



# ANTERO RESOURCES CORPORATION



Location: Wetzel County, WV  
 Field: Wetzel  
 Facility: Fluharty Pad

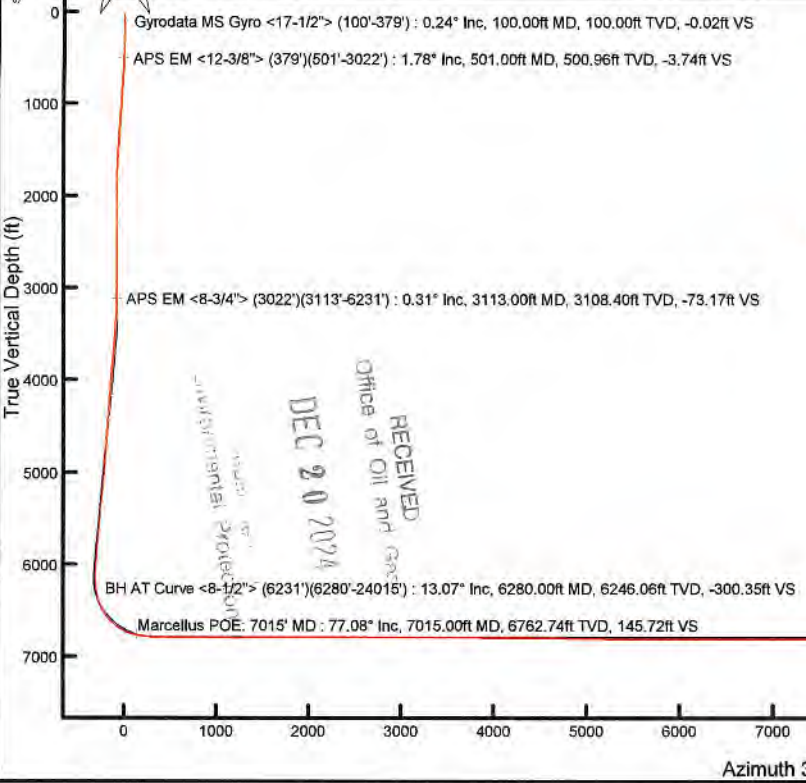
Slot: Slot C  
 Well: Howell Unit 1H  
 Wellbore: Howell Unit 1H PWB

Field reference wellbore is Howell Unit 1H PWB Rev-B.0	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 317 (R&B)	North Reference: Grid north
Reference wellbore measured depths are referenced to H&P 317 (R&B)	Scale: True distance
H&P 317 (R&B) to Mean Sea Level: 1266.5 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot C): -1161 feet	Depths are in feet
Other wellbore MDs are referenced to each well's default MD datum	Created by: subayan on 2024-04-13, Database: WA_MPL_EASTERNMPL_Debr

Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Fluharty Pad	1692996.950	14370028.840	39°34'16.9651"N	80°48'52.2497"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot C	10.39	-10.81	1692976.140	14370039.230
			39°34'17.0691"N	80°48'52.3875"W
Comment: Howell Unit 1H				
H&P 317 (R&B) to Ground level (At Slot: Slot C)	25.5ft			
Mean Sea Level to Ground level (At Slot: Slot C)	-1161ft			
H&P 317 (R&B) to Mean Sea Level	1206.5ft			

Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	VS (ft)
Tie On	3022.00	0.570	44.880	3017.41	-92.78	-44.05	-73.52
Proj. to Bottom	3093.00	0.570	44.880	3088.40	-92.29	-43.55	-73.20
KOP 1	3173.00	0.570	44.880	3168.40	-91.72	-42.99	-72.85
End of 3D Arc	3624.59	8.473	213.217	3518.44	-118.02	-59.96	2.00
Curve KOP	6124.43	8.473	213.217	6091.01	-426.16	-261.44	0.00
POE	7000.79	73.569	341.102	6757.00	-15.56	-466.36	9.00
Landing Pt.	7183.36	90.000	341.102	6783.00	154.82	-524.68	9.00
BHL	24005.01	90.000	341.102	6783.00	16089.74	-5972.89	0.00

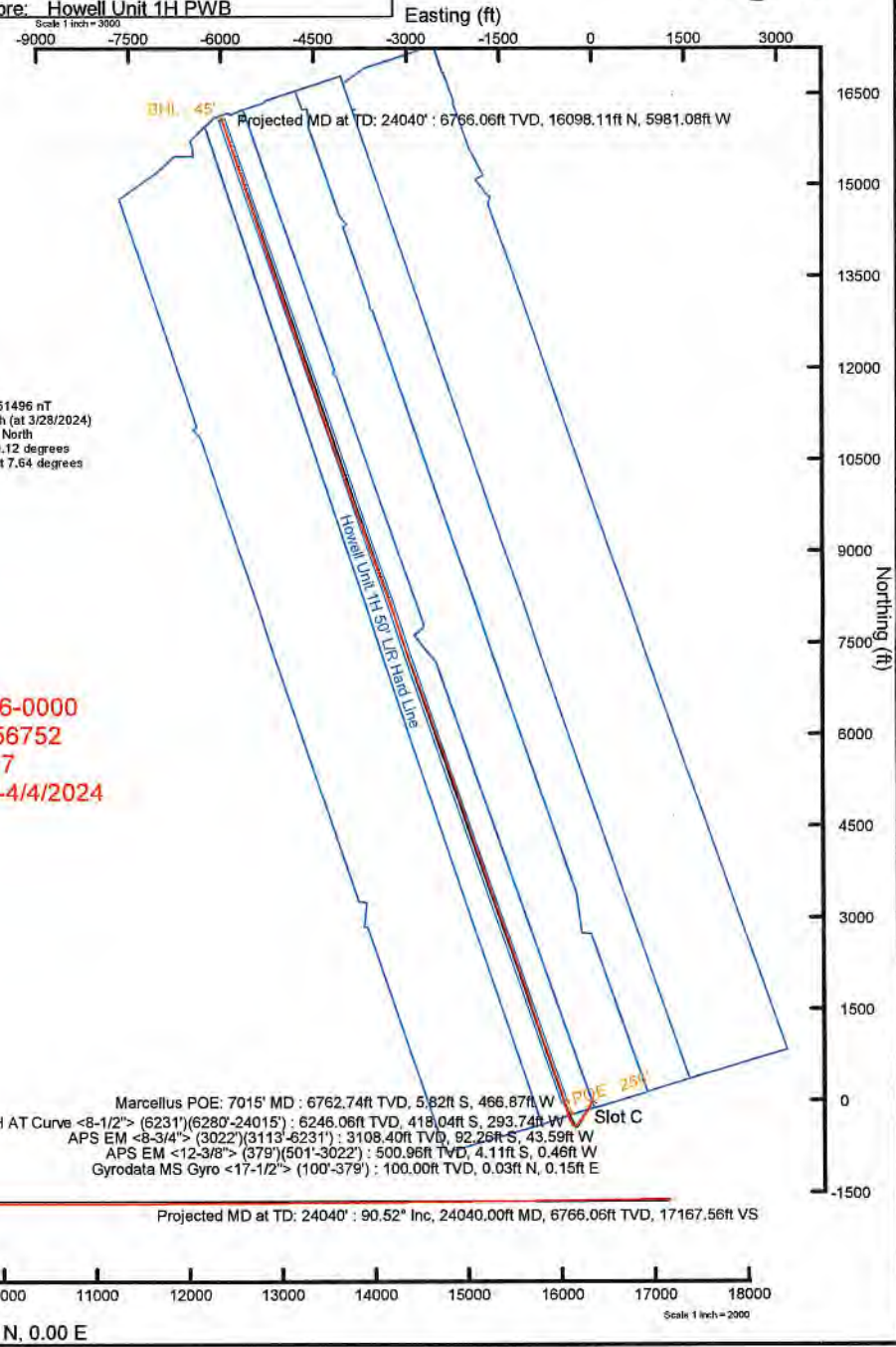
Well Data			
Slot	Well	Wellbore	Wellpath
Slot C	Howell Unit 1H	Howell Unit 1H AWB	Howell Unit 1H AWP Proj. 24040°
Slot C	Howell Unit 1H	Howell Unit 1H PWB	Howell Unit 1H PWP Rev-B.0



API: 47-103-03636-0000  
 BH Job #: 112156752  
 Rig: H&P 317  
 Duration: 3/31/2024-4/4/2024



User specified (HDGM) Dip: 66.24° Field: 51496 nT  
 Magnetic North is 7.52 degrees West of True North (at 3/28/2024)  
 Grid North is 0.12 degrees East of True North  
 To correct azimuth from True to Grid subtract 0.12 degrees  
 To correct azimuth from Magnetic to Grid subtract 7.64 degrees



RECEIVED  
 Office of Oil and Gas  
 DEC 20 2024  
 ENVIRONMENTAL PROTECTION



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'  
Page 1 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999603	Report Generated	4/13/2024 at 9:28:54 PM
Convergence at slot	0.12° 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	10.39	-10.81	1692676.14	14370039.23	39°34'17.0691"N	80°48'52.3875"W
Facility Reference Pt			1692686.95	14370028.84	39°34'16.9661"N	80°48'52.2497"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 317 (RKB) to Facility Vertical Datum	1206.50ft
Horizontal Reference Pt	Slot	H&P 317 (RKB) to Mean Sea Level	1206.50ft
Vertical Reference Pt	H&P 317 (RKB)	H&P 317 (RKB) to Ground Level at Slot (Slot C)	25.50ft
MD Reference Pt	H&P 317 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	341.10°

RECEIVED  
Office of Oil and Gas  
DEC 20 2024  
WV Department of  
Environmental Protection



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'  
Page 2 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

WELLPATH DATA (260 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	77.860	0.00	0.00	0.00	0.00	1692676.14	14370039.23	39°34'17.0691"N	80°48'52.3875"W	0.00	0.000	0.00	0.00	0.00	
25.50	0.000	77.860	25.50	0.00	0.00	0.00	1692676.14	14370039.23	39°34'17.0691"N	80°48'52.3875"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.240	77.860	100.00	-0.02	0.03	0.15	1692676.29	14370039.26	39°34'17.0694"N	80°48'52.3856"W	0.16	77.860	0.32	0.32	0.00	Gyrodata MS Gyro <17-1/2"> (100'-379')
200.00	0.490	155.330	200.00	-0.47	-0.31	0.54	1692676.68	14370038.92	39°34'17.0660"N	80°48'52.3807"W	0.62	120.191	0.50	0.25	77.47	
300.00	0.520	178.270	299.99	-1.33	-1.15	0.73	1692676.87	14370038.08	39°34'17.0577"N	80°48'52.3783"W	1.36	147.753	0.20	0.03	22.94	
379.00	0.560	197.870	378.99	-1.98	-1.88	0.62	1692676.76	14370037.35	39°34'17.0505"N	80°48'52.3797"W	1.98	161.736	0.24	0.05	24.81	
501.00	1.780	208.330	500.96	-3.74	-4.11	-0.46	1692675.68	14370035.12	39°34'17.0284"N	80°48'52.3935"W	4.14	186.404	1.01	1.00	8.57	APS EM <12-3/8"> (379')(501'-3022')
590.00	3.640	215.660	589.86	-6.32	-7.63	-2.77	1692673.38	14370031.61	39°34'16.9938"N	80°48'52.4230"W	8.11	199.926	2.12	2.09	8.24	
679.00	4.170	215.690	678.65	-9.83	-12.55	-6.30	1692669.84	14370026.68	39°34'16.9452"N	80°48'52.4683"W	14.04	206.654	0.60	0.60	0.03	
768.00	3.900	213.150	767.43	-13.57	-17.71	-9.84	1692666.30	14370021.52	39°34'16.8942"N	80°48'52.5137"W	20.26	209.060	0.36	-0.30	-2.85	
856.00	5.420	214.600	855.14	-17.88	-23.64	-13.84	1692662.31	14370015.60	39°34'16.8357"N	80°48'52.5649"W	27.39	210.346	1.73	1.73	1.65	
944.00	5.830	214.660	942.72	-23.01	-30.74	-18.74	1692657.41	14370008.50	39°34'16.7657"N	80°48'52.6277"W	36.00	211.372	0.47	0.47	0.07	
1038.00	5.530	209.800	1036.25	-28.83	-38.59	-23.71	1692652.44	14370000.65	39°34'16.6881"N	80°48'52.6913"W	45.29	211.561	0.60	-0.32	-5.17	
1133.00	5.460	210.960	1130.82	-34.77	-46.44	-28.31	1692647.84	14369992.81	39°34'16.6107"N	80°48'52.7502"W	54.39	211.363	0.14	-0.07	1.22	
1227.00	5.300	210.460	1224.40	-40.48	-54.02	-32.81	1692643.34	14369985.23	39°34'16.5359"N	80°48'52.8079"W	63.20	211.272	0.18	-0.17	-0.53	
1321.00	5.230	209.090	1318.01	-46.17	-61.51	-37.09	1692639.06	14369977.75	39°34'16.4620"N	80°48'52.8628"W	71.82	211.093	0.15	-0.07	-1.46	
1416.00	5.410	209.330	1412.60	-52.06	-69.19	-41.39	1692634.77	14369970.06	39°34'16.3861"N	80°48'52.9179"W	80.63	210.888	0.19	0.19	0.25	
1510.00	5.090	208.220	1506.20	-57.85	-76.73	-45.53	1692630.62	14369962.53	39°34'16.3117"N	80°48'52.9710"W	89.22	210.686	0.36	-0.34	-1.18	
1605.00	4.930	204.720	1600.84	-63.67	-84.15	-49.23	1692626.93	14369955.11	39°34'16.2384"N	80°48'53.0185"W	97.50	210.330	0.36	-0.17	-3.68	
1699.00	3.570	200.540	1694.58	-68.85	-90.56	-51.95	1692624.21	14369948.70	39°34'16.1751"N	80°48'53.0533"W	104.40	209.840	1.48	-1.45	-4.45	
1794.00	1.820	188.590	1789.47	-72.48	-94.82	-53.21	1692622.95	14369944.44	39°34'16.1330"N	80°48'53.0695"W	108.73	209.300	1.92	-1.84	-12.58	
1888.00	0.670	113.070	1883.45	-74.17	-96.52	-52.93	1692623.23	14369942.75	39°34'16.1163"N	80°48'53.0660"W	110.08	208.741	1.89	-1.22	-80.34	
1983.00	0.520	81.770	1978.45	-74.62	-96.67	-51.99	1692624.17	14369942.60	39°34'16.1147"N	80°48'53.0540"W	109.77	208.272	0.37	-0.16	-32.95	
2077.00	0.300	69.740	2072.45	-74.69	-96.53	-51.34	1692624.82	14369942.74	39°34'16.1162"N	80°48'53.0457"W	109.33	208.007	0.25	-0.23	-12.80	
2172.00	0.470	82.170	2167.44	-74.76	-96.39	-50.72	1692625.44	14369942.88	39°34'16.1175"N	80°48'53.0378"W	108.92	207.754	0.20	0.18	13.08	
2266.00	0.590	68.740	2261.44	-74.81	-96.16	-49.89	1692626.27	14369943.11	39°34'16.1198"N	80°48'53.0271"W	108.33	207.420	0.18	0.13	-14.29	
2360.00	0.520	76.630	2355.43	-74.84	-95.88	-49.02	1692627.14	14369943.38	39°34'16.1225"N	80°48'53.0160"W	107.69	207.078	0.11	-0.07	8.39	
2455.00	0.600	76.040	2450.43	-74.92	-95.66	-48.12	1692628.04	14369943.60	39°34'16.1246"N	80°48'53.0045"W	107.08	206.702	0.08	0.08	-0.62	
2549.00	0.600	64.110	2544.42	-74.90	-95.33	-47.20	1692628.96	14369943.94	39°34'16.1279"N	80°48'52.9928"W	106.37	206.340	0.13	0.00	-12.69	
2644.00	0.550	50.210	2639.42	-74.68	-94.82	-46.40	1692629.76	14369944.45	39°34'16.1329"N	80°48'52.9826"W	105.57	206.075	0.16	-0.05	-14.63	

RECEIVED  
Office of Oil and Gas  
DEC 20 2024  
Mental Health Services  
Mental Health Services



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'

Page 3 of 13



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

## WELLPATH DATA (260 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
2738.00	0.450	60.980	2733.42	-74.45	-94.35	-45.73	1692630.43	14369944.91	39°34'16.1375"N	80°48'52.9740"W	104.85	205.858	0.15	-0.11	11.46	
2833.00	0.450	46.570	2828.41	-74.23	-93.92	-45.13	1692631.02	14369945.35	39°34'16.1418"N	80°48'52.9664"W	104.20	205.668	0.12	0.00	-15.17	
2927.00	0.440	41.870	2922.41	-73.90	-93.39	-44.62	1692631.53	14369945.87	39°34'16.1470"N	80°48'52.9598"W	103.51	205.539	0.04	-0.01	-5.00	
3022.00	0.570	44.880	3017.41	-73.52	-92.79	-44.05	1692632.11	14369946.48	39°34'16.1530"N	80°48'52.9525"W	102.71	205.395	0.14	0.14	3.17	
3113.00	0.310	34.880	3108.40	-73.17	-92.26	-43.59	1692632.57	14369947.00	39°34'16.1581"N	80°48'52.9466"W	102.04	205.287	0.30	-0.29	-10.99	APS EM <8-3/4"> (3022')(3113'-6231')
3208.00	2.280	215.070	3203.38	-74.13	-93.60	-44.53	1692631.63	14369945.67	39°34'16.1449"N	80°48'52.9586"W	103.65	205.441	2.73	2.07	-189.27	
3302.00	4.540	208.050	3297.21	-77.77	-98.42	-47.35	1692628.81	14369940.85	39°34'16.0974"N	80°48'52.9948"W	109.21	205.694	2.44	2.40	-7.47	
3397.00	6.890	211.940	3391.73	-83.94	-106.57	-52.13	1692624.03	14369932.70	39°34'16.0169"N	80°48'53.0561"W	118.64	206.068	2.51	2.47	4.09	
3492.00	7.070	209.840	3486.03	-91.39	-116.48	-58.06	1692618.11	14369922.80	39°34'15.9191"N	80°48'53.1320"W	130.14	206.494	0.33	0.19	-2.21	
3586.00	6.470	207.070	3579.37	-98.89	-126.21	-63.35	1692612.82	14369913.07	39°34'15.8230"N	80°48'53.1998"W	141.22	206.653	0.73	-0.64	-2.95	
3680.00	6.390	200.520	3672.78	-106.61	-135.83	-67.59	1692608.58	14369903.46	39°34'15.7281"N	80°48'53.2542"W	151.71	206.456	0.78	-0.09	-6.97	
3774.00	7.680	208.050	3766.07	-114.94	-146.27	-72.38	1692603.79	14369893.02	39°34'15.6250"N	80°48'53.3156"W	163.20	206.327	1.68	1.37	8.01	
3868.00	8.720	219.990	3859.12	-122.91	-157.27	-79.91	1692596.26	14369882.02	39°34'15.5164"N	80°48'53.4121"W	176.41	206.936	2.12	1.11	12.70	
3963.00	8.030	218.950	3953.11	-130.16	-167.95	-88.71	1692587.46	14369871.35	39°34'15.4110"N	80°48'53.5248"W	189.94	207.843	0.74	-0.73	-1.09	
4057.00	7.670	212.640	4046.23	-137.56	-178.34	-96.22	1692579.96	14369860.96	39°34'15.3085"N	80°48'53.6210"W	202.64	208.349	0.99	-0.38	-6.71	
4151.00	7.110	207.330	4139.45	-145.48	-188.79	-102.28	1692573.90	14369850.52	39°34'15.2053"N	80°48'53.6985"W	214.71	208.447	0.94	-0.60	-5.65	
4246.00	8.060	216.180	4233.62	-153.36	-199.39	-108.91	1692567.28	14369839.92	39°34'15.1007"N	80°48'53.7835"W	227.19	208.644	1.58	1.00	9.32	
4340.00	8.010	216.740	4326.69	-160.83	-209.96	-116.72	1692559.47	14369829.36	39°34'14.9964"N	80°48'53.8835"W	240.22	209.070	0.10	-0.05	0.60	
4434.00	7.290	210.260	4419.86	-168.43	-220.36	-123.64	1692552.55	14369818.96	39°34'14.8938"N	80°48'53.9722"W	252.67	209.296	1.19	-0.77	-6.89	
4529.00	8.080	217.730	4514.01	-176.04	-230.84	-130.76	1692545.43	14369808.48	39°34'14.7903"N	80°48'54.0634"W	265.31	209.529	1.34	0.83	7.86	
4623.00	7.980	216.920	4607.09	-183.34	-241.28	-138.72	1692537.47	14369798.04	39°34'14.6873"N	80°48'54.1653"W	278.32	209.896	0.16	-0.11	-0.86	
4717.00	7.140	212.940	4700.27	-190.62	-251.40	-145.82	1692530.38	14369787.93	39°34'14.5874"N	80°48'54.2562"W	290.63	210.115	1.05	-0.89	-4.23	
4812.00	8.080	220.590	4794.43	-197.65	-261.43	-153.37	1692522.83	14369777.91	39°34'14.4885"N	80°48'54.3530"W	303.10	210.399	1.45	0.89	8.05	
4909.00	7.900	220.220	4890.49	-204.54	-271.70	-162.11	1692514.09	14369767.64	39°34'14.3872"N	80°48'54.4648"W	316.39	210.824	0.19	-0.19	-0.38	
5004.00	7.140	213.560	4984.68	-211.48	-281.60	-169.59	1692506.61	14369757.74	39°34'14.2894"N	80°48'54.5606"W	328.73	211.058	1.22	-0.80	-7.01	
5098.00	8.240	218.410	5077.83	-218.68	-291.75	-177.01	1692499.20	14369747.60	39°34'14.1893"N	80°48'54.6556"W	341.25	211.246	1.36	1.17	5.16	
5192.00	10.270	216.690	5170.60	-227.06	-303.75	-186.20	1692490.01	14369735.60	39°34'14.0709"N	80°48'54.7733"W	356.28	211.509	2.18	2.16	-1.83	
5287.00	10.050	216.970	5264.11	-236.49	-317.16	-196.25	1692479.97	14369722.20	39°34'13.9385"N	80°48'54.9019"W	372.96	211.748	0.24	-0.23	0.29	
5381.00	9.260	215.050	5356.78	-245.55	-329.90	-205.52	1692470.70	14369709.46	39°34'13.8128"N	80°48'55.0207"W	388.69	211.922	0.91	-0.84	-2.04	
5475.00	8.280	209.920	5449.68	-254.45	-341.96	-213.24	1692462.98	14369697.40	39°34'13.6937"N	80°48'55.1196"W	403.00	211.947	1.33	-1.04	-5.46	

RECEIVED  
Office of Oil and Gas  
DEC 20 2024  
Antero Resources  
Environmental Protection



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'  
Page 4 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

WELLPATH DATA (260 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
5570.00	9.220	218.750	5543.58	-263.03	-353.83	-221.42	1692454.81	14369685.54	39°34'13.5766"N	80°48'55.2243"W	417.40	212.038	1.72	0.99	9.29	
5665.00	9.410	220.720	5637.33	-271.03	-365.65	-231.25	1692444.98	14369673.73	39°34'13.4600"N	80°48'55.3501"W	432.64	212.311	0.39	0.20	2.07	
5759.00	8.590	214.770	5730.17	-279.08	-377.24	-240.27	1692435.97	14369662.14	39°34'13.3456"N	80°48'55.4656"W	447.26	212.493	1.32	-0.87	-6.33	
5853.00	8.550	219.040	5823.12	-286.94	-388.43	-248.67	1692427.57	14369650.95	39°34'13.2352"N	80°48'55.5732"W	461.21	212.627	0.68	-0.04	4.54	
5948.00	8.060	222.040	5917.12	-293.93	-398.87	-257.58	1692418.66	14369640.52	39°34'13.1323"N	80°48'55.6872"W	474.81	212.853	0.69	-0.52	3.16	
6042.00	6.610	220.680	6010.35	-299.87	-407.86	-265.52	1692410.73	14369631.53	39°34'13.0435"N	80°48'55.7888"W	486.67	213.064	1.55	-1.54	-1.45	
6137.00	5.690	232.500	6104.81	-304.14	-414.88	-272.82	1692403.43	14369624.52	39°34'12.9743"N	80°48'55.8822"W	496.54	213.328	1.64	-0.97	12.44	
6231.00	9.510	263.890	6198.00	-303.91	-418.54	-284.25	1692392.01	14369620.85	39°34'12.9383"N	80°48'56.0283"W	505.94	214.182	5.86	4.06	33.39	
6280.00	13.070	279.750	6246.06	-300.35	-418.04	-293.74	1692382.52	14369621.36	39°34'12.9435"N	80°48'56.1494"W	510.92	215.094	9.58	7.27	32.37	BH AT Curve <8-1/2"> (6231')(6280'-24015')
6357.00	16.200	299.840	6320.80	-288.09	-411.21	-311.65	1692364.61	14369628.18	39°34'13.0113"N	80°48'56.3780"W	515.98	217.158	7.69	4.06	26.09	
6452.00	21.310	324.990	6410.67	-261.48	-390.43	-333.10	1692343.18	14369648.95	39°34'13.2171"N	80°48'56.6513"W	513.22	220.469	9.95	5.38	26.47	
6518.00†	27.586	330.264	6470.73	-234.92	-367.31	-347.57	1692328.70	14369672.06	39°34'13.4459"N	80°48'56.8356"W	505.69	223.418	10.06	9.51	7.99	Sycamore: 6518' MD
6547.00	30.390	331.930	6496.09	-221.08	-355.01	-354.36	1692321.92	14369684.36	39°34'13.5677"N	80°48'56.9219"W	501.60	224.948	10.06	9.67	5.74	
6641.00	39.280	338.760	6573.20	-167.75	-306.18	-376.38	1692299.91	14369733.18	39°34'14.0507"N	80°48'57.2018"W	485.18	230.872	10.32	9.46	7.27	
6654.00†	40.620	339.320	6583.17	-159.41	-298.38	-379.36	1692296.93	14369740.97	39°34'14.1278"N	80°48'57.2397"W	482.65	231.814	10.67	10.31	4.31	Middlesex: 6654' MD
6736.00	49.120	342.270	6641.23	-101.63	-243.78	-398.27	1692278.03	14369795.55	39°34'14.6679"N	80°48'57.4797"W	466.95	238.530	10.67	10.37	3.60	
6786.00†	54.047	343.381	6672.29	-62.48	-206.35	-409.82	1692266.49	14369832.96	39°34'15.0380"N	80°48'57.6262"W	458.84	243.273	10.01	9.85	2.22	Burkett: 6786' MD
6822.00†	57.600	344.098	6692.51	-32.74	-177.77	-418.15	1692258.15	14369861.53	39°34'15.3207"N	80°48'57.7319"W	454.37	246.968	10.01	9.87	1.99	Tully: 6822' MD
6830.00	58.390	344.250	6696.75	-25.96	-171.24	-420.00	1692256.31	14369868.06	39°34'15.3852"N	80°48'57.7554"W	453.57	247.819	10.01	9.88	1.89	
6924.00	70.420	344.560	6737.29	58.52	-89.73	-442.74	1692233.58	14369949.53	39°34'16.1912"N	80°48'58.0436"W	451.74	258.543	12.80	12.80	0.33	
7015.00†	77.077	343.371	6762.74	145.72	-5.82	-466.87	1692209.45	14370033.41	39°34'17.0210"N	80°48'58.3496"W	466.91	269.286	7.42	7.32	-1.31	Marcellus POE: 7015' MD
7019.00	77.370	343.320	6763.63	149.62	-2.08	-467.99	1692208.34	14370037.15	39°34'17.0580"N	80°48'58.3637"W	467.99	269.745	7.42	7.32	-1.26	
7114.00	83.520	343.070	6779.39	243.19	87.55	-495.06	1692181.27	14370126.75	39°34'17.9445"N	80°48'58.7071"W	502.75	280.029	6.48	6.47	-0.26	
7208.00	87.570	342.000	6786.69	336.86	176.93	-523.19	1692153.16	14370216.09	39°34'18.8283"N	80°48'59.0639"W	552.29	288.684	4.46	4.31	-1.14	
7303.00	89.780	340.730	6788.88	431.83	266.92	-553.53	1692122.83	14370306.04	39°34'19.7183"N	80°48'59.4491"W	614.53	295.744	2.68	2.33	-1.34	
7397.00	89.970	341.130	6789.09	525.82	355.76	-584.24	1692092.13	14370394.85	39°34'20.5970"N	80°48'59.8390"W	684.04	301.338	0.47	0.20	0.43	
7491.00	90.280	340.950	6788.88	619.82	444.66	-614.79	1692061.60	14370483.71	39°34'21.4762"N	80°49'0.2267"W	758.74	305.877	0.38	0.33	-0.19	
7586.00	89.940	342.290	6788.70	714.82	534.81	-644.74	1692031.66	14370573.83	39°34'22.3678"N	80°49'0.6068"W	837.68	309.676	1.46	-0.36	1.41	
7680.00	89.540	340.700	6789.13	808.81	623.95	-674.57	1692001.84	14370662.93	39°34'23.2493"N	80°49'0.9855"W	918.89	312.767	1.74	-0.43	-1.69	
7775.00	90.430	340.940	6789.15	903.81	713.67	-705.78	1691970.64	14370752.62	39°34'24.1367"N	80°49'1.3817"W	1003.72	315.318	0.97	0.94	0.25	

RECEIVED  
 Office of Oil and Gas  
 DEC 20 2024  
 (Antero) Department of  
 Environmental Protection



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040  
Page 5 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

WELLPATH DATA (260 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
7869.00	90.060	341.360	6788.75	997.81	802.63	-736.15	1691940.28	14370841.54	39°34'25.0165"N	80°49'1.7672"W	1089.10	317.474	0.60	-0.39	0.45	
7964.00	89.600	340.390	6789.03	1092.81	892.38	-767.28	1691909.17	14370931.26	39°34'25.9042"N	80°49'2.1624"W	1176.89	319.311	1.13	-0.48	-1.02	
8059.00	89.780	340.970	6789.55	1187.80	982.03	-798.71	1691877.75	14371020.87	39°34'26.7909"N	80°49'2.5614"W	1265.83	320.878	0.64	0.19	0.61	
8153.00	90.340	341.300	6789.45	1281.80	1070.98	-829.10	1691847.37	14371109.78	39°34'27.6706"N	80°49'2.9472"W	1354.40	322.255	0.69	0.60	0.35	
8248.00	89.850	341.260	6789.29	1376.80	1160.96	-859.59	1691816.89	14371199.72	39°34'28.5604"N	80°49'3.3343"W	1444.55	323.483	0.52	-0.52	-0.04	
8342.00	90.860	342.000	6788.71	1470.79	1250.16	-889.21	1691787.28	14371288.89	39°34'29.4427"N	80°49'3.7103"W	1534.15	324.577	1.33	1.07	0.79	
8437.00	90.400	341.750	6787.66	1565.78	1340.44	-918.77	1691757.74	14371379.14	39°34'30.3355"N	80°49'4.0853"W	1625.09	325.572	0.55	-0.48	-0.26	
8532.00	90.180	341.630	6787.18	1660.77	1430.63	-948.61	1691727.91	14371469.29	39°34'31.2275"N	80°49'4.4641"W	1716.56	326.453	0.26	-0.23	-0.13	
8626.00	90.550	342.210	6786.59	1754.76	1519.99	-977.78	1691698.75	14371558.61	39°34'32.1112"N	80°49'4.8343"W	1807.32	327.248	0.73	0.39	0.62	
8721.00	90.800	341.240	6785.47	1849.75	1610.19	-1007.57	1691668.97	14371648.78	39°34'33.0033"N	80°49'5.2124"W	1899.45	327.964	1.05	0.26	-1.02	
8815.00	90.430	341.470	6784.46	1943.74	1699.25	-1037.62	1691638.93	14371737.80	39°34'33.8841"N	80°49'5.5939"W	1991.01	328.590	0.46	-0.39	0.24	
8910.00	90.550	341.240	6783.64	2038.73	1789.26	-1067.99	1691608.58	14371827.78	39°34'34.7743"N	80°49'5.9794"W	2083.76	329.167	0.27	0.13	-0.24	
9004.00	89.720	341.560	6783.42	2132.73	1878.35	-1097.97	1691578.61	14371916.83	39°34'35.6554"N	80°49'6.3600"W	2175.72	329.692	0.95	-0.88	0.34	
9099.00	90.030	340.870	6783.63	2227.73	1968.29	-1128.56	1691548.03	14372006.73	39°34'36.5449"N	80°49'6.7484"W	2268.88	330.171	0.80	0.33	-0.73	
9194.00	90.150	341.270	6783.48	2322.73	2058.15	-1159.38	1691517.22	14372096.56	39°34'37.4336"N	80°49'7.1396"W	2362.23	330.607	0.44	0.13	0.42	
9289.00	90.280	340.830	6783.12	2417.73	2148.00	-1190.23	1691486.38	14372186.37	39°34'38.3222"N	80°49'7.5313"W	2455.72	331.009	0.48	0.14	-0.46	
9383.00	90.120	341.590	6782.80	2511.73	2236.99	-1220.51	1691456.12	14372275.33	39°34'39.2023"N	80°49'7.9157"W	2548.29	331.383	0.83	-0.17	0.81	
9478.00	89.630	341.330	6783.00	2606.73	2327.06	-1250.72	1691425.92	14372365.36	39°34'40.0931"N	80°49'8.2991"W	2641.87	331.743	0.58	-0.52	-0.27	
9572.00	89.630	341.820	6783.61	2700.72	2416.24	-1280.43	1691396.22	14372454.50	39°34'40.9751"N	80°49'8.6762"W	2734.54	332.080	0.52	0.00	0.52	
9666.00	89.750	341.310	6784.12	2794.72	2505.41	-1310.15	1691366.51	14372543.64	39°34'41.8570"N	80°49'9.0536"W	2827.29	332.394	0.56	0.13	-0.54	
9761.00	89.720	342.070	6784.56	2889.71	2595.60	-1340.00	1691336.68	14372633.80	39°34'42.7489"N	80°49'9.4324"W	2921.08	332.695	0.80	-0.03	0.80	
9856.00	89.350	340.540	6785.33	2984.70	2685.58	-1370.44	1691306.24	14372723.74	39°34'43.6388"N	80°49'9.8190"W	3015.04	332.965	1.66	-0.39	-1.61	
9950.00	89.910	342.430	6785.94	3078.69	2774.71	-1400.29	1691276.41	14372812.83	39°34'44.5203"N	80°49'10.1979"W	3108.03	333.222	2.10	0.60	2.01	
10044.00	89.660	339.620	6786.29	3172.68	2863.59	-1430.85	1691245.86	14372901.68	39°34'45.3994"N	80°49'10.5859"W	3201.17	333.450	3.00	-0.27	-2.99	
10138.00	90.400	341.170	6786.24	3266.67	2952.14	-1462.39	1691214.33	14372990.19	39°34'46.2751"N	80°49'10.9864"W	3294.50	333.648	1.83	0.79	1.65	
10233.00	89.600	341.290	6786.24	3361.67	3042.09	-1492.96	1691183.78	14373080.11	39°34'47.1647"N	80°49'11.3745"W	3388.69	333.860	0.85	-0.84	0.13	
10327.00	90.520	340.490	6786.14	3455.67	3130.91	-1523.73	1691153.01	14373168.89	39°34'48.0431"N	80°49'11.7653"W	3482.00	334.049	1.30	0.98	-0.85	
10421.00	89.320	341.660	6786.27	3549.67	3219.82	-1554.22	1691122.54	14373257.77	39°34'48.9225"N	80°49'12.1523"W	3575.31	334.233	1.78	-1.28	1.24	
10516.00	89.570	341.010	6787.19	3644.66	3309.82	-1584.62	1691092.15	14373347.73	39°34'49.8126"N	80°49'12.5383"W	3669.60	334.417	0.73	0.26	-0.68	
10610.00	89.450	341.340	6788.00	3738.66	3398.79	-1614.95	1691061.83	14373436.66	39°34'50.6924"N	80°49'12.9234"W	3762.96	334.585	0.37	-0.13	0.35	

RECEIVED  
Office of Oil and Gas  
DEC 20 2024  
Environmental Protection



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'  
Page 6 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

WELLPATH DATA (260 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
10705.00	89.540	340.440	6788.83	3833.65	3488.55	-1646.05	1691030.75	14373526.39	39°34'51.5802"N	80°49'13.3183"W	3857.39	334.740	0.95	0.09	-0.95	
10800.00	89.200	341.190	6789.88	3928.64	3578.27	-1677.27	1690999.54	14373616.07	39°34'52.4675"N	80°49'13.7147"W	3951.86	334.886	0.87	-0.36	0.79	
10894.00	89.380	341.230	6791.04	4022.64	3667.25	-1707.54	1690969.28	14373705.02	39°34'53.3475"N	80°49'14.0991"W	4045.30	335.032	0.20	0.19	0.04	
10989.00	90.000	341.840	6791.56	4117.63	3757.36	-1737.63	1690939.20	14373795.09	39°34'54.2387"N	80°49'14.4811"W	4139.70	335.181	0.92	0.65	0.64	
11083.00	89.080	341.710	6792.31	4211.62	3846.64	-1767.03	1690909.82	14373884.33	39°34'55.1216"N	80°49'14.8543"W	4233.09	335.327	0.99	-0.98	-0.14	
11178.00	89.510	341.430	6793.48	4306.61	3936.76	-1797.06	1690879.80	14373974.42	39°34'56.0129"N	80°49'15.2355"W	4327.53	335.464	0.54	0.45	-0.29	
11272.00	90.120	341.440	6793.79	4400.61	4025.87	-1826.99	1690849.88	14374063.49	39°34'56.8942"N	80°49'15.6155"W	4421.03	335.591	0.65	0.65	0.01	
11367.00	89.260	341.340	6794.30	4495.60	4115.90	-1857.30	1690819.58	14374153.49	39°34'57.7845"N	80°49'16.0004"W	4515.55	335.713	0.91	-0.91	-0.11	
11461.00	90.030	340.940	6794.88	4589.60	4204.85	-1887.69	1690789.20	14374242.40	39°34'58.6643"N	80°49'16.3862"W	4609.13	335.823	0.92	0.82	-0.43	
11555.00	89.230	341.470	6795.49	4683.60	4293.83	-1917.97	1690758.93	14374331.35	39°34'59.5443"N	80°49'16.7707"W	4702.72	335.931	1.02	-0.85	0.56	
11649.00	90.090	342.500	6796.05	4777.58	4383.22	-1947.04	1690729.87	14374420.70	39°35'0.4283"N	80°49'17.1397"W	4796.21	336.049	1.43	0.91	1.10	
11744.00	88.950	340.490	6796.84	4872.57	4473.30	-1977.19	1690699.74	14374510.75	39°35'1.3192"N	80°49'17.5225"W	4890.78	336.155	2.43	-1.20	-2.12	
11838.00	88.920	341.540	6798.59	4966.55	4562.17	-2007.77	1690669.18	14374599.58	39°35'2.1981"N	80°49'17.9108"W	4984.43	336.246	1.12	-0.03	1.12	
11933.00	89.110	341.510	6800.22	5061.54	4652.26	-2037.87	1690639.09	14374689.63	39°35'3.0891"N	80°49'18.2929"W	5079.02	336.345	0.20	0.20	-0.03	
12027.00	88.830	341.450	6801.91	5155.52	4741.38	-2067.72	1690609.25	14374778.72	39°35'3.9704"N	80°49'18.6720"W	5172.63	336.438	0.30	-0.30	-0.06	
12122.00	89.570	341.280	6803.24	5250.51	4831.39	-2098.07	1690578.91	14374868.69	39°35'4.8606"N	80°49'19.0573"W	5267.28	336.527	0.80	0.78	-0.18	
12216.00	90.520	342.830	6803.16	5344.49	4920.81	-2127.03	1690549.96	14374958.08	39°35'5.7450"N	80°49'19.4250"W	5360.84	336.623	1.93	1.01	1.65	
12311.00	89.200	341.050	6803.40	5439.47	5011.12	-2156.48	1690520.52	14375048.36	39°35'6.6381"N	80°49'19.7988"W	5455.44	336.716	2.33	-1.39	-1.87	
12405.00	89.510	342.010	6804.46	5533.46	5100.28	-2186.26	1690490.75	14375137.47	39°35'7.5198"N	80°49'20.1769"W	5549.10	336.797	1.07	0.33	1.02	
12500.00	90.150	340.400	6804.74	5628.46	5190.21	-2216.87	1690460.16	14375227.37	39°35'8.4092"N	80°49'20.5656"W	5643.82	336.871	1.82	0.67	-1.69	
12594.00	89.720	341.600	6804.84	5722.46	5279.08	-2247.47	1690429.57	14375316.21	39°35'9.2882"N	80°49'20.9542"W	5737.58	336.939	1.36	-0.46	1.28	
12689.00	89.940	340.190	6805.13	5817.45	5368.85	-2278.56	1690398.49	14375405.94	39°35'10.1760"N	80°49'21.3491"W	5832.36	337.003	1.50	0.23	-1.48	
12783.00	90.060	341.470	6805.13	5911.45	5457.63	-2309.43	1690367.63	14375494.69	39°35'11.0540"N	80°49'21.7411"W	5926.15	337.064	1.37	0.13	1.36	
12877.00	90.150	339.470	6804.95	6005.44	5546.22	-2340.85	1690336.22	14375583.24	39°35'11.9302"N	80°49'22.1402"W	6019.98	337.117	2.13	0.10	-2.13	
12972.00	89.750	340.330	6805.04	6100.42	5635.43	-2373.50	1690303.59	14375672.42	39°35'12.8125"N	80°49'22.5549"W	6114.87	337.160	1.00	-0.42	0.91	
13066.00	90.490	340.450	6804.84	6194.41	5723.98	-2405.04	1690272.05	14375760.93	39°35'13.6883"N	80°49'22.9556"W	6208.72	337.209	0.80	0.79	0.13	
13160.00	88.920	340.670	6805.32	6288.40	5812.62	-2436.33	1690240.78	14375849.53	39°35'14.5649"N	80°49'23.3530"W	6302.58	337.259	1.69	-1.67	0.23	
13254.00	91.200	340.820	6805.22	6382.39	5901.35	-2467.32	1690209.80	14375938.23	39°35'15.4425"N	80°49'23.7467"W	6396.38	337.310	2.43	2.43	0.16	
13349.00	89.050	338.790	6805.02	6477.36	5990.50	-2500.12	1690177.02	14376027.34	39°35'16.3242"N	80°49'24.1633"W	6491.28	337.347	3.11	-2.26	-2.14	
13444.00	90.860	340.990	6805.09	6572.33	6079.70	-2532.78	1690144.37	14376116.51	39°35'17.2064"N	80°49'24.5782"W	6586.18	337.384	3.00	1.91	2.32	

RECEIVED  
Office of Oil and Gas  
DEC 20 2024  
Environmental Protection



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'  
Page 7 of 13



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fliuharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

## WELLPATH DATA (260 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
13538.00	88.860	340.520	6805.32	6666.32	6168.44	-2563.76	1690113.40	14376205.21	39°35'18.0841"N	80°49'24.9717"W	6680.01	337.431	2.19	-2.13	-0.50	
13633.00	90.620	339.670	6805.75	6761.30	6257.76	-2596.10	1690008.08	14376294.50	39°35'18.9675"N	80°49'25.3826"W	6774.91	337.468	2.06	1.85	-0.89	
13727.00	89.780	340.600	6805.42	6855.28	6346.17	-2628.04	1690049.15	14376382.87	39°35'19.8418"N	80°49'25.7883"W	6868.80	337.505	1.33	-0.89	0.99	
13822.00	89.940	340.250	6805.66	6950.28	6435.68	-2659.87	1690017.33	14376472.34	39°35'20.7270"N	80°49'26.1926"W	6963.68	337.545	0.41	0.17	-0.37	
13917.00	89.880	340.920	6805.81	7045.27	6525.27	-2691.45	1689985.77	14376561.90	39°35'21.6132"N	80°49'26.5938"W	7058.55	337.586	0.71	-0.06	0.71	
14011.00	89.750	340.430	6806.11	7139.27	6613.98	-2722.55	1689954.67	14376650.57	39°35'22.4904"N	80°49'26.9889"W	7152.41	337.626	0.54	-0.14	-0.52	
14106.00	89.570	340.550	6806.67	7234.26	6703.52	-2754.28	1689922.96	14376740.08	39°35'23.3760"N	80°49'27.3919"W	7247.29	337.664	0.23	-0.19	0.13	
14200.00	89.750	340.930	6807.23	7328.26	6792.26	-2785.29	1689891.96	14376828.78	39°35'24.2536"N	80°49'27.7857"W	7341.16	337.703	0.45	0.19	0.40	
14295.00	89.630	340.420	6807.75	7423.25	6881.90	-2816.72	1689860.54	14376918.39	39°35'25.1402"N	80°49'28.1850"W	7436.03	337.741	0.55	-0.13	-0.54	
14389.00	90.150	340.440	6807.93	7517.25	6970.47	-2848.21	1689829.07	14377006.92	39°35'26.0162"N	80°49'28.5850"W	7529.93	337.775	0.55	0.55	0.02	
14483.00	89.660	340.070	6808.08	7611.24	7058.95	-2879.97	1689797.32	14377095.36	39°35'26.8912"N	80°49'28.9884"W	7623.84	337.805	0.65	-0.52	-0.39	
14578.00	90.250	340.220	6808.16	7706.22	7148.30	-2912.23	1689765.07	14377184.68	39°35'27.7749"N	80°49'29.3984"W	7718.76	337.834	0.64	0.62	0.16	
14673.00	90.060	340.720	6807.90	7801.22	7237.83	-2943.99	1689733.32	14377274.18	39°35'28.6604"N	80°49'29.8018"W	7813.66	337.866	0.56	-0.20	0.53	
14767.00	90.830	340.780	6807.17	7895.21	7326.57	-2974.98	1689702.35	14377362.88	39°35'29.5380"N	80°49'30.1954"W	7907.54	337.900	0.82	0.82	0.06	
14862.00	90.620	340.320	6805.97	7990.20	7416.14	-3006.61	1689670.73	14377452.42	39°35'30.4239"N	80°49'30.5972"W	8002.43	337.932	0.53	-0.22	-0.48	
14956.00	89.420	339.870	6805.93	8084.18	7504.53	-3038.61	1689638.74	14377540.76	39°35'31.2980"N	80°49'31.0038"W	8096.36	337.957	1.36	-1.28	-0.48	
15050.00	89.450	340.360	6806.86	8178.16	7592.92	-3070.58	1689606.78	14377629.12	39°35'32.1722"N	80°49'31.4100"W	8190.29	337.982	0.52	0.03	0.52	
15144.00	89.820	340.370	6807.46	8272.15	7681.45	-3102.17	1689575.21	14377717.62	39°35'33.0478"N	80°49'31.8113"W	8284.21	338.009	0.39	0.39	0.01	
15239.00	89.600	340.650	6807.94	8367.15	7771.00	-3133.87	1689543.52	14377807.14	39°35'33.9335"N	80°49'32.2139"W	8379.12	338.037	0.37	-0.23	0.29	
15333.00	90.180	340.420	6808.12	8461.14	7859.63	-3165.19	1689512.21	14377895.73	39°35'34.8100"N	80°49'32.6119"W	8473.03	338.065	0.66	0.62	-0.24	
15427.00	89.880	340.510	6808.07	8555.14	7948.22	-3196.62	1689480.79	14377984.28	39°35'35.6861"N	80°49'33.0112"W	8566.95	338.091	0.33	-0.32	0.10	
15521.00	90.000	340.680	6808.17	8649.13	8036.88	-3227.85	1689449.57	14378072.91	39°35'36.5630"N	80°49'33.4079"W	8660.86	338.118	0.22	0.13	0.18	
15615.00	89.570	340.910	6808.52	8743.13	8125.65	-3258.77	1689418.67	14378161.64	39°35'37.4409"N	80°49'33.8007"W	8754.76	338.147	0.52	-0.46	0.24	
15804.00	89.970	340.690	6809.28	8932.13	8304.13	-3320.93	1689356.54	14378340.05	39°35'39.2061"N	80°49'34.5903"W	8943.56	338.203	0.24	0.21	-0.12	
15899.00	90.000	340.130	6809.31	9027.12	8393.63	-3352.78	1689324.70	14378429.52	39°35'40.0912"N	80°49'34.9949"W	9038.49	338.226	0.59	0.03	-0.59	
15994.00	89.940	340.110	6809.36	9122.10	8482.97	-3385.09	1689292.40	14378518.82	39°35'40.9748"N	80°49'35.4054"W	9133.44	338.246	0.07	-0.06	-0.02	
16088.00	89.910	340.380	6809.48	9216.09	8571.44	-3416.86	1689260.65	14378607.25	39°35'41.8497"N	80°49'35.8091"W	9227.38	338.266	0.29	-0.03	0.29	
16182.00	89.910	340.520	6809.63	9310.09	8660.02	-3448.31	1689229.20	14378695.80	39°35'42.7258"N	80°49'36.2087"W	9321.31	338.288	0.15	0.00	0.15	
16277.00	90.060	340.560	6809.65	9405.08	8749.59	-3479.96	1689197.57	14378785.33	39°35'43.6117"N	80°49'36.6108"W	9416.24	338.311	0.16	0.16	0.04	
16371.00	89.750	340.500	6809.81	9499.08	8838.22	-3511.29	1689166.25	14378873.92	39°35'44.4882"N	80°49'37.0088"W	9510.17	338.333	0.34	-0.33	-0.06	

Office RECEIVED  
 RECEIVED  
 Oil and Gas  
 DEC 20 2024  
 Environmental Protection  
 Department





# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'

Page 8 of 13



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Howell Unit 1H
Field	Wetzel		API	47-103-03636-0000
Facility	Fluharty Pad		Wellbore	Howell Unit 1H AWB
Slot	Slot C			

WELLPATH DATA (260 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
16466.00	89.970	340.810	6810.04	9594.08	8927.85	-3542.76	1689134.79	14378963.52	39°35'45.3746"N	80°49'37.4086"W	9605.09	338.356	0.40	0.23	0.33	
16560.00	89.910	340.740	6810.14	9688.07	9016.61	-3573.71	1689103.85	14379052.25	39°35'46.2524"N	80°49'37.8019"W	9699.01	338.379	0.10	-0.06	-0.07	
16655.00	90.060	340.670	6810.16	9783.07	9106.28	-3605.11	1689072.47	14379141.87	39°35'47.1392"N	80°49'38.2007"W	9793.93	338.402	0.17	0.16	-0.07	
16749.00	89.720	340.190	6810.34	9877.06	9194.85	-3636.59	1689041.00	14379230.41	39°35'48.0151"N	80°49'38.6007"W	9887.87	338.421	0.63	-0.36	-0.51	
16843.00	89.780	340.340	6810.75	9971.05	9283.32	-3668.33	1689009.27	14379318.85	39°35'48.8902"N	80°49'39.0040"W	9981.82	338.438	0.17	0.06	0.16	
17032.00	89.880	340.260	6811.31	10160.03	9461.26	-3732.04	1688945.59	14379496.72	39°35'50.6500"N	80°49'39.8135"W	10170.72	338.473	0.07	0.05	-0.04	
17127.00	89.690	340.530	6811.67	10255.03	9550.75	-3763.92	1688913.72	14379586.17	39°35'51.5350"N	80°49'40.2185"W	10265.67	338.491	0.35	-0.20	0.28	
17221.00	89.910	340.860	6812.00	10349.02	9639.47	-3794.99	1688882.66	14379674.85	39°35'52.4124"N	80°49'40.6133"W	10359.60	338.511	0.42	0.23	0.35	
17316.00	89.720	340.510	6812.31	10444.02	9729.12	-3826.42	1688851.25	14379764.47	39°35'53.2991"N	80°49'41.0125"W	10454.53	338.531	0.42	-0.20	-0.37	
17410.00	89.780	340.590	6812.72	10538.01	9817.75	-3857.72	1688819.96	14379853.07	39°35'54.1756"N	80°49'41.4102"W	10548.47	338.549	0.11	0.06	0.09	
17505.00	89.820	340.600	6813.05	10633.01	9907.36	-3889.28	1688788.41	14379942.63	39°35'55.0618"N	80°49'41.8113"W	10643.41	338.567	0.04	0.04	0.01	
17599.00	89.850	340.280	6813.32	10727.00	9995.93	-3920.75	1688756.95	14380031.17	39°35'55.9378"N	80°49'42.2111"W	10737.36	338.583	0.34	0.03	-0.34	
17693.00	90.030	340.820	6813.42	10821.00	10084.57	-3952.05	1688725.67	14380119.77	39°35'56.8144"N	80°49'42.6088"W	10831.31	338.600	0.61	0.19	0.57	
17788.00	90.220	340.510	6813.21	10916.00	10174.21	-3983.50	1688694.23	14380209.38	39°35'57.7009"N	80°49'43.0085"W	10926.24	338.618	0.38	0.20	-0.33	
17882.00	90.370	340.710	6812.73	11009.99	10262.88	-4014.71	1688663.03	14380298.01	39°35'58.5778"N	80°49'43.4050"W	11020.19	338.635	0.27	0.16	0.21	
17977.00	90.090	340.590	6812.34	11104.99	10352.51	-4046.19	1688631.57	14380387.61	39°35'59.4643"N	80°49'43.8049"W	11115.13	338.652	0.32	-0.29	-0.13	
18071.00	90.310	340.530	6812.02	11198.98	10441.15	-4077.47	1688600.29	14380476.21	39°36'0.3409"N	80°49'44.2024"W	11209.08	338.668	0.24	0.23	-0.06	
18166.00	90.150	340.490	6811.63	11293.98	10530.70	-4109.17	1688568.61	14380565.73	39°36'1.2266"N	80°49'44.6051"W	11304.03	338.684	0.17	-0.17	-0.04	
18260.00	90.310	340.380	6811.26	11387.97	10619.28	-4140.65	1688537.15	14380654.27	39°36'2.1026"N	80°49'45.0051"W	11397.98	338.698	0.21	0.17	-0.12	
18355.00	90.250	340.490	6810.79	11482.96	10708.79	-4172.48	1688505.35	14380743.75	39°36'2.9878"N	80°49'45.4094"W	11492.94	338.713	0.13	-0.06	0.12	
18449.00	90.340	340.780	6810.31	11576.96	10797.47	-4203.63	1688474.19	14380832.39	39°36'3.8649"N	80°49'45.8054"W	11586.88	338.728	0.32	0.10	0.31	
18544.00	90.280	340.580	6809.80	11671.95	10887.12	-4235.06	1688442.77	14380922.01	39°36'4.7515"N	80°49'46.2048"W	11681.83	338.744	0.22	-0.06	-0.21	
18638.00	90.220	340.520	6809.39	11765.95	10975.75	-4266.36	1688411.48	14381010.61	39°36'5.6281"N	80°49'46.6025"W	11775.78	338.759	0.09	-0.06	-0.06	
18732.00	90.310	340.560	6808.95	11859.94	11064.38	-4297.67	1688380.18	14381099.20	39°36'6.5046"N	80°49'47.0004"W	11869.73	338.773	0.10	0.10	0.04	
18826.00	90.180	341.580	6808.55	11953.94	11153.30	-4328.17	1688349.70	14381188.08	39°36'7.3839"N	80°49'47.3878"W	11963.66	338.791	1.09	-0.14	1.09	
18921.00	90.220	341.480	6808.22	12048.94	11243.40	-4358.26	1688319.61	14381278.15	39°36'8.2750"N	80°49'47.7701"W	12058.55	338.812	0.11	0.04	-0.11	
19015.00	90.400	341.580	6807.71	12142.93	11332.56	-4388.04	1688289.85	14381367.27	39°36'9.1567"N	80°49'48.1484"W	12152.44	338.833	0.22	0.19	0.11	
19109.00	90.520	341.740	6806.95	12236.93	11421.78	-4417.62	1688260.28	14381456.46	39°36'10.0391"N	80°49'48.5241"W	12246.33	338.855	0.21	0.13	0.17	
19204.00	90.150	341.390	6806.40	12331.92	11511.91	-4447.66	1688230.25	14381546.54	39°36'10.9303"N	80°49'48.9058"W	12341.22	338.876	0.54	-0.39	-0.37	
19298.00	90.220	341.400	6806.09	12425.92	11600.99	-4477.65	1688200.28	14381635.60	39°36'11.8113"N	80°49'49.2868"W	12435.13	338.895	0.08	0.07	0.01	

RECEIVED  
 Office of Oil and Gas  
 DEC 20 2024  
 Environmental Protection



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'  
Page 9 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

WELLPATH DATA (260 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
19393.00	90.180	341.390	6805.76	12520.92	11691.03	-4507.96	1688169.98	14381725.59	39°36'12.7017"N	80°49'49.6718"W	12530.04	338.914	0.04	-0.04	-0.01	
19487.00	90.400	341.730	6805.29	12614.91	11780.20	-4537.69	1688140.26	14381814.73	39°36'13.5836"N	80°49'50.0495"W	12623.94	338.933	0.43	0.23	0.36	
19582.00	90.180	341.100	6804.81	12709.91	11870.24	-4567.97	1688109.99	14381904.74	39°36'14.4741"N	80°49'50.4342"W	12718.85	338.952	0.70	-0.23	-0.66	
19676.00	90.340	341.280	6804.38	12803.91	11959.22	-4598.28	1688079.70	14381993.68	39°36'15.3540"N	80°49'50.8192"W	12812.77	338.968	0.26	0.17	0.19	
19771.00	90.220	341.160	6803.92	12898.91	12049.16	-4628.86	1688049.13	14382083.59	39°36'16.2435"N	80°49'51.2078"W	12907.70	338.985	0.18	-0.13	-0.13	
19865.00	90.580	342.740	6803.26	12992.89	12138.53	-4657.99	1688020.01	14382172.92	39°36'17.1273"N	80°49'51.5777"W	13001.57	339.006	1.72	0.38	1.68	
19960.00	90.120	341.440	6802.68	13087.87	12228.93	-4687.20	1687990.81	14382263.28	39°36'18.0212"N	80°49'51.9488"W	13096.43	339.029	1.45	-0.48	-1.37	
20054.00	90.120	341.310	6802.48	13181.87	12318.00	-4717.22	1687960.80	14382352.32	39°36'18.9021"N	80°49'52.3302"W	13190.35	339.045	0.14	0.00	-0.14	
20149.00	90.340	341.500	6802.10	13276.87	12408.04	-4747.51	1687930.52	14382442.32	39°36'19.7926"N	80°49'52.7151"W	13285.27	339.062	0.31	0.23	0.20	
20243.00	90.460	341.140	6801.44	13370.87	12497.08	-4777.62	1687900.43	14382531.33	39°36'20.6732"N	80°49'53.0976"W	13379.19	339.078	0.40	0.13	-0.38	
20338.00	90.280	340.980	6800.83	13465.86	12586.94	-4808.45	1687869.61	14382621.15	39°36'21.5618"N	80°49'53.4894"W	13474.14	339.092	0.25	-0.19	-0.17	
20432.00	90.310	341.430	6800.35	13559.86	12675.93	-4838.74	1687839.33	14382710.10	39°36'22.4418"N	80°49'53.8741"W	13568.07	339.107	0.48	0.03	0.48	
20527.00	90.280	341.620	6799.86	13654.86	12766.03	-4868.84	1687809.24	14382800.17	39°36'23.3329"N	80°49'54.2566"W	13662.99	339.124	0.20	-0.03	0.20	
20621.00	90.400	341.360	6799.30	13748.85	12855.17	-4898.68	1687779.41	14382889.27	39°36'24.2144"N	80°49'54.6357"W	13756.90	339.140	0.30	0.13	-0.28	
20716.00	90.280	341.480	6798.74	13843.85	12945.21	-4928.95	1687749.15	14382979.28	39°36'25.1049"N	80°49'55.0203"W	13851.83	339.155	0.18	-0.13	0.13	
20810.00	90.250	341.470	6798.30	13937.85	13034.34	-4958.82	1687719.30	14383068.37	39°36'25.9863"N	80°49'55.3998"W	13945.75	339.171	0.03	-0.03	-0.01	
20904.00	90.280	341.320	6797.87	14031.85	13123.43	-4988.81	1687689.32	14383157.42	39°36'26.8673"N	80°49'55.7808"W	14039.68	339.186	0.16	0.03	-0.16	
20999.00	90.000	341.130	6797.63	14126.85	13213.37	-5019.38	1687658.76	14383247.33	39°36'27.7568"N	80°49'56.1693"W	14134.62	339.200	0.36	-0.29	-0.20	
21093.00	90.580	341.660	6797.16	14220.84	13302.46	-5049.37	1687628.78	14383336.38	39°36'28.6378"N	80°49'56.5503"W	14228.55	339.214	0.84	0.62	0.56	
21188.00	90.520	341.660	6796.25	14315.83	13392.63	-5079.26	1687598.90	14383426.52	39°36'29.5295"N	80°49'56.9301"W	14323.46	339.230	0.06	-0.06	0.00	
21282.00	90.460	341.580	6795.44	14409.83	13481.83	-5108.90	1687569.28	14383515.68	39°36'30.4117"N	80°49'57.3066"W	14417.37	339.246	0.11	-0.06	-0.09	
21377.00	90.620	341.500	6794.55	14504.82	13571.94	-5138.98	1687539.21	14383605.76	39°36'31.3028"N	80°49'57.6888"W	14512.29	339.261	0.19	0.17	-0.08	
21471.00	90.550	341.540	6793.59	14598.81	13661.09	-5168.78	1687509.43	14383694.87	39°36'32.1844"N	80°49'58.0674"W	14606.22	339.275	0.09	-0.07	0.04	
21565.00	90.310	341.400	6792.88	14692.81	13750.21	-5198.65	1687479.57	14383783.96	39°36'33.0658"N	80°49'58.4469"W	14700.15	339.290	0.30	-0.26	-0.15	
21660.00	90.400	341.550	6792.29	14787.80	13840.29	-5228.83	1687449.39	14383874.00	39°36'33.9566"N	80°49'58.8304"W	14795.07	339.304	0.18	0.09	0.16	
21754.00	90.710	341.580	6791.38	14881.80	13929.46	-5258.55	1687419.68	14383963.13	39°36'34.8384"N	80°49'59.2081"W	14889.00	339.318	0.33	0.33	0.03	
21848.00	90.740	341.600	6790.19	14975.78	14018.64	-5288.24	1687390.01	14384052.28	39°36'35.7204"N	80°49'59.5852"W	14982.92	339.332	0.04	0.03	0.02	
21943.00	90.580	341.600	6789.10	15070.77	14108.78	-5318.22	1687360.04	14384142.38	39°36'36.6117"N	80°49'59.9662"W	15077.84	339.346	0.17	-0.17	0.00	
22037.00	90.520	341.630	6788.20	15164.77	14197.98	-5347.87	1687330.40	14384231.54	39°36'37.4938"N	80°50'00.3429"W	15171.76	339.360	0.07	-0.06	0.03	
22132.00	90.740	341.370	6787.15	15259.76	14288.06	-5378.01	1687300.27	14384321.59	39°36'38.3847"N	80°50'00.7259"W	15266.69	339.374	0.36	0.23	-0.27	

RECEIVED  
Office of Environmental Affairs  
DEC 21 2011



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'

Page 10 of 13



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Howell Unit 1H
Field	Wetzel		API	47-103-03636-0000
Facility	Fluharty Pad		Wellbore	Howell Unit 1H AWB
Slot	Slot C			

WELLPATH DATA (260 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
22226.00	90.370	341.570	6786.24	15353.75	14377.18	-5407.88	1687270.41	14384410.68	39°36'39.2661"N	80°50'1.1054"W	15360.62	339.387	0.45	-0.39	0.21	
22321.00	90.550	341.380	6785.48	15448.75	14467.26	-5438.07	1687240.24	14384500.72	39°36'40.1569"N	80°50'1.4890"W	15455.55	339.399	0.28	0.19	-0.20	
22415.00	90.580	341.370	6784.55	15542.74	14556.33	-5468.09	1687210.24	14384589.76	39°36'41.0377"N	80°50'1.8704"W	15549.49	339.411	0.03	0.03	-0.01	
22509.00	90.520	341.360	6783.65	15636.74	14645.40	-5498.12	1687180.21	14384678.79	39°36'41.9185"N	80°50'2.2521"W	15643.44	339.423	0.06	-0.06	-0.01	
22604.00	90.860	341.660	6782.51	15731.73	14735.49	-5528.25	1687150.10	14384768.84	39°36'42.8095"N	80°50'2.6349"W	15738.37	339.436	0.48	0.36	0.32	
22698.00	90.430	341.330	6781.45	15825.72	14824.62	-5558.08	1687120.28	14384857.94	39°36'43.6909"N	80°50'3.0139"W	15832.30	339.448	0.58	-0.46	-0.35	
22887.00	90.680	341.880	6779.62	16014.70	15003.96	-5617.72	1687060.66	14385037.20	39°36'45.4644"N	80°50'3.7717"W	16021.16	339.473	0.32	0.13	0.29	
22981.00	90.740	341.390	6778.45	16108.69	15093.16	-5647.33	1687031.06	14385126.37	39°36'46.3466"N	80°50'4.1480"W	16115.08	339.486	0.53	0.06	-0.52	
23076.00	90.770	341.990	6777.20	16203.67	15183.34	-5677.17	1687001.23	14385216.52	39°36'47.2384"N	80°50'4.5272"W	16210.00	339.499	0.63	0.03	0.63	
23171.00	90.770	341.760	6775.92	16298.66	15273.62	-5706.73	1686971.69	14385306.76	39°36'48.1312"N	80°50'4.9027"W	16304.91	339.513	0.24	0.00	-0.24	
23265.00	90.550	341.470	6774.84	16392.65	15362.82	-5736.37	1686942.06	14385395.92	39°36'49.0132"N	80°50'5.2794"W	16398.84	339.525	0.39	-0.23	-0.31	
23359.00	90.650	341.410	6773.86	16486.64	15451.92	-5766.29	1686912.15	14385484.99	39°36'49.8944"N	80°50'5.6596"W	16492.79	339.536	0.12	0.11	-0.06	
23453.00	90.890	341.190	6772.59	16580.63	15540.95	-5796.42	1686882.03	14385573.98	39°36'50.7749"N	80°50'6.0425"W	16586.73	339.546	0.35	0.26	-0.23	
23548.00	90.520	341.350	6771.42	16675.62	15630.92	-5826.93	1686851.54	14385663.91	39°36'51.6645"N	80°50'6.4302"W	16681.68	339.555	0.42	-0.39	0.17	
23642.00	90.710	341.700	6770.42	16769.62	15720.07	-5856.71	1686821.76	14385753.03	39°36'52.5462"N	80°50'6.8087"W	16775.62	339.566	0.42	0.20	0.37	
23732.00	90.830	342.120	6769.21	16859.60	15805.61	-5884.66	1686793.83	14385838.53	39°36'53.3921"N	80°50'7.1638"W	16865.54	339.579	0.49	0.13	0.47	
23823.00	90.520	341.410	6768.13	16950.58	15892.03	-5913.13	1686765.37	14385924.92	39°36'54.2468"N	80°50'7.5256"W	16956.47	339.591	0.85	-0.34	-0.78	
23912.00	90.580	341.830	6767.28	17039.58	15976.49	-5941.19	1686737.32	14386009.35	39°36'55.0819"N	80°50'7.8821"W	17045.41	339.601	0.48	0.07	0.47	
24015.00	90.520	341.850	6766.29	17142.56	16074.35	-5973.29	1686705.23	14386107.17	39°36'56.0497"N	80°50'8.2900"W	17148.32	339.615	0.06	-0.06	0.02	
24040.00‡	90.520	341.850	6766.06	17167.56	16098.11	-5981.08	1686697.45	14386130.92	39°36'56.2847"N	80°50'8.3890"W	17173.30	339.618	0.00	0.00	0.00	Projected MD at TD: 24040'

RECEIVED  
 Office of Oil and Gas  
 WV Department of  
 Environmental Protection  
 DEC 20 2024



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'

Page 11 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

HOLE & CASING SECTIONS - Ref Wellbore: Howell Unit 1H AWB Ref Wellpath: Howell Unit 1H AWP Proj: 24040'									
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	25.50	125.50	100.00	25.50	125.50	0.00	0.00	0.03	0.26
17.5in Open Hole	125.50	420.00	294.50	125.50	419.99	0.03	0.26	-2.39	0.42
13.375in Casing Surface	25.50	400.00	374.50	25.50	399.99	0.00	0.00	-2.11	0.54
12.375in Open Hole	420.00	3093.00	2673.00	419.99	3088.40	-2.39	0.42	-92.36	-43.66
9.625in Casing Intermediate	25.50	3063.00	3037.50	25.50	3058.41	0.00	0.00	-92.52	-43.80
8.75in Open Hole	3093.00	6307.00	3214.00	3088.40	6272.31	-92.36	-43.66	-416.52	-299.85
8.5in Open Hole	6307.00	24040.00	17733.00	6272.31	6766.06	-416.52	-299.85	16098.11	-5981.08
5.5in Casing Production	25.50	24020.00	23994.50	25.50	6766.25	0.00	0.00	16079.10	-5974.85

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Howell Unit 1H POE Rev-3	6757.00	-15.56	-466.36	1692209.97	14370023.68	39°34'16.9248"N	80°48'58.3432"W	point
Howell Unit 1H BHL Rev-3	6783.00	16069.74	-5972.89	1686705.63	14386102.56	39°36'56.0041"N	80°50'8.2850"W	point
Howell Unit 1H LP Rev-3	6783.00	154.82	-524.68	1692151.67	14370193.98	39°34'18.6098"N	80°48'59.0836"W	point
Howell Unit 1H 50' L/R Hard Line	7000.00	8027.09	-3219.62	1689457.80	14378063.12	39°35'36.4661"N	80°49'33.3031"W	rectangle
2D Rectangle 17001.7 x 100.								

RECEIVED  
 Office of Oil and Gas  
 WV Department of  
 Environmental Protection  
 DEC 20 2024



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'  
Page 12 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

WELLPATH COMPOSITION - Ref Wellbore: Howell Unit 1H AWB Ref Wellpath: Howell Unit 1H AWP Proj: 24040'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
25.50	379.00	Gyrodata 2015 - GC+WR+DPIPE	01 Gyrodata MS Gyro <17-1/2"> (100'-379')	Howell Unit 1H AWB	3/8/2024
379.00	3022.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02 APS EM <12-3/8"> (379')(501'-3022')	Howell Unit 1H AWB	3/8/2024
3022.00	6231.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03 APS EM <8-3/4"> (3022')(3113'-6231')	Howell Unit 1H AWB	3/28/2024
6231.00	24040.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04 BH AT Curve <8-1/2"> (6231')(6280'-24015')	Howell Unit 1H AWB	3/28/2024

RECEIVED  
 Office of Oil and Gas  
 DEC 20 2024  
 Energy Services Department



# Actual Wellpath Report

Howell Unit 1H AWP Proj: 24040'

Page 13 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Howell Unit 1H
Field	Wetzel	API	47-103-03636-0000
Facility	Fluharty Pad	Wellbore	Howell Unit 1H AWB
Slot	Slot C		

COMMENTS
<p><b>Wellpath general comments</b>            API: 47-103-03636-0000            BH Job #: 112156752            Rig: H&amp;P 317            Duration: 3/31/2024-4/4/2024            Gyrodata MS Gyro &lt;17-1/2"&gt; (100'-379')            APS EM &lt;12-3/8"&gt; (379')(501'-3022')            APS EM &lt;8-3/4"&gt; (3022')(3113'-6231')            BH AT Curve &lt;8-1/2"&gt; (6231')(6280'-24015')            Sycamore: 6518' MD            Middlesex: 6654' MD            Burkett: 6786' MD            Tully: 6822' MD            Marcellus POE: 7015' MD            Projected MD at TD: 24040'</p>

RECEIVED  
 Office of Oil and Gas  
 DEC 20 2024  
 WV Department of  
 Environmental Protection