



Actual Wellpath Report

Earl Unit 1H AWP Proj: 20536'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Earl Unit 1H
Field	Ritchie	API	47-085-10414-0000
Facility	Weekley West Pad	Wellbore	Earl Unit 1H 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	0.999601	Report Generated	03/Mar/2022 at 11:51
Convergence at slot	0.08° 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	44.92	-0.16	1675735.01	14223762.98	39°10'11.0470"N	80°52'31.3872"W
Facility Reference Pt			1675735.17	14223718.08	39°10'10.6030"N	80°52'31.3860"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	1155.00ft
Horizontal Reference Pt	Slot	H&P 531 (RKB) to Mean Sea Level	1155.00ft
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	161.28°



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WELLPATH DATA (221 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	68.140	0.00	0.00	0.00	0.00	1675735.01	14223762.98	39°10'11.0470"N	80°52'31.3872"W	0.00	0.000	0.00	0.00	0.00	
30.00	0.000	68.140	30.00	0.00	0.00	0.00	1675735.01	14223762.98	39°10'11.0470"N	80°52'31.3872"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.090	68.140	100.00	0.00	0.02	0.05	1675735.06	14223763.00	39°10'11.0472"N	80°52'31.3866"W	0.05	68.140	0.13	0.13	0.00	Gyrodata MS Gyro <17-1/2"> (100'-500')
200.00	0.310	75.420	200.00	0.01	0.12	0.39	1675735.40	14223763.10	39°10'11.0481"N	80°52'31.3823"W	0.40	73.016	0.22	0.22	7.28	
300.00	0.270	113.780	300.00	0.19	0.09	0.86	1675735.87	14223763.07	39°10'11.0479"N	80°52'31.3762"W	0.87	83.988	0.19	-0.04	38.36	
400.00	0.280	125.680	400.00	0.55	-0.15	1.28	1675736.29	14223762.83	39°10'11.0455"N	80°52'31.3710"W	1.29	96.548	0.06	0.01	11.90	
500.00	0.330	223.950	500.00	0.88	-0.50	1.28	1675736.29	14223762.48	39°10'11.0420"N	80°52'31.3710"W	1.37	111.262	0.46	0.05	98.27	
600.00	0.380	184.780	599.99	1.32	-1.03	1.05	1675736.06	14223761.95	39°10'11.0367"N	80°52'31.3739"W	1.47	134.612	0.24	0.05	-39.17	Gyrodata MS Gyro <12-1/4"> (500')(600'-645')
645.00	0.540	182.620	644.99	1.65	-1.39	1.03	1675736.04	14223761.59	39°10'11.0332"N	80°52'31.3742"W	1.73	143.656	0.36	0.36	-4.80	
686.00	0.710	181.300	685.99	2.07	-1.84	1.01	1675736.02	14223761.14	39°10'11.0288"N	80°52'31.3744"W	2.10	151.221	0.42	0.41	-3.22	APS EM <12-1/4"> (645')(686'-2566')
777.00	0.640	63.470	776.99	2.53	-2.18	1.45	1675736.46	14223760.80	39°10'11.0254"N	80°52'31.3688"W	2.62	146.286	1.27	-0.08	-129.48	
869.00	2.780	31.280	868.94	1.03	-0.04	3.07	1675738.08	14223762.94	39°10'11.0465"N	80°52'31.3482"W	3.07	90.781	2.46	2.33	-34.99	
959.00	4.280	27.250	958.77	-2.71	4.81	5.74	1675740.75	14223767.79	39°10'11.0944"N	80°52'31.3142"W	7.49	50.056	1.69	1.67	-4.48	
1050.00	4.730	24.510	1049.49	-7.81	11.24	8.85	1675743.86	14223774.22	39°10'11.1580"N	80°52'31.2746"W	14.31	38.224	0.55	0.49	-3.01	
1145.00	6.310	18.500	1144.04	-14.82	19.76	12.14	1675747.14	14223782.73	39°10'11.2421"N	80°52'31.2328"W	23.19	31.560	1.77	1.66	-6.33	
1240.00	8.020	11.900	1238.30	-24.68	31.19	15.16	1675750.16	14223794.16	39°10'11.3551"N	80°52'31.1942"W	34.68	25.918	1.99	1.80	-6.95	
1335.00	9.750	7.990	1332.16	-37.57	45.65	17.64	1675752.65	14223808.61	39°10'11.4979"N	80°52'31.1624"W	48.94	21.134	1.93	1.82	-4.12	
1430.00	11.390	5.730	1425.54	-53.29	62.95	19.70	1675754.70	14223825.90	39°10'11.6689"N	80°52'31.1360"W	65.96	17.377	1.78	1.73	-2.38	
1524.00	13.380	3.260	1517.35	-71.83	83.04	21.24	1675756.25	14223845.99	39°10'11.8675"N	80°52'31.1160"W	85.72	14.350	2.19	2.12	-2.63	
1619.00	13.370	2.160	1609.78	-92.29	104.99	22.28	1675757.28	14223867.93	39°10'12.0844"N	80°52'31.1024"W	107.33	11.983	0.27	-0.01	-1.16	
1714.00	13.090	1.480	1702.25	-112.65	126.72	22.98	1675757.98	14223889.65	39°10'12.2992"N	80°52'31.0933"W	128.79	10.276	0.34	-0.29	-0.72	
1808.00	13.970	357.340	1793.65	-133.54	148.70	22.72	1675757.72	14223911.62	39°10'12.5164"N	80°52'31.0961"W	150.43	8.688	1.39	0.94	-4.40	
1903.00	13.700	355.950	1885.89	-155.44	171.38	21.40	1675756.40	14223934.29	39°10'12.7406"N	80°52'31.1125"W	172.71	7.117	0.45	-0.28	-1.46	
1998.00	13.200	355.160	1978.29	-176.86	193.41	19.69	1675754.69	14223956.31	39°10'12.9583"N	80°52'31.1339"W	194.41	5.812	0.56	-0.53	-0.83	
2093.00	12.700	352.470	2070.87	-197.63	214.57	17.40	1675752.41	14223977.46	39°10'13.1675"N	80°52'31.1625"W	215.27	4.637	0.82	-0.53	-2.83	
2187.00	13.600	353.850	2162.40	-218.55	235.80	14.87	1675749.87	14223998.69	39°10'13.3774"N	80°52'31.1943"W	236.27	3.607	1.01	0.96	1.47	
2281.00	14.720	356.450	2253.55	-240.87	258.71	12.94	1675747.95	14224021.58	39°10'13.6038"N	80°52'31.2184"W	259.03	2.864	1.37	1.19	2.77	
2376.00	14.620	356.030	2345.45	-264.11	282.72	11.36	1675746.37	14224045.58	39°10'13.8412"N	80°52'31.2380"W	282.94	2.302	0.15	-0.11	-0.44	
2471.00	14.390	355.570	2437.42	-287.15	308.45	9.62	1675744.63	14224069.30	39°10'14.0757"N	80°52'31.2597"W	306.60	1.799	0.27	-0.24	-0.48	
2566.00	13.800	353.940	2529.56	-309.64	329.48	7.51	1675742.52	14224092.33	39°10'14.3034"N	80°52'31.2860"W	329.57	1.307	0.75	-0.62	-1.72	



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Facility	Weekley West Pad	Wellbore	Earl Unit 1H AWB
Slot	Slot D		

WELLPATH DATA (221 stations)																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)			(ft)	(°)	(°/100ft)	(°/100ft)	(°/100ft)	
2661.00	13.450	353.810	2621.89	-331.48	351.73	5.13	1675740.14	14224114.57	39°10'14.5234"N	80°52'31.3160"W	351.77	0.835	0.37	-0.37	-0.14	APS EM <8-3/4"> (2566')(2661'-5752')
2756.00	13.750	349.840	2714.23	-353.43	373.83	1.94	1675736.95	14224136.66	39°10'14.7419"N	80°52'31.3560"W	373.84	0.298	1.03	0.32	-4.18	
2850.00	13.390	355.430	2805.61	-375.03	395.68	-0.89	1675734.12	14224158.50	39°10'14.9578"N	80°52'31.3917"W	395.68	359.871	1.45	-0.38	5.95	
2945.00	12.930	359.370	2898.11	-395.80	417.27	-1.89	1675733.12	14224180.08	39°10'15.1713"N	80°52'31.4039"W	417.28	359.741	1.06	-0.48	4.15	
3039.00	12.800	354.830	2989.76	-415.92	438.16	-2.94	1675732.07	14224200.96	39°10'15.3777"N	80°52'31.4169"W	438.17	359.615	1.08	-0.14	-4.83	
3136.00	13.000	351.740	3084.31	-437.10	459.66	-5.48	1675729.54	14224222.45	39°10'15.5903"N	80°52'31.4487"W	459.69	359.317	0.74	0.21	-3.19	
3230.00	13.300	359.670	3175.85	-457.76	480.93	-7.06	1675727.95	14224243.72	39°10'15.8006"N	80°52'31.4684"W	480.99	359.159	1.94	0.32	8.44	
3325.00	13.240	8.030	3268.32	-477.84	502.63	-5.60	1675729.41	14224265.41	39°10'16.0151"N	80°52'31.4496"W	502.67	359.362	2.02	-0.06	8.80	
3420.00	13.030	4.090	3360.84	-497.43	524.09	-3.32	1675731.69	14224286.86	39°10'16.2271"N	80°52'31.4202"W	524.10	359.637	0.97	-0.22	-4.15	
3514.00	12.910	0.950	3452.44	-517.09	545.16	-2.39	1675732.62	14224307.92	39°10'16.4353"N	80°52'31.4080"W	545.16	359.749	0.76	-0.13	-3.34	
3609.00	12.410	357.390	3545.13	-536.89	565.97	-2.68	1675732.33	14224328.72	39°10'16.6410"N	80°52'31.4113"W	565.97	359.729	0.98	-0.53	-3.75	
3703.00	11.900	353.770	3637.03	-556.05	585.69	-4.19	1675730.82	14224348.44	39°10'16.8360"N	80°52'31.4302"W	585.71	359.590	0.98	-0.54	-3.85	
3798.00	12.780	2.060	3729.84	-575.44	605.93	-4.87	1675730.14	14224368.67	39°10'17.0360"N	80°52'31.4385"W	605.95	359.539	2.08	0.93	8.73	
3892.00	13.560	8.010	3821.37	-595.01	627.24	-2.96	1675732.05	14224389.96	39°10'17.2466"N	80°52'31.4139"W	627.24	359.729	1.66	0.83	6.33	
3987.00	13.270	5.880	3913.78	-614.87	649.11	-0.30	1675734.71	14224411.83	39°10'17.4627"N	80°52'31.3796"W	649.11	359.974	0.60	-0.31	-2.24	
4081.00	12.760	4.720	4005.37	-634.19	670.18	1.66	1675736.67	14224432.89	39°10'17.6710"N	80°52'31.3544"W	670.18	0.142	0.62	-0.55	-1.23	
4176.00	12.560	3.890	4098.06	-653.35	690.93	3.23	1675738.24	14224453.64	39°10'17.8761"N	80°52'31.3342"W	690.94	0.268	0.28	-0.20	-0.87	
4271.00	11.940	1.090	4190.90	-672.13	711.06	4.11	1675739.12	14224473.76	39°10'18.0750"N	80°52'31.3228"W	711.08	0.332	0.90	-0.65	-2.95	
4365.00	13.460	1.480	4282.59	-691.54	731.72	4.58	1675739.59	14224494.41	39°10'18.2792"N	80°52'31.3163"W	731.74	0.359	1.62	1.62	0.41	
4460.00	14.020	359.600	4374.87	-712.84	754.28	4.79	1675739.80	14224516.96	39°10'18.5022"N	80°52'31.3133"W	754.30	0.364	0.75	0.59	-1.98	
4555.00	13.330	355.370	4467.18	-734.39	776.71	3.82	1675738.83	14224539.38	39°10'18.7238"N	80°52'31.3251"W	776.72	0.282	1.28	-0.73	-4.45	
4649.00	12.890	351.790	4558.73	-755.21	797.89	1.45	1675736.46	14224560.55	39°10'18.9332"N	80°52'31.3549"W	797.89	0.104	0.98	-0.47	-3.81	
4744.00	13.890	356.390	4651.15	-776.64	819.76	-0.78	1675734.23	14224582.41	39°10'19.1494"N	80°52'31.3828"W	819.76	359.945	1.54	1.05	4.84	
4838.00	15.270	1.180	4742.13	-799.17	843.39	-1.24	1675733.77	14224606.04	39°10'19.3830"N	80°52'31.3882"W	843.39	359.916	1.95	1.47	5.10	
4933.00	14.420	356.200	4833.96	-822.37	867.71	-1.76	1675733.25	14224630.34	39°10'19.6233"N	80°52'31.3944"W	867.71	359.884	1.61	-0.89	-5.24	
5027.00	13.930	351.960	4925.10	-844.80	890.59	-4.12	1675730.89	14224653.21	39°10'19.8495"N	80°52'31.4240"W	890.60	359.735	1.22	-0.52	-4.51	
5122.00	14.030	357.550	5017.29	-867.09	913.42	-6.21	1675728.80	14224676.03	39°10'20.0752"N	80°52'31.4502"W	913.44	359.610	1.42	0.11	5.88	
5216.00	15.320	8.390	5108.24	-889.09	937.09	-4.89	1675730.13	14224699.70	39°10'20.3092"N	80°52'31.4329"W	937.10	359.701	3.22	1.37	11.53	
5311.00	15.460	5.020	5199.83	-911.85	962.12	-1.95	1675733.06	14224724.71	39°10'20.5565"N	80°52'31.3952"W	962.12	359.884	0.95	0.15	-3.55	
5405.00	15.880	0.390	5290.34	-935.47	987.46	-0.76	1675734.25	14224750.05	39°10'20.8070"N	80°52'31.3797"W	987.46	359.956	1.40	0.45	-4.93	



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[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]	[° N]	[° W]	[ft]	[°]	["/100ft]	["/100ft]	["/100ft]	
5499.00	15.890	356.860	5380.76	-960.02	1013.17	-1.38	1675733.63	14224775.75	39°10'21.0611"N	80°52'31.3871"W	1013.17	359.922	1.03	0.01	-3.76	
5594.00	15.340	353.110	5472.25	-984.84	1038.63	-3.60	1675731.41	14224801.20	39°10'21.3128"N	80°52'31.4148"W	1038.64	359.801	1.21	-0.58	-3.95	
5689.00	14.980	351.080	5563.95	-1009.24	1063.24	-7.01	1675728.00	14224825.79	39°10'21.5560"N	80°52'31.4577"W	1063.26	359.622	0.68	-0.38	-2.14	
5752.00	14.620	349.150	5624.86	-1025.14	1079.09	-9.77	1675725.24	14224841.64	39°10'21.7127"N	80°52'31.4925"W	1079.13	359.481	0.97	-0.57	-3.06	
5814.00	14.670	347.740	5684.84	-1040.69	1094.45	-12.91	1675722.10	14224856.99	39°10'21.8646"N	80°52'31.5321"W	1094.52	359.324	0.58	0.08	-2.27	BH AT Curve <8-1/2"> (5752')(5814'-20510')
5884.00	5.710	337.060	5753.67	-1053.00	1106.34	-16.16	1675718.86	14224868.88	39°10'21.9822"N	80°52'31.5731"W	1106.46	359.163	13.03	-12.80	-15.26	
5978.00	7.150	173.230	5847.46	-1051.93	1104.83	-17.30	1675717.72	14224867.37	39°10'21.9673"N	80°52'31.5875"W	1104.97	359.103	13.55	1.53	-174.29	
6073.00	14.730	172.860	5940.67	-1034.29	1086.95	-15.09	1675719.92	14224849.50	39°10'21.7905"N	80°52'31.5599"W	1087.06	359.204	7.98	7.98	-0.39	
6167.00	18.430	168.960	6030.75	-1007.85	1060.50	-10.76	1675724.25	14224823.05	39°10'21.5290"N	80°52'31.5054"W	1060.55	359.419	4.11	3.94	-4.15	
6262.00	21.730	156.090	6120.00	-975.43	1029.66	-0.75	1675734.26	14224792.23	39°10'21.2240"N	80°52'31.3788"W	1029.66	359.958	5.79	3.47	-13.55	
6357.00	26.330	150.650	6206.76	-937.18	995.20	16.71	1675751.72	14224757.78	39°10'20.8832"N	80°52'31.1576"W	995.34	0.962	5.37	4.84	-5.73	
6360.00†	26.579	150.783	6209.44	-935.87	994.03	17.37	1675752.37	14224756.61	39°10'20.8716"N	80°52'31.1493"W	994.18	1.001	8.52	8.29	4.43	Sycamore: 6360' MD
6451.00	34.170	153.960	6287.90	-890.44	953.24	38.56	1675773.55	14224715.84	39°10'20.4682"N	80°52'30.8810"W	954.02	2.316	8.52	8.34	3.49	
6545.00	42.020	155.060	6361.82	-832.89	900.91	63.45	1675798.44	14224663.53	39°10'19.9506"N	80°52'30.5658"W	903.14	4.029	8.38	8.35	1.17	
6589.00†	44.237	155.384	6379.33	-816.57	886.01	70.33	1675805.31	14224648.64	39°10'19.8033"N	80°52'30.4788"W	888.80	4.538	9.28	9.24	1.35	Middlesex: 6589' MD
6640.00	50.800	156.210	6427.26	-764.48	838.27	91.76	1675826.74	14224600.92	39°10'19.3312"N	80°52'30.2075"W	843.28	6.247	9.28	9.24	1.16	
6735.00	58.870	157.850	6481.93	-687.09	766.81	121.99	1675856.95	14224529.48	39°10'18.6244"N	80°52'29.8249"W	776.45	9.039	8.61	8.49	1.73	
6748.00†	60.184	158.192	6488.52	-675.91	756.42	126.19	1675861.15	14224519.10	39°10'18.5217"N	80°52'29.7718"W	766.87	9.471	10.36	10.11	2.63	Burkett: 6748' MD
6829.00	68.390	160.150	6523.64	-603.04	688.26	152.07	1675887.02	14224450.96	39°10'17.8476"N	80°52'29.4443"W	704.86	12.459	10.36	10.13	2.42	Tully: 6829' MD
6895.00†	74.565	161.045	6544.59	-540.50	629.26	172.84	1675907.78	14224391.99	39°10'17.2642"N	80°52'29.1816"W	652.56	15.359	9.44	9.36	1.36	Marcellus POE: 6895' MD
6924.00	77.280	161.420	6551.65	-512.37	602.63	181.89	1675916.83	14224365.37	39°10'17.0008"N	80°52'29.0672"W	629.48	16.795	9.44	9.36	1.29	
7018.00	87.200	162.950	6564.32	-419.36	514.06	210.34	1675945.26	14224276.84	39°10'16.1251"N	80°52'28.7076"W	555.43	22.253	10.68	10.55	1.63	
7113.00	92.310	159.710	6564.73	-324.41	424.11	240.73	1675975.65	14224186.92	39°10'15.2355"N	80°52'28.3232"W	487.67	29.580	6.37	5.38	-3.41	
7207.00	89.600	159.290	6563.16	-230.47	336.08	273.65	1676008.55	14224098.92	39°10'14.3650"N	80°52'27.9069"W	433.39	39.153	2.92	-2.88	-0.45	
7302.00	93.390	159.910	6560.69	-135.57	247.08	306.74	1676041.63	14224009.96	39°10'13.4849"N	80°52'27.4882"W	393.88	51.148	4.04	3.99	0.65	
7396.00	89.450	159.170	6558.36	-41.66	159.06	339.58	1676074.46	14223921.98	39°10'12.6145"N	80°52'27.0728"W	374.99	64.902	4.26	-4.19	-0.79	
7490.00	89.420	158.960	6559.28	52.27	71.27	373.17	1676108.03	14223834.22	39°10'11.7463"N	80°52'26.8479"W	379.91	79.188	0.23	-0.03	-0.22	
7584.00	90.830	159.760	6559.08	146.21	-16.69	406.30	1676141.15	14223746.29	39°10'10.8764"N	80°52'26.2287"W	406.65	92.353	1.72	1.50	0.85	
7679.00	90.580	161.420	6557.91	241.19	-108.29	437.87	1676172.70	14223656.74	39°10'9.9905"N	80°52'25.8295"W	450.59	103.644	1.77	-0.26	1.75	
7773.00	90.030	161.140	6557.41	335.19	-195.31	468.04	1676202.86	14223567.75	39°10'9.1101"N	80°52'25.4480"W	507.16	112.651	0.66	-0.59	-0.30	



Actual Wellpath Report

Earl Unit 1H AWP Proj: 20536'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Earl Unit 1H
Field	Ritchie	API	47-085-10414-0000
Facility	Weekley West Pad	Wellbore	Earl Unit 1H AWB
Slot	Slot D		

WELLPATH DATA (221 stations)																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]	
7867.00	89.850	161.040	6557.51	429.19	-284.24	498.50	1676233.31	14223478.86	39°10'8.2308"N	80°52'25.0628"W	573.84	119.691	0.22	-0.19	-0.11	
7962.00	90.680	160.800	6557.07	524.19	-374.02	529.56	1676264.35	14223389.11	39°10'7.3430"N	80°52'24.6701"W	648.32	125.233	0.91	0.87	-0.25	
8057.00	90.550	161.100	6556.05	619.18	-463.81	560.56	1676295.35	14223299.36	39°10'6.4551"N	80°52'24.2781"W	727.56	129.604	0.34	-0.14	0.32	
8151.00	90.680	161.190	6555.04	713.18	-552.76	590.94	1676325.71	14223210.44	39°10'5.5754"N	80°52'23.8940"W	809.17	133.088	0.17	0.14	0.10	
8246.00	90.400	160.730	6554.14	808.17	-642.56	621.93	1676356.69	14223120.68	39°10'4.6875"N	80°52'23.5021"W	894.25	135.935	0.57	-0.29	-0.48	
8341.00	90.250	158.920	6553.61	903.13	-731.72	654.69	1676389.44	14223031.55	39°10'3.8057"N	80°52'23.0877"W	981.86	138.180	1.91	-0.16	-1.91	
8436.00	90.090	160.410	6553.32	998.09	-820.80	687.70	1676422.44	14222942.51	39°10'2.9248"N	80°52'22.6701"W	1070.82	140.042	1.58	-0.17	1.57	
8530.00	90.340	160.590	6552.97	1092.08	-909.41	719.08	1676453.80	14222853.94	39°10'2.0486"N	80°52'22.2733"W	1159.35	141.666	0.33	0.27	0.19	
8625.00	90.860	160.470	6551.98	1187.07	-998.97	750.74	1676485.45	14222764.41	39°10'1.1629"N	80°52'21.8729"W	1249.62	143.075	0.56	0.55	-0.13	
8719.00	91.080	160.770	6550.38	1281.05	-1087.63	781.93	1676516.63	14222675.78	39°10'0.2862"N	80°52'21.4785"W	1339.54	144.286	0.40	0.23	0.32	
8814.00	90.430	157.800	6549.13	1375.97	-1176.47	815.53	1676550.21	14222586.98	39°09'59.4076"N	80°52'21.0536"W	1431.49	145.270	3.20	-0.68	-3.13	
8908.00	90.250	160.130	6548.57	1469.89	-1264.20	849.26	1676583.93	14222499.29	39°09'58.5401"N	80°52'20.6268"W	1522.97	146.108	2.49	-0.19	2.48	
9003.00	90.280	157.580	6548.14	1564.79	-1352.80	883.53	1676618.19	14222410.73	39°09'57.6639"N	80°52'20.1933"W	1615.76	146.851	2.68	0.03	-2.68	
9098.00	90.220	159.520	6547.72	1659.68	-1441.21	918.27	1676652.91	14222322.35	39°09'56.7895"N	80°52'19.7539"W	1708.89	147.497	2.04	-0.06	2.04	
9193.00	90.770	162.960	6546.90	1754.66	-1531.15	948.82	1676683.45	14222232.45	39°09'55.9002"N	80°52'19.3676"W	1801.29	148.214	3.67	0.58	3.62	
9289.00	90.680	162.870	6545.69	1850.62	-1622.90	977.02	1676711.64	14222140.73	39°09'54.9929"N	80°52'19.0112"W	1894.30	148.951	0.13	-0.09	-0.09	
9382.00	90.400	162.540	6544.81	1943.58	-1711.69	1004.66	1676739.27	14222051.97	39°09'54.1149"N	80°52'18.6618"W	1984.75	149.590	0.47	-0.30	-0.35	
9477.00	91.050	163.100	6543.61	2038.54	-1802.45	1032.72	1676767.32	14221961.26	39°09'53.2175"N	80°52'18.3072"W	2077.34	150.189	0.90	0.68	0.59	
9571.00	90.620	162.830	6542.24	2132.49	-1892.31	1060.26	1676794.84	14221871.43	39°09'52.3289"N	80°52'17.9593"W	2169.10	150.738	0.54	-0.46	-0.29	
9760.00	90.620	162.530	6540.19	2321.42	-2072.73	1116.52	1676851.08	14221691.08	39°09'50.5449"N	80°52'17.2482"W	2354.32	151.690	0.16	0.00	-0.16	
9855.00	90.890	163.030	6538.94	2416.38	-2163.46	1144.64	1676879.19	14221600.38	39°09'49.6477"N	80°52'16.8928"W	2447.61	152.118	0.60	0.28	0.53	
9949.00	90.830	162.080	6537.53	2510.34	-2253.13	1172.82	1676907.36	14221510.75	39°09'48.7610"N	80°52'16.5367"W	2540.10	152.502	1.01	-0.06	-1.01	
10044.00	90.370	161.040	6536.53	2605.34	-2343.25	1202.87	1676937.39	14221420.67	39°09'47.8699"N	80°52'16.1568"W	2633.95	152.827	1.20	-0.48	-1.09	
10138.00	90.680	162.560	6535.67	2699.33	-2432.54	1232.22	1676966.74	14221331.42	39°09'46.9869"N	80°52'15.7857"W	2726.83	153.135	1.65	0.33	1.62	
10233.00	90.550	162.630	6534.65	2794.30	-2523.18	1260.64	1676995.14	14221240.81	39°09'46.0906"N	80°52'15.4266"W	2820.58	153.452	0.16	-0.14	0.07	
10423.00	90.520	162.570	6532.88	2984.24	-2704.48	1317.45	1677051.94	14221059.58	39°09'44.2979"N	80°52'14.7086"W	3008.30	154.028	0.04	-0.02	-0.03	
10517.00	90.770	162.170	6531.82	3078.21	-2794.06	1345.92	1677080.39	14220970.04	39°09'43.4121"N	80°52'14.3488"W	3101.33	154.279	0.50	0.27	-0.43	
10612.00	90.620	162.630	6530.67	3173.19	-2884.60	1374.65	1677109.10	14220879.53	39°09'42.5167"N	80°52'13.9858"W	3195.40	154.520	0.51	-0.16	0.48	
10706.00	90.460	162.450	6529.78	3267.16	-2974.27	1402.85	1677137.30	14220789.90	39°09'41.6301"N	80°52'13.6294"W	3288.50	154.749	0.26	-0.17	-0.19	
10801.00	90.090	162.290	6529.33	3362.14	-3064.81	1431.62	1677166.06	14220699.40	39°09'40.7348"N	80°52'13.2657"W	3382.69	154.962	0.42	-0.39	-0.17	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Earl Unit 1H
Field	Ritchie	API	47-085-10414-0000
Facility	Weekley West Pad	Wellbore	Earl Unit 1H AWB
Slot	Slot D		

WELLPATH DATA (221 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
10990.00	90.060	161.040	6529.08	3551.13	-3244.21	1491.07	1677225.49	14220520.07	39°09'38.9608"N	80°52'12.5142"W	3570.46	155.316	0.65	-0.02	-0.66	
11085.00	90.150	162.100	6528.91	3646.13	-3334.33	1521.11	1677255.51	14220429.98	39°09'38.0696"N	80°52'12.1346"W	3664.91	155.478	1.12	0.09	1.12	
11180.00	90.650	162.220	6528.24	3741.12	-3424.76	1550.21	1677284.60	14220339.59	39°09'37.1753"N	80°52'11.7668"W	3759.28	155.646	0.54	0.53	0.13	
11275.00	90.370	162.330	6527.40	3836.10	-3515.25	1579.13	1677313.51	14220249.14	39°09'36.2806"N	80°52'11.4012"W	3853.65	155.809	0.32	-0.29	0.12	
11370.00	88.610	159.900	6528.24	3931.08	-3605.12	1609.87	1677344.24	14220159.30	39°09'35.3918"N	80°52'11.0126"W	3948.24	155.937	3.16	-1.85	-2.56	
11464.00	89.600	163.190	6529.71	4025.06	-3694.26	1639.62	1677373.98	14220070.20	39°09'34.5104"N	80°52'10.6366"W	4041.78	156.067	3.65	1.05	3.50	
11559.00	89.570	162.160	6530.40	4120.03	-3784.95	1667.91	1677402.25	14219979.55	39°09'33.6136"N	80°52'10.2791"W	4136.16	156.218	1.08	-0.03	-1.08	
11654.00	90.180	162.990	6530.61	4215.00	-3875.59	1696.36	1677430.69	14219888.94	39°09'32.7173"N	80°52'9.9196"W	4230.58	156.361	1.08	0.64	0.87	
11749.00	89.910	162.720	6530.53	4309.96	-3966.37	1724.36	1677458.68	14219798.20	39°09'31.8197"N	80°52'9.5657"W	4324.99	156.503	0.40	-0.28	-0.28	
11844.00	90.280	162.340	6530.37	4404.94	-4056.99	1752.88	1677487.19	14219707.62	39°09'30.9236"N	80°52'9.2053"W	4419.47	156.632	0.56	0.39	-0.40	
11938.00	90.180	162.470	6530.00	4498.92	-4146.59	1781.30	1677515.60	14219618.05	39°09'30.0376"N	80°52'8.8463"W	4513.00	156.753	0.17	-0.11	0.14	
12033.00	89.600	162.470	6530.18	4593.90	-4237.17	1809.91	1677544.20	14219527.50	39°09'29.1418"N	80°52'8.4847"W	4607.54	156.870	0.61	-0.61	0.00	
12128.00	88.520	162.430	6531.74	4688.87	-4327.74	1838.56	1677572.83	14219436.97	39°09'28.2463"N	80°52'8.1227"W	4702.09	156.983	1.14	-1.14	-0.04	
12222.00	89.660	162.930	6533.23	4782.83	-4417.46	1866.54	1677600.80	14219347.29	39°09'27.3591"N	80°52'7.7692"W	4795.62	157.094	1.32	1.21	0.53	
12317.00	88.710	161.590	6534.58	4877.80	-4507.93	1895.48	1677629.73	14219256.85	39°09'26.4644"N	80°52'7.4034"W	4890.23	157.194	1.73	-1.00	-1.41	
12412.00	89.690	160.290	6535.91	4972.78	-4597.71	1926.50	1677660.74	14219167.11	39°09'25.5766"N	80°52'7.0113"W	4985.01	157.266	1.71	1.03	-1.37	
12507.00	89.570	160.680	6536.52	5067.77	-4687.26	1958.23	1677692.46	14219077.60	39°09'24.6912"N	80°52'6.6101"W	5079.87	157.326	0.43	-0.13	0.41	
12601.00	89.660	159.910	6537.15	5161.76	-4775.75	1989.93	1677724.14	14218989.15	39°09'23.8160"N	80°52'6.2094"W	5173.74	157.380	0.82	0.10	-0.82	
12696.00	89.850	160.320	6537.56	5256.74	-4865.08	2022.24	1677756.44	14218899.85	39°09'22.9326"N	80°52'5.8008"W	5268.63	157.429	0.48	0.20	0.43	
12791.00	89.850	160.200	6537.81	5351.72	-4954.50	2054.32	1677788.51	14218810.46	39°09'22.0483"N	80°52'5.3952"W	5363.52	157.479	0.13	0.00	-0.13	
12885.00	89.690	160.500	6538.19	5445.71	-5043.02	2085.93	1677820.11	14218721.98	39°09'21.1729"N	80°52'4.9955"W	5457.40	157.529	0.36	-0.17	0.32	
12979.00	89.940	160.590	6538.49	5539.70	-5131.66	2117.24	1677851.40	14218633.38	39°09'20.2964"N	80°52'4.5997"W	5551.27	157.580	0.28	0.27	0.10	
13074.00	89.780	160.390	6538.72	5634.69	-5221.20	2148.97	1677883.12	14218543.87	39°09'19.4109"N	80°52'4.1986"W	5646.15	157.629	0.27	-0.17	-0.21	
13169.00	89.570	160.270	6539.26	5729.67	-5310.66	2180.95	1677915.08	14218454.45	39°09'18.5263"N	80°52'3.7944"W	5741.06	157.673	0.25	-0.22	-0.13	
13264.00	89.720	160.010	6539.85	5824.65	-5400.01	2213.22	1677947.34	14218365.14	39°09'17.6427"N	80°52'3.3863"W	5835.96	157.713	0.32	0.16	-0.27	
13359.00	89.910	160.540	6540.16	5919.64	-5489.43	2245.28	1677979.39	14218275.75	39°09'16.7584"N	80°52'2.9810"W	5930.86	157.755	0.59	0.20	0.56	
13453.00	89.850	160.670	6540.35	6013.63	-5578.10	2276.50	1678010.59	14218187.12	39°09'15.8816"N	80°52'2.5864"W	6024.75	157.799	0.15	-0.06	0.14	
13548.00	89.970	160.290	6540.50	6108.62	-5667.64	2308.24	1678042.32	14218097.62	39°09'14.9961"N	80°52'2.1851"W	6119.65	157.841	0.42	0.13	-0.40	
13643.00	89.660	160.560	6540.81	6203.61	-5757.14	2340.07	1678074.14	14218008.14	39°09'14.1109"N	80°52'1.7827"W	6214.55	157.880	0.43	-0.33	0.28	
13738.00	89.660	160.030	6541.37	6298.59	-5846.58	2372.10	1678106.16	14217918.74	39°09'13.2265"N	80°52'1.3778"W	6309.46	157.916	0.56	0.00	-0.56	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Earl Unit 1H
Field	Ritchie	API	47-085-10414-0000
Facility	Weekley West Pad	Wellbore	Earl Unit 1H AWB
Slot	Slot D		

WELLPATH DATA (221 stations)																
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]	
13832.00	89.750	160.850	6541.86	6392.58	-5935.15	2403.57	1678137.62	14217830.21	39°09'12.3506"N	80°52'0.9800"W	6403.37	157.953	0.88	0.10	0.87	
13927.00	89.260	160.170	6542.68	6487.57	-6024.70	2435.26	1678169.30	14217740.69	39°09'11.4650"N	80°52'0.5793"W	6498.27	157.991	0.88	-0.52	-0.72	
14021.00	89.480	159.770	6543.71	6581.54	-6113.01	2467.46	1678201.48	14217652.42	39°09'10.5917"N	80°52'0.1723"W	6592.21	158.019	0.49	0.23	-0.43	
14116.00	89.780	160.620	6544.32	6676.52	-6202.39	2499.64	1678233.65	14217563.07	39°09'9.7078"N	80°51'59.7654"W	6687.14	158.050	0.95	0.32	0.89	
14210.00	89.410	160.460	6544.99	6770.51	-6291.02	2530.96	1678264.96	14217474.48	39°09'8.8314"N	80°51'59.3695"W	6781.05	158.084	0.43	-0.39	-0.17	
14305.00	89.480	160.420	6545.91	6865.49	-6380.53	2562.76	1678296.75	14217385.00	39°09'7.9462"N	80°51'58.9675"W	6875.97	158.117	0.08	0.07	-0.04	
14400.00	89.570	157.290	6546.70	6960.39	-6469.12	2597.03	1678331.00	14217296.45	39°09'7.0700"N	80°51'58.5342"W	6970.95	158.127	3.30	0.09	-3.29	
14494.00	89.660	160.310	6547.33	7054.29	-6556.75	2631.02	1678364.97	14217208.86	39°09'6.2035"N	80°51'58.1044"W	7064.93	158.136	3.21	0.10	3.21	
14589.00	89.600	160.390	6547.94	7149.28	-6646.21	2662.96	1678396.90	14217119.43	39°09'5.3187"N	80°51'57.7006"W	7159.86	158.165	0.11	-0.06	0.08	
14684.00	89.600	160.420	6548.60	7244.27	-6735.71	2694.82	1678428.75	14217029.97	39°09'4.4337"N	80°51'57.2979"W	7254.78	158.195	0.03	0.00	0.03	
14778.00	89.630	160.150	6549.24	7338.25	-6824.20	2726.53	1678460.45	14216941.52	39°09'3.5586"N	80°51'56.8970"W	7348.72	158.221	0.29	0.03	-0.29	
14872.00	89.720	160.020	6549.77	7432.23	-6912.58	2758.55	1678492.45	14216853.17	39°09'2.6846"N	80°51'56.4922"W	7442.67	158.245	0.17	0.10	-0.14	
14967.00	89.910	160.480	6550.08	7527.21	-7001.99	2790.65	1678524.54	14216763.80	39°09'1.8004"N	80°51'56.0864"W	7537.61	158.270	0.52	0.20	0.48	
15061.00	89.750	160.110	6550.36	7621.20	-7090.48	2822.34	1678556.22	14216675.34	39°09'0.9253"N	80°51'55.6858"W	7631.55	158.295	0.43	-0.17	-0.39	
15156.00	89.940	160.350	6550.61	7716.18	-7179.88	2854.48	1678588.34	14216585.97	39°09'0.0412"N	80°51'55.2796"W	7726.50	158.319	0.32	0.20	0.25	
15250.00	89.820	160.200	6550.81	7810.17	-7268.37	2886.20	1678620.06	14216497.53	39°08'59.1661"N	80°51'54.8786"W	7820.44	158.342	0.20	-0.13	-0.16	
15345.00	89.170	159.640	6551.65	7905.13	-7357.59	2918.82	1678652.66	14216408.34	39°08'58.2838"N	80°51'54.4663"W	7915.40	158.361	0.90	-0.68	-0.59	
15440.00	88.950	160.190	6553.20	8000.09	-7446.80	2951.44	1678685.26	14216319.17	39°08'57.4016"N	80°51'54.0539"W	8010.35	158.380	0.62	-0.23	0.58	
15534.00	89.350	162.220	6554.60	8094.08	-7535.77	2981.72	1678715.53	14216230.23	39°08'56.5217"N	80°51'53.6712"W	8104.23	158.413	2.20	0.43	2.16	
15629.00	89.510	162.220	6555.54	8189.06	-7626.23	3010.73	1678744.53	14216139.81	39°08'55.6272"N	80°51'53.3047"W	8199.01	158.457	0.17	0.17	0.00	
15724.00	89.510	162.270	6556.36	8284.04	-7716.70	3039.69	1678773.49	14216049.37	39°08'54.7326"N	80°51'52.9387"W	8293.80	158.500	0.05	0.00	0.05	
15818.00	89.020	162.340	6557.56	8378.02	-7806.24	3068.26	1678802.04	14215959.86	39°08'53.8471"N	80°51'52.5778"W	8387.59	158.543	0.53	-0.52	0.07	
15913.00	89.480	161.820	6558.81	8473.00	-7896.63	3097.49	1678831.26	14215869.52	39°08'52.9533"N	80°51'52.2085"W	8482.40	158.582	0.73	0.48	-0.55	
16008.00	90.430	162.030	6558.88	8568.00	-7986.94	3126.97	1678860.72	14215779.24	39°08'52.0603"N	80°51'51.8361"W	8577.24	158.619	1.02	1.00	0.22	
16102.00	91.020	162.180	6557.69	8661.98	-8076.38	3155.85	1678889.59	14215689.83	39°08'51.1758"N	80°51'51.4712"W	8671.06	158.657	0.65	0.63	0.16	
16197.00	90.150	162.880	6556.72	8756.95	-8167.00	3184.36	1678918.10	14215599.26	39°08'50.2797"N	80°51'51.1110"W	8765.84	158.699	1.18	-0.92	0.74	
16291.00	90.030	162.030	6556.57	8850.93	-8256.62	3212.70	1678946.42	14215509.67	39°08'49.3935"N	80°51'50.7530"W	8859.64	158.739	0.91	-0.13	-0.90	
16386.00	90.460	162.440	6556.17	8945.91	-8347.09	3241.69	1678975.40	14215419.23	39°08'48.4988"N	80°51'50.3888"W	8954.46	158.776	0.63	0.45	0.43	
16480.00	90.520	162.100	6555.36	9039.90	-8436.62	3270.31	1679004.01	14215329.74	39°08'47.6135"N	80°51'50.0252"W	9048.29	158.812	0.37	0.06	-0.36	
16575.00	90.340	161.880	6554.65	9134.89	-8526.96	3299.68	1679033.37	14215239.43	39°08'46.7201"N	80°51'49.6541"W	9143.14	158.845	0.30	-0.19	-0.23	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Earl Unit 1H
Field	Ritchie	API	47-085-10414-0000
Facility	Weekley West Pad	Wellbore	Earl Unit 1H AWB
Slot	Slot D		

WELLPATH DATA (221 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
16670.00	90.090	161.970	6554.29	9229.88	-8617.28	3329.16	1679062.83	14215149.16	39°08'45.8270"N	80°51'49.2817"W	9238.00	158.877	0.28	-0.26	0.09	
16764.00	89.940	160.510	6554.27	9323.88	-8706.28	3359.39	1679093.05	14215060.19	39°08'44.9469"N	80°51'48.8997"W	9331.92	158.900	1.56	-0.16	-1.55	
16859.00	90.090	160.880	6554.24	9418.87	-8795.94	3390.79	1679124.45	14214970.57	39°08'44.0602"N	80°51'48.5028"W	9426.88	158.919	0.42	0.16	0.39	
16954.00	90.180	161.770	6554.02	9513.87	-8885.93	3421.21	1679154.85	14214880.80	39°08'43.1703"N	80°51'48.1185"W	9521.79	158.943	0.94	0.09	0.94	
17048.00	90.430	161.800	6553.52	9607.86	-8975.22	3450.59	1679184.22	14214791.35	39°08'42.2873"N	80°51'47.7472"W	9615.68	158.970	0.27	0.27	0.03	
17143.00	90.680	162.160	6552.60	9702.85	-9065.56	3479.98	1679213.60	14214701.05	39°08'41.3940"N	80°51'47.3760"W	9710.54	159.000	0.46	0.26	0.38	
17237.00	90.680	162.160	6551.48	9796.84	-9155.03	3508.78	1679242.38	14214611.61	39°08'40.5092"N	80°51'47.0122"W	9804.39	159.030	0.00	0.00	0.00	
17332.00	90.490	162.490	6550.51	9891.81	-9245.54	3537.62	1679271.21	14214521.14	39°08'39.6142"N	80°51'46.6479"W	9899.23	159.062	0.40	-0.20	0.35	
17425.00	90.370	162.110	6549.82	9984.80	-9334.14	3565.89	1679299.48	14214432.58	39°08'38.7381"N	80°51'46.2907"W	9992.08	159.092	0.43	-0.13	-0.41	
17521.00	90.340	162.250	6549.22	10080.78	-9425.53	3595.27	1679328.84	14214341.23	39°08'37.8343"N	80°51'45.9196"W	10087.94	159.121	0.15	-0.03	0.15	
17710.00	90.580	162.130	6547.70	10269.75	-9605.47	3653.08	1679386.62	14214161.36	39°08'36.0550"N	80°51'45.1893"W	10276.67	159.178	0.14	0.13	-0.06	
17805.00	90.250	163.050	6547.02	10364.72	-9696.11	3681.50	1679415.04	14214070.75	39°08'35.1586"N	80°51'44.8303"W	10371.50	159.209	1.03	-0.35	0.97	
17899.00	90.310	161.990	6546.56	10458.70	-9785.77	3709.74	1679443.26	14213981.13	39°08'34.2720"N	80°51'44.4737"W	10465.34	159.239	1.13	0.06	-1.13	
17994.00	90.280	161.410	6546.07	10553.70	-9875.96	3739.56	1679473.08	14213890.97	39°08'33.3801"N	80°51'44.0969"W	10560.25	159.261	0.61	-0.03	-0.61	
18184.00	90.250	161.850	6545.19	10743.69	-10056.28	3799.44	1679532.93	14213710.73	39°08'31.5970"N	80°51'43.3404"W	10750.09	159.303	0.23	-0.02	0.23	
18278.00	90.400	162.450	6544.66	10837.68	-10145.75	3828.26	1679561.73	14213621.29	39°08'30.7122"N	80°51'42.9764"W	10843.97	159.327	0.66	0.16	0.64	
18373.00	90.620	162.200	6543.81	10932.66	-10236.26	3857.10	1679590.56	14213530.82	39°08'29.8172"N	80°51'42.6121"W	10938.84	159.353	0.35	0.23	-0.26	
18467.00	89.690	161.730	6543.56	11026.65	-10325.64	3886.20	1679619.65	14213441.47	39°08'28.9333"N	80°51'42.2445"W	11032.74	159.375	1.11	-0.99	-0.50	
18562.00	90.150	161.590	6543.69	11121.65	-10415.82	3916.09	1679649.53	14213351.34	39°08'28.0416"N	80°51'41.8668"W	11127.67	159.395	0.51	0.48	-0.15	
18657.00	90.550	162.030	6543.11	11216.64	-10506.07	3945.75	1679679.18	14213261.12	39°08'27.1491"N	80°51'41.4922"W	11222.58	159.415	0.63	0.42	0.46	
18752.00	90.620	162.430	6542.14	11311.62	-10596.53	3974.74	1679708.16	14213170.70	39°08'26.2545"N	80°51'41.1260"W	11317.46	159.439	0.43	0.07	0.42	
18846.00	90.060	161.890	6541.58	11405.61	-10686.01	4003.54	1679736.94	14213081.25	39°08'25.3697"N	80°51'40.7622"W	11411.36	159.461	0.83	-0.60	-0.57	
18941.00	90.890	163.020	6540.79	11500.58	-10776.58	4032.17	1679765.57	14212990.71	39°08'24.4740"N	80°51'40.4006"W	11506.22	159.486	1.48	0.87	1.19	
19036.00	88.310	160.960	6541.46	11595.56	-10866.91	4061.54	1679794.92	14212900.42	39°08'23.5807"N	80°51'40.0296"W	11601.12	159.507	3.48	-2.72	-2.17	
19130.00	90.310	162.000	6542.59	11689.55	-10956.03	4091.39	1679824.76	14212811.34	39°08'22.6994"N	80°51'39.6524"W	11695.05	159.522	2.40	2.13	1.11	
19225.00	90.550	159.480	6541.88	11784.53	-11045.71	4122.73	1679856.08	14212721.70	39°08'21.8126"N	80°51'39.2565"W	11790.02	159.532	2.66	0.25	-2.65	
19319.00	90.550	160.510	6540.97	11878.50	-11134.03	4154.88	1679888.23	14212633.41	39°08'20.9392"N	80°51'38.8501"W	11884.01	159.536	1.10	0.00	1.10	
19414.00	90.650	160.240	6539.98	11973.49	-11223.51	4186.79	1679920.12	14212543.97	39°08'20.0543"N	80°51'38.4470"W	11978.99	159.543	0.30	0.11	-0.28	
19509.00	90.620	160.460	6538.93	12068.47	-11312.97	4218.73	1679952.05	14212454.54	39°08'19.1696"N	80°51'38.0433"W	12073.98	159.549	0.23	-0.03	0.23	
19604.00	90.220	159.830	6538.23	12163.45	-11402.32	4251.00	1679984.30	14212365.23	39°08'18.2859"N	80°51'37.6356"W	12168.97	159.554	0.79	-0.42	-0.66	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Earl Unit 1H
Field	Ritchie	API	47-085-10414-0000
Facility	Weekley West Pad	Wellbore	Earl Unit 1H AWB
Slot	Slot D		

WELLPATH DATA (221 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]	
19898.00	89.380	159.970	6538.56	12257.42	-11490.59	4283.30	1680016.59	14212276.99	39°08'17.4130"N	80°51'37.2273"W	12262.97	159.556	0.91	-0.89	0.15	
19792.00	91.080	160.390	6538.18	12351.39	-11579.02	4315.17	1680048.45	14212188.60	39°08'16.5385"N	80°51'36.8246"W	12356.96	159.561	1.86	1.81	0.45	
19887.00	90.800	160.170	6536.62	12446.37	-11668.43	4347.22	1680080.49	14212099.22	39°08'15.6542"N	80°51'36.4195"W	12451.94	159.566	0.37	-0.29	-0.23	
19982.00	89.690	159.690	6536.21	12541.34	-11757.66	4379.82	1680113.08	14212010.03	39°08'14.7718"N	80°51'36.0076"W	12546.93	159.569	1.27	-1.17	-0.51	
20076.00	89.260	159.670	6537.08	12635.30	-11845.81	4412.46	1680145.71	14211921.92	39°08'13.9000"N	80°51'35.5950"W	12640.93	159.570	0.46	-0.46	-0.02	
20171.00	90.860	159.870	6536.98	12730.26	-11934.95	4445.31	1680178.54	14211832.81	39°08'13.0185"N	80°51'35.1799"W	12735.92	159.572	1.70	1.68	0.21	
20266.00	90.150	159.540	6536.14	12825.22	-12024.04	4478.26	1680211.48	14211743.75	39°08'12.1374"N	80°51'34.7635"W	12830.92	159.573	0.82	-0.75	-0.35	
20360.00	90.550	160.590	6535.57	12919.20	-12112.41	4510.31	1680243.51	14211655.42	39°08'11.2635"N	80°51'34.3585"W	12924.91	159.576	1.20	0.43	1.12	
20455.00	90.310	160.470	6534.85	13014.19	-12201.97	4541.97	1680275.16	14211565.89	39°08'10.3777"N	80°51'33.9584"W	13019.90	159.583	0.28	-0.25	-0.13	
20510.00	90.490	160.570	6534.47	13069.18	-12253.82	4560.31	1680293.50	14211514.06	39°08'9.8650"N	80°51'33.7267"W	13074.89	159.587	0.37	0.33	0.18	
20536.00†	90.490	160.570	6534.25	13095.18	-12278.34	4568.96	1680302.14	14211489.56	39°08'9.6225"N	80°51'33.6174"W	13100.88	159.589	0.00	0.00	0.00	Projected MD at TD: 20536'

HOLE & CASING SECTIONS - Ref Wellbore: Earl Unit 1H AWB Ref Wellpath: Earl Unit 1H AWP Proj: 20536'									
String/Diameter	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	Start E/W	End N/S	End E/W
	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]
20in Conductor	30.00	130.00	100.00	30.00	130.00	0.00	0.00	0.04	0.11
17.5in Open Hole	130.00	600.00	470.00	130.00	599.99	0.04	0.11	-1.03	1.05
13.375in Casing Surface	30.00	580.00	550.00	30.00	579.99	0.00	0.00	-0.91	1.07
12.25in Open Hole	600.00	2643.00	2043.00	599.99	2604.38	-1.03	1.05	347.56	5.58
9.625in Casing Intermediate	30.00	2624.00	2594.00	30.00	2585.91	0.00	0.00	343.13	6.06
8.75in Open Hole	2643.00	5826.00	3183.00	2604.38	5696.49	347.56	5.58	1097.26	-13.54
8.5in Open Hole	5826.00	20536.00	14710.00	5696.49	6534.25	1097.26	-13.54	-12278.34	4568.96
5.5in Casing Production	30.00	20516.00	20486.00	30.00	6534.42	0.00	0.00	-12259.48	4562.31



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Earl Unit 1H AWP Proj: 20536'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Earl Unit 1H
Field	Ritchie	API	47-085-10414-0000
Facility	Weekley West Pad	Wellbore	Earl Unit 1H AWB
Slot	Slot D		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Earl Unit 1H POE Rev-2	6552.00	614.66	192.87	1675927.80	14224377.39	39°10'17.1196"N	80°52'28.9276"W	point
Earl Unit 1H BHL Rev-3	6575.00	-12267.27	4559.13	1680292.31	14211500.62	39°08'9.7320"N	80°51'33.7420"W	point
Earl Unit 1H LP Rev-3	6575.00	444.14	250.66	1675985.57	14224206.94	39°10'15.4334"N	80°52'28.1968"W	point
Earl Unit 1H 50' L/R Hard Line	7000.00	-5826.31	2376.00	1678110.06	14217939.00	39°09'13.4268"N	80°52'1.3279"W	rectangle
2D Rectangle 13601.8 x 100.								

WELLPATH COMPOSITION - Ref Wellbore: Earl Unit 1H AWB Ref Wellpath: Earl Unit 1H AWP Proj: 20536'						
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date	
30.00	500.00	Gyrodata 2015 - GC+WIR+DPIPE	01 Gyrodata MS Gyro <17-1/2"> (100'-500')	Earl Unit 1H AWB	07/Jan/2022	
500.00	645.00	Gyrodata 2015 - GC+WIR+DPIPE	02 Gyrodata MS Gyro <12-1/4"> (500')(600'-645')	Earl Unit 1H AWB	12/Jan/2022	
645.00	2566.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03 APS EM <12-1/4"> (645')(686'-2566')	Earl Unit 1H AWB	07/Jan/2022	
2566.00	5752.00	BH NaviTrak (2019) (Axial Corr+HRGM)	04 APS EM <8-3/4"> (2566')(2661'-5752')	Earl Unit 1H AWB	17/Feb/2022	
5752.00	20536.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	05 BH AT Curve <8-1/2"> (5752')(5814'-20510')	Earl Unit 1H AWB	17/Feb/2022	



Actual Wellpath Report

Earl Unit 1H AWP Proj: 20536'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Earl Unit 1H
Field	Ritchie	API	47-085-10414-0000
Facility	Weekley West Pad	Wellbore	Earl Unit 1H AWB
Slot	Slot D		

COMMENTS

Wellpath general comments

API: 47-085-10414-0000
 BH Job #: 111180547
 Rig: H&P 531
 Duration: 2/20/2022-2/26/2022
 Gyrodata MS Gyro <17-1/2"> (100'-500')
 Gyrodata MS Gyro <12-1/4"> (500')(600'-645')
 APS EM <12-1/4"> (645')(686'-2566')
 APS EM <8-3/4"> (2566')(2661'-5752')
 BH AT Curve <8-1/2"> (5752')(5814'-20510')
 Sycamore: 6360' MD
 Middlesex: 6569' MD
 Burkett: 6748' MD
 Tully: 6829' MD
 Marcellus POE: 6895' MD
 Projected MD at TD: 20536'



ANTERO RESOURCES CORPORATION

Location: Ritchie County, WV
Field: Ritchie
Facility: Weekley West Pad

Slot: Slot D
Well: Earl Unit 1H
Wellbore: Earl Unit 1H PWB



Plot reference wellpath as Earl Unit 1H PWB Rev-B.0	Grid System: NAD27 / 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: 1155 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot D): -125 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: edasanyar on 2022-03-03; Database: WA_MPL_EASTERNUS_Datb

Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Weekley West Pad	1676735.170	14223718.090	39°10'10.8030"N	80°52'31.3660"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot D	44.92	-0.16	1675735.010	14223762.990
Comment	Earl Unit 1H			
H&P 531 (RKB) to Ground level (At Slot: Slot D)	30ft			
Mean Sea Level to Ground level (At Slot: Slot D)	-1125ft			
H&P 531 (RKB) to Mean Sea Level	1155ft			

Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	2566.00	13.800	353.940	2529.58	329.48	7.51	0.75	-309.64
Proj. to Bottom	2643.00	13.900	353.940	2604.34	347.75	5.58	0.00	-327.56
Drill Out	2723.00	13.800	353.840	2682.03	366.72	3.55	0.00	-346.18
End of 3D Arc	2776.62	13.487	358.290	2734.14	379.33	2.70	2.00	-358.40
Curve KOP	5826.83	13.487	358.290	5700.23	1090.40	-18.53	0.00	-1038.66
POE	6931.34	75.440	161.276	6552.00	614.66	192.87	8.00	-520.24
Landing Pt.	7113.34	90.000	161.276	6575.00	444.14	250.66	8.00	-340.20
BHL	20535.07	90.000	161.276	6575.00	-12267.27	4559.13	0.00	13081.54

Well Data			
Slot	Well	Wellbore	Wellpath
Slot D	Earl Unit 1H	Earl Unit 1H AWB	Earl Unit 1H AWP Proj: 20536'
Slot D	Earl Unit 1H	Earl Unit 1H PWB	Earl Unit 1H PWB Rev-B.0

