421.83	39°18'51.944"N	80°57'45.144"W	114.91	54.182	2.42	2.41	0.94	
1706.00	16.060	49.550	1693.64	-34.61	83.00	113.61	1651032.21	14276437.58	39°18'52.100"N	80°57'44.884"W	140.70	53.849	2.68	2.18	-6.07	
1806.00	17.980	45.290	1789.26	-45.02	102.83	135.11	1651053.70	14276457.40	39°18'52.296"N	80°57'44.611"W	169.79	52.724	2.29	1.92	-4.26	
1906.00	19.780	50.850	1883.88	-56.02	124.38	159.20	1651077.79	14276478.94	39°18'52.509"N	80°57'44.304"W	202.03	52.001	2.54	1.80	5.56	
2006.00	21.610	55.310	1977.43	-65.12	145.54	187.47	1651106.04	14276500.10	39°18'52.718"N	80°57'43.944"W	237.33	52.175	2.41	1.83	4.46	
2106.00	22.930	56.280	2069.97	-73.19	166.84	218.81	1651137.38	14276521.38	39°18'52.928"N	80°57'43.545"W	275.16	52.675	1.37	1.32	0.97	
2206.00	21.130	55.660	2162.66	-81.06	187.82	249.90	1651168.45	14276542.36	39°18'53.135"N	80°57'43.150"W	312.62	53.072	1.81	-1.80	-0.62	
2306.00	16.750	52.280	2257.23	-88.87	206.82	276.20	1651194.74	14276561.34	39°18'53.323"N	80°57'42.815"W	345.05	53.174	4.51	-4.38	-3.38	
2406.00	16.120	51.000	2353.14	-86.88	224.37	298.38	1651216.91	14276578.89	39°18'53.496"N	80°57'42.533"W	373.33	53.059	0.73	-0.63	-1.28	
2506.00	17.360	53.470	2448.91	-104.74	241.99	321.16	1651239.68	14276596.50	39°18'53.670"N	80°57'42.243"W	402.12	53.003	1.43	1.24	2.47	
2606.00	17.200	53.050	2544.39	-112.34	259.76	344.97	1651263.48	14276614.26	39°18'53.846"N	80°57'41.940"W	431.83	53.021	0.20	-0.16	-0.42	
2706.00	15.810	53.980	2640.27	-119.51	276.66	367.80	1651266.30	14276631.15	39°18'54.013"N	80°57'41.649"W	460.23	53.050	1.41	-1.39	0.93	
2806.00	15.350	55.620	2738.60	-125.69	292.14	389.74	1651308.24	14276646.63	39°18'54.165"N	80°57'41.370"W	487.08	53.146	0.64	-0.46	1.64	

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# Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Ritchie County, WV	Well	Aubie Unit 2H
Field	Ritchie	Wellbore	Aubie Unit 2H AWB
Facility	Kelly Pad		

WELLPATH DATA (203 stations) † = Interpolated/extrapolated station																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
2906.00	17.720	60.570	2832.46	-130.54	307.09	413.93	1651332.41	14276661.58	39°18'54.314"N	80°57'41.062"W	515.40	53.428	2.76	2.37	4.95	
3006.00	20.630	57.150	2926.90	-135.89	324.13	441.99	1651360.46	14276678.61	39°18'54.482"N	80°57'40.705"W	548.10	53.745	3.12	2.91	-3.42	
3106.00	21.420	54.620	3020.25	-143.49	344.26	471.68	1651390.14	14276698.73	39°18'54.681"N	80°57'40.327"W	583.95	53.875	1.20	0.79	-2.53	
3206.00	19.840	50.400	3113.84	-152.91	365.65	499.64	1651418.09	14276720.12	39°18'54.892"N	80°57'39.971"W	619.15	53.802	2.17	-1.58	-4.22	
3306.00	17.800	55.030	3208.49	-161.52	385.23	525.25	1651443.69	14276739.69	39°18'55.085"N	80°57'39.645"W	651.38	53.742	2.53	-2.04	4.63	
3406.00	19.150	55.110	3303.33	-168.67	403.38	551.23	1651469.66	14276757.83	39°18'55.265"N	80°57'39.315"W	683.06	53.804	1.35	1.35	0.08	
3506.00	19.360	51.600	3397.74	-177.06	423.06	577.67	1651496.09	14276777.50	39°18'55.459"N	80°57'38.978"W	716.02	53.783	1.18	0.21	-3.51	
3606.00	18.380	45.990	3492.38	-187.71	444.31	602.00	1651520.41	14276798.74	39°18'55.669"N	80°57'38.668"W	748.21	53.571	2.06	-0.98	-5.61	
3706.00	16.350	48.960	3587.82	-198.26	464.51	623.96	1651542.36	14276818.93	39°18'55.868"N	80°57'38.389"W	777.88	53.334	2.21	-2.03	2.97	
3806.00	17.480	51.950	3683.49	-207.05	483.01	646.41	1651564.80	14276837.42	39°18'56.051"N	80°57'38.103"W	806.93	53.232	1.43	1.13	2.99	
3906.00	19.470	52.830	3778.33	-215.62	502.33	671.51	1651589.89	14276856.74	39°18'56.242"N	80°57'37.784"W	838.61	53.201	2.01	1.99	0.88	
4006.00	20.570	55.110	3872.29	-223.95	522.45	699.21	1651617.57	14276876.85	39°18'56.441"N	80°57'37.431"W	872.84	53.233	1.35	1.10	2.28	
4106.00	18.870	50.220	3966.43	-232.87	542.85	726.05	1651644.41	14276897.24	39°18'56.642"N	80°57'37.090"W	906.55	53.215	2.37	-1.70	-4.89	
4206.00	17.620	49.810	4061.40	-242.58	562.96	750.04	1651668.39	14276917.35	39°18'56.841"N	80°57'36.784"W	937.81	53.109	1.26	-1.25	-0.41	
4306.00	16.470	51.310	4157.00	-251.43	581.59	772.66	1651691.00	14276935.97	39°18'57.025"N	80°57'36.496"W	967.09	53.031	1.23	-1.15	1.50	
4406.00	15.910	55.230	4253.04	-258.58	598.27	794.99	1651713.32	14276952.64	39°18'57.190"N	80°57'36.212"W	994.96	53.037	1.23	-0.56	3.92	
4506.00	18.050	57.570	4348.68	-264.46	614.40	819.33	1651737.65	14276968.76	39°18'57.349"N	80°57'35.902"W	1024.10	53.134	2.25	2.14	2.34	
4606.00	19.860	53.240	4443.25	-271.65	632.88	846.02	1651764.33	14276987.23	39°18'57.532"N	80°57'35.563"W	1056.54	53.201	2.29	1.81	-4.33	
4706.00	18.290	52.760	4537.76	-280.16	652.54	872.12	1651790.42	14277006.89	39°18'57.726"N	80°57'35.230"W	1089.22	53.195	1.58	-1.57	-0.48	
4806.00	17.290	61.000	4632.99	-286.15	669.24	897.61	1651815.90	14277023.58	39°18'57.891"N	80°57'34.906"W	1119.64	53.293	2.71	-1.00	8.24	
4906.00	18.590	62.690	4728.13	-289.49	683.76	924.77	1651843.05	14277038.09	39°18'58.034"N	80°57'34.560"W	1150.10	53.522	1.40	1.30	1.69	
5006.00	19.370	59.880	4822.69	-293.36	699.39	953.28	1651871.55	14277053.72	39°18'58.189"N	80°57'34.198"W	1182.33	53.734	1.20	0.78	-2.81	
5106.00	18.920	53.620	4917.17	-299.79	717.33	980.68	1651898.94	14277071.66	39°18'58.366"N	80°57'33.849"W	1215.03	53.816	2.10	-0.45	-6.26	
5206.00	18.650	48.690	5011.85	-309.16	737.51	1005.75	1651923.99	14277091.82	39°18'58.565"N	80°57'33.530"W	1247.17	53.748	1.61	-0.27	-4.93	
5306.00	18.480	57.120	5106.67	-317.49	756.67	1031.07	1651949.31	14277110.98	39°18'58.754"N	80°57'33.207"W	1278.93	53.726	2.69	-0.17	8.43	
5406.00	18.440	55.880	5201.52	-323.86	774.15	1057.47	1651975.70	14277128.44	39°18'58.927"N	80°57'32.871"W	1310.55	53.793	0.39	-0.04	-1.24	
5506.00	18.520	49.820	5296.37	-332.19	793.27	1082.70	1652000.92	14277147.56	39°18'59.116"N	80°57'32.550"W	1342.21	53.771	1.92	0.08	-6.06	
5606.00	17.880	45.150	5391.38	-343.15	814.34	1105.72	1652023.93	14277168.62	39°18'59.324"N	80°57'32.257"W	1373.23	53.629	1.59	-0.64	-4.67	
5646.00†	16.993	47.275	5429.54	-347.63	822.64	1114.37	1652032.57	14277176.92	39°18'59.406"N	80°57'32.147"W	1385.12	53.565	2.73	-2.22	5.31	Middlesex: 6546' MD
5706.00	15.710	50.890	5487.11	-353.15	833.71	1127.12	1652045.31	14277187.99	39°18'59.515"N	80°57'31.985"W	1401.95	53.510	2.73	-2.14	6.03	





# Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022  
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Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Ritchie County, WV	Ritchie	Kelly Pad
	Aubie Unit 2H	Well	
	Aubie Unit 2H	Wellbore	

WELLPATH DATA (203 stations) † = interpolated/extrapolated station												
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Dir
(m)	(°)	(°)	(m)	(m)	(m)	(m)	(m)	(m)	(°N)	(°E)	(m)	(°)
5726.00	15.950	51.740	5506.35	-354.72	837.12	1131.37	1652049.57	14277191.39	39°18'59.549"N	80°57'31.931"W	1407.40	53.502
5852.00	18.330	53.280	5626.75	-364.67	859.69	1160.85	1652079.04	14277213.95	39°18'59.772"N	80°57'31.556"W	1444.52	53.478
5941.00	17.870	51.370	5711.34	-372.18	876.58	1182.74	1652100.91	14277230.84	39°18'59.939"N	80°57'31.277"W	1472.16	53.456
5986.00	17.710	53.760	5754.19	-375.86	884.94	1193.65	1652111.82	14277239.19	39°19'00.021"N	80°57'31.138"W	1485.91	53.448
6031.00	16.710	62.560	5797.19	-378.18	891.97	1204.92	1652123.08	14277246.22	39°19'00.091"N	80°57'30.995"W	1499.14	53.488
6076.00	16.020	73.440	5840.37	-378.23	896.72	1216.61	1652134.77	14277250.97	39°19'00.138"N	80°57'30.846"W	1511.38	53.607
6121.00	16.070	81.330	5883.62	-376.23	899.43	1228.72	1652146.88	14277253.88	39°19'00.164"N	80°57'30.692"W	1522.74	53.796
6166.00	17.360	94.920	5926.74	-371.77	899.79	1241.57	1652159.72	14277254.04	39°19'00.168"N	80°57'30.528"W	1533.34	54.068
6210.00	19.430	107.280	5968.50	-364.18	897.06	1255.11	1652173.25	14277251.31	39°19'00.141"N	80°57'30.356"W	1542.73	54.446
6255.00	21.970	120.730	6010.62	-352.75	890.53	1269.50	1652187.64	14277244.78	39°19'00.076"N	80°57'30.173"W	1550.70	54.851
6300.00	24.680	130.600	6051.95	-337.72	880.11	1283.88	1652202.01	14277234.36	39°18'59.973"N	80°57'29.990"W	1556.58	55.569
6345.00	28.960	134.890	6092.11	-319.37	866.30	1298.74	1652216.87	14277220.56	39°18'59.837"N	80°57'29.801"W	1561.15	56.296
6388.00	33.200	136.690	6129.78	-298.35	850.00	1314.56	1652232.68	14277204.27	39°18'59.675"N	80°57'29.600"W	1565.43	57.113
6434.00	37.460	138.720	6166.49	-273.96	830.75	1332.04	1652250.16	14277185.02	39°18'59.485"N	80°57'29.378"W	1569.87	58.050
6479.00	41.110	141.110	6201.09	-246.64	808.73	1350.53	1652268.64	14277163.02	39°18'59.267"N	80°57'29.143"W	1574.16	59.086
6524.00	46.710	143.170	6233.26	-216.40	783.89	1369.81	1652287.91	14277138.19	39°18'59.022"N	80°57'28.897"W	1578.25	60.219
6569.00	49.810	145.630	6263.22	-183.78	756.59	1389.34	1652307.43	14277110.89	39°18'58.752"N	80°57'28.649"W	1581.99	61.429
6614.00	52.550	147.040	6291.43	-149.46	727.41	1408.77	1652326.85	14277081.72	39°18'58.463"N	80°57'28.402"W	1585.48	62.691
6659.00	55.580	149.430	6317.84	-113.57	696.43	1427.93	1652346.01	14277050.76	39°18'58.157"N	80°57'28.158"W	1588.71	64.001
6703.00	59.730	153.960	6341.38	-76.65	663.70	1445.52	1652363.59	14277018.05	39°18'57.834"N	80°57'27.935"W	1590.60	65.338
6728.00†	62.004	155.130	6353.55	-54.86	643.99	1454.90	1652372.96	14276998.34	39°18'57.639"N	80°57'27.816"W	1591.05	66.124
6748.00	63.830	156.030	6362.66	-37.07	627.77	1462.26	1652380.32	14276982.13	39°18'57.478"N	80°57'27.722"W	1591.32	66.765
6793.00	68.620	156.080	6380.79	4.08	590.15	1478.97	1652397.02	14276944.52	39°18'57.106"N	80°57'27.510"W	1592.36	68.247
6794.00†	68.718	156.077	6381.16	5.01	589.30	1479.35	1652397.40	14276943.67	39°18'57.098"N	80°57'27.505"W	1592.40	68.280
6836.00	73.020	155.950	6395.58	46.54	551.33	1496.24	1652414.29	14276905.71	39°18'56.723"N	80°57'27.290"W	1594.58	69.772
6883.00	76.870	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
6927.00	79.170	157.830	6416.39	133.00	471.75	1530.11	1652448.15	14276828.17	39°18'55.936"N	80°57'26.860"W	1601.19	72.855
6972.00	82.720	158.950	6423.48	177.44	430.44	1546.48	1652464.50	14276784.88	39°18'55.528"N	80°57'26.652"W	1605.26	74.446
6977.00	87.440	159.150	6427.33	222.25	388.59	1562.50	1652480.52	14276743.04	39°18'55.114"N	80°57'26.448"W	1610.10	76.034
6983.00	88.55	159.55	6430.33	62.85	356.40	1572.84	1652420.89	14276890.79	39°18'56.575"N	80°57'27.206"W	1595.70	70.357
6992.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
6993.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
6994.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
6995.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
6996.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
6997.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
6998.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
6999.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7000.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7001.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7002.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7003.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7004.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7005.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7006.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7007.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7008.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7009.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7010.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7011.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7012.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7013.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7014.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7015.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7016.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7017.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7018.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7019.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7020.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7021.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7022.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.329"N	80°57'27.070"W	1597.67	71.328
7023.00	89.97	156.990	6407.26	89.97	511.49	1513.58	1652431.62	14276865.89	39°18'56.3			





# Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022



Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Richie County, WV	Richie	Kelly Pad
	Aubie Unit 2H	Wellbore	
	Aubie Unit 2H		
	Slot #02		

WELLPATH DATA (203 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]
7107.00	90.000	6429.34	312.21	304.66	1594.93	1652512.94	14276659.15	39°18'54.284"N	80°57'26.036"W	1623.77	79.186	2.91
7196.00	89.750	6429.54	401.20	222.51	1629.13	1652547.13	14276577.03	39°18'53.472"N	80°57'25.601"W	1644.26	82.223	2.69
7286.00	89.880	6429.83	491.11	140.51	1666.24	1652584.22	14276495.07	39°18'52.661"N	80°57'25.130"W	1672.16	85.180	1.25
7375.00	89.880	6430.02	580.05	59.28	1702.60	1652620.56	14276413.87	39°18'51.868"N	80°57'24.668"W	1703.63	88.006	1.80
7465.00	89.850	6430.23	670.03	-23.74	1737.35	1652655.30	14276330.88	39°18'51.038"N	80°57'24.226"W	1737.51	90.783	1.32
7555.00	90.120	6430.25	760.01	-107.91	1769.18	1652687.12	14276246.74	39°18'50.206"N	80°57'23.822"W	1772.47	93.490	3.14
7645.00	89.750	6430.35	849.90	-192.97	1798.58	1652716.50	14276161.71	39°18'49.365"N	80°57'23.448"W	1808.90	96.124	0.68
7734.00	89.880	6430.64	938.76	-277.27	1827.13	1652744.15	14276077.45	39°18'48.532"N	80°57'23.085"W	1848.05	98.629	0.28
7824.00	89.970	6430.76	1028.63	-362.43	1866.25	1652774.15	14275992.33	39°18'47.690"N	80°57'22.715"W	1891.30	101.048	0.60
7914.00	89.850	6430.90	1118.56	-447.23	1886.39	1652804.29	14275907.56	39°18'46.851"N	80°57'22.332"W	1938.68	103.337	0.96
8003.00	90.090	6430.95	1207.48	-531.09	1916.20	1652834.08	14275823.74	39°18'46.022"N	80°57'21.954"W	1988.43	105.491	1.01
8093.00	89.910	6430.95	1297.44	-615.44	1947.56	1652865.43	14275739.42	39°18'45.189"N	80°57'21.555"W	2042.49	107.537	2.82
8182.00	89.910	6431.09	1386.41	-697.29	1982.48	1652900.33	14275657.60	39°18'44.379"N	80°57'21.111"W	2101.53	109.378	3.25
8272.00	89.970	6431.18	1476.25	-778.62	2021.02	1652938.66	14275576.30	39°18'43.575"N	80°57'20.622"W	2165.82	111.070	1.79
8361.00	89.970	6431.23	1564.92	-858.06	2061.15	1652978.97	14275496.90	39°18'42.790"N	80°57'20.112"W	2232.62	112.602	1.44
8451.00	89.940	6431.30	1654.58	-938.33	2101.85	1653019.66	14275416.66	39°18'41.996"N	80°57'19.594"W	2301.79	114.057	1.22
8541.00	90.430	6431.01	1744.33	-1019.11	2141.53	1653059.32	14275335.91	39°18'41.198"N	80°57'19.090"W	2371.65	115.449	0.88
8630.00	90.490	6430.29	1833.10	-1099.09	2180.55	1653098.33	14275255.96	39°18'40.407"N	80°57'18.594"W	2441.89	116.750	0.09
8720.00	90.450	6429.57	1923.04	-1181.94	2215.59	1653133.35	14275173.14	39°18'39.588"N	80°57'18.149"W	2511.14	118.078	6.90
8810.00	90.250	6429.04	2012.99	-1266.47	2246.50	1653164.24	14275088.55	39°18'38.753"N	80°57'17.756"W	2578.89	119.412	0.62
8899.00	90.430	6428.51	2101.95	-1349.92	2277.40	1653195.14	14275005.23	39°18'37.928"N	80°57'17.363"W	2647.43	120.657	0.21
8979.00	90.580	6428.80	2281.66	-1520.30	2335.39	1653253.10	14274834.92	39°18'36.243"N	80°57'16.982"W	2717.14	121.873	1.75
9079.00	90.520	6428.83	2370.36	-1605.33	2361.67	1653279.37	14274749.93	39°18'35.403"N	80°57'16.293"W	2855.62	124.206	0.62
9168.00	90.180	6425.40	2460.16	-1690.60	2388.82	1653307.51	14274664.49	39°18'34.558"N	80°57'15.935"W	2927.46	125.279	2.98
9258.00	90.550	6424.83	2550.14	-1774.62	2422.56	1653340.24	14274580.71	39°18'33.729"N	80°57'15.519"W	3003.01	126.224	3.98
9347.00	90.340	6424.13	2639.13	-1857.35	2455.34	1653373.01	14274498.01	39°18'32.911"N	80°57'15.103"W	3078.71	127.106	3.39
9437.00	90.550	6423.43	2729.07	-1941.94	2486.05	1653403.70	14274413.45	39°18'32.075"N	80°57'14.713"W	3154.61	127.995	0.43
9527.00	90.520	6422.59	2818.96	-2026.94	2515.62	1653433.26	14274328.48	39°18'31.235"N	80°57'14.337"W	3230.61	128.860	1.36
9617.00	90.400	6421.87	2908.80	-2112.27	2544.21	1653461.84	14274243.18	39°18'30.391"N	80°57'13.974"W	3306.77	129.700	0.17
9707.00	90.400	161.520										

MO	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]	[ft]	[ft]	[ft]	[ft/100ft]	[ft/100ft]	[ft/100ft]	
9707.00	90.400	161.520															
9716.00	90.520	161.430															
9527.00	90.550	160.210	6423.43	2729.07	-1941.94	2486.05	1653403.70	14274413.45	39°18'32.075"N	80°57'14.713"W	3154.61	127.995	0.43				0.23
9437.00	90.340	159.890	6424.13	2639.13	-1857.35	2455.34	1653373.01	14274498.01	39°18'32.911"N	80°57'15.103"W	3078.71	127.106	3.39				-0.24
9347.00	90.550	158.880	6424.83	2550.14	-1774.62	2422.56	1653340.24	14274580.71	39°18'33.729"N	80°57'15.519"W	3003.01	126.224	3.98				-3.96
9258.00	90.180	160.440	6425.40	2460.16	-1690.60	2388.82	1653307.51	14274664.49	39°18'34.558"N	80°57'15.935"W	2927.46	125.279	2.98				-2.98
9168.00	90.520	163.100	6425.95	2370.36	-1605.33	2361.67	1653279.37	14274749.93	39°18'35.403"N	80°57'16.293"W	2855.62	124.206	0.62				-0.07
9079.00	90.580	162.550	6426.80	2281.66	-1520.30	2335.39	1653253.10	14274834.92	39°18'36.243"N	80°57'16.982"W	2717.14	123.064	1.41				0.00
8979.00	90.580	161.280	6427.71	2191.87	-1434.75	2307.45	1653225.17	14274920.43	39°18'37.089"N	80°57'16.982"W	2717.14	121.873	1.75				0.17
8899.00	90.430	159.710	6428.51	2101.95	-1349.92	2277.40	1653195.14	14275005.23	39°18'37.928"N	80°57'17.363"W	2647.43	120.657	0.21				0.20
8810.00	90.250	159.650	6429.04	2012.99	-1266.47	2246.50	1653164.24	14275088.55	39°18'38.753"N	80°57'17.756"W	2578.89	119.412	0.62				-0.20
8720.00	90.450	160.180	6429.57	1923.04	-1181.94	2215.59	1653133.35	14275173.14	39°18'39.588"N	80°57'18.149"W	2511.14	118.078	6.90				-0.07
8630.00	90.490	153.970	6430.29	1833.10	-1099.09	2180.55	1653098.33	14275255.96	39°18'40.407"N	80°57'18.594"W	2441.89	116.750	0.09				0.07
8541.00	90.430	154.020	6431.01	1744.33	-1019.11	2141.53	1653059.32	14275335.91	39°18'41.198"N	80°57'19.090"W	2371.65	115.449	0.88				0.54
8451.00	89.940	153.660	6431.30	1654.58	-938.33	2101.85	1653019.66	14275416.66	39°18'41.996"N	80°57'19.594"W	2301.79	114.057	1.22				-0.03
8361.00	89.970	152.560	6431.23	1564.92	-858.06	2061.15	1652978.97	14275496.90	39°18'42.790"N	80°57'20.112"W	2232.62	112.602	1.44				0.00
8272.00	89.970	153.840	6431.18	1476.25	-778.62	2021.02	1652938.66	14275576.30	39°18'43.575"N	80°57'20.622"W	2165.82	111.070	1.79				-0.07
8182.00	89.910	155.450	6431.09	1386.41	-697.29	1982.48	1652900.33	14275657.60	39°18'44.379"N	80°57'21.111"W	2101.53	109.378	3.25				0.00
8093.00	89.910	158.340	6430.95	1297.44	-615.44	1947.56	1652865.43	14275739.42	39°18'45.189"N	80°57'21.555"W	2042.49	107.537	2.82				-0.20
8003.00	90.090	160.870	6430.95	1207.48	-531.09	1916.20	1652834.08	14275823.74	39°18'46.022"N	80°57'21.954"W	1988.43	105.491	1.01				0.27
7914.00	89.850	160.000	6430.90	1118.56	-447.23	1886.39	1652804.29	14275907.56	39°18'46.851"N	80°57'22.332"W	1938.68	103.337	0.96				-0.13
7824.00	89.970	160.860	6430.76	1028.63	-362.43	1866.25	1652774.15	14275992.33	39°18'47.690"N	80°57'22.715"W	1891.30	101.048	0.60				0.10
7734.00	89.880	161.390	6430.64	938.76	-277.27	1827.13	1652744.15	14276077.45	39°18'48.532"N	80°57'23.085"W	1848.05	98.629	0.28				0.15
7645.00	89.750	161.180	6430.35	849.90	-192.97	1798.58	1652716.50	14276161.71	39°18'49.365"N	80°57'23.448"W	1808.90	96.124	0.68				-0.41
7555.00	90.120	160.690	6430.25	760.01	-107.91	1769.18	1652687.12	14276246.74	39°18'50.206"N	80°57'23.822"W	1772.47	93.490	3.14				0.30
7465.00	89.850	157.880	6430.23	670.03	-23.74	1737.35	1652655.30	14276330.88	39°18'51.038"N	80°57'24.226"W	1737.51	90.783	1.32				-0.03
7375.00	89.880																









# Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022  
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Operator	ANTERO RESOURCES CORPORATION
Area	Ritchie County, WV
Field	Ritchie
Facility	Kelly Pad
Slot	Aubie Unit 2H
Slot #02	Aubie Unit 2H AWB

WELLPATH DATA (203 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)
1284.00	90.550	6406.81	5680.28	-4676.11	3596.95	165454.16	14271680.38	39°18'05.046"N	80°57'00.599"W	5899.50	142.432	1.36
12574.00	90.460	6408.01	4760.01	-4760.01	3629.49	1654546.68	14271596.51	39°18'04.216"N	80°57'00.186"W	5985.89	142.675	1.66
12663.00	90.490	6405.28	5859.25	-4843.06	3661.47	1654578.65	14271513.49	39°18'03.395"N	80°56'59.779"W	6071.38	142.910	1.98
12753.00	90.400	6404.58	5949.21	-4927.51	3692.60	1654609.76	14271429.08	39°18'02.560"N	80°56'59.384"W	6157.56	143.163	-0.10
12842.00	90.400	6403.96	6038.18	-5010.94	3723.58	1654640.73	14271345.69	39°18'01.736"N	80°56'58.991"W	6242.96	143.384	-0.19
12932.00	90.370	6403.35	6128.16	-5095.10	3755.46	1654672.60	14271261.56	39°18'00.904"N	80°56'58.586"W	6329.57	143.607	-0.63
13022.00	90.370	6402.77	6218.15	-5178.60	3789.02	1654706.15	14271178.09	39°18'00.078"N	80°56'58.159"W	6416.74	143.808	-1.92
13111.00	90.400	6402.17	6307.14	-5261.31	3821.87	1654738.97	14271095.42	39°17'59.261"N	80°56'57.742"W	6502.93	144.005	2.46
13201.00	90.120	6401.76	6397.12	-5345.50	3853.67	1654770.77	14271011.26	39°17'58.428"N	80°56'57.338"W	6589.78	144.211	-0.27
13290.00	89.940	6401.72	6488.12	-5428.34	3886.22	1654803.30	14270928.46	39°17'57.609"N	80°56'56.925"W	6676.04	144.401	-1.44
13380.00	89.970	6401.79	6576.11	-5511.46	3920.72	1654837.79	14270845.37	39°17'56.788"N	80°56'56.487"W	6763.74	144.573	-1.00
13469.00	89.910	6401.88	6665.01	-5592.44	3957.62	1654874.68	14270764.42	39°17'55.987"N	80°56'56.018"W	6851.14	144.714	-3.39
13559.00	89.970	6401.97	6754.67	-5672.71	3998.30	1654915.34	14270684.18	39°17'55.193"N	80°56'55.501"W	6940.18	144.823	-1.92
13648.00	90.250	6401.80	6843.33	-5752.09	4038.54	1654955.57	14270604.83	39°17'54.409"N	80°56'54.990"W	7028.26	144.927	1.93
13738.00	90.400	6401.29	6933.13	-5833.23	4077.48	1654994.49	14270523.72	39°17'53.606"N	80°56'54.495"W	7117.05	145.046	0.87
13828.00	90.030	6400.96	7023.00	-5914.83	4115.45	1655032.45	14270442.16	39°17'52.800"N	80°56'54.012"W	7205.70	145.170	0.64
13917.00	90.060	6400.89	7111.97	-5996.51	4150.78	1655067.76	14270360.51	39°17'51.992"N	80°56'53.564"W	7292.95	145.309	2.88
14007.00	90.000	6400.84	7201.92	-6080.91	4181.99	1655098.96	14270276.15	39°17'51.158"N	80°56'53.167"W	7380.14	145.483	4.04
14096.00	90.000	6400.84	7290.65	-6165.77	4208.80	1655125.76	14270191.32	39°17'50.319"N	80°56'52.827"W	7465.30	145.682	2.10
14186.00	90.180	6400.70	7380.22	-6252.16	4234.05	1655151.00	14270104.97	39°17'49.465"N	80°56'52.506"W	7550.93	145.894	0.71
14275.00	89.970	6400.58	7468.83	-6337.49	4259.32	1655176.26	14270019.67	39°17'48.621"N	80°56'52.185"W	7635.81	146.096	-1.13
14365.00	89.850	6400.72	7558.52	-6423.48	4285.87	1655202.80	14269933.71	39°17'47.771"N	80°56'51.848"W	7722.03	146.288	-0.34
14455.00	90.000	6400.84	7648.27	-6509.26	4313.10	1655230.02	14269847.96	39°17'46.923"N	80°56'51.503"W	7808.54	146.471	0.70
14544.00	89.910	6400.91	7737.10	-6593.68	4341.29	1655258.20	14269763.58	39°17'46.089"N	80°56'51.145"W	7894.52	146.639	1.23
14634.00	89.820	6401.12	7827.03	-6678.50	4371.37	1655288.26	14269678.79	39°17'45.250"N	80°56'50.763"W	7981.94	146.794	-1.14
14724.00	89.720	6401.48	7916.99	-6762.91	4402.60	1655319.48	14269594.42	39°17'44.416"N	80°56'50.366"W	8069.69	146.936	-0.59
14813.00	89.820	6401.84	8005.97	-6846.05	4434.37	1655351.23	14269511.31	39°17'43.594"N	80°56'49.963"W	8156.71	147.068	-0.76
14903.00	89.350	6402.49	8095.97	-6929.67	4467.63	1655384.49	14269427.73	39°17'42.767"N	80°56'49.490"W	8245.00	147.190	-0.99
14993.00	89.450	6403.43	8185.96	-7012.87	4501.94	1655418.78	14269344.56	39°17'41.945"N	80°56'49.104"W	8333.53	147.301	-0.59
15083.00	89.350	6404.38	8275.93	-7095.51	4537.57	1655454.39	14269261.95	39°17'41.128"N	80°56'48.652"W	8422.34	147.401	-1.46

Turn Rate	Comments
(°/100ft)	(ft/100ft)
0.24	
-0.10	
1.66	
-1.66	
0.03	
1.98	
-0.12	
0.00	
143.384	
143.163	
143.607	
143.808	
144.005	
144.211	
144.401	
144.573	
144.714	
144.823	
144.927	
145.046	
145.170	
145.309	
145.483	
145.682	
145.894	
146.096	
146.288	
146.471	
146.639	
146.794	
146.936	
147.068	
147.190	
147.301	
147.401	





# Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022  
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Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Ritchie County, WV	Ritchie	Kelly Pad
	Aubie Unit 2H	Well	
	Aubie Unit 2H AWB	Wellbore	
	Slot #02		

WELLPATH DATA (203 stations)												
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir
[m]	[°]	[°]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[°]
15722.00	89.600	155.480	6405.19	8364.85	-1776.65	4574.12	1655490.93	14269180.84	39°17'40.32"N	80°56'48.18"W	8510.40	147.488
15626.00	89.600	155.470	6405.82	8454.75	-7258.53	4611.48	1655528.27	14269099.00	39°17'39.51"N	80°56'47.73"W	8599.53	147.571
15522.00	89.110	155.160	6406.83	8544.64	-7340.30	4649.06	1655565.84	14269017.26	39°17'38.70"N	80°56'47.23"W	8688.72	147.651
15441.00	89.080	155.240	6408.24	8633.51	-7421.08	4686.39	1655603.16	14268936.51	39°17'37.90"N	80°56'46.76"W	8776.94	147.728
15331.00	89.290	156.680	6409.52	8723.44	-7503.26	4723.05	1655639.80	14268854.66	39°17'37.09"N	80°56'46.29"W	8866.01	147.811
15210.00	89.110	157.410	6410.78	8813.42	-7586.13	4758.14	1655674.88	14268771.53	39°17'36.27"N	80°56'45.85"W	8954.85	147.903
15090.00	88.980	157.900	6413.75	8922.39	-7751.94	4825.51	1655742.22	14268605.79	39°17'34.63"N	80°56'44.99"W	9131.16	148.098
14970.00	88.260	158.070	6415.13	9082.38	-7835.37	4859.25	1655775.94	14268522.39	39°17'33.81"N	80°56'44.56"W	9219.83	148.194
14850.00	89.780	158.480	6415.88	9171.37	-7918.04	4892.19	1655808.87	14268439.75	39°17'32.89"N	80°56'44.14"W	9307.46	148.290
14722.00	89.630	157.230	6416.34	9261.37	-8001.40	4926.11	1655842.78	14268356.42	39°17'32.17"N	80°56'43.71"W	9396.22	148.381
14609.00	89.570	156.530	6416.97	9351.35	-8084.17	4961.45	1655878.11	14268273.69	39°17'31.35"N	80°56'43.26"W	9485.24	148.462
14498.00	89.780	154.380	6417.48	9440.24	-8165.12	4998.42	1655915.06	14268192.77	39°17'30.53"N	80°56'42.79"W	9573.58	148.526
14338.00	89.570	150.180	6417.99	9529.76	-8244.77	5040.27	1655956.90	14268113.15	39°17'29.76"N	80°56'42.26"W	9663.37	148.561
14227.00	89.880	153.350	6418.41	9618.20	-8323.17	5082.37	1655998.98	14268034.78	39°17'28.91"N	80°56'41.73"W	9752.21	148.591
14117.00	89.660	158.480	6418.78	9708.11	-8405.31	5119.09	1656035.68	14267952.68	39°17'28.17"N	80°56'41.26"W	9841.46	148.657
14007.00	89.780	161.760	6419.22	9798.04	-8489.93	5149.69	1656066.27	14267868.09	39°17'27.34"N	80°56'40.87"W	9929.66	148.761
13896.00	89.880	162.430	6419.48	9886.82	-8574.62	5177.05	1656093.62	14267783.43	39°17'26.50"N	80°56'40.53"W	10016.29	148.878
13785.00	89.720	162.650	6419.79	9976.55	-8660.47	5204.05	1656120.61	14267697.62	39°17'25.65"N	80°56'40.18"W	10103.76	148.998
13675.00	89.780	163.030	6420.18	10065.24	-8745.51	5230.31	1656148.86	14267612.61	39°17'24.81"N	80°56'39.85"W	10190.20	149.118
13565.00	89.660	161.990	6420.62	10154.98	-8831.35	5257.36	1656173.90	14267526.81	39°17'23.96"N	80°56'39.51"W	10277.77	149.234
13457.00	89.720	161.840	6420.80	10186.90	-8861.77	5267.29	1656183.83	14267496.40	39°17'23.66"N	80°56'39.38"W	10308.99	149.273
13347.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
13222.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
13102.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
12982.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
12862.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
12742.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
12622.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
12502.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
12382.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
12262.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
12142.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
12022.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
11902.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
11782.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
11662.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
11542.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
11422.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
11302.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
11182.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
11062.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
10942.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
10822.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
10702.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
10582.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
10462.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
10342.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
10222.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
10102.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
9982.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
9862.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
9742.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
9622.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
9502.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
9382.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
9262.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
9142.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
9022.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
8902.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
8782.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
8662.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
8542.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
8422.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
8302.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
8182.00	89.720	161.840	6420.92	10211.85	-8885.52	5275.08	1656191.61	14267472.66	39°17'23.43"N	80°56'39.28"W	10333.39	149.304
8062.00	89.720	161.840	6420.92	10211.85								





## Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022



### REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Ritchie County, WV	Well	Aubie Unit 2H
Field	Ritchie	Wellbore	Aubie Unit 2H AWB
Facility	Kelly Pad		

### HOLE & CASING SECTIONS - Ref Wellbore: Aubie Unit 2H AWB Ref Wellpath: Aubie Unit 2H AWP Proj: 17022

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start EW [ft]	End N/S [ft]	End EW [ft]
20in Conductor	19.00	59.00	40.00	19.00	59.00	0.00	0.00	0.00	-0.08
17.5in Open Hole	59.00	571.00	512.00	59.00	570.99	0.05	-0.08	0.22	-1.79
13.375in Casing Surface	19.00	571.00	552.00	19.00	570.99	0.00	0.00	0.22	-1.79
12.25in Open Hole	571.00	2670.00	2099.00	570.99	2605.67	0.22	-1.79	270.77	359.76
9.625in Casing Intermediate	19.00	2670.00	2651.00	19.00	2605.67	0.00	0.00	270.77	359.76
8.75in Open Hole	2670.00	5894.00	3224.00	2605.67	5666.64	270.77	359.76	867.62	1171.32
8.5in Open Hole	5894.00	17022.00	11128.00	5666.64	6420.92	867.62	1171.32	-8885.52	5275.08
5.5in Casing Production	19.00	17022.00	17003.00	19.00	6420.92	0.00	0.00	-8885.52	5275.08

### TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Ghd East [US ft]	Ghd North [US ft]	Latitude	Longitude	Shape
Aubie Unit 2H POE Plat	6397.00	499.59	1506.96	1652425.00	14276854.00	39°18'56.21"N	80°57'27.154"W	point
Aubie Unit 2H POE Rev-1	6397.00	552.72	1485.60	1652403.65	14276907.10	39°18'56.736"N	80°57'27.426"W	point
Aubie Unit 2H BHL Plat	6423.00	-8748.09	5225.08	1656141.63	14267610.03	39°17'24.790"N	80°56'39.920"W	point
Aubie Unit 2H BHL Rev-1	6423.00	-8908.60	5289.62	1656206.14	14267449.59	39°17'23.203"N	80°56'39.100"W	point
Aubie Unit 2H LP Rev-1	6423.00	408.52	1543.57	1652461.60	14276762.97	39°18'55.311"N	80°57'26.689"W	point
Aubie Unit 2H 20' L/R Hard Line	6600.00	-4250.04	3416.59	1654333.87	14272106.28	39°18'09.258"N	80°57'02.890"W	rectangle





# Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Ritchie County, WV	Well	Aubie Unit 2H
Field	Ritchie	Wellbore	Aubie Unit 2H AWB
Facility	Kelly Pad		

WELLPATH COMPOSITION - Ref Wellbore: Aubie Unit 2H AWB Ref Wellpath: Aubie Unit 2H AWP Proj: 17022'				
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment	Wellbore
19.00	5726.00	Gyrodatta standard - Continuous gyro	03 Gyrodatta Cont. Gyro <8-3/4"> (100'-5720')	Aubie Unit 2H AWB
5726.00	16997.00	BHI AutoTrak Curve (Axial)	04 BHI AT Curve <8-1/2"> (5726')(5852'-16997')	Aubie Unit 2H AWB
16997.00	17022.00	Blind Drilling (std)	Projection to bit	Aubie Unit 2H AWB





# Actual Wellpath Report

Aubie Unit 2H AWP Proj: 17022'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #02
Area	Ritchie County, WV	Well	Aubie Unit 2H
Field	Ritchie	Wellbore	Aubie Unit 2H AWB
Facility	Kelly Pad		

COMMENTS
<p>Wellpath general comments API: 47-085-10194-0000 BHI Job #: 8261660 Rig: Precision 525 Duration: 11.23.2016 - 11.26.2016 Gyrodatta Cont. Gyro &lt;8-3/4"&gt; (106'-5726') BHI AT Curve &lt;8-1/2"&gt; (5726')(5852'-16997') Middlesex: 6546' MD Burkett: 6728' MD Tully: 6794' MD Marcellus POE: 6855' MD Projected MD at TD: 17022'</p>