



ANTERO RESOURCES CORPORATION

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

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



API: 47-017-06782-0000
 BHI Job #: 8517651
 Rig: Frontier 22
 Duration: 05/06/2017-05/08/2017

Plot reference wellpath is Janice Unit 3H PWP Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to Frontier 22 (RKB)	* = Wellpath 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 (At Slot: Slot #03): -1021 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: delaset on 2017-05-10
	Database: WA_MPL_EasternUS_Defn

Gyrodata MS Gyro <8-3/4"> (100'-5597') : 0.07° Inc, 111.50ft MD, 111.50ft TVD, -0.05ft VS

Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Long Run Pad	1678891.242	14271319.517	39°18'01.230"N	80°51'50.390"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot #03	9.10	-4.73	1678886.510	14271328.610
Latitude	Longitude			
39°18'01.320"N	80°51'50.450"W			
Comment				
Janice Unit 3H				
Frontier 22 (RKB) to Mud line (At Slot: Slot #03)				24.5ft
Mean Sea Level to Mud line (At Slot: Slot #03)				-1021ft
Frontier 22 (RKB) to Mean Sea Level				1045.5ft

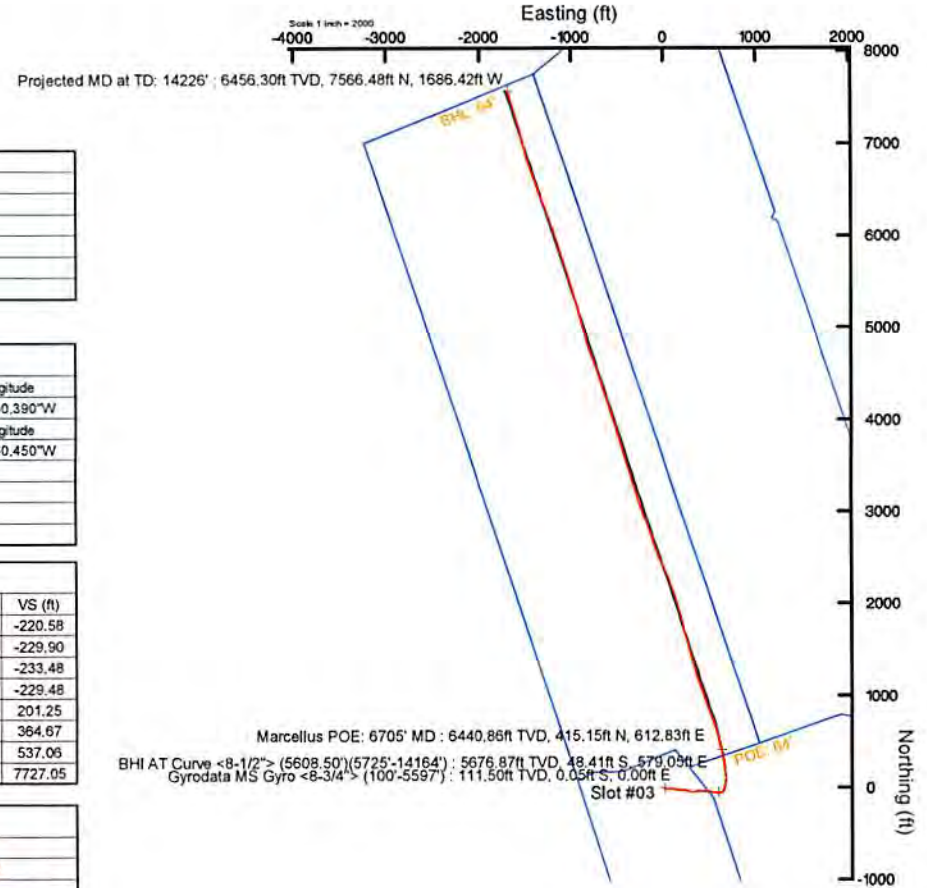
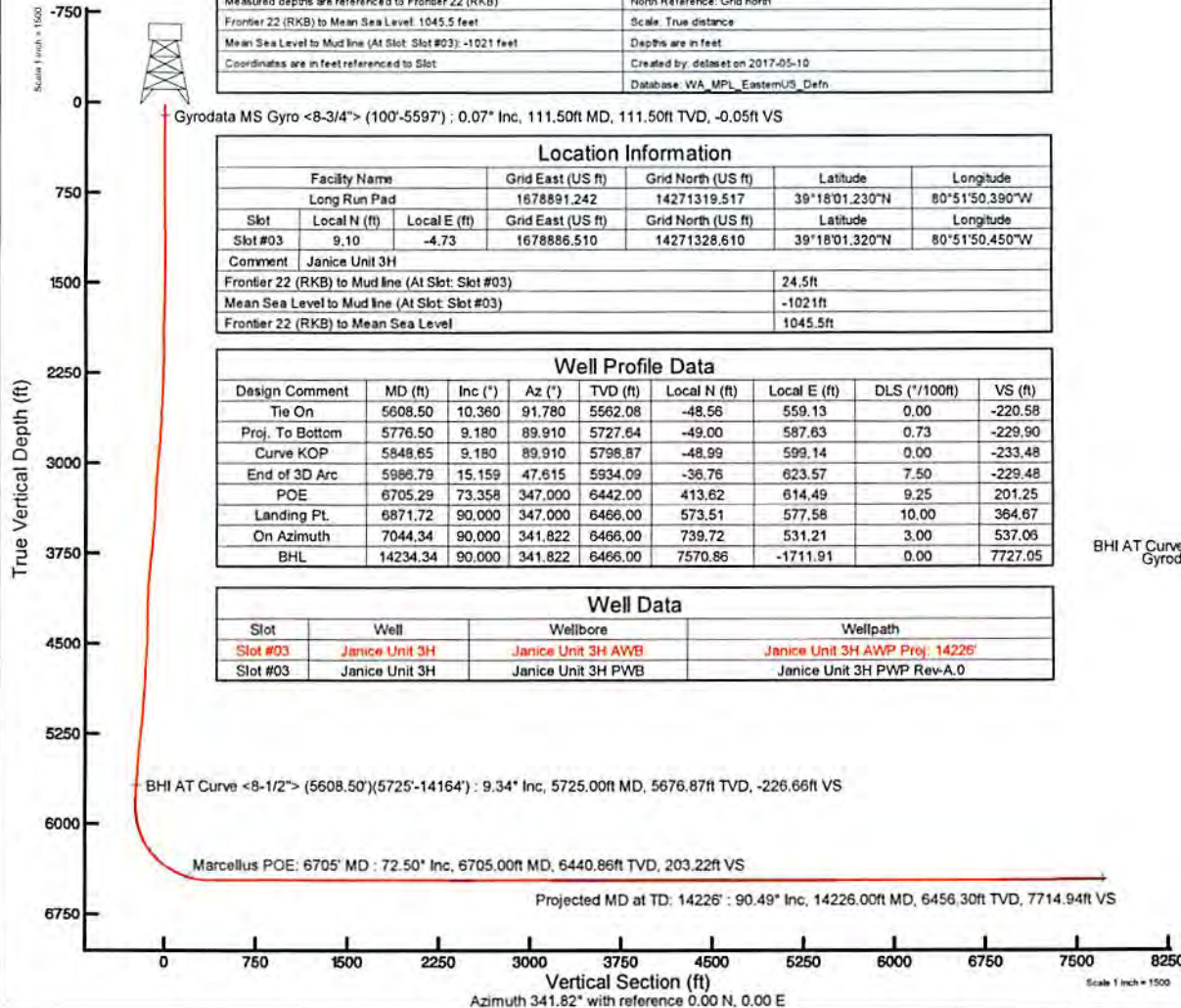
Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	5608.50	10.360	91.780	5562.08	-48.56	559.13	0.00	-220.58
Proj. To Bottom	5776.50	9.180	89.910	5727.64	-49.00	587.63	0.73	-229.90
Curve KOP	5848.65	9.180	89.910	5798.87	-48.99	599.14	0.00	-233.48
End of 3D Arc	5986.79	15.159	47.615	5934.09	-36.76	623.57	7.50	-229.48
POE	6705.29	73.358	347.000	6442.00	413.62	614.49	9.25	201.25
Landing Pt.	6871.72	90.000	347.000	6466.00	573.51	577.58	10.00	364.67
On Azimuth	7044.34	90.000	341.822	6466.00	739.72	531.21	3.00	537.05
BHL	14234.34	90.000	341.822	6466.00	7570.86	-1711.91	0.00	7727.05

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #03	Janice Unit 3H	Janice Unit 3H AWP	Janice Unit 3H AWP Proj: 14226'
Slot #03	Janice Unit 3H	Janice Unit 3H PWB	Janice Unit 3H PWP Rev-A.0

BHI AT Curve <8-1/2"> (5608.50')(5725'-14164') : 9.34° Inc, 5725.00ft MD, 5676.87ft TVD, -226.66ft VS

Marcellus POE: 6705' MD : 72.50° Inc, 6705.00ft MD, 6440.86ft TVD, 203.22ft VS

Projected MD at TD: 14226' : 90.49° Inc, 14226.00ft MD, 6456.30ft TVD, 7714.94ft VS



User specified (HDGM) Dip: 66.59° Field: 52058 nT
 Magnetic North is 7.65 degrees West of True North (at 18/Apr/2017)
 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 7.74 degrees



Actual Wellpath Report

Janice Unit 3H AWP Proj: 14226'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Doddridge Co., WV	Well	Janice Unit 3H
Field	Doddridge	Wellbore	Janice 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	10/May/2017 at 10:51
Convergence at slot	0.09° East	Database/Source file	WA_MPL_EasternUS_Defn/Janice_Unit_3H_AWP_Proj_14226_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	9.10	-4.73	1678886.51	14271328.61	39°18'01.320"N	80°51'50.450"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 #03)	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	347.44°



Actual Wellpath Report

Janice Unit 3H AWP Proj: 14226'

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REFERENCE WELLPATH IDENTIFICATION			
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Area	Doddridge Co., WV	Well	Janice Unit 3H
Field	Doddridge	Wellbore	Janice Unit 3H AWB
Facility	Long Run Pad		

WELLPATH DATA (165 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 ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]	Comments
0.00	0.00	183.920	0.00	0.00	0.00	0.00	1678886.51	14271328.61	39°18'01.320"N	80°51'50.450"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.00	183.920	24.50	0.00	0.00	0.00	1678886.51	14271328.61	39°18'01.320"N	80°51'50.450"W	0.00	0.000	0.00	0.00	0.00	
111.50	0.070	183.920	111.50	-0.05	-0.05	0.00	1678886.51	14271328.56	39°18'01.319"N	80°51'50.450"W	0.05	183.920	0.08	0.08	-202.39	Gyrodata MS Gyro <8-3/4"> (100'-5597')
211.50	0.080	98.620	211.50	-0.13	-0.12	0.06	1678886.57	14271328.49	39°18'01.319"N	80°51'50.449"W	0.14	153.804	0.10	0.01	-85.30	
311.50	0.090	76.800	311.50	-0.16	-0.12	0.21	1678886.72	14271328.49	39°18'01.319"N	80°51'50.447"W	0.24	119.502	0.03	0.01	-21.82	
411.50	0.450	78.820	411.50	-0.17	-0.02	0.67	1678887.18	14271328.59	39°18'01.320"N	80°51'50.442"W	0.67	91.961	0.36	0.36	2.02	
511.50	0.490	79.440	511.50	-0.19	0.13	1.47	1678887.98	14271328.74	39°18'01.321"N	80°51'50.431"W	1.48	84.897	0.04	0.04	0.62	
611.50	0.520	78.830	611.49	-0.22	0.30	2.34	1678888.85	14271328.91	39°18'01.323"N	80°51'50.420"W	2.36	82.744	0.03	0.03	-0.61	
711.50	0.160	34.540	711.49	-0.13	0.50	2.86	1678889.37	14271329.11	39°18'01.325"N	80°51'50.414"W	2.91	80.081	0.42	-0.36	-44.29	
811.50	0.460	294.960	811.49	0.21	0.79	2.58	1678889.09	14271329.39	39°18'01.328"N	80°51'50.417"W	2.70	73.067	0.51	0.30	-99.58	
911.50	0.630	289.730	911.48	0.74	1.14	1.70	1678888.21	14271329.75	39°18'01.331"N	80°51'50.428"W	2.05	56.114	0.18	0.17	-5.23	
1011.50	0.950	286.560	1011.47	1.44	1.56	0.39	1678886.90	14271330.17	39°18'01.335"N	80°51'50.445"W	1.61	13.867	0.32	0.32	-3.17	
1111.50	1.050	285.780	1111.46	2.28	2.05	-1.29	1678885.22	14271330.66	39°18'01.340"N	80°51'50.466"W	2.42	327.774	0.10	0.10	-0.78	
1211.50	0.580	297.370	1211.45	3.04	2.53	-2.62	1678883.89	14271331.14	39°18'01.345"N	80°51'50.483"W	3.64	313.971	0.50	-0.47	11.59	
1311.50	0.440	334.560	1311.44	3.74	3.11	-3.24	1678883.27	14271331.72	39°18'01.351"N	80°51'50.491"W	4.49	313.849	0.35	-0.14	37.19	
1411.50	0.980	66.710	1411.44	4.27	3.79	-2.62	1678883.90	14271332.40	39°18'01.358"N	80°51'50.483"W	4.61	325.414	1.09	0.54	92.15	
1511.50	1.390	80.040	1511.42	4.38	4.34	-0.64	1678885.87	14271332.95	39°18'01.363"N	80°51'50.458"W	4.39	351.670	0.49	0.41	13.33	
1611.50	1.480	119.670	1611.39	3.45	3.91	1.68	1678888.19	14271332.52	39°18'01.359"N	80°51'50.429"W	4.26	23.254	0.98	0.09	39.63	
1711.50	1.890	159.540	1711.35	0.95	1.73	3.38	1678889.89	14271330.34	39°18'01.337"N	80°51'50.407"W	3.80	62.922	1.21	0.41	39.87	
1811.50	2.160	174.890	1811.29	-2.55	-1.69	4.12	1678890.63	14271326.92	39°18'01.303"N	80°51'50.398"W	4.46	112.335	0.60	0.27	15.35	
1911.50	0.710	179.640	1911.25	-5.03	-4.19	4.30	1678890.80	14271324.42	39°18'01.278"N	80°51'50.395"W	6.00	134.293	1.45	-1.45	4.75	
2011.50	1.820	85.310	2011.23	-5.85	-4.68	5.88	1678892.39	14271323.93	39°18'01.274"N	80°51'50.375"W	7.52	128.510	2.00	1.11	-94.33	
2111.50	3.100	85.150	2111.14	-6.43	-4.32	10.16	1678896.67	14271324.29	39°18'01.277"N	80°51'50.321"W	11.04	113.047	1.28	1.28	-0.16	
2211.50	3.800	87.260	2210.96	-7.36	-3.94	16.16	1678902.67	14271324.68	39°18'01.281"N	80°51'50.245"W	16.64	103.683	0.71	0.70	2.11	
2311.50	5.980	91.990	2310.59	-9.23	-3.96	24.68	1678911.18	14271324.65	39°18'01.280"N	80°51'50.136"W	25.00	99.110	2.22	2.18	4.73	
2411.50	7.860	93.820	2409.86	-12.47	-4.59	36.71	1678923.21	14271324.02	39°18'01.274"N	80°51'49.983"W	37.00	97.133	1.89	1.88	1.83	
2511.50	8.760	90.080	2508.81	-16.07	-5.06	51.15	1678937.64	14271323.55	39°18'01.269"N	80°51'49.800"W	51.40	95.650	1.05	0.90	-3.74	
2611.50	8.630	90.100	2607.66	-19.38	-5.08	66.27	1678952.75	14271323.53	39°18'01.269"N	80°51'49.607"W	66.46	94.387	0.13	-0.13	0.02	
2711.50	8.500	93.160	2706.54	-23.03	-5.50	81.15	1678967.62	14271323.11	39°18'01.264"N	80°51'49.418"W	81.33	93.881	0.47	-0.13	3.06	
2811.50	8.910	99.530	2805.39	-27.94	-7.19	96.16	1678982.64	14271321.42	39°18'01.247"N	80°51'49.227"W	96.43	94.278	1.05	0.41	6.37	



Actual Wellpath Report

Janice Unit 3H AWP Proj: 14226'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Doddridge Co., WV	Well	Janice Unit 3H
Field	Doddridge	Wellbore	Janice Unit 3H AWB
Facility	Long Run Pad		

WELLPATH DATA (165 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
2911.50	10.280	105.170	2903.99	-35.01	-10.81	112.41	1678998.88	14271317.80	39°18'01.211"N	80°51'49.020"W	112.93	95.494	1.66	1.37	5.64	
3011.50	10.620	100.880	3002.33	-42.83	-14.89	130.08	1679016.53	14271313.73	39°18'01.171"N	80°51'48.796"W	130.92	96.529	0.85	0.34	-4.29	
3111.50	10.730	94.320	3100.61	-49.20	-17.33	148.41	1679034.86	14271311.29	39°18'01.147"N	80°51'48.563"W	149.42	96.659	1.22	0.11	-6.56	
3211.50	10.610	89.930	3198.88	-53.89	-18.02	166.90	1679053.34	14271310.60	39°18'01.139"N	80°51'48.327"W	167.87	96.161	0.82	-0.12	-4.39	
3311.50	10.030	86.740	3297.26	-57.29	-17.51	184.80	1679071.23	14271311.11	39°18'01.144"N	80°51'48.100"W	185.63	95.413	0.81	-0.58	-3.19	
3411.50	7.890	89.940	3396.04	-60.19	-17.01	200.36	1679086.79	14271311.61	39°18'01.149"N	80°51'47.902"W	201.08	94.852	2.20	-2.14	3.20	
3511.50	7.440	98.540	3495.15	-64.00	-17.96	213.62	1679100.05	14271310.66	39°18'01.139"N	80°51'47.733"W	214.38	94.806	1.23	-0.45	8.60	
3611.50	7.990	105.610	3594.24	-69.62	-20.79	226.72	1679113.14	14271307.82	39°18'01.111"N	80°51'47.566"W	227.67	95.240	1.10	0.55	7.07	
3711.50	9.210	111.600	3693.12	-77.39	-25.61	240.86	1679127.27	14271303.01	39°18'01.063"N	80°51'47.387"W	242.21	96.069	1.51	1.22	5.99	
3811.50	9.490	111.350	3791.79	-86.49	-31.56	255.97	1679142.38	14271297.07	39°18'01.004"N	80°51'47.195"W	257.91	97.028	0.28	0.28	-0.25	
3911.50	9.920	103.940	3890.36	-94.93	-36.63	272.01	1679158.41	14271291.99	39°18'00.954"N	80°51'46.991"W	274.47	97.670	1.32	0.43	-7.41	
4011.50	9.200	97.680	3988.98	-101.54	-39.78	288.30	1679174.69	14271288.85	39°18'00.923"N	80°51'46.784"W	291.03	97.856	1.26	-0.72	-6.26	
4111.50	8.820	81.070	4087.76	-104.79	-39.66	303.80	1679190.18	14271288.97	39°18'00.924"N	80°51'46.586"W	306.37	97.437	2.62	-0.38	-16.61	
4211.50	9.350	79.800	4186.51	-105.62	-37.03	319.36	1679205.75	14271291.60	39°18'00.949"N	80°51'46.388"W	321.50	96.613	0.57	0.53	-1.27	
4311.50	9.260	78.740	4285.19	-106.13	-34.02	335.25	1679221.63	14271294.61	39°18'00.979"N	80°51'46.186"W	336.97	95.794	0.19	-0.09	-1.06	
4411.50	7.940	79.210	4384.06	-106.53	-31.15	349.93	1679236.30	14271297.47	39°18'01.007"N	80°51'45.999"W	351.31	95.088	1.32	-1.32	0.47	
4511.50	8.190	84.370	4483.07	-107.61	-29.16	363.80	1679250.16	14271299.46	39°18'01.026"N	80°51'45.823"W	364.97	94.583	0.77	0.25	5.16	
4611.50	9.930	91.090	4581.83	-110.50	-28.63	379.51	1679265.87	14271299.99	39°18'01.031"N	80°51'45.623"W	380.59	94.314	2.03	1.74	6.72	
4711.50	10.060	91.650	4680.31	-114.68	-29.04	396.86	1679283.21	14271299.58	39°18'01.027"N	80°51'45.402"W	397.92	94.185	0.16	0.13	0.56	
4811.50	9.900	90.150	4778.80	-118.72	-29.32	414.19	1679300.53	14271299.31	39°18'01.024"N	80°51'45.182"W	415.22	94.049	0.31	-0.16	-1.50	
4911.50	10.470	88.500	4877.22	-122.35	-29.10	431.87	1679318.20	14271299.52	39°18'01.026"N	80°51'44.957"W	432.85	93.855	0.64	0.57	-1.65	
5011.50	10.030	92.160	4975.62	-126.31	-29.19	449.65	1679335.98	14271299.43	39°18'01.025"N	80°51'44.731"W	450.60	93.714	0.79	-0.44	3.66	
5111.50	9.510	98.960	5074.18	-131.56	-30.81	466.52	1679352.84	14271297.82	39°18'01.009"N	80°51'44.516"W	467.53	93.778	1.26	-0.52	6.80	
5211.50	10.380	103.580	5172.68	-138.56	-34.21	483.43	1679369.75	14271294.42	39°18'00.975"N	80°51'44.301"W	484.64	94.048	1.18	0.87	4.62	
5311.50	11.100	104.590	5270.92	-146.92	-38.75	501.51	1679387.82	14271289.88	39°18'00.930"N	80°51'44.071"W	503.00	94.418	0.74	0.72	1.01	
5411.50	11.950	101.780	5368.91	-155.58	-43.29	520.96	1679407.26	14271285.34	39°18'00.884"N	80°51'43.824"W	522.75	94.750	1.02	0.85	-2.81	
5511.50	11.440	98.490	5466.83	-163.41	-46.86	540.90	1679427.19	14271281.76	39°18'00.849"N	80°51'43.570"W	542.93	94.952	0.84	-0.51	-3.29	
5608.50	10.360	91.780	5562.08	-169.03	-48.56	559.13	1679445.42	14271280.07	39°18'00.832"N	80°51'43.339"W	561.24	94.963	1.72	-1.11	-6.92	
5725.00	9.340	87.160	5676.87	-173.22	-48.41	579.05	1679465.32	14271280.22	39°18'00.833"N	80°51'43.085"W	581.07	94.779	1.11	-0.88	-3.97	BHI AT Curve <8-1/2"> (5608.50')(5725'-14164')
5820.00	8.530	86.960	5770.71	-175.69	-47.66	593.78	1679480.05	14271280.97	39°18'00.840"N	80°51'42.898"W	595.69	94.589	0.85	-0.85	-0.21	



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Field	Doddridge	Wellbore	Janice Unit 3H AWB
Facility	Long Run Pad		

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5867.00	8.540	72.530	5817.20	-175.97	-46.42	600.59	1679486.86	14271282.20	39°18'00.852"N	80°51'42.811"W	602.38	94.420	4.54	0.02	-30.70	
5914.00	11.230	56.460	5863.50	-174.03	-42.85	607.74	1679494.01	14271285.78	39°18'00.887"N	80°51'42.720"W	609.25	94.033	8.15	5.72	-34.19	
5961.00	13.040	50.440	5909.45	-169.98	-36.94	615.64	1679501.91	14271291.68	39°18'00.946"N	80°51'42.620"W	616.75	93.434	4.69	3.85	-12.81	
6010.00	15.200	40.230	5956.98	-163.59	-28.51	624.05	1679510.31	14271300.11	39°18'01.029"N	80°51'42.512"W	624.71	92.616	6.71	4.41	-20.84	
6057.00	18.030	27.320	6002.03	-154.28	-17.34	631.38	1679517.63	14271311.28	39°18'01.139"N	80°51'42.419"W	631.61	91.573	9.86	6.02	-27.47	
6104.00	20.530	20.370	6046.39	-141.78	-3.15	637.59	1679523.84	14271325.46	39°18'01.279"N	80°51'42.340"W	637.59	90.283	7.21	5.32	-14.79	
6151.00	24.280	16.410	6089.84	-126.40	13.85	643.19	1679529.44	14271342.46	39°18'01.447"N	80°51'42.268"W	643.34	88.766	8.60	7.98	-8.43	
6199.00	28.260	12.090	6132.88	-107.43	34.44	648.36	1679534.61	14271363.04	39°18'01.651"N	80°51'42.202"W	649.27	86.959	9.19	8.29	-9.00	
6249.00	32.430	7.960	6176.02	-84.10	59.31	652.69	1679538.94	14271387.89	39°18'01.896"N	80°51'42.146"W	655.38	84.808	9.32	8.34	-8.26	
6294.00	36.350	3.850	6213.16	-60.00	84.58	655.26	1679541.51	14271413.15	39°18'02.146"N	80°51'42.113"W	660.70	82.645	10.12	8.71	-9.13	
6343.00	41.100	359.380	6251.38	-30.29	115.19	656.06	1679542.31	14271443.76	39°18'02.449"N	80°51'42.102"W	666.10	80.041	11.24	9.69	-9.12	
6358.00†	42.717	358.259	6262.54	-20.47	125.21	655.86	1679542.10	14271453.77	39°18'02.548"N	80°51'42.105"W	667.70	79.192	11.88	10.78	-7.47	Middlesex: 6358' MD
6388.00	45.980	356.210	6283.99	0.20	146.15	654.83	1679541.08	14271474.70	39°18'02.755"N	80°51'42.117"W	670.94	77.418	11.88	10.88	-6.83	
6436.00	50.950	354.420	6315.81	35.78	181.95	651.88	1679538.13	14271510.48	39°18'03.109"N	80°51'42.154"W	676.79	74.405	10.72	10.35	-3.73	
6482.00	55.080	352.750	6343.48	72.30	218.45	647.76	1679534.01	14271546.97	39°18'03.469"N	80°51'42.206"W	683.60	71.364	9.43	8.98	-3.63	
6532.00	60.030	350.770	6370.30	114.36	260.19	641.69	1679527.95	14271588.69	39°18'03.882"N	80°51'42.282"W	692.44	67.929	10.45	9.90	-3.96	
6557.00†	61.929	350.223	6382.43	136.19	281.75	638.08	1679524.34	14271610.25	39°18'04.095"N	80°51'42.328"W	697.52	66.176	7.83	7.60	-2.19	Burket: 6557' MD
6577.00	63.450	349.800	6391.60	153.94	299.25	635.00	1679521.26	14271627.74	39°18'04.268"N	80°51'42.367"W	701.98	64.768	7.83	7.60	-2.12	
6622.00†	65.893	349.855	6410.85	194.58	339.28	627.82	1679514.08	14271667.76	39°18'04.664"N	80°51'42.457"W	713.63	61.613	5.43	5.43	0.12	Tully: 6622' MD
6626.00	66.110	349.860	6412.48	198.23	342.88	627.18	1679513.43	14271671.35	39°18'04.699"N	80°51'42.465"W	714.78	61.334	5.43	5.43	0.12	
6672.00	69.100	348.680	6430.01	240.73	384.66	619.25	1679505.52	14271713.11	39°18'05.113"N	80°51'42.565"W	729.00	58.153	6.92	6.50	-2.57	
6687.00†	70.643	348.159	6435.17	254.81	398.46	616.43	1679502.69	14271726.91	39°18'05.249"N	80°51'42.601"W	733.99	57.122	10.79	10.29	-3.47	Hamilton: 6687' MD
6705.00†	72.497	347.547	6440.86	271.89	415.15	612.83	1679499.10	14271743.59	39°18'05.414"N	80°51'42.646"W	740.21	55.885	10.79	10.30	-3.40	Marcellus POE: 6705' MD
6719.00	73.940	347.080	6444.90	285.29	428.22	609.89	1679496.16	14271756.66	39°18'05.543"N	80°51'42.684"W	745.21	54.926	10.79	10.31	-3.34	
6767.00	78.790	345.940	6456.21	331.92	473.57	599.01	1679485.28	14271801.99	39°18'05.992"N	80°51'42.821"W	763.59	51.670	10.36	10.10	-2.38	
6814.00	84.330	345.700	6463.11	378.37	518.63	587.62	1679473.90	14271847.03	39°18'06.437"N	80°51'42.965"W	783.76	48.569	11.80	11.79	-0.51	
6861.00	89.540	345.290	6465.62	425.26	564.05	575.87	1679462.15	14271892.43	39°18'06.886"N	80°51'43.114"W	806.09	45.594	11.12	11.09	-0.87	
6956.00	90.060	342.280	6465.95	520.06	655.26	549.35	1679435.64	14271983.60	39°18'07.788"N	80°51'43.449"W	855.07	39.975	3.22	0.55	-3.17	
7050.00	89.910	339.720	6465.98	613.46	744.13	518.74	1679405.05	14272072.44	39°18'08.667"N	80°51'43.837"W	907.10	34.881	2.73	-0.16	-2.72	
7145.00	89.820	338.780	6466.20	707.49	832.96	485.09	1679371.40	14272161.24	39°18'09.545"N	80°51'44.263"W	963.92	30.215	0.99	-0.09	-0.99	



Actual Wellpath Report

Janice Unit 3H AWP Proj: 14226'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Doddridge Co., WV	Well	Janice Unit 3H
Field	Doddridge	Wellbore	Janice Unit 3H AWB
Facility	Long Run Pad		

WELLPATH DATA (165 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
7239.00	89.780	341.600	6466.53	800.73	921.39	453.23	1679339.56	14272249.63	39°18'10.420"N	80°51'44.667"W	1026.83	26.193	3.00	-0.04	3.00	
7334.00	89.970	341.860	6466.74	895.26	1011.60	423.45	1679309.79	14272339.81	39°18'11.312"N	80°51'45.044"W	1096.66	22.714	0.34	0.20	0.27	
7428.00	90.000	339.110	6466.76	988.56	1100.19	392.05	1679278.41	14272428.36	39°18'12.188"N	80°51'45.442"W	1167.96	19.613	2.93	0.03	-2.93	
7524.00	89.850	341.480	6466.89	1083.81	1190.57	359.69	1679246.05	14272518.70	39°18'13.082"N	80°51'45.852"W	1243.71	16.810	2.47	-0.16	2.47	
7618.00	89.940	343.910	6467.06	1177.48	1280.30	331.73	1679218.11	14272608.40	39°18'13.969"N	80°51'46.206"W	1322.58	14.526	2.59	0.10	2.59	
7714.00	89.820	344.890	6467.26	1273.34	1372.77	305.91	1679192.30	14272700.83	39°18'14.883"N	80°51'46.532"W	1406.44	12.563	1.03	-0.12	1.02	
7808.00	89.850	345.060	6467.53	1367.25	1463.55	281.54	1679167.94	14272791.58	39°18'15.781"N	80°51'46.840"W	1490.39	10.889	0.18	0.03	0.18	
7902.00	89.850	344.760	6467.78	1461.16	1554.31	257.07	1679143.48	14272882.30	39°18'16.678"N	80°51'47.150"W	1575.43	9.391	0.32	0.00	-0.32	
7996.00	89.880	344.430	6468.00	1555.05	1644.93	232.10	1679118.52	14272972.89	39°18'17.575"N	80°51'47.466"W	1661.23	8.031	0.35	0.03	-0.35	
8090.00	90.030	345.650	6468.07	1648.96	1735.75	207.84	1679094.26	14273063.66	39°18'18.472"N	80°51'47.773"W	1748.14	6.828	1.31	0.16	1.30	
8185.00	89.910	346.250	6468.12	1743.93	1827.90	184.77	1679071.21	14273155.78	39°18'19.384"N	80°51'48.065"W	1837.22	5.772	0.64	-0.13	0.63	
8280.00	89.940	344.620	6468.25	1838.87	1919.85	160.88	1679047.33	14273247.69	39°18'20.293"N	80°51'48.367"W	1926.58	4.790	1.72	0.03	-1.72	
8374.00	90.030	341.540	6468.27	1932.59	2009.77	133.53	1679019.99	14273337.57	39°18'21.182"N	80°51'48.713"W	2014.20	3.801	3.28	0.10	-3.28	
8469.00	89.910	341.080	6468.32	2027.04	2099.76	103.09	1678989.56	14273427.53	39°18'22.072"N	80°51'49.098"W	2102.29	2.811	0.50	-0.13	-0.48	
8563.00	89.780	340.680	6468.57	2120.43	2188.57	72.30	1678958.78	14273516.31	39°18'22.950"N	80°51'49.488"W	2189.77	1.892	0.45	-0.14	-0.43	
8658.00	89.780	339.880	6468.94	2214.69	2278.00	40.24	1678926.74	14273605.70	39°18'23.834"N	80°51'49.895"W	2278.35	1.012	0.84	0.00	-0.84	
8752.00	89.880	336.580	6469.22	2307.46	2365.28	5.39	1678891.89	14273692.95	39°18'24.698"N	80°51'50.336"W	2365.29	0.130	3.51	0.11	-3.51	
8847.00	89.850	334.790	6469.44	2400.47	2451.85	-33.73	1678852.79	14273779.48	39°18'25.554"N	80°51'50.832"W	2452.08	359.212	1.88	-0.03	-1.88	
8941.00	90.000	337.790	6469.56	2492.69	2537.91	-71.52	1678815.02	14273865.50	39°18'26.405"N	80°51'51.311"W	2538.91	358.386	3.20	0.16	3.19	
9036.00	90.060	341.910	6469.51	2586.83	2627.07	-104.24	1678782.31	14273954.63	39°18'27.287"N	80°51'51.726"W	2629.14	357.728	4.34	0.06	4.34	
9131.00	90.150	343.530	6469.34	2681.51	2717.78	-132.46	1678754.10	14274045.30	39°18'28.184"N	80°51'52.083"W	2721.01	357.210	1.71	0.09	1.71	
9225.00	90.180	340.380	6469.07	2775.07	2807.15	-161.57	1678725.00	14274134.63	39°18'29.067"N	80°51'52.452"W	2811.79	356.706	3.35	0.03	-3.35	
9320.00	90.060	339.160	6468.87	2869.22	2896.28	-194.42	1678692.17	14274223.74	39°18'29.949"N	80°51'52.868"W	2902.80	356.160	1.29	-0.13	-1.28	
9414.00	90.060	339.340	6468.77	2962.26	2984.19	-227.73	1678658.88	14274311.60	39°18'30.818"N	80°51'53.290"W	2992.86	355.636	0.19	0.00	0.19	
9508.00	89.780	341.200	6468.90	3055.52	3072.66	-259.46	1678627.16	14274400.04	39°18'31.693"N	80°51'53.692"W	3083.60	355.173	2.00	-0.30	1.98	
9603.00	89.820	342.550	6469.24	3150.07	3162.95	-289.01	1678597.62	14274490.29	39°18'32.586"N	80°51'54.066"W	3176.12	354.779	1.42	0.04	1.42	
9699.00	89.850	342.450	6469.51	3245.71	3254.50	-317.88	1678568.76	14274581.81	39°18'33.491"N	80°51'54.432"W	3269.99	354.421	0.11	0.03	-0.10	
9794.00	89.780	342.410	6469.82	3340.35	3345.07	-346.56	1678540.09	14274672.34	39°18'34.387"N	80°51'54.795"W	3362.98	354.085	0.08	-0.07	-0.04	
9890.00	89.690	341.850	6470.26	3435.94	3436.44	-376.01	1678510.65	14274763.67	39°18'35.290"N	80°51'55.168"W	3456.95	353.756	0.59	-0.09	-0.58	
9985.00	89.880	342.430	6470.62	3530.53	3526.86	-405.15	1678481.52	14274854.06	39°18'36.184"N	80°51'55.537"W	3550.05	353.447	0.64	0.20	0.61	



Actual Wellpath Report

Janice Unit 3H AWP Proj: 14226'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Doddridge Co., WV	Well	Janice Unit 3H
Field	Doddridge	Wellbore	Janice Unit 3H AWP
Facility	Long Run Pad		

WELLPATH DATA (165 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
10080.00	89.720	343.220	6470.95	3625.22	3617.62	-433.20	1678453.48	14274944.78	39°18'37.082"N	80°51'55.892"W	3643.47	353.171	0.85	-0.17	0.83	
10174.00	89.850	342.970	6471.30	3718.95	3707.56	-460.53	1678426.16	14275034.69	39°18'37.971"N	80°51'56.238"W	3736.05	352.919	0.30	0.14	-0.27	
10269.00	89.970	343.180	6471.45	3813.68	3798.45	-488.19	1678398.51	14275125.53	39°18'38.870"N	80°51'56.588"W	3829.69	352.676	0.25	0.13	0.22	
10365.00	90.030	343.010	6471.45	3909.40	3890.30	-516.11	1678370.61	14275217.35	39°18'39.778"N	80°51'56.942"W	3924.38	352.443	0.19	0.06	-0.18	
10460.00	89.910	342.370	6471.50	4004.08	3980.99	-544.37	1678342.36	14275308.01	39°18'40.675"N	80°51'57.300"W	4018.04	352.213	0.69	-0.13	-0.67	
10555.00	89.940	342.040	6471.63	4098.68	4071.45	-573.41	1678313.33	14275398.43	39°18'41.569"N	80°51'57.667"W	4111.63	351.983	0.35	0.03	-0.35	
10649.00	89.940	340.550	6471.73	4192.14	4160.48	-603.55	1678283.20	14275487.43	39°18'42.450"N	80°51'58.049"W	4204.03	351.746	1.59	0.00	-1.59	
10744.00	90.000	340.950	6471.77	4286.49	4250.17	-634.87	1678251.89	14275577.08	39°18'43.337"N	80°51'58.446"W	4297.32	351.504	0.43	0.06	0.42	
10839.00	90.120	344.160	6471.68	4381.14	4340.79	-663.35	1678223.43	14275667.66	39°18'44.233"N	80°51'58.807"W	4391.18	351.311	3.38	0.13	3.38	
10934.00	89.880	342.890	6471.68	4475.91	4431.89	-690.29	1678196.50	14275758.72	39°18'45.134"N	80°51'59.148"W	4485.32	351.147	1.36	-0.25	-1.34	
11029.00	89.970	339.750	6471.80	4570.36	4521.87	-720.71	1678166.09	14275848.67	39°18'46.023"N	80°51'59.533"W	4578.94	350.944	3.31	0.09	-3.31	
11125.00	89.910	338.970	6471.90	4665.41	4611.71	-754.55	1678132.26	14275938.47	39°18'46.912"N	80°51'59.962"W	4673.03	350.708	0.81	-0.06	-0.81	
11219.00	89.780	340.210	6472.15	4758.53	4699.80	-787.33	1678099.49	14276026.53	39°18'47.783"N	80°52'00.377"W	4765.30	350.490	1.33	-0.14	1.32	
11314.00	89.970	341.380	6472.36	4852.89	4789.52	-818.58	1678068.26	14276116.21	39°18'48.670"N	80°52'00.773"W	4858.96	350.301	1.25	0.20	1.23	
11408.00	89.940	343.780	6472.44	4946.54	4879.20	-846.72	1678040.13	14276205.85	39°18'49.557"N	80°52'01.129"W	4952.12	350.155	2.55	-0.03	2.55	
11503.00	90.400	345.350	6472.15	5041.42	4970.77	-872.00	1678014.86	14276297.39	39°18'50.462"N	80°52'01.449"W	5046.67	350.050	1.72	0.48	1.65	
11598.00	90.220	344.240	6471.64	5136.32	5062.44	-896.92	1677989.95	14276389.02	39°18'51.369"N	80°52'01.765"W	5141.28	349.953	1.18	-0.19	-1.17	
11693.00	90.280	345.230	6471.23	5231.21	5154.09	-921.93	1677964.95	14276480.63	39°18'52.275"N	80°52'02.081"W	5235.89	349.859	1.04	0.06	1.04	
11789.00	90.220	344.400	6470.81	5327.11	5246.73	-947.07	1677939.81	14276573.24	39°18'53.191"N	80°52'02.399"W	5331.52	349.768	0.87	-0.06	-0.86	
11883.00	90.310	343.060	6470.37	5420.91	5336.96	-973.41	1677913.49	14276663.44	39°18'54.083"N	80°52'02.733"W	5425.01	349.663	1.43	0.10	-1.43	
11978.00	90.310	343.660	6469.86	5515.66	5427.98	-1000.61	1677886.30	14276754.42	39°18'54.983"N	80°52'03.077"W	5519.44	349.555	0.63	0.00	0.63	
12073.00	90.370	343.310	6469.29	5610.44	5519.06	-1027.62	1677859.30	14276845.46	39°18'55.884"N	80°52'03.419"W	5613.92	349.453	0.37	0.06	-0.37	
12168.00	90.620	342.390	6468.47	5705.13	5609.83	-1055.63	1677831.30	14276936.20	39°18'56.781"N	80°52'03.774"W	5708.29	349.343	1.00	0.26	-0.97	
12263.00	90.280	340.560	6467.73	5799.61	5699.91	-1085.81	1677801.13	14277026.23	39°18'57.672"N	80°52'04.156"W	5802.41	349.215	1.96	-0.36	-1.93	
12357.00	90.310	342.290	6467.24	5893.09	5789.00	-1115.75	1677771.20	14277115.30	39°18'58.553"N	80°52'04.535"W	5895.55	349.091	1.84	0.03	1.84	
12452.00	90.340	343.430	6466.70	5987.78	5879.78	-1143.75	1677743.22	14277206.04	39°18'59.451"N	80°52'04.890"W	5989.99	348.992	1.20	0.03	1.20	
12547.00	90.030	343.200	6466.40	6082.53	5970.78	-1171.02	1677715.96	14277297.00	39°19'00.350"N	80°52'05.235"W	6084.53	348.904	0.41	-0.33	-0.24	
12643.00	89.450	340.310	6466.83	6178.05	6061.94	-1201.08	1677685.92	14277388.13	39°19'01.252"N	80°52'05.616"W	6179.79	348.793	3.07	-0.60	-3.01	
12737.00	90.150	338.210	6467.16	6271.09	6149.85	-1234.36	1677652.64	14277476.00	39°19'02.121"N	80°52'06.038"W	6272.50	348.651	2.35	0.74	-2.23	
12832.00	90.220	338.880	6466.85	6364.95	6238.26	-1269.11	1677617.91	14277564.38	39°19'02.996"N	80°52'06.478"W	6366.05	348.501	0.71	0.07	0.71	



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Actual Wellpath Report

Janice Unit 3H AWP Proj: 14226
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Operator		ANTERO RESOURCES CORPORATION	
Area	Doddridge Co., WV	Wellbore	Janice Unit 3H
Field	Doddridge	Wellbore	Janice Unit 3H AWB
Facility	Long Run Pad	Wellbore	Janice Unit 3H AWB

REFERENCE WELLPATH IDENTIFICATION

WELLPATH DATA (165 stations)														
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Dir	DLS
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)	(N)	(W)	(ft)	(°)	(ft)
12927.00	90.250	340.500	6459.46	6327.35	-1302.08	1677584.95	14277653.43	39°19'03.87"N	80°52'06.89"W	6459.94	348.372	1.71	0.03	1.71
13022.00	90.180	340.270	6456.11	6553.36	6416.84	-1333.97	1677553.07	39°19'04.76"N	80°52'07.30"W	6554.03	348.256	0.25	-0.07	-0.24
13118.00	90.280	339.930	6465.72	6648.57	6507.11	-1366.65	1677520.41	39°19'05.65"N	80°52'07.71"W	6649.07	348.139	0.37	0.10	-0.35
13213.00	90.400	338.570	6465.16	6742.60	6595.94	-1400.31	1677486.77	39°19'06.53"N	80°52'08.14"W	6742.94	348.014	1.44	0.13	-1.43
13307.00	90.120	339.430	6464.73	6835.58	6683.70	-1433.99	1677453.09	39°19'07.40"N	80°52'08.66"W	6835.80	347.891	0.96	-0.30	0.91
13402.00	90.150	340.830	6464.51	6929.81	6773.04	-1466.28	1677420.82	39°19'08.28"N	80°52'08.97"W	6929.94	347.785	1.47	0.03	1.47
13497.00	90.180	345.140	6464.23	7024.50	6863.86	-1494.07	1677393.04	39°19'09.18"N	80°52'09.32"W	7024.58	347.720	4.54	0.03	4.54
13593.00	90.740	348.690	6463.46	7120.47	6957.35	-1515.80	1677371.31	39°19'10.10"N	80°52'09.60"W	7120.56	347.709	3.74	0.58	3.70
13688.00	91.200	347.610	6461.86	7215.45	7050.31	-1535.31	1677351.82	39°19'11.93"N	80°52'09.85"W	7215.54	347.715	1.24	0.48	-1.14
13783.00	90.770	344.180	6460.22	7310.39	7142.41	-1558.45	1677328.68	39°19'11.93"N	80°52'10.14"W	7310.46	347.691	3.64	-0.45	-3.61
13878.00	90.400	343.120	6459.25	7405.18	7233.57	-1585.19	1677301.95	39°19'12.83"N	80°52'10.48"W	7405.22	347.639	1.18	-0.39	-1.12
13973.00	90.490	343.890	6458.51	7499.95	7324.65	-1612.17	1677274.99	39°19'13.73"N	80°52'10.82"W	7499.97	347.587	0.82	0.09	0.81
14068.00	90.520	343.570	6457.68	7594.75	7415.84	-1638.78	1677248.39	39°19'14.64"N	80°52'11.16"W	7594.76	347.539	0.34	0.03	-0.34
14164.00	90.490	341.960	6456.83	7690.42	7507.53	-1667.22	1677219.96	39°19'15.54"N	80°52'11.52"W	7690.42	347.479	1.68	-0.03	-1.68
14226.00	90.490	341.960	6456.30	7752.14	7566.48	-1686.42	1677200.76	39°19'16.12"N	80°52'11.76"W	7752.14	347.435	0.00	0.00	0.00

Projected MD at TD: 14226'



Actual Wellpath Report

Janice Unit 3H AWP Proj: 14226'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Doddridge Co., WV	Well	Janice Unit 3H
Field	Doddridge	Wellbore	Janice Unit 3H AWB
Facility	Long Run Pad		

HOLE & CASING SECTIONS - Ref Wellbore: Janice Unit 3H AWB Ref Wellpath: Janice Unit 3H AWP Proj: 14226'									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
20in Conductor	24.50	64.50	40.00	24.50	64.50	0.00	0.00	-0.01	0.00
17.5in Open Hole	64.50	515.30	450.80	64.50	515.30	-0.01	0.00	0.14	1.51
13.375in Casing Surface	24.50	515.30	490.80	24.50	515.30	0.00	0.00	0.14	1.51
12.25in Open Hole	515.30	2577.50	2062.20	515.30	2574.04	0.14	1.51	-5.08	61.15
9.625in Casing Intermediate	24.50	2577.50	2553.00	24.50	2574.04	0.00	0.00	-5.08	61.15
8.75in Open Hole	2577.50	5776.50	3199.00	2574.04	5727.72	-5.08	61.15	-48.00	587.20
8.5in Open Hole	5776.50	14226.00	8449.50	5727.72	6456.30	-48.00	587.20	7566.48	-1686.42
5.5in Casing Production	24.50	14226.00	14201.50	24.50	6456.30	0.00	0.00	7566.48	-1686.42

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Janice Unit 3H POE-Rev-2	6442.00	413.62	614.49	1679500.76	14271742.07	39°18'05.399"N	80°51'42.625"W	point
Janice Unit 3H BHL-Rev-2	6466.00	7570.86	-1711.91	1677175.28	14278896.44	39°19'16.173"N	80°52'12.088"W	point
Janice Unit 3H LP-Rev-2	6466.00	573.51	577.58	1679463.86	14271901.89	39°18'06.980"N	80°51'43.092"W	point

WELLPATH COMPOSITION - Ref Wellbore: Janice Unit 3H AWB Ref Wellpath: Janice Unit 3H AWP Proj: 14226'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.50	5608.50	Gyrodata standard - Drop gyro or Multi-shot	05 Gyrodata MS Gyro <8-3/4"> (100'-5597')	Janice Unit 3H AWB
5608.50	14164.00	BHI AutoTrak Curve (Short)	06 BHI AT Curve <8-1/2">(5608.50')(5725'-14164')	Janice Unit 3H AWB
14164.00	14226.00	Blind Drilling (std)	Projection to bit	Janice Unit 3H AWB



Actual Wellpath Report

Janice Unit 3H AWP Proj: 14226'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #03
Area	Doddridge Co., WV	Well	Janice Unit 3H
Field	Doddridge	Wellbore	Janice Unit 3H AWB
Facility	Long Run Pad		

COMMENTS

Wellpath general comments

API: 47-017-06782-0000

BHI Job #: 8517651

Rig: Frontier 22

Duration: 05/06/2017-05/08/2017

Gyrodata MS Gyro <8-3/4"> (100'-5597')

BHI AT Curve <8-1/2"> (5608.50')(5725'-14164')

Middlesex: 6358' MD

Burket: 6557' MD

Tully: 6622' MD

Hamilton: 6687' MD

Marcellus POE: 6705' MD

Projected MD at TD: 14226'