



ANTERO RESOURCES CORPORATION



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

Slot: Slot D
 Well: Elklick Unit 2H
 Wellbore: Elklick Unit 2H PWB

Easting (ft)

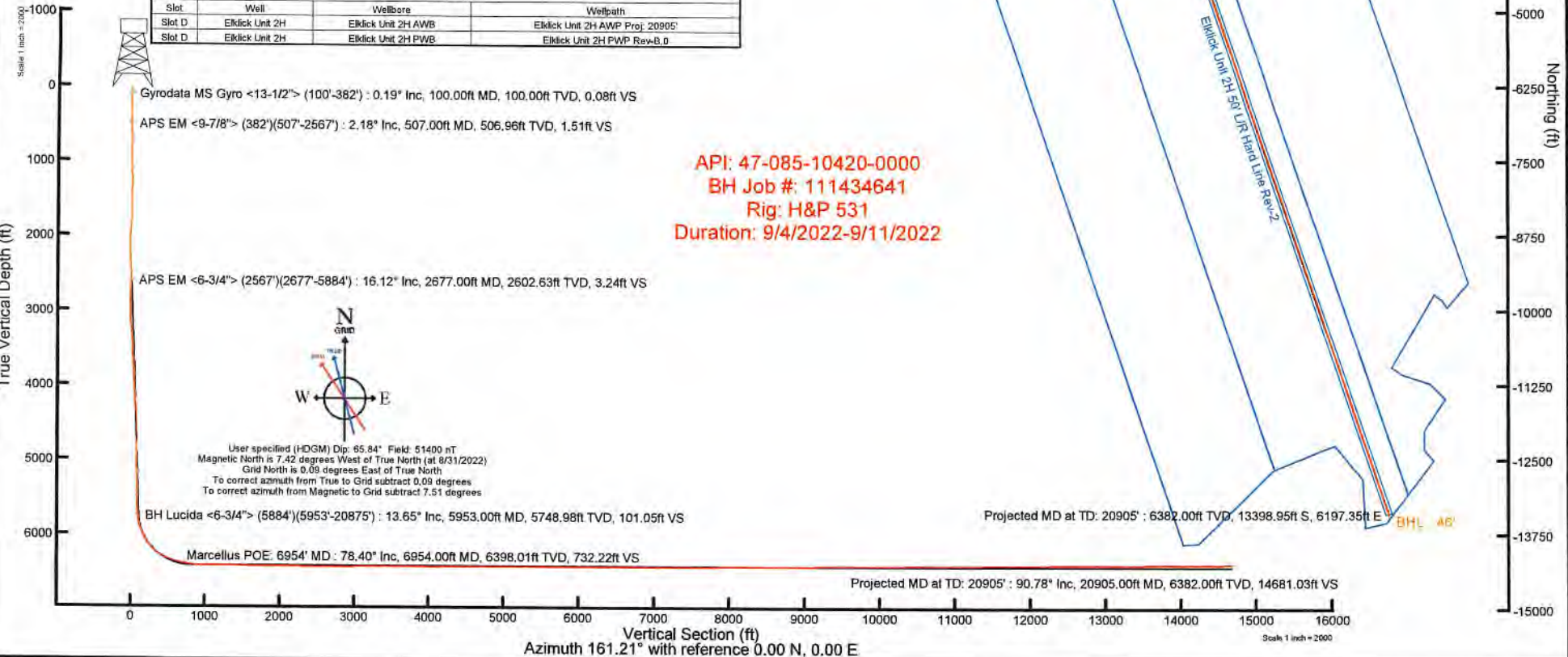
Scale 1 inch = 2500

Plot reference wellpath is Elklick Unit 2H PWP Rev-B.0	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 531 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 531 (RKB)	Scale: True distance
H&P 531 (RKB) to Mean Sea Level: 1049 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (R Slot: Slot D): -1019 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's (default MD datum)	Created by: rdjmar on 2022-10-02; Date/time: VIA MPL, EASTERN S, Delh

Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Cashew Pad	1680670.880	14224370.270	39°10'16.9800"N	80°51'28.5800"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot D	40.50	19.83	1680690.500	14224410.750
Comment	Elklick Unit 2H			
H&P 531 (RKB) to Ground level (At Slot: Slot D)	30ft			
Mean Sea Level to Ground level (At Slot: Slot D)	-1019ft			
H&P 531 (RKB) to Mean Sea Level	1049ft			

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (*/100ft)	VS (ft)
Tie On	2567.00	16.830	76.850	2497.11	153.18	460.88	1.81	3.44
Proj. to Bottom	2657.00	16.830	76.850	2583.26	159.10	486.25	0.00	6.00
Drill Out	2737.00	16.830	76.850	2659.83	164.37	508.81	0.00	8.27
End of 3D Arc	2786.81	15.878	77.898	2707.63	167.44	522.49	2.00	9.78
Curve KOP	5943.86	15.878	77.898	5744.22	348.53	1367.06	0.00	110.37
POE	6860.44	74.552	161.207	6399.00	-107.35	1675.21	8.00	641.22
Landing Pt	7032.08	90.000	161.207	6422.00	-267.89	1729.84	9.00	810.79
BHL	20896.58	90.000	161.207	6422.00	-13393.28	6196.20	0.00	14675.29

Well Data			
Slot	Well	Wellbore	Wellpath
Slot D	Elklick Unit 2H	Elklick Unit 2H AWB	Elklick Unit 2H AWP Proj: 20905'
Slot D	Elklick Unit 2H	Elklick Unit 2H PWB	Elklick Unit 2H PWP Rev-B.0



API: 47-085-10420-0000
 BH Job #: 111434641
 Rig: H&P 531
 Duration: 9/4/2022-9/11/2022

85-10420



Actual Wellpath Report

Elklick Unit 2H AWP Proj: 20905'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Elklick Unit 2H
Field	Ritchie	API	47-085-10420-0000
Facility	Cashew Pad	Wellbore	Elklick Unit 2H AWB
Slot	Slot D		

REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999602	Report Generated	10/2/2022 at 12:43:07 AM
Convergence at slot	0.09° East	Database	WA_MPL_EASTERNUS_Defn

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	40.50	19.63	1680690.50	14224410.75	39°10'17.3800"N	80°51'28.4300"W
Facility Reference Pt			1680670.88	14224370.27	39°10'16.9800"N	80°51'28.6800"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.3013"W

WELLPATH DATUM

Calculation method	Minimum curvature	H&P 531 (RKB) to Facility Vertical Datum	1049.00ft
Horizontal Reference Pt	Slot	H&P 531 (RKB) to Mean Sea Level	1049.00ft
Vertical Reference Pt	H&P 531 (RKB)	H&P 531 (RKB) to Ground Level at Slot (Slot D)	30.00ft
MD Reference Pt	H&P 531 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	161.21°



Actual Wellpath Report

Elklick Unit 2H AWP Proj: 20905'
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REFERENCE WELLPATH IDENTIFICATION			
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Field	Ritchie	API	47-085-10420-0000
Facility	Cashew Pad	Wellbore	Elklick Unit 2H AWB
Slot	Slot D		

WELLPATH DATA (224 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†	0.000	117.840	0.00	0.00	0.00	0.00	1680690.50	14224410.75	39°10'17.3800"N	80°51'28.4300"W	0.00	0.000	0.00	0.00	0.00	
30.00	0.000	117.840	30.00	0.00	0.00	0.00	1680690.50	14224410.75	39°10'17.3800"N	80°51'28.4300"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.190	117.840	100.00	0.08	-0.05	0.10	1680690.60	14224410.70	39°10'17.3795"N	80°51'28.4287"W	0.12	117.840	0.27	0.27	0.00	Gyrodata MS Gyro <13-1/2"> (100'-382')
200.00	0.260	69.730	200.00	0.20	-0.05	0.46	1680690.96	14224410.70	39°10'17.3795"N	80°51'28.4241"W	0.47	96.547	0.19	0.07	-48.11	
300.00	0.130	87.090	300.00	0.22	0.03	0.79	1680691.29	14224410.78	39°10'17.3803"N	80°51'28.4200"W	0.79	87.723	0.14	-0.13	17.36	
382.00	0.410	110.120	382.00	0.43	-0.06	1.16	1680691.66	14224410.69	39°10'17.3793"N	80°51'28.4153"W	1.16	93.210	0.36	0.34	28.09	
507.00	2.180	90.870	506.96	1.51	-0.25	3.95	1680694.45	14224410.50	39°10'17.3774"N	80°51'28.3798"W	3.96	93.687	1.44	1.42	-15.40	APS EM <9-7/8"> (382')(507'-2567')
597.00	4.470	78.990	596.80	2.57	0.39	9.11	1680699.61	14224411.14	39°10'17.3837"N	80°51'28.3143"W	9.12	87.554	2.64	2.54	-13.20	
687.00	5.460	71.250	686.47	3.04	2.44	16.61	1680707.10	14224413.18	39°10'17.4038"N	80°51'28.2191"W	16.78	81.657	1.33	1.10	-8.60	
777.00	6.600	67.260	775.97	2.69	5.81	25.43	1680715.92	14224416.56	39°10'17.4370"N	80°51'28.1069"W	26.09	77.129	1.35	1.27	-4.43	
868.00	8.250	67.770	866.20	1.94	10.30	36.30	1680726.78	14224421.05	39°10'17.4813"N	80°51'27.9689"W	37.73	74.154	1.81	1.81	0.56	
958.00	9.250	79.950	955.16	2.65	14.01	49.40	1680739.88	14224424.75	39°10'17.5177"N	80°51'27.8024"W	51.35	74.168	2.33	1.11	13.53	
1052.00	8.920	83.560	1047.98	5.36	16.14	64.08	1680754.56	14224426.89	39°10'17.5386"N	80°51'27.6160"W	66.08	75.859	0.70	-0.35	3.84	
1147.00	9.770	80.350	1141.72	8.21	18.32	79.35	1680769.81	14224429.06	39°10'17.5599"N	80°51'27.4221"W	81.43	76.998	1.05	0.89	-3.38	
1241.00	9.570	74.680	1234.39	9.95	21.72	94.75	1680785.21	14224432.46	39°10'17.5932"N	80°51'27.2265"W	97.20	77.086	1.03	-0.21	-6.03	
1335.00	9.550	68.210	1327.08	10.02	26.68	109.52	1680799.98	14224437.42	39°10'17.6420"N	80°51'27.0388"W	112.73	76.308	1.14	-0.02	-6.88	
1430.00	11.470	67.530	1420.49	9.00	33.22	125.57	1680816.02	14224443.96	39°10'17.7064"N	80°51'26.8349"W	129.89	75.182	2.03	2.02	-0.72	
1525.00	14.180	71.330	1513.11	8.42	40.55	145.33	1680835.77	14224451.29	39°10'17.7786"N	80°51'26.5839"W	150.88	74.408	2.99	2.85	4.00	
1619.00	17.070	73.520	1603.63	9.00	48.16	169.47	1680859.90	14224458.89	39°10'17.8533"N	80°51'26.2772"W	176.18	74.137	3.14	3.07	2.33	
1714.00	15.800	66.040	1694.75	8.39	57.37	194.66	1680885.08	14224468.09	39°10'17.9440"N	80°51'25.9572"W	202.94	73.580	2.60	-1.34	-7.87	
1809.00	15.060	57.970	1786.34	4.40	69.16	216.95	1680907.36	14224479.89	39°10'18.0603"N	80°51'25.6740"W	227.71	72.317	2.39	-0.78	-8.49	
1904.00	16.500	56.410	1877.76	-1.87	83.17	238.65	1680929.05	14224493.89	39°10'18.1984"N	80°51'25.3981"W	252.73	70.785	1.58	1.52	-1.64	
1998.00	21.830	60.940	1966.52	-8.40	99.06	265.07	1680955.46	14224509.77	39°10'18.3550"N	80°51'25.0624"W	282.97	69.508	5.88	5.67	4.82	
2093.00	23.160	64.930	2054.30	-13.60	115.56	297.43	1680987.81	14224526.26	39°10'18.5176"N	80°51'24.6511"W	319.09	68.768	2.13	1.40	4.20	
2188.00	21.390	73.800	2142.23	-14.86	128.31	331.00	1681021.37	14224539.01	39°10'18.6431"N	80°51'24.2246"W	355.00	68.811	3.99	-1.86	9.34	
2283.00	21.960	78.680	2230.52	-11.77	136.63	365.06	1681055.41	14224547.33	39°10'18.7248"N	80°51'23.7920"W	389.79	69.480	1.99	0.60	5.14	
2377.00	22.850	81.310	2317.42	-6.28	142.84	400.34	1681090.68	14224553.53	39°10'18.7856"N	80°51'23.3440"W	425.05	70.363	1.43	0.95	2.80	
2472.00	17.920	81.310	2406.45	-0.48	147.84	433.04	1681123.36	14224558.53	39°10'18.8345"N	80°51'22.9287"W	457.58	71.150	5.19	-5.19	0.00	
2567.00	16.830	76.850	2497.11	3.44	153.18	460.88	1681151.19	14224563.86	39°10'18.8868"N	80°51'22.5750"W	485.67	71.615	1.81	-1.15	-4.69	
2677.00	16.120	64.600	2602.63	3.24	163.35	490.19	1681180.49	14224574.04	39°10'18.9869"N	80°51'22.2027"W	516.69	71.570	3.22	-0.65	-11.14	APS EM <6-3/4"> (2567')(2677'-5884')



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Elklick Unit 2H AWP Proj: 20905'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Elklick Unit 2H
Field	Ritchie	API	47-085-10420-0000
Facility	Cashew Pad	Wellbore	Elklick Unit 2H AWB
Slot	Slot D		

WELLPATH DATA (224 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
2761.00	17.300	59.900	2683.08	-0.55	174.62	511.53	1681201.83	14224585.30	39°10'19.0980"N	80°51'21.9315"W	540.51	71.152	2.13	1.40	-5.60	
2856.00	22.190	63.650	2772.48	-5.68	189.68	539.84	1681230.13	14224600.35	39°10'19.2463"N	80°51'21.5716"W	572.20	70.641	5.31	5.15	3.95	
2949.00	21.920	70.100	2858.68	-8.33	203.38	571.91	1681262.18	14224614.05	39°10'19.3813"N	80°51'21.1642"W	607.00	70.424	2.62	-0.29	6.94	
3043.00	21.800	67.880	2945.93	-9.68	215.93	604.58	1681294.84	14224626.59	39°10'19.5048"N	80°51'20.7492"W	641.98	70.346	0.89	-0.13	-2.36	
3142.00	19.920	71.910	3038.44	-10.55	228.09	637.64	1681327.89	14224638.74	39°10'19.6244"N	80°51'20.3291"W	677.21	70.318	2.39	-1.90	4.07	
3237.00	19.400	87.420	3127.96	-5.94	233.83	668.81	1681359.04	14224644.48	39°10'19.6807"N	80°51'19.9332"W	708.51	70.730	5.50	-0.55	16.33	
3332.00	19.230	82.620	3217.62	1.56	236.55	700.09	1681390.31	14224647.20	39°10'19.7071"N	80°51'19.5360"W	738.97	71.331	1.68	-0.18	-5.05	
3426.00	17.170	90.810	3306.93	9.28	238.34	729.32	1681419.53	14224648.99	39°10'19.7243"N	80°51'19.1648"W	767.28	71.903	3.49	-2.19	8.71	
3521.00	16.200	92.850	3397.93	18.87	237.48	756.58	1681446.78	14224648.14	39°10'19.7154"N	80°51'18.8187"W	792.98	72.574	1.19	-1.02	2.15	
3616.00	15.380	81.976	3489.36	26.11	238.58	782.30	1681472.48	14224649.24	39°10'19.7259"N	80°51'18.4922"W	817.87	73.039	3.23	-0.86	-11.45	
3710.00	15.310	72.550	3580.02	28.73	244.05	806.48	1681496.66	14224654.70	39°10'19.7795"N	80°51'18.1850"W	842.60	73.164	2.65	-0.07	-10.02	
3805.00	15.430	77.500	3671.63	30.41	250.54	830.79	1681520.95	14224661.19	39°10'19.8433"N	80°51'17.8762"W	867.74	73.218	1.39	0.13	5.21	
3899.00	15.490	86.380	3762.24	35.06	254.04	855.52	1681545.68	14224664.69	39°10'19.8775"N	80°51'17.5621"W	892.45	73.462	2.52	0.06	9.45	
3993.00	14.330	76.990	3853.09	39.52	257.45	879.39	1681569.54	14224668.10	39°10'19.9109"N	80°51'17.2590"W	916.30	73.682	2.85	-1.23	-9.99	
4088.00	13.410	81.030	3945.32	42.58	261.82	901.73	1681591.87	14224672.46	39°10'19.9537"N	80°51'16.9752"W	938.97	73.809	1.41	-0.97	4.25	
4182.00	14.040	86.700	4036.64	47.49	264.17	923.88	1681614.01	14224674.82	39°10'19.9766"N	80°51'16.6939"W	960.91	74.043	1.58	0.67	6.03	
4277.00	15.090	81.950	4128.59	52.87	266.57	947.63	1681637.75	14224677.21	39°10'19.9999"N	80°51'16.3923"W	984.41	74.289	1.67	1.11	-5.00	
4372.00	14.860	90.010	4220.37	59.10	268.30	972.06	1681662.17	14224678.94	39°10'20.0166"N	80°51'16.0821"W	1008.41	74.570	2.20	-0.24	8.48	
4466.00	12.330	86.060	4311.73	65.56	268.99	994.13	1681684.23	14224679.63	39°10'20.0231"N	80°51'15.8019"W	1029.88	74.860	2.87	-2.69	-4.20	
4561.00	13.580	87.190	4404.31	71.23	270.23	1015.39	1681705.48	14224680.87	39°10'20.0350"N	80°51'15.5319"W	1050.73	75.097	1.34	1.32	1.19	
4655.00	12.790	83.180	4495.84	76.42	272.01	1036.74	1681726.83	14224682.65	39°10'20.0522"N	80°51'15.2607"W	1071.83	75.299	1.29	-0.84	-4.27	
4750.00	15.610	80.780	4587.93	80.73	275.30	1059.80	1681749.88	14224685.94	39°10'20.0845"N	80°51'14.9678"W	1094.98	75.438	3.03	2.97	-2.53	
4844.00	15.670	74.130	4678.45	83.48	280.80	1084.50	1681774.57	14224691.44	39°10'20.1384"N	80°51'14.6541"W	1120.26	75.484	1.91	0.06	-7.07	
4938.00	14.030	64.730	4769.32	82.84	289.14	1107.02	1681797.08	14224699.77	39°10'20.2205"N	80°51'14.3680"W	1144.16	75.362	3.10	-1.74	-10.00	
5033.00	15.680	68.370	4861.15	80.91	298.79	1129.37	1681819.42	14224709.42	39°10'20.3155"N	80°51'14.0841"W	1168.23	75.181	1.99	1.74	3.83	
5127.00	15.250	69.180	4951.74	79.84	307.87	1152.73	1681842.77	14224718.49	39°10'20.4048"N	80°51'13.7872"W	1193.14	75.047	0.51	-0.46	0.86	
5222.00	15.460	76.310	5043.36	80.52	315.30	1176.72	1681866.74	14224725.93	39°10'20.4779"N	80°51'13.4826"W	1218.23	75.000	2.00	0.22	7.51	
5316.00	15.860	74.640	5133.87	82.40	321.67	1201.27	1681891.29	14224732.29	39°10'20.5405"N	80°51'13.1706"W	1243.60	75.009	0.64	0.43	-1.78	
5411.00	16.330	80.480	5225.15	85.33	327.32	1226.97	1681916.97	14224737.94	39°10'20.5959"N	80°51'12.8443"W	1269.87	75.063	1.77	0.49	6.15	
5506.00	17.080	77.890	5316.15	89.11	332.45	1253.78	1681943.78	14224743.07	39°10'20.6462"N	80°51'12.5037"W	1297.11	75.149	1.11	0.79	-2.73	



Actual Wellpath Report

Elklick Unit 2H AWP Proj: 20905'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Elklick Unit 2H
Field	Ritchie	API	47-085-10420-0000
Facility	Cashew Pad	Wellbore	Elklick Unit 2H AWB
Slot	Slot D		

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5600.00	14.990	70.360	5406.49	90.53	339.44	1278.73	1681968.72	14224750.05	39°10'20.7149"N	80°51'12.1867"W	1323.01	75.134	3.13	-2.22	-8.01	
5695.00	14.700	77.690	5498.33	91.71	346.14	1302.08	1681992.06	14224756.75	39°10'20.7807"N	80°51'11.8901"W	1347.30	75.113	2.00	-0.31	7.72	
5790.00	13.380	76.170	5590.49	94.02	351.34	1324.53	1682014.50	14224761.94	39°10'20.8317"N	80°51'11.6050"W	1370.33	75.144	1.44	-1.39	-1.60	
5884.00	13.550	83.560	5681.91	97.32	355.17	1346.04	1682036.00	14224765.78	39°10'20.8693"N	80°51'11.3318"W	1392.11	75.219	1.84	0.18	7.86	
5953.00	13.650	85.440	5748.98	101.05	356.72	1362.18	1682052.14	14224767.33	39°10'20.8844"N	80°51'11.1268"W	1408.12	75.325	0.66	0.14	2.72	BH Lucida <6-3/4"> (5884')(5953'-20875')
6048.00	18.090	104.260	5840.40	111.86	353.98	1387.68	1682077.63	14224764.59	39°10'20.8568"N	80°51'10.8031"W	1432.12	75.690	7.10	4.67	19.81	
6142.00	23.420	122.560	5928.36	134.45	340.31	1417.62	1682107.56	14224750.92	39°10'20.7212"N	80°51'10.4231"W	1457.90	76.501	8.87	5.67	19.47	
6237.00	29.350	134.840	6013.48	170.11	313.69	1450.10	1682140.02	14224724.31	39°10'20.4576"N	80°51'10.0114"W	1483.64	77.794	8.45	6.24	12.93	
6272.00†	31.653	137.761	6043.64	186.22	300.84	1462.36	1682152.27	14224711.47	39°10'20.3304"N	80°51'9.8560"W	1492.98	78.375	7.82	6.58	8.35	Sycamore: 6272' MD
6331.00	35.660	141.900	6092.75	216.67	275.83	1483.38	1682173.29	14224686.47	39°10'20.0829"N	80°51'9.5895"W	1508.81	79.466	7.82	6.79	7.02	
6426.00	41.450	145.190	6167.01	273.08	228.17	1518.45	1682208.35	14224638.83	39°10'19.6113"N	80°51'9.1452"W	1535.50	81.454	6.46	6.09	3.46	
6504.00†	48.112	148.685	6222.36	326.31	182.12	1548.32	1682238.20	14224592.79	39°10'19.1556"N	80°51'8.7669"W	1558.99	83.292	9.10	8.54	4.48	Middlesex: 6504' MD
6520.00	49.490	149.310	6232.90	338.07	171.80	1554.52	1682244.40	14224582.48	39°10'19.0535"N	80°51'8.6884"W	1563.98	83.694	9.10	8.61	3.91	
6614.00	58.570	154.240	6288.07	413.03	104.78	1590.28	1682280.14	14224515.49	39°10'18.3905"N	80°51'8.2358"W	1593.73	86.230	10.55	9.66	5.24	
6707.00†	66.342	157.946	6331.06	495.09	29.44	1623.57	1682313.42	14224440.17	39°10'17.6453"N	80°51'7.8146"W	1623.84	88.961	9.07	8.36	3.98	Burkett: 6707' MD
6709.00	66.510	158.020	6331.86	496.92	27.74	1624.26	1682314.11	14224438.47	39°10'17.6285"N	80°51'7.8059"W	1624.50	89.022	9.07	8.41	3.72	
6804.00	73.780	162.210	6364.11	586.17	-56.24	1654.55	1682344.39	14224354.54	39°10'16.7980"N	80°51'7.4230"W	1655.51	91.947	8.70	7.65	4.41	
6849.00†	76.978	163.513	6375.47	629.69	-97.84	1667.38	1682357.21	14224312.95	39°10'16.3866"N	80°51'7.2610"W	1670.25	93.358	7.64	7.11	2.90	Tully: 6849' MD
6851.00	77.120	163.570	6375.92	631.84	-99.71	1667.93	1682357.76	14224311.08	39°10'16.3681"N	80°51'7.2540"W	1670.91	93.421	7.64	7.11	2.85	
6898.00	77.420	161.370	6386.28	677.47	-143.42	1681.74	1682371.57	14224267.39	39°10'15.9359"N	80°51'7.0796"W	1687.85	94.874	4.61	0.64	-4.68	
6954.00†	78.398	161.181	6398.01	732.22	-195.28	1699.32	1682389.14	14224215.55	39°10'15.4230"N	80°51'6.8575"W	1710.50	96.555	1.78	1.75	-0.34	Marcellus POE: 6954' MD
6993.00	79.080	161.050	6405.62	770.47	-231.47	1711.70	1682401.51	14224179.37	39°10'15.0651"N	80°51'6.7010"W	1727.28	97.701	1.78	1.75	-0.34	
7088.00	87.270	160.980	6416.90	864.72	-320.59	1742.36	1682432.16	14224090.29	39°10'14.1838"N	80°51'6.3136"W	1771.61	100.426	8.62	8.62	-0.07	
7182.00	90.080	160.690	6419.08	958.68	-409.35	1773.21	1682463.00	14224001.57	39°10'13.3060"N	80°51'5.9237"W	1819.84	102.999	3.01	2.99	-0.31	
7277.00	89.610	161.260	6419.33	1053.68	-499.16	1804.18	1682493.95	14223911.79	39°10'12.4178"N	80°51'5.5324"W	1871.95	105.465	0.78	-0.49	0.60	
7371.00	89.610	161.480	6419.97	1147.68	-588.23	1834.20	1682523.97	14223822.76	39°10'11.5369"N	80°51'5.1530"W	1926.22	107.781	0.23	0.00	0.23	
7465.00	89.610	161.290	6420.61	1241.68	-677.31	1864.21	1682553.96	14223733.71	39°10'10.6560"N	80°51'4.7739"W	1983.44	109.967	0.20	0.00	-0.20	
7560.00	89.550	161.220	6421.31	1336.67	-767.27	1894.74	1682584.48	14223643.79	39°10'9.7664"N	80°51'4.3882"W	2044.19	112.045	0.10	-0.06	-0.07	
7654.00	89.460	161.200	6422.12	1430.67	-856.26	1925.01	1682614.74	14223554.84	39°10'8.8863"N	80°51'4.0056"W	2106.86	113.980	0.10	-0.10	-0.02	
7749.00	89.460	161.240	6423.02	1525.66	-946.19	1955.59	1682645.31	14223464.93	39°10'7.9969"N	80°51'3.6192"W	2172.47	115.820	0.04	0.00	0.04	



Actual Wellpath Report

Elklick Unit 2H AWP Proj: 20905'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Elklick Unit 2H
Field	Ritchie	API	47-085-10420-0000
Facility	Cashew Pad	Wellbore	Elklick Unit 2H AWB
Slot	Slot D		

WELLPATH DATA (224 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
7843.00	89.520	161.210	6423.85	1619.66	-1035.19	1985.85	1682675.55	14223375.98	39°10'7.1168"N	80°51'3.2369"W	2239.47	117.532	0.07	0.06	-0.03	
7938.00	89.490	161.490	6424.67	1714.66	-1125.20	2016.23	1682705.92	14223286.00	39°10'6.2267"N	80°51'2.8531"W	2308.95	119.165	0.30	-0.03	0.29	
8032.00	89.370	161.280	6425.61	1808.65	-1214.27	2046.23	1682735.91	14223196.96	39°10'5.3457"N	80°51'2.4740"W	2379.40	120.686	0.26	-0.13	-0.22	
8127.00	89.610	161.360	6426.46	1903.65	-1304.27	2076.66	1682766.33	14223107.01	39°10'4.4558"N	80°51'2.0896"W	2452.27	122.131	0.27	0.29	0.08	
8221.00	89.370	161.050	6427.29	1997.64	-1393.25	2106.94	1682796.60	14223018.06	39°10'3.5758"N	80°51'1.7069"W	2525.93	123.475	0.42	-0.26	-0.33	
8315.00	89.400	161.420	6428.30	2091.64	-1482.25	2137.18	1682826.82	14222929.09	39°10'2.6956"N	80°51'1.3249"W	2600.88	124.743	0.39	0.03	0.39	
8410.00	89.370	161.370	6429.32	2186.63	-1572.28	2167.48	1682857.12	14222839.10	39°10'1.8053"N	80°51'0.9420"W	2677.69	125.957	0.06	-0.03	-0.05	
8504.00	89.610	161.050	6430.16	2280.63	-1661.27	2197.76	1682887.38	14222750.15	39°10'0.9252"N	80°51'0.5595"W	2754.99	127.085	0.43	0.26	-0.34	
8599.00	89.580	161.210	6430.83	2375.63	-1751.16	2228.48	1682918.09	14222660.29	39°10'0.0363"N	80°51'0.1713"W	2834.20	128.160	0.17	-0.03	0.17	
8693.00	89.550	161.220	6431.54	2469.62	-1840.15	2258.75	1682948.35	14222571.34	39°09'59.1562"N	80°50'59.7888"W	2913.44	129.169	0.03	-0.03	0.01	
8787.00	89.520	161.280	6432.31	2563.62	-1929.16	2288.97	1682978.55	14222482.37	39°09'58.2759"N	80°50'59.4071"W	2993.50	130.124	0.07	-0.03	0.06	
8882.00	89.770	161.560	6432.89	2658.62	-2019.20	2319.24	1683008.81	14222392.36	39°09'57.3854"N	80°50'59.0247"W	3075.07	131.044	0.40	0.26	0.29	
8976.00	89.830	161.190	6433.22	2752.62	-2108.28	2349.26	1683038.82	14222303.31	39°09'56.5045"N	80°50'58.6454"W	3156.56	131.906	0.40	0.06	-0.39	
9070.00	89.340	161.010	6433.90	2846.61	-2197.21	2379.70	1683069.25	14222214.42	39°09'55.6250"N	80°50'58.2607"W	3238.94	132.717	0.56	-0.52	-0.19	
9165.00	91.860	162.040	6432.91	2941.60	-2287.30	2409.81	1683099.34	14222124.37	39°09'54.7341"N	80°50'57.8805"W	3322.48	133.508	2.87	2.65	1.08	
9353.00	92.600	161.280	6425.59	3129.45	-2465.61	2468.91	1683158.43	14221946.12	39°09'52.9707"N	80°50'57.1338"W	3489.24	134.962	0.56	0.39	-0.40	
9448.00	89.490	161.360	6423.86	3224.42	-2555.58	2499.33	1683188.83	14221856.19	39°09'52.0809"N	80°50'56.7495"W	3574.59	135.638	3.27	-3.27	0.08	
9542.00	89.580	161.330	6424.62	3318.42	-2644.64	2529.40	1683218.89	14221767.17	39°09'51.2002"N	80°50'56.3697"W	3659.51	136.276	0.10	0.10	-0.03	
9636.00	89.580	161.270	6425.31	3412.41	-2733.68	2559.54	1683249.01	14221678.17	39°09'50.3197"N	80°50'55.9889"W	3744.89	136.884	0.06	0.00	-0.06	
9731.00	89.340	160.950	6426.21	3507.41	-2823.55	2590.29	1683279.75	14221588.32	39°09'49.4308"N	80°50'55.6004"W	3831.72	137.467	0.42	-0.25	-0.34	
9825.00	89.370	160.680	6427.27	3601.40	-2912.33	2621.18	1683310.63	14221499.59	39°09'48.5529"N	80°50'55.2101"W	3918.19	138.012	0.29	0.03	-0.29	
9920.00	89.400	160.540	6428.29	3696.39	-3001.94	2652.72	1683342.16	14221410.02	39°09'47.6667"N	80°50'54.8116"W	4006.06	138.534	0.15	0.03	-0.15	
10014.00	89.240	160.750	6429.40	3790.38	-3090.62	2683.87	1683373.29	14221321.37	39°09'46.7897"N	80°50'54.4180"W	4093.29	139.029	0.28	-0.17	0.22	
10109.00	90.200	161.770	6429.87	3885.38	-3180.58	2714.39	1683403.80	14221231.45	39°09'45.9000"N	80°50'54.0324"W	4181.38	139.522	1.47	1.01	1.07	
10203.00	89.580	161.140	6430.05	3979.37	-3269.69	2744.28	1683433.69	14221142.36	39°09'45.0187"N	80°50'53.6548"W	4268.72	139.993	0.94	-0.66	-0.67	
10297.00	90.110	161.210	6430.30	4073.37	-3358.67	2774.62	1683464.01	14221053.43	39°09'44.1388"N	80°50'53.2716"W	4356.50	140.440	0.57	0.56	0.07	
10392.00	90.200	161.580	6430.04	4168.37	-3448.70	2804.92	1683494.30	14220963.43	39°09'43.2484"N	80°50'52.8887"W	4445.35	140.878	0.40	0.09	0.39	
10486.00	90.230	161.360	6429.69	4262.37	-3537.83	2834.80	1683524.16	14220874.34	39°09'42.3670"N	80°50'52.5114"W	4533.46	141.295	0.24	0.03	-0.23	
10581.00	90.020	161.410	6429.48	4357.37	-3627.86	2865.12	1683554.48	14220784.35	39°09'41.4766"N	80°50'52.1283"W	4622.80	141.700	0.23	-0.22	0.05	
10675.00	90.170	161.500	6429.33	4451.37	-3716.98	2895.02	1683584.36	14220695.26	39°09'40.5953"N	80°50'51.7506"W	4711.37	142.086	0.19	0.16	0.10	



Actual Wellpath Report

Elklick Unit 2H AWP Proj: 20905'
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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Elklick Unit 2H
Field	Ritchie		API	47-085-10420-0000
Facility	Cashew Pad		Wellbore	Elklick Unit 2H AWB
Slot	Slot D			

WELLPATH DATA (224 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
10770.00	90.080	161.210	6429.12	4546.37	-3806.99	2925.39	1683614.72	14220605.28	39°09'39.7051"N	80°50'51.3670"W	4801.15	142.460	0.32	-0.09	-0.31	
10864.00	90.140	161.340	6428.94	4640.37	-3896.01	2955.57	1683644.88	14220516.30	39°09'38.8247"N	80°50'50.9858"W	4890.22	142.816	0.15	0.06	0.14	
10958.00	90.170	161.460	6428.69	4734.37	-3985.10	2985.55	1683674.85	14220427.24	39°09'37.9436"N	80°50'50.6071"W	4979.41	143.160	0.13	0.03	0.13	
11053.00	90.140	161.190	6428.43	4829.37	-4075.10	3015.97	1683705.26	14220337.28	39°09'37.0536"N	80°50'50.2228"W	5069.76	143.495	0.29	-0.03	-0.28	
11148.00	90.170	161.100	6428.17	4924.37	-4165.00	3046.67	1683735.95	14220247.41	39°09'36.1645"N	80°50'49.8350"W	5160.37	143.815	0.10	0.03	-0.09	
11242.00	90.260	160.940	6427.82	5018.36	-4253.89	3077.24	1683766.51	14220158.56	39°09'35.2854"N	80°50'49.4488"W	5250.24	144.118	0.20	0.10	-0.17	
11337.00	90.170	160.960	6427.46	5113.36	-4343.69	3108.25	1683797.51	14220068.80	39°09'34.3973"N	80°50'49.0570"W	5341.24	144.413	0.10	-0.09	0.02	
11431.00	90.170	161.060	6427.18	5207.36	-4432.57	3138.84	1683828.08	14219979.95	39°09'33.5183"N	80°50'48.6706"W	5431.39	144.697	0.11	0.00	0.11	
11526.00	90.230	160.980	6426.85	5302.36	-4522.41	3169.73	1683858.97	14219890.15	39°09'32.6299"N	80°50'48.2803"W	5522.62	144.974	0.11	0.06	-0.08	
11620.00	90.230	160.860	6426.47	5396.36	-4611.24	3200.46	1683889.68	14219801.35	39°09'31.7513"N	80°50'47.8921"W	5613.07	145.237	0.13	0.00	-0.13	
11715.00	90.050	160.870	6426.24	5491.36	-4700.99	3231.60	1683920.81	14219711.64	39°09'30.8637"N	80°50'47.4987"W	5704.61	145.494	0.19	-0.19	0.01	
11809.00	90.230	160.680	6426.01	5585.35	-4789.75	3262.55	1683951.75	14219622.92	39°09'29.9859"N	80°50'47.1077"W	5795.34	145.739	0.28	0.19	-0.20	
11904.00	90.050	161.030	6425.78	5680.35	-4879.50	3293.71	1683982.89	14219533.21	39°09'29.0984"N	80°50'46.7141"W	5887.10	145.980	0.41	-0.19	0.37	
11998.00	90.350	161.170	6425.45	5774.35	-4968.43	3324.16	1684013.33	14219444.31	39°09'28.2189"N	80°50'46.3295"W	5977.90	146.215	0.35	0.32	0.15	
12093.00	90.200	161.030	6425.00	5869.35	-5058.30	3354.93	1684044.09	14219354.47	39°09'27.3300"N	80°50'45.9408"W	6069.76	146.446	0.22	-0.16	-0.15	
12187.00	90.260	161.040	6424.62	5963.35	-5147.20	3385.48	1684074.62	14219265.61	39°09'26.4509"N	80°50'45.5549"W	6160.77	146.666	0.06	0.06	0.01	
12282.00	89.770	161.070	6424.59	6058.35	-5237.05	3416.32	1684105.45	14219175.79	39°09'25.5622"N	80°50'45.1653"W	6252.84	146.882	0.52	-0.52	0.03	
12376.00	90.170	160.880	6424.64	6152.35	-5325.92	3446.96	1684136.08	14219086.96	39°09'24.6834"N	80°50'44.7783"W	6344.05	147.089	0.47	0.43	-0.20	
12471.00	88.600	160.340	6425.66	6247.33	-5415.52	3478.50	1684167.61	14218997.39	39°09'23.7972"N	80°50'44.3798"W	6436.45	147.287	1.75	-1.65	-0.57	
12565.00	90.200	161.030	6426.65	6341.32	-5504.22	3509.59	1684198.68	14218908.73	39°09'22.9200"N	80°50'43.9871"W	6527.92	147.478	1.85	1.70	0.73	
12660.00	90.230	160.990	6426.29	6436.32	-5594.05	3540.50	1684229.58	14218818.94	39°09'22.0316"N	80°50'43.5966"W	6620.32	147.670	0.05	0.03	-0.04	
12755.00	90.200	160.960	6425.93	6531.32	-5683.86	3571.47	1684260.54	14218729.16	39°09'21.1434"N	80°50'43.2054"W	6712.80	147.857	0.04	-0.03	-0.03	
12849.00	88.320	160.670	6427.15	6625.30	-5772.63	3602.36	1684291.41	14218640.43	39°09'20.2655"N	80°50'42.8153"W	6804.43	148.034	2.02	-2.00	-0.31	
12943.00	90.290	160.700	6428.29	6719.29	-5861.33	3633.44	1684322.49	14218551.77	39°09'19.3883"N	80°50'42.4226"W	6896.16	148.205	2.10	2.10	0.03	
13038.00	90.230	161.310	6427.86	6814.28	-5951.15	3664.36	1684353.40	14218461.98	39°09'18.4999"N	80°50'42.0320"W	6988.83	148.378	0.65	-0.06	0.64	
13133.00	90.230	161.110	6427.48	6909.28	-6041.09	3694.96	1684383.98	14218372.08	39°09'17.6105"N	80°50'41.6455"W	7081.49	148.548	0.21	0.00	-0.21	
13227.00	90.390	161.050	6426.97	7003.28	-6130.01	3725.44	1684414.45	14218283.19	39°09'16.7311"N	80°50'41.2605"W	7173.28	148.711	0.18	0.17	-0.06	
13322.00	90.140	160.700	6426.53	7098.28	-6219.77	3756.57	1684445.56	14218193.47	39°09'15.8434"N	80°50'40.8674"W	7266.17	148.869	0.45	-0.26	-0.37	
13416.00	90.320	160.860	6426.15	7192.28	-6308.53	3787.51	1684476.50	14218104.75	39°09'14.9656"N	80°50'40.4765"W	7358.18	149.020	0.26	0.19	0.17	
13511.00	90.290	160.910	6425.64	7287.27	-6398.29	3818.62	1684507.59	14218015.02	39°09'14.0779"N	80°50'40.0836"W	7451.17	149.170	0.06	-0.03	0.05	



Actual Wellpath Report

Eiklick Unit 2H AWP Proj: 20905'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Eiklick Unit 2H
Field	Ritchie		API	47-085-10420-0000
Facility	Cashew Pad		Wellbore	Eiklick Unit 2H AWB
Slot	Slot D			

WELLPATH DATA (224 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
13605.00	89.860	161.210	6425.52	7381.27	-6487.20	3849.13	1684538.09	14217926.15	39°09'13.1986"N	80°50'39.6982"W	7543.18	149.318	0.56	-0.46	0.32	
13700.00	90.350	160.960	6425.35	7476.27	-6577.07	3879.93	1684568.87	14217836.31	39°09'12.3098"N	80°50'39.3093"W	7636.21	149.463	0.58	0.52	-0.26	
13794.00	90.320	161.240	6424.80	7570.27	-6666.00	3910.37	1684599.31	14217747.42	39°09'11.4303"N	80°50'38.9247"W	7728.29	149.603	0.30	-0.03	0.30	
13888.00	90.260	161.000	6424.32	7664.27	-6754.94	3940.79	1684629.71	14217658.51	39°09'10.5507"N	80°50'38.5405"W	7820.42	149.741	0.26	-0.06	-0.26	
13983.00	90.290	161.030	6423.87	7759.27	-6844.77	3971.69	1684660.61	14217568.72	39°09'9.6623"N	80°50'38.1502"W	7913.61	149.875	0.04	0.03	0.03	
14077.00	90.170	160.950	6423.49	7853.26	-6933.64	4002.31	1684691.21	14217479.88	39°09'8.7834"N	80°50'37.7635"W	8005.87	150.005	0.15	-0.13	-0.09	
14172.00	90.230	161.270	6423.16	7948.26	-7023.53	4033.07	1684721.96	14217390.03	39°09'7.8944"N	80°50'37.3750"W	8099.11	150.135	0.34	0.06	0.34	
14266.00	90.420	161.030	6422.62	8042.26	-7112.48	4063.44	1684752.31	14217301.11	39°09'7.0147"N	80°50'36.9915"W	8191.40	150.260	0.33	0.20	-0.26	
14361.00	90.230	160.930	6422.09	8137.26	-7202.29	4094.40	1684783.26	14217211.34	39°09'6.1264"N	80°50'36.6004"W	8284.75	150.382	0.23	-0.20	-0.11	
14455.00	90.170	160.810	6421.76	8231.26	-7291.10	4125.20	1684814.05	14217122.56	39°09'5.2481"N	80°50'36.2113"W	8377.20	150.499	0.14	-0.06	-0.13	
14550.00	90.320	160.880	6421.35	8326.25	-7380.84	4156.38	1684845.21	14217032.86	39°09'4.3606"N	80°50'35.8176"W	8470.67	150.615	0.17	0.16	0.07	
14644.00	90.290	161.080	6420.85	8420.25	-7469.71	4187.01	1684875.83	14216944.03	39°09'3.4818"N	80°50'35.4307"W	8563.15	150.728	0.22	-0.03	0.21	
14738.00	90.450	160.610	6420.24	8514.25	-7558.50	4217.85	1684906.67	14216855.27	39°09'2.6036"N	80°50'35.0412"W	8655.71	150.837	0.53	0.17	-0.50	
14833.00	90.290	161.220	6419.63	8609.24	-7648.28	4248.91	1684937.71	14216765.53	39°09'1.7157"N	80°50'34.6489"W	8749.25	150.946	0.66	-0.17	0.64	
14927.00	90.230	161.200	6419.20	8703.24	-7737.27	4279.19	1684967.98	14216676.58	39°09'0.8356"N	80°50'34.2665"W	8841.76	151.055	0.07	-0.06	-0.02	
15022.00	90.320	161.030	6418.75	8798.24	-7827.15	4309.94	1684998.72	14216586.73	39°08'59.9467"N	80°50'33.8782"W	8935.32	151.161	0.20	0.09	-0.18	
15117.00	90.350	161.260	6418.19	8893.24	-7917.05	4340.64	1685029.40	14216496.86	39°08'59.0576"N	80°50'33.4905"W	9028.89	151.266	0.24	0.03	0.24	
15211.00	90.320	161.310	6417.64	8987.24	-8006.08	4370.80	1685059.55	14216407.87	39°08'58.1771"N	80°50'33.1096"W	9121.47	151.368	0.06	-0.03	0.05	
15306.00	90.290	161.080	6417.14	9082.24	-8096.01	4401.42	1685090.16	14216317.98	39°08'57.2878"N	80°50'32.7229"W	9215.09	151.469	0.24	-0.03	-0.24	
15401.00	90.290	161.180	6416.66	9177.24	-8185.90	4432.15	1685120.88	14216228.12	39°08'56.3987"N	80°50'32.3349"W	9308.76	151.567	0.11	0.00	0.11	
15495.00	90.230	161.240	6416.23	9271.24	-8274.89	4462.43	1685151.14	14216139.17	39°08'55.5187"N	80°50'31.9525"W	9401.44	151.663	0.09	-0.06	0.06	
15584.00	90.850	160.760	6414.45	9460.22	-8453.59	4523.95	1685212.64	14215960.55	39°08'53.7514"N	80°50'31.1755"W	9587.98	151.846	0.41	0.33	-0.25	
15779.00	90.230	161.170	6413.55	9555.22	-8543.39	4554.94	1685243.61	14215870.78	39°08'52.8633"N	80°50'30.7842"W	9681.78	151.936	0.78	-0.65	0.43	
15873.00	90.200	161.360	6413.20	9649.22	-8632.41	4585.13	1685273.79	14215781.80	39°08'51.9829"N	80°50'30.4030"W	9774.55	152.025	0.20	-0.03	0.20	
15967.00	90.260	161.490	6412.82	9743.22	-8721.51	4615.07	1685303.73	14215692.73	39°08'51.1017"N	80°50'30.0249"W	9867.30	152.114	0.15	0.06	0.14	
16062.00	90.390	161.360	6412.28	9838.21	-8811.56	4645.33	1685333.97	14215602.72	39°08'50.2111"N	80°50'29.6428"W	9961.06	152.202	0.19	0.14	-0.14	
16251.00	90.230	161.100	6411.26	10027.21	-8990.50	4706.15	1685394.76	14215423.84	39°08'48.4414"N	80°50'28.8748"W	10147.76	152.370	0.16	-0.08	-0.14	
16345.00	90.260	161.440	6410.86	10121.21	-9079.52	4736.33	1685424.94	14215334.86	39°08'47.5610"N	80°50'28.4937"W	10240.63	152.451	0.36	0.03	0.36	
16439.00	90.170	160.910	6410.51	10215.21	-9168.50	4766.66	1685455.25	14215245.92	39°08'46.6811"N	80°50'28.1107"W	10333.56	152.530	0.57	-0.10	-0.56	
16534.00	90.230	161.360	6410.18	10310.21	-9258.39	4797.38	1685485.96	14215156.06	39°08'45.7920"N	80°50'27.7228"W	10427.50	152.608	0.48	0.06	0.47	



Actual Wellpath Report

Eiklick Unit 2H AWP Proj: 20905'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Eiklick Unit 2H
Field	Ritchie	API	47-085-10420-0000
Facility	Cashew Pad	Wellbore	Eiklick Unit 2H AWB
Slot	Slot D		

WELLPATH DATA (224 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
16628.00	90.200	161.160	6409.82	10404.21	-9347.41	4827.58	1685516.15	14215067.08	39°08'44.9117"N	80°50'27.3415"W	10520.43	152.685	0.22	-0.03	-0.21	
16723.00	90.320	161.210	6409.39	10499.21	-9437.33	4858.22	1685546.77	14214977.20	39°08'44.0223"N	80°50'26.9546"W	10614.40	152.761	0.14	0.13	0.05	
16912.00	90.230	161.050	6408.48	10688.20	-9616.17	4919.34	1685607.87	14214798.43	39°08'42.2536"N	80°50'28.1827"W	10801.42	152.907	0.10	-0.05	-0.08	
17007.00	90.450	161.390	6407.92	10783.20	-9706.11	4949.93	1685638.45	14214708.52	39°08'41.3641"N	80°50'25.7966"W	10895.43	152.979	0.43	0.23	0.36	
17101.00	90.380	160.980	6407.24	10877.20	-9795.09	4980.24	1685668.75	14214619.58	39°08'40.4842"N	80°50'25.4138"W	10988.47	153.049	0.44	-0.07	-0.44	
17290.00	90.450	161.440	6405.87	11066.19	-9974.01	5041.12	1685729.60	14214440.73	39°08'38.7147"N	80°50'24.6451"W	11175.58	153.187	0.25	0.04	0.24	
17379.00	90.570	161.430	6405.08	11155.19	-10058.37	5069.45	1685757.92	14214356.40	39°08'37.8803"N	80°50'24.2874"W	11263.67	153.252	0.14	0.13	-0.01	
17474.00	90.380	161.600	6404.29	11250.18	-10148.47	5099.57	1685788.03	14214266.34	39°08'36.9893"N	80°50'23.9071"W	11357.69	153.321	0.27	-0.20	0.18	
17568.00	90.380	162.380	6403.67	11344.17	-10237.86	5128.63	1685817.08	14214176.99	39°08'36.1052"N	80°50'23.5403"W	11450.62	153.392	0.83	0.00	0.83	
17663.00	90.350	161.950	6403.06	11439.16	-10328.29	5157.73	1685846.17	14214086.59	39°08'35.2109"N	80°50'23.1730"W	11544.51	153.463	0.45	-0.03	-0.45	
17757.00	90.570	161.930	6402.31	11533.15	-10417.66	5186.87	1685875.29	14213997.26	39°08'34.3271"N	80°50'22.8052"W	11637.49	153.532	0.24	0.23	-0.02	
17852.00	90.540	161.730	6401.39	11628.14	-10507.92	5216.49	1685904.91	14213907.04	39°08'33.4345"N	80°50'22.4312"W	11731.50	153.599	0.21	-0.03	-0.21	
17946.00	90.750	161.250	6400.33	11722.13	-10597.05	5246.33	1685934.73	14213817.94	39°08'32.5530"N	80°50'22.0545"W	11824.61	153.661	0.56	0.22	-0.51	
18041.00	90.510	161.780	6399.28	11817.12	-10687.14	5276.45	1685964.84	14213727.89	39°08'31.6620"N	80°50'21.6742"W	11918.72	153.724	0.61	-0.25	0.56	
18135.00	90.140	161.830	6398.75	11911.12	-10776.44	5305.80	1685994.18	14213638.62	39°08'30.7789"N	80°50'21.3037"W	12011.79	153.787	0.40	-0.39	0.05	
18230.00	90.200	160.840	6398.47	12006.11	-10866.44	5336.20	1686024.57	14213548.66	39°08'29.8887"N	80°50'20.9199"W	12105.98	153.846	1.04	0.06	-1.04	
18324.00	90.380	161.640	6397.99	12100.11	-10955.45	5366.44	1686054.79	14213459.69	39°08'29.0085"N	80°50'20.5382"W	12199.20	153.902	0.87	0.19	0.85	
18419.00	90.480	161.320	6397.28	12195.11	-11045.52	5396.61	1686084.95	14213369.65	39°08'28.1176"N	80°50'20.1573"W	12293.37	153.961	0.35	0.11	-0.34	
18608.00	90.320	160.970	6395.96	12384.10	-11224.38	5457.69	1686146.00	14213190.86	39°08'26.3488"N	80°50'19.3861"W	12480.91	154.069	0.20	-0.08	-0.19	
18702.00	90.420	161.920	6395.35	12478.10	-11313.49	5487.60	1686175.90	14213101.79	39°08'25.4675"N	80°50'19.0085"W	12574.13	154.124	1.02	0.11	1.01	
18797.00	90.380	161.960	6394.69	12573.09	-11403.80	5517.05	1686205.34	14213011.51	39°08'24.5743"N	80°50'18.6368"W	12668.25	154.183	0.06	-0.04	0.04	
18891.00	90.170	160.840	6394.24	12667.09	-11492.89	5547.03	1686235.31	14212922.46	39°08'23.6932"N	80°50'18.2583"W	12761.51	154.236	1.21	-0.22	-1.19	
18985.00	90.200	161.440	6393.94	12761.08	-11581.85	5577.42	1686265.69	14212833.54	39°08'22.8135"N	80°50'17.8746"W	12854.83	154.286	0.64	0.03	0.64	
19080.00	90.230	161.070	6393.58	12856.08	-11671.81	5607.95	1686296.20	14212743.62	39°08'21.9238"N	80°50'17.4892"W	12949.13	154.337	0.39	0.03	-0.39	
19174.00	90.230	161.180	6393.20	12950.08	-11760.75	5638.35	1686326.60	14212654.71	39°08'21.0441"N	80°50'17.1053"W	13042.48	154.386	0.12	0.00	0.12	
19269.00	90.410	161.250	6392.67	13045.08	-11850.69	5668.95	1686357.18	14212564.80	39°08'20.1546"N	80°50'16.7191"W	13136.81	154.435	0.20	0.19	0.07	
19363.00	90.290	161.050	6392.10	13139.08	-11939.64	5699.32	1686387.54	14212475.88	39°08'19.2749"N	80°50'16.3357"W	13230.17	154.483	0.25	-0.13	-0.21	
19457.00	90.230	161.040	6391.67	13233.08	-12028.55	5729.85	1686418.06	14212387.02	39°08'18.3956"N	80°50'15.9502"W	13323.55	154.529	0.06	-0.06	-0.01	
19552.00	90.290	161.180	6391.24	13328.08	-12118.43	5760.61	1686448.80	14212297.17	39°08'17.5067"N	80°50'15.5619"W	13417.93	154.575	0.16	0.06	0.15	
19646.00	90.420	161.370	6390.66	13422.08	-12207.45	5790.78	1686478.96	14212208.18	39°08'16.6262"N	80°50'15.1809"W	13511.29	154.622	0.24	0.14	0.20	



Actual Wellpath Report

Eiklick Unit 2H AWP Proj: 20905'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Eiklick Unit 2H
Field	Ritchie	API	47-085-10420-0000
Facility	Cashew Pad	Wellbore	Eiklick Unit 2H AWB
Slot	Slot D		

WELLPATH DATA (224 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
19740.00	90.260	161.010	6390.10	13516.07	-12296.43	5821.09	1686509.26	14212119.24	39°08'15.7463"N	80°50'14.7983"W	13604.68	154.667	0.42	-0.17	-0.38	
19834.00	90.260	161.270	6389.67	13610.07	-12385.38	5851.47	1686539.63	14212030.32	39°08'14.8665"N	80°50'14.4147"W	13698.08	154.712	0.28	0.00	0.28	
19929.00	90.260	161.030	6389.24	13705.07	-12475.29	5882.17	1686570.31	14211940.46	39°08'13.9774"N	80°50'14.0272"W	13792.49	154.756	0.25	0.00	-0.25	
20023.00	90.410	161.190	6388.69	13799.07	-12564.22	5912.60	1686600.73	14211851.56	39°08'13.0978"N	80°50'13.6430"W	13885.91	154.799	0.23	0.16	0.17	
20118.00	90.320	161.620	6388.09	13894.07	-12654.26	5942.89	1686631.02	14211761.55	39°08'12.2073"N	80°50'13.2607"W	13980.28	154.844	0.46	-0.09	0.45	
20213.00	90.140	160.490	6387.71	13989.06	-12744.11	5973.74	1686661.84	14211671.74	39°08'11.3187"N	80°50'12.8713"W	14074.73	154.885	1.20	-0.19	-1.19	
20307.00	90.320	161.020	6387.33	14083.06	-12832.86	6004.72	1686692.82	14211583.03	39°08'10.4410"N	80°50'12.4801"W	14168.24	154.924	0.60	0.19	0.56	
20402.00	90.290	161.400	6386.82	14178.06	-12922.79	6035.32	1686723.40	14211493.13	39°08'9.5515"N	80°50'12.0938"W	14262.67	154.966	0.40	-0.03	0.40	
20496.00	90.350	161.570	6386.30	14272.06	-13011.93	6065.17	1686753.24	14211404.03	39°08'8.6700"N	80°50'11.7171"W	14356.06	155.009	0.19	0.06	0.18	
20591.00	90.290	161.310	6385.77	14367.05	-13101.98	6095.40	1686783.47	14211314.01	39°08'7.7793"N	80°50'11.3354"W	14450.47	155.051	0.28	-0.06	-0.27	
20686.00	90.720	160.940	6384.93	14462.05	-13191.87	6126.14	1686814.18	14211224.16	39°08'6.8903"N	80°50'10.9474"W	14544.93	155.090	0.60	0.45	-0.39	
20780.00	90.780	160.810	6383.70	14556.04	-13280.68	6156.93	1686844.97	14211135.39	39°08'6.0120"N	80°50'10.5587"W	14638.45	155.128	0.15	0.06	-0.14	
20875.00	90.780	161.330	6382.41	14651.03	-13370.53	6187.75	1686875.77	14211045.57	39°08'5.1234"N	80°50'10.1696"W	14732.93	155.166	0.55	0.00	0.55	
20905.00‡	90.780	161.330	6382.00	14681.03	-13398.95	6197.35	1686885.37	14211017.16	39°08'4.8423"N	80°50'10.0484"W	14762.76	155.178	0.00	0.00	0.00	Projected MD at TD: 20905'

HOLE & CASING SECTIONS - Ref Wellbore: Eiklick Unit 2H AWB Ref Wellpath: Eiklick Unit 2H AWP Proj: 20905'

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]
16in Conductor	30.00	130.00	100.00	30.00	130.00	0.00	0.00	-0.09	0.20
13.5in Open Hole	130.00	390.00	260.00	130.00	390.00	-0.09	0.20	-0.08	1.22
10.75in Casing Surface	30.00	370.00	340.00	30.00	370.00	0.00	0.00	-0.04	1.08
9.875in Open Hole	390.00	2657.00	2267.00	390.00	2583.42	-0.08	1.22	161.07	485.12
7.625in Casing Intermediate	30.00	2637.00	2607.00	30.00	2564.22	0.00	0.00	158.97	479.93
6.75in Open Hole	2657.00	20905.00	18248.00	2583.42	6382.00	161.07	485.12	-13398.95	6197.35
5in Casing Intermediate	30.00	20885.00	20855.00	30.00	6382.27	0.00	0.00	-13380.00	6190.95



Actual Wellpath Report

Elklick Unit 2H AWP Proj: 20905'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Elklick Unit 2H
Field	Ritchie	API	47-085-10420-0000
Facility	Cashew Pad	Wellbore	Elklick Unit 2H AWB
Slot	Slot D		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Elklick Unit 2H POE Rev-2	6399.00	-107.35	1675.21	1682365.04	14224303.44	39°10'16.2925"N	80°51'7.1618"W	point
Elklick Unit 2H BHL Rev-2	6422.00	-13424.12	6206.69	1686894.71	14210992.00	39°08'4.5933"N	80°50'9.9304"W	point
Elklick Unit 2H BHL Rev-3	6422.00	-13393.28	6196.20	1686884.22	14211022.83	39°08'4.8983"N	80°50'10.0629"W	point
Elklick Unit 2H LP Rev-2	6422.00	-267.89	1729.84	1682419.65	14224142.97	39°10'14.7049"N	80°51'6.4715"W	point
Elklick Unit 2H 50' L/R Hard Line Rev-2	7000.00	-6750.32	3935.70	1684624.63	14217663.13	39°09'10.5965"N	80°50'38.6050"W	rectangle
2D Rectangle 14034.1 x 100.								

WELLPATH COMPOSITION - Ref Wellbore: Elklick Unit 2H AWB Ref Wellpath: Elklick Unit 2H AWP Proj: 20905'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
30.00	382.00	Gyrodata 2015 - GC+WIR+DPIPE	01_Gyrodata MS Gyro <13-1/2"> (100'-382')	Elklick Unit 2H AWB	7/19/2022
382.00	2567.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02_APS EM <9-7/8"> (382')(507'-2567')	Elklick Unit 2H AWB	7/19/2022
2567.00	5884.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03_APS EM <6-3/4"> (2567')(2677'-5884')	Elklick Unit 2H AWB	8/31/2022
5884.00	20905.00	BH OnTrak (2019) (HRGM, Short spacing)	04_BH Lucida <6-3/4"> (5884')(5953'-20875')	Elklick Unit 2H AWB	8/31/2022



Actual Wellpath Report

Elklick Unit 2H AWP Proj: 20905'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Elklick Unit 2H
Field	Ritchie	API	47-085-10420-0000
Facility	Cashew Pad	Wellbore	Elklick Unit 2H AWB
Slot	Slot D		

COMMENTS
<p>Wellpath general comments API: 47-085-10420-0000 BH Job #: 111434641 Rig: H&P 531 Duration: 9/4/2022-9/11/2022 Gyrodatta MS Gyro <13-1/2"> (100'-382') APS EM <9-7/8"> (382')(507'-2567') APS EM <6-3/4"> (2567')(2677'-5884') BH Lucida <6-3/4"> (5884')(5953'-20875') Sycamore: 6272' MD Middlesex: 6504' MD Burkett: 6707' MD Tully: 6849' MD Marcellus POE: 6954' MD Projected MD at TD: 20905'</p>

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