



# ANTERO RESOURCES CORPORATION



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

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

Plot reference wellpath is Galarraga Unit 1H PWP Rev-B.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 317 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 317 (RKB)	Scale: True distance
H&P 317 (RKB) to Mean Sea Level: 1206.5 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to General level (At Slot: Slot D): -1181 feet	Depths are in feet
Official wellpath MDs are referenced to each path's default MD datum	Created by: edokayev on 2024-04-17, Database: WA_MPL_EASTERNUS_Datb

Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Fluharty Pad	1692686.950	14370028.840	39°34'16.9661"N	80°48'52.2497"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot D	0.00	0.00	1692686.950	14370028.840
			39°34'16.9661"N	80°48'52.2497"W
Comment: Galarraga Unit 1H				
H&P 317 (RKB) to Ground level (At Slot: Slot D)				25.5ft
Mean Sea Level to Ground level (At Slot: Slot D)				-1181ft
H&P 317 (RKB) to Mean Sea Level				1206.5ft

Well Profile Data								
Design Comment	MD (ft)	Inc. (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	2993.00	0.630	263.910	2992.81	-19.39	-15.01	0.19	-13.46
Prej. to Bottom	3065.00	0.630	263.910	3064.81	-19.46	-15.80	0.00	-13.28
KOP 1	3145.00	0.630	263.910	3144.60	-19.57	-16.67	0.00	-13.08
End of 3D Arc	3491.20	6.294	83.653	3490.37	-17.67	0.32	2.00	-16.82
Curve KOP	6192.87	6.294	83.653	6175.76	15.07	294.69	0.00	-81.65
Build / Avoid No-Go	6525.13	30.000	0.000	6491.97	102.13	313.21	9.00	-5.35
POE	6973.40	72.673	341.007	6767.00	433.59	239.80	10.00	331.96
Landing Pt.	7146.67	90.000	341.007	6793.00	594.94	184.26	10.00	502.60
BHL	23776.94	90.000	341.007	6793.00	16319.81	-5229.20	0.00	17132.88

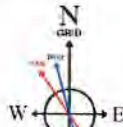
Scale 1 inch = 200'

Gyrodatta MS Gyro <17-1/2"> (100'-400') : 0.13° Inc, 100.00ft MD, 100.00ft TVD, -0.08ft VS  
 Gyrodatta MS Gyro <12-3/8"> (400')(468') : 0.61° Inc, 468.00ft MD, 467.99ft TVD, -2.21ft VS  
 APS EM <12-3/8"> (468')(590'-2993') : 0.69° Inc, 590.00ft MD, 589.98ft TVD, -3.46ft VS

Well Data			
Slot	Well	Wellbore	Wellpath
Slot D	Galarraga Unit 1H	Galarraga Unit 1H AWB	Galarraga Unit 1H AWP Proj: 23804'
Slot D	Galarraga Unit 1H	Galarraga Unit 1H PWB	Galarraga Unit 1H PWP Rev-B.0

True Vertical Depth (ft)

APS EM <8-3/4"> (2993')(3113'-6134') : 0.79° Inc, 3113.00ft MD, 3112.80ft TVD, -13.22ft VS



User specified (HDGM) Dip: 66.24° Field: 51493 nT  
 Magnetic North is 7.52 degrees West of True North (at 4/5/2024)  
 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

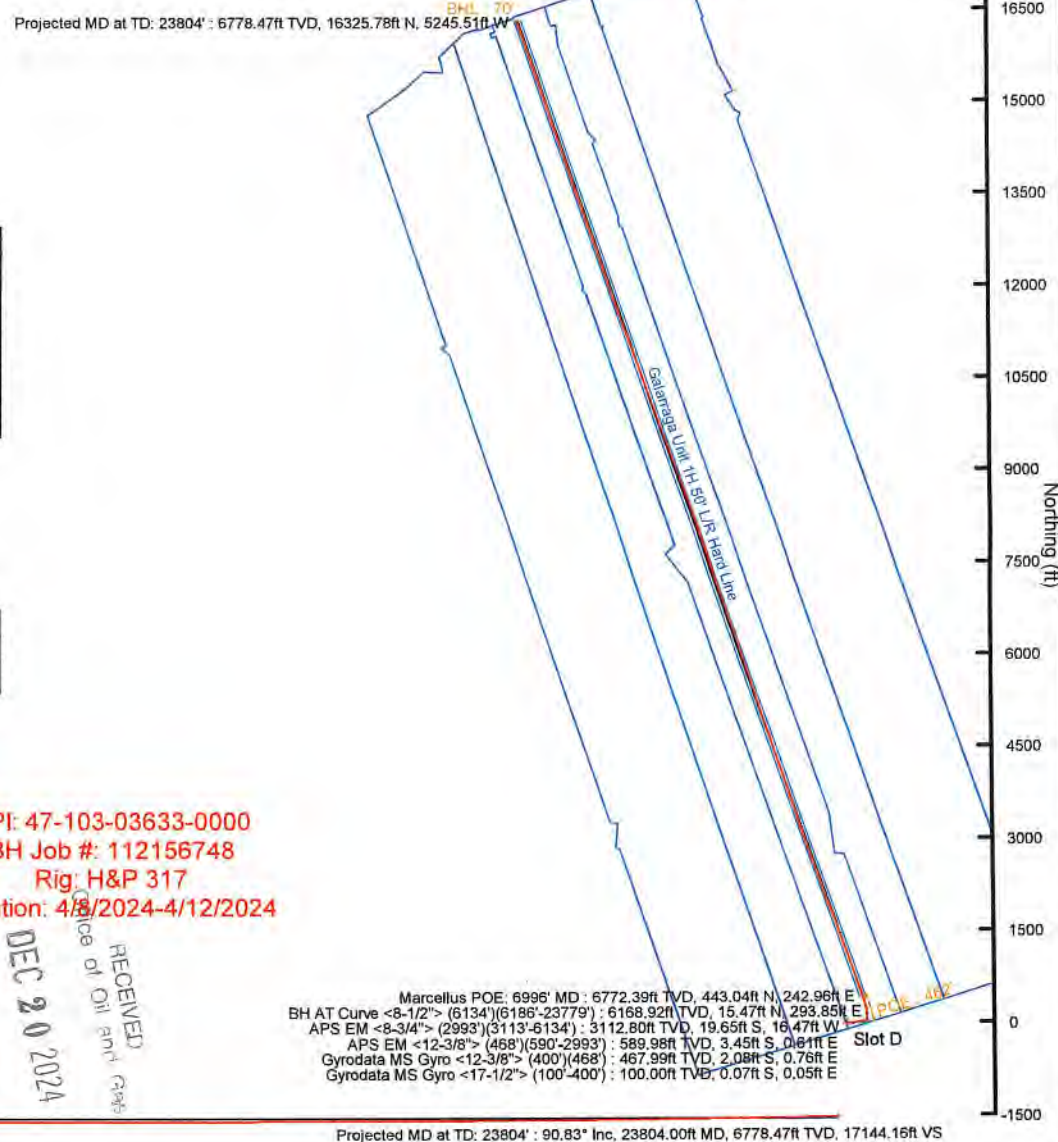
BH AT Curve <8-1/2"> (6134')(6186'-23779') : 4.24° Inc, 6186.00ft MD, 6168.92ft TVD, -80.99ft VS

Marcellus POE: 6996' MD : 76.92° Inc, 6996.00ft MD, 6772.39ft TVD, 339.86ft VS

API: 47-103-03633-0000  
 BH Job #: 112156748  
 Rig: H&P 317  
 Duration: 4/8/2024-4/12/2024

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

Scale 1 inch = 3000'  
 Easting (ft)  
 -9000 -7500 -6000 -4500 -3000 -1500 0 1500



Marcellus POE: 6996' MD : 6772.39ft TVD, 443.04ft N, 242.96ft E  
 BH AT Curve <8-1/2"> (6134')(6186'-23779') : 6168.92ft TVD, 15.47ft N, 293.85ft E  
 APS EM <8-3/4"> (2993')(3113'-6134') : 3112.80ft TVD, 19.65ft S, 16.47ft W  
 APS EM <12-3/8"> (468')(590'-2993') : 589.98ft TVD, 3.45ft S, 0.01ft E  
 Gyrodatta MS Gyro <12-3/8"> (400')(468') : 467.99ft TVD, 2.08ft S, 0.76ft E  
 Gyrodatta MS Gyro <17-1/2"> (100'-400') : 100.00ft TVD, 0.07ft S, 0.05ft E

Projected MD at TD: 23804' : 90.83° Inc, 23804.00ft MD, 6778.47ft TVD, 17144.16ft VS

Vertical Section (ft)  
 Azimuth 341.01° with reference 0.00 N, 0.00 E  
 Scale 1 inch = 2000'



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'

Page 1 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Galarraga Unit 1H
Field	Wetzel	API	47-103-03633-0000
Facility	Fluharty Pad	Wellbore	Galarraga 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	0.999603	Report Generated	4/17/2024 at 5:47:25 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	0.00	0.00	1692686.95	14370028.84	39°34'16.9661"N	80°48'52.2497"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 D)	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	341.01°

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



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'

Page 2 of 13



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Galarraga Unit 1H
Field	Wetzel		API	47-103-03633-0000
Facility	Fluharty Pad		Wellbore	Galarraga Unit 1H AWB
Slot	Slot D			

WELLPATH DATA (261 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	145.930	0.00	0.00	0.00	0.00	1692686.95	14370028.84	39°34'16.9661"N	80°48'52.2497"W	0.00	0.000	0.00	0.00	0.00	
25.50	0.000	145.930	25.50	0.00	0.00	0.00	1692686.95	14370028.84	39°34'16.9661"N	80°48'52.2497"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.130	145.930	100.00	-0.08	-0.07	0.05	1692687.00	14370028.77	39°34'16.9655"N	80°48'52.2491"W	0.08	145.930	0.17	0.17	0.00	Gyrodata MS Gyro <17-1/2"> (100'-400')
200.00	0.290	127.850	200.00	-0.40	-0.32	0.31	1692687.26	14370028.52	39°34'16.9630"N	80°48'52.2458"W	0.45	135.776	0.17	0.16	-18.08	
300.00	0.370	162.600	300.00	-0.94	-0.78	0.61	1692687.56	14370028.06	39°34'16.9584"N	80°48'52.2420"W	0.99	142.199	0.21	0.08	34.75	
400.00	0.440	169.140	400.00	-1.64	-1.47	0.78	1692687.73	14370027.37	39°34'16.9516"N	80°48'52.2398"W	1.66	152.136	0.08	0.07	6.54	
468.00	0.610	190.600	467.99	-2.21	-2.08	0.76	1692687.71	14370026.76	39°34'16.9456"N	80°48'52.2401"W	2.21	159.963	0.38	0.25	31.56	Gyrodata MS Gyro <12-3/8"> (400')(468')
590.00	0.690	182.260	589.98	-3.46	-3.45	0.61	1692687.56	14370025.39	39°34'16.9320"N	80°48'52.2420"W	3.51	169.977	0.10	0.07	-6.84	APS EM <12-3/8"> (468')(590'-2993')
679.00	0.900	180.060	678.98	-4.62	-4.69	0.59	1692687.54	14370024.15	39°34'16.9198"N	80°48'52.2423"W	4.72	172.845	0.24	0.24	-2.47	
768.00	0.700	191.540	767.97	-5.75	-5.92	0.48	1692687.43	14370022.92	39°34'16.9076"N	80°48'52.2438"W	5.94	175.375	0.29	-0.22	12.90	
856.00	0.810	203.050	855.96	-6.68	-7.02	0.13	1692687.08	14370021.83	39°34'16.8968"N	80°48'52.2483"W	7.02	178.957	0.21	0.12	13.08	
944.00	0.840	193.180	943.95	-7.69	-8.22	-0.26	1692686.69	14370020.63	39°34'16.8849"N	80°48'52.2533"W	8.22	181.832	0.16	0.03	-11.22	
1038.00	0.750	193.190	1037.94	-8.79	-9.49	-0.56	1692686.39	14370019.36	39°34'16.8724"N	80°48'52.2571"W	9.50	183.380	0.10	-0.10	0.01	
1133.00	0.830	199.540	1132.93	-9.85	-10.74	-0.93	1692686.02	14370018.10	39°34'16.8600"N	80°48'52.2619"W	10.78	184.961	0.12	0.08	6.68	
1227.00	1.040	190.950	1226.92	-11.13	-12.22	-1.32	1692685.63	14370016.62	39°34'16.8454"N	80°48'52.2669"W	12.29	186.175	0.27	0.22	-9.14	
1321.00	1.100	196.730	1320.90	-12.60	-13.92	-1.74	1692685.21	14370014.92	39°34'16.8286"N	80°48'52.2724"W	14.03	187.140	0.13	0.06	6.15	
1416.00	1.020	188.870	1415.89	-14.09	-15.63	-2.14	1692684.81	14370013.22	39°34'16.8117"N	80°48'52.2774"W	15.78	187.784	0.17	-0.08	-8.27	
1510.00	0.970	201.220	1509.87	-15.43	-17.20	-2.55	1692684.40	14370011.65	39°34'16.7962"N	80°48'52.2828"W	17.39	188.445	0.23	-0.05	13.14	
1605.00	0.170	246.470	1604.87	-16.06	-18.01	-2.97	1692683.98	14370010.84	39°34'16.7883"N	80°48'52.2882"W	18.25	189.379	0.90	-0.84	47.63	
1699.00	0.310	298.100	1698.87	-15.88	-17.94	-3.33	1692683.63	14370010.91	39°34'16.7889"N	80°48'52.2927"W	18.25	190.503	0.26	0.15	54.93	
1794.00	0.450	265.620	1793.87	-15.60	-17.85	-3.92	1692683.03	14370011.00	39°34'16.7898"N	80°48'52.3003"W	18.28	192.402	0.26	0.15	-34.19	
1888.00	0.460	265.960	1887.86	-15.41	-17.90	-4.67	1692682.28	14370010.94	39°34'16.7893"N	80°48'52.3098"W	18.50	194.617	0.01	0.01	0.36	
1983.00	0.500	265.900	1982.86	-15.20	-17.96	-5.46	1692681.49	14370010.89	39°34'16.7888"N	80°48'52.3200"W	18.77	196.919	0.04	0.04	-0.06	
2077.00	0.570	251.620	2076.85	-15.09	-18.14	-6.32	1692680.64	14370010.71	39°34'16.7870"N	80°48'52.3308"W	19.21	199.200	0.16	0.07	-15.19	
2172.00	0.570	250.640	2171.85	-15.09	-18.44	-7.21	1692679.74	14370010.40	39°34'16.7840"N	80°48'52.3423"W	19.80	201.354	0.01	0.00	-1.03	
2266.00	0.640	272.440	2265.85	-14.90	-18.58	-8.18	1692678.78	14370010.27	39°34'16.7827"N	80°48'52.3546"W	20.29	203.757	0.25	0.07	23.19	
2360.00	0.610	264.170	2359.84	-14.60	-18.60	-9.20	1692677.76	14370010.24	39°34'16.7825"N	80°48'52.3677"W	20.75	206.309	0.10	-0.03	-8.80	
2455.00	0.410	274.850	2454.84	-14.35	-18.63	-10.04	1692676.91	14370010.22	39°34'16.7823"N	80°48'52.3784"W	21.16	208.326	0.23	-0.21	11.24	
2549.00	0.590	259.470	2548.83	-14.14	-18.69	-10.85	1692676.10	14370010.16	39°34'16.7817"N	80°48'52.3888"W	21.61	210.143	0.24	0.19	-16.36	
2644.00	0.470	242.760	2643.83	-14.12	-18.95	-11.68	1692675.28	14370009.89	39°34'16.7791"N	80°48'52.3993"W	22.26	211.639	0.20	-0.13	-17.59	

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



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'

Page 3 of 13



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Galarraga Unit 1H
Field	Wetzel		API	47-103-03633-0000
Facility	Fluharty Pad		Wellbore	Galarraga Unit 1H AWB
Slot	Slot D			

WELLPATH DATA (261 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	0.600	266.900	2737.82	-14.04	-19.16	-12.51	1692674.44	14370009.69	39°34'16.7771"N	80°48'52.4100"W	22.88	213.151	0.27	0.14	25.68	
2833.00	0.570	267.310	2832.82	-13.77	-19.21	-13.48	1692673.47	14370009.64	39°34'16.7766"N	80°48'52.4224"W	23.47	215.066	0.03	-0.03	0.43	
2927.00	0.510	259.630	2926.82	-13.58	-19.30	-14.36	1692672.60	14370009.54	39°34'16.7757"N	80°48'52.4336"W	24.06	216.645	0.10	-0.06	-8.17	
2993.00	0.630	263.910	2992.81	-13.46	-19.39	-15.01	1692671.95	14370009.45	39°34'16.7748"N	80°48'52.4419"W	24.52	217.736	0.19	0.18	6.48	
3113.00	0.790	257.200	3112.80	-13.22	-19.65	-16.47	1692670.48	14370009.20	39°34'16.7723"N	80°48'52.4606"W	25.64	219.975	0.15	0.13	-5.59	APS EM <8-3/4"> (2993')(3113'-6134')
3208.00	1.630	99.810	3207.79	-13.80	-20.02	-15.78	1692671.18	14370008.82	39°34'16.7686"N	80°48'52.4517"W	25.49	218.240	2.50	0.88	-165.67	
3302.00	4.490	81.730	3301.65	-15.13	-19.72	-10.82	1692676.13	14370009.13	39°34'16.7715"N	80°48'52.3884"W	22.49	208.750	3.17	3.04	-19.23	
3397.00	6.630	77.360	3396.20	-16.43	-17.99	-1.79	1692685.16	14370010.86	39°34'16.7884"N	80°48'52.2730"W	18.08	185.675	2.29	2.25	-4.60	
3492.00	6.720	76.160	3490.55	-17.53	-15.46	8.96	1692695.91	14370013.39	39°34'16.8132"N	80°48'52.1357"W	17.87	149.898	0.17	0.09	-1.26	
3586.00	6.210	70.780	3583.96	-18.00	-12.47	19.10	1692706.04	14370016.38	39°34'16.8425"N	80°48'52.0061"W	22.81	123.132	0.84	-0.54	-5.72	
3680.00	6.890	82.130	3677.35	-19.07	-10.02	29.49	1692716.43	14370018.82	39°34'16.8665"N	80°48'51.8734"W	31.14	108.771	1.55	0.72	12.07	
3774.00	6.710	88.770	3770.69	-21.83	-9.13	40.56	1692727.50	14370019.71	39°34'16.8751"N	80°48'51.7320"W	41.58	102.687	0.86	-0.19	7.06	
3868.00	6.740	82.820	3864.04	-24.64	-8.32	51.53	1692738.46	14370020.52	39°34'16.8828"N	80°48'51.5919"W	52.20	99.177	0.74	0.03	-6.33	
3963.00	6.160	78.930	3958.44	-26.48	-6.65	62.06	1692748.99	14370022.19	39°34'16.8992"N	80°48'51.4574"W	62.42	96.115	0.76	-0.61	-4.09	
4057.00	5.690	71.720	4051.94	-27.23	-4.22	71.44	1692758.36	14370024.62	39°34'16.9230"N	80°48'51.3376"W	71.56	93.380	0.94	-0.50	-7.67	
4151.00	6.800	90.220	4145.39	-29.12	-2.78	81.43	1692768.34	14370026.06	39°34'16.9370"N	80°48'51.2100"W	81.47	91.954	2.43	1.18	19.68	
4246.00	6.840	95.070	4239.72	-33.28	-3.30	92.69	1692779.60	14370025.54	39°34'16.9316"N	80°48'51.0662"W	92.74	92.039	0.61	0.04	5.11	
4340.00	6.050	91.140	4333.12	-37.27	-3.89	103.21	1692790.12	14370024.95	39°34'16.9256"N	80°48'50.9318"W	103.29	92.160	0.96	-0.84	-4.18	
4434.00	5.800	86.210	4426.62	-40.22	-3.68	112.91	1692799.81	14370025.16	39°34'16.9275"N	80°48'50.8080"W	112.97	91.866	0.60	-0.27	-5.24	
4529.00	4.920	78.030	4521.21	-41.97	-2.52	121.68	1692808.58	14370026.33	39°34'16.9388"N	80°48'50.6959"W	121.71	91.184	1.22	-0.93	-8.61	
4623.00	5.560	86.600	4614.82	-43.69	-1.41	130.17	1692817.07	14370027.43	39°34'16.9496"N	80°48'50.5875"W	130.18	90.620	1.07	0.68	9.12	
4717.00	7.370	84.450	4708.21	-46.32	-0.56	140.72	1692827.61	14370028.28	39°34'16.9578"N	80°48'50.4528"W	140.72	90.227	1.94	1.93	-2.29	
4812.00	6.800	77.360	4802.49	-48.35	1.28	152.27	1692839.16	14370030.10	39°34'16.9755"N	80°48'50.3052"W	152.28	89.525	1.10	-0.60	-7.46	
4906.00	6.690	73.280	4895.84	-49.19	4.06	162.94	1692849.83	14370032.90	39°34'17.0029"N	80°48'50.1688"W	163.00	88.574	0.52	-0.12	-4.34	
5001.00	5.710	69.070	4990.28	-49.25	7.34	172.66	1692859.54	14370036.17	39°34'17.0351"N	80°48'50.0447"W	172.81	87.567	1.14	-1.03	-4.43	
5095.00	6.250	78.440	5083.77	-49.75	10.03	182.04	1692868.92	14370038.87	39°34'17.0616"N	80°48'49.9248"W	182.32	86.845	1.18	0.57	9.97	
5189.00	7.480	89.210	5177.10	-52.32	11.14	193.17	1692880.04	14370039.98	39°34'17.0723"N	80°48'49.7827"W	193.49	86.699	1.89	1.31	11.46	
5284.00	6.690	89.430	5271.38	-56.00	11.28	204.89	1692891.76	14370040.12	39°34'17.0735"N	80°48'49.6330"W	205.20	86.848	0.83	-0.83	0.23	
5378.00	5.810	82.140	5364.82	-58.65	11.99	215.08	1692901.94	14370040.82	39°34'17.0802"N	80°48'49.5029"W	215.41	86.810	1.26	-0.94	-7.76	
5472.00	6.120	86.700	5458.31	-60.92	12.93	224.79	1692911.65	14370041.76	39°34'17.0893"N	80°48'49.3788"W	225.16	86.709	0.60	0.33	4.85	



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'

Page 4 of 13



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Galarraga Unit 1H
Field	Wetzel		API	47-103-03633-0000
Facility	Fluharty Pad		Wellbore	Galarraga Unit 1H AWB
Slot	Slot D			

WELLPATH DATA (261 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
5567.00	5.780	84.380	5552.80	-63.40	13.69	234.61	1692921.46	14370042.52	39°34'17.0966"N	80°48'49.2535"W	235.01	86.661	0.44	-0.36	-2.44	
5662.00	6.230	92.970	5647.28	-66.43	13.89	244.52	1692931.37	14370042.72	39°34'17.0984"N	80°48'49.1269"W	244.91	86.749	1.06	0.47	9.04	
5756.00	5.570	91.820	5740.78	-69.96	13.48	254.17	1692941.02	14370042.31	39°34'17.0942"N	80°48'49.0037"W	254.53	86.964	0.71	-0.70	-1.22	
5850.00	4.510	87.590	5834.41	-72.64	13.49	262.42	1692949.27	14370042.32	39°34'17.0941"N	80°48'48.8983"W	262.77	87.057	1.19	-1.13	-4.50	
5945.00	5.640	80.340	5929.04	-74.46	14.43	270.76	1692957.60	14370043.26	39°34'17.1032"N	80°48'48.7918"W	271.14	86.949	1.37	1.19	-7.63	
6039.00	6.180	87.630	6022.54	-76.66	15.41	280.37	1692967.20	14370044.25	39°34'17.1128"N	80°48'48.6691"W	280.79	86.853	0.98	0.57	7.76	
6134.00	5.040	90.800	6117.09	-79.53	15.57	289.65	1692976.48	14370044.40	39°34'17.1141"N	80°48'48.5506"W	290.07	86.923	1.24	-1.20	3.34	
6186.00	4.240	91.970	6168.92	-80.99	15.47	293.85	1692980.69	14370044.30	39°34'17.1130"N	80°48'48.4969"W	294.26	86.986	1.55	-1.54	2.25	BH AT Curve <8-1/2"> (6134')(6186'-23779')
6263.00	6.590	66.120	6245.58	-81.63	17.16	300.74	1692987.57	14370045.99	39°34'17.1296"N	80°48'48.4089"W	301.23	86.734	4.33	3.05	-33.57	
6358.00	13.260	12.680	6339.27	-71.87	30.03	308.14	1692994.96	14370058.86	39°34'17.2567"N	80°48'48.3141"W	309.60	84.433	11.27	7.02	-56.25	
6452.00	20.400	2.340	6429.21	-47.40	56.96	311.18	1692998.00	14370085.78	39°34'17.5228"N	80°48'48.2745"W	316.35	79.627	8.21	7.60	-11.00	
6507.00†	26.073	359.128	6479.73	-26.96	78.64	311.39	1692998.21	14370107.45	39°34'17.7370"N	80°48'48.2713"W	321.16	75.826	10.57	10.31	-5.84	Sycamore: 6507' MD
6547.00	30.230	357.510	6514.99	-8.94	97.50	310.81	1692997.64	14370126.30	39°34'17.9234"N	80°48'48.2781"W	325.75	72.583	10.57	10.39	-4.04	
6640.00†	40.024	352.423	6590.97	42.95	150.68	305.84	1692992.67	14370179.46	39°34'18.4491"N	80°48'48.3402"W	340.94	63.772	10.98	10.53	-5.47	Middlesex: 6640' MD
6641.00	40.130	352.380	6591.74	43.58	151.31	305.76	1692992.58	14370180.09	39°34'18.4554"N	80°48'48.3413"W	341.15	63.670	10.98	10.63	-4.29	
6736.00	50.770	349.550	6658.29	110.18	218.04	294.99	1692981.82	14370246.79	39°34'19.1151"N	80°48'48.4770"W	366.83	53.530	11.40	11.20	-2.98	
6775.00†	54.574	349.152	6681.94	140.86	248.51	289.26	1692976.09	14370277.25	39°34'19.4163"N	80°48'48.5494"W	381.35	49.333	9.79	9.75	-1.02	Burkett: 6775' MD
6813.00†	58.281	348.799	6702.95	172.21	279.58	283.20	1692970.04	14370308.31	39°34'19.7235"N	80°48'48.6259"W	397.96	45.368	9.79	9.76	-0.93	Tully: 6813' MD
6830.00	59.940	348.650	6711.68	186.67	293.89	280.35	1692967.19	14370322.61	39°34'19.8650"N	80°48'48.6619"W	406.16	43.649	9.79	9.76	-0.88	
6925.00	69.740	346.260	6752.02	272.01	377.70	261.63	1692948.47	14370406.39	39°34'20.6937"N	80°48'48.8988"W	459.46	34.710	10.56	10.32	-2.52	
6996.00†	76.918	341.932	6772.39	339.86	443.04	242.96	1692929.81	14370471.70	39°34'21.3398"N	80°48'49.1355"W	505.28	28.740	11.67	10.11	-6.10	Marcellus POE: 6996' MD
7019.00	79.260	340.590	6777.13	362.37	464.34	235.73	1692922.59	14370493.00	39°34'21.5506"N	80°48'49.2272"W	520.75	26.915	11.67	10.18	-5.83	
7114.00	83.860	340.860	6791.07	456.31	553.02	204.72	1692891.59	14370581.64	39°34'22.4276"N	80°48'49.6209"W	589.70	20.314	4.85	4.84	0.28	
7208.00	90.030	340.450	6796.08	550.13	641.55	173.64	1692860.52	14370670.13	39°34'23.3032"N	80°48'50.0154"W	664.63	15.145	6.58	6.56	-0.44	
7303.00	89.820	341.380	6796.20	645.13	731.33	142.58	1692829.47	14370759.87	39°34'24.1911"N	80°48'50.4097"W	745.09	11.032	1.00	-0.22	0.98	
7397.00	89.660	340.650	6796.63	739.13	820.21	112.00	1692798.90	14370848.72	39°34'25.0702"N	80°48'50.7979"W	827.82	7.775	0.80	-0.17	-0.78	
7492.00	89.910	338.800	6796.99	834.10	909.32	79.08	1692766.00	14370937.80	39°34'25.9515"N	80°48'51.2159"W	912.75	4.970	1.97	0.26	-1.95	
7588.00	89.880	340.490	6797.16	930.07	999.32	45.69	1692732.62	14371027.76	39°34'26.8417"N	80°48'51.6399"W	1000.37	2.618	1.76	-0.03	1.76	
7683.00	90.280	340.100	6797.03	1025.06	1088.76	13.66	1692700.60	14371117.16	39°34'27.7263"N	80°48'52.0466"W	1088.84	0.719	0.59	0.42	-0.41	
7777.00	90.220	340.200	6796.62	1119.05	1177.17	-18.26	1692668.70	14371205.54	39°34'28.6008"N	80°48'52.4519"W	1177.31	359.111	0.12	-0.06	0.11	

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



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'  
Page 5 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Galarraga Unit 1H
Field	Wetzel	API	47-103-03633-0000
Facility	Fuharty Pad	Wellbore	Galarraga Unit 1H AWB
Slot	Slot D		

WELLPATH DATA (261 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
7872.00	90.180	340.660	6796.29	1214.04	1266.68	-50.08	1692636.89	14371295.02	39°34'29.4861"N	80°48'52.8559"W	1267.67	357.736	0.49	-0.04	0.48	
7967.00	89.910	340.260	6796.21	1309.04	1356.21	-81.86	1692605.13	14371384.51	39°34'30.3716"N	80°48'53.2593"W	1358.68	356.546	0.51	-0.28	-0.42	
8061.00	90.340	340.570	6796.01	1403.03	1444.77	-113.37	1692573.63	14371473.04	39°34'31.2475"N	80°48'53.6594"W	1449.21	355.513	0.56	0.46	0.33	
8156.00	90.250	340.720	6795.52	1498.03	1534.40	-144.85	1692542.16	14371562.63	39°34'32.1339"N	80°48'54.0591"W	1541.23	354.607	0.18	-0.09	0.16	
8250.00	90.120	340.540	6795.22	1592.03	1623.08	-176.03	1692510.99	14371651.27	39°34'33.0110"N	80°48'54.4549"W	1632.60	353.810	0.24	-0.14	-0.19	
8345.00	90.550	340.390	6794.66	1687.02	1712.61	-207.79	1692479.24	14371740.77	39°34'33.8965"N	80°48'54.8583"W	1725.17	353.082	0.48	0.45	-0.16	
8439.00	90.000	339.320	6794.21	1781.00	1800.86	-240.16	1692446.88	14371828.98	39°34'34.7693"N	80°48'55.2694"W	1816.80	352.404	1.28	-0.59	-1.14	
8533.00	89.910	339.320	6794.28	1874.96	1888.80	-273.36	1692413.70	14371916.89	39°34'35.6391"N	80°48'55.6910"W	1908.48	351.765	0.10	-0.10	0.00	
8628.00	90.430	337.990	6794.00	1969.87	1977.28	-307.94	1692379.13	14372005.33	39°34'36.5143"N	80°48'56.1302"W	2001.12	351.148	1.50	0.55	-1.40	
8722.00	89.420	338.890	6794.12	2063.78	2064.70	-342.48	1692344.61	14372092.72	39°34'37.3790"N	80°48'56.5691"W	2092.92	350.582	1.44	-1.07	0.96	
8816.00	90.460	340.690	6794.22	2157.75	2152.91	-374.95	1692312.15	14372180.89	39°34'38.2514"N	80°48'56.9815"W	2185.32	350.120	2.21	1.11	1.91	
8910.00	89.480	341.060	6794.27	2251.75	2241.72	-405.75	1692281.36	14372269.67	39°34'39.1298"N	80°48'57.3724"W	2278.15	349.741	1.11	-1.04	0.39	
9005.00	90.250	341.770	6794.50	2346.75	2331.77	-436.03	1692251.10	14372359.68	39°34'40.0203"N	80°48'57.7568"W	2372.18	349.408	1.10	0.81	0.75	
9099.00	89.690	340.880	6794.54	2440.74	2420.82	-466.12	1692221.01	14372448.69	39°34'40.9010"N	80°48'58.1388"W	2465.28	349.101	1.12	-0.60	-0.95	
9194.00	89.820	341.760	6794.95	2535.74	2510.81	-496.55	1692190.60	14372538.65	39°34'41.7911"N	80°48'58.5250"W	2559.44	348.813	0.94	0.14	0.93	
9288.00	89.660	341.210	6795.38	2629.73	2599.94	-526.40	1692160.76	14372627.75	39°34'42.6726"N	80°48'58.9039"W	2652.70	348.554	0.61	-0.17	-0.59	
9383.00	90.120	341.520	6795.56	2724.73	2689.96	-556.76	1692130.42	14372717.73	39°34'43.5629"N	80°48'59.2893"W	2746.98	348.306	0.58	0.48	0.33	
9478.00	90.060	341.440	6795.41	2819.73	2780.04	-586.93	1692100.25	14372807.77	39°34'44.4538"N	80°48'59.6723"W	2841.32	348.079	0.11	-0.06	-0.08	
9572.00	89.540	341.700	6795.74	2913.72	2869.22	-616.65	1692070.55	14372896.92	39°34'45.3358"N	80°49'0.0495"W	2934.74	347.871	0.62	-0.55	0.28	
9667.00	89.600	341.670	6796.45	3008.71	2959.41	-646.50	1692040.71	14372987.06	39°34'46.2277"N	80°49'0.4284"W	3029.20	347.677	0.07	0.06	-0.03	
9761.00	90.030	341.470	6796.76	3102.71	3048.58	-676.22	1692011.00	14373076.21	39°34'47.1096"N	80°49'0.8056"W	3122.68	347.493	0.50	0.46	-0.21	
9856.00	90.460	342.210	6796.35	3197.70	3138.85	-705.83	1691981.41	14373166.44	39°34'48.0023"N	80°49'1.1814"W	3217.23	347.327	0.90	0.45	0.78	
9950.00	89.600	341.360	6796.30	3291.69	3228.14	-735.21	1691952.04	14373255.69	39°34'48.8854"N	80°49'1.5543"W	3310.80	347.170	1.29	-0.91	-0.90	
10044.00	89.690	342.130	6796.88	3385.68	3317.40	-764.65	1691922.60	14373344.92	39°34'49.7682"N	80°49'1.9281"W	3404.39	347.020	0.82	0.10	0.82	
10139.00	89.420	341.200	6797.62	3480.67	3407.58	-794.54	1691892.73	14373435.06	39°34'50.6600"N	80°49'2.3074"W	3498.98	346.875	1.02	-0.28	-0.98	
10233.00	89.540	340.790	6798.47	3574.66	3496.45	-825.15	1691862.13	14373523.90	39°34'51.5390"N	80°49'2.6960"W	3592.50	346.721	0.45	0.13	-0.44	
10327.00	89.260	341.340	6799.46	3668.66	3585.36	-855.65	1691831.65	14373612.77	39°34'52.4183"N	80°49'3.0832"W	3686.04	346.577	0.65	-0.30	0.59	
10422.00	89.910	341.410	6800.15	3763.65	3675.38	-885.99	1691801.32	14373702.75	39°34'53.3086"N	80°49'3.4684"W	3780.66	346.447	0.69	0.68	0.07	
10516.00	89.540	341.550	6800.60	3857.65	3764.51	-915.84	1691771.47	14373791.85	39°34'54.1901"N	80°49'3.8474"W	3874.31	346.327	0.42	-0.39	0.15	
10611.00	89.940	342.740	6801.03	3952.63	3854.93	-944.97	1691742.36	14373882.24	39°34'55.0843"N	80°49'4.2171"W	3969.06	346.227	1.32	0.42	1.25	

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



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'  
Page 6 of 13



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Galarraga Unit 1H
Field	Wetzel		API	47-103-03633-0000
Facility	Fluharty Pad		Wellbore	Galarraga Unit 1H AWB
Slot	Slot D			

WELLPATH DATA (261 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	90.000	342.030	6801.08	4046.60	3944.52	-973.42	1691713.92	14373971.79	39°34'55.9704"N	80°49'4.5781"W	4062.86	346.138	0.76	0.06	-0.76	
10800.00	90.060	342.060	6801.03	4141.58	4034.90	-1002.70	1691684.65	14374062.13	39°34'56.8641"N	80°49'4.9498"W	4157.62	346.044	0.07	0.06	0.03	
10894.00	89.820	341.850	6801.13	4235.57	4124.27	-1031.82	1691655.54	14374151.47	39°34'57.7480"N	80°49'5.3193"W	4251.39	345.954	0.34	-0.26	-0.22	
10989.00	89.570	342.270	6801.63	4330.55	4214.65	-1061.08	1691626.29	14374241.81	39°34'58.6419"N	80°49'5.6907"W	4346.17	345.869	0.51	-0.26	0.44	
11083.00	90.000	341.450	6801.98	4424.54	4303.98	-1090.35	1691597.04	14374331.10	39°34'59.5253"N	80°49'6.0622"W	4439.94	345.784	0.98	0.46	-0.87	
11177.00	89.720	341.070	6802.21	4518.54	4393.00	-1120.55	1691566.85	14374420.08	39°35'0.4056"N	80°49'6.4456"W	4533.66	345.690	0.50	-0.30	-0.40	
11272.00	90.060	343.000	6802.40	4613.52	4483.36	-1149.85	1691537.56	14374510.41	39°35'1.2993"N	80°49'6.8175"W	4628.46	345.615	2.06	0.36	2.03	
11366.00	89.570	341.810	6802.70	4707.49	4572.96	-1178.26	1691509.16	14374599.98	39°35'2.1854"N	80°49'7.1781"W	4722.32	345.552	1.37	-0.52	-1.27	
11461.00	89.660	341.030	6803.34	4802.48	4663.01	-1208.53	1691478.90	14374689.99	39°35'3.0760"N	80°49'7.5624"W	4817.07	345.470	0.83	0.09	-0.82	
11555.00	89.780	339.880	6803.80	4896.48	4751.59	-1239.98	1691447.47	14374778.53	39°35'3.9520"N	80°49'7.9617"W	4910.71	345.374	1.23	0.13	-1.22	
11649.00	90.060	341.880	6803.93	4990.47	4840.40	-1270.76	1691416.69	14374867.31	39°35'4.8304"N	80°49'8.3527"W	5004.43	345.290	2.15	0.30	2.13	
11743.00	90.120	341.580	6803.78	5084.46	4929.66	-1300.23	1691387.24	14374956.53	39°35'5.7132"N	80°49'8.7268"W	5098.25	345.224	0.33	0.06	-0.32	
11838.00	89.570	341.580	6804.04	5179.46	5019.79	-1330.25	1691357.23	14375046.63	39°35'6.6045"N	80°49'9.1078"W	5193.06	345.158	0.58	-0.58	0.00	
11932.00	89.750	341.980	6804.60	5273.45	5109.08	-1359.64	1691327.85	14375135.88	39°35'7.4876"N	80°49'9.4809"W	5286.90	345.098	0.47	0.19	0.43	
12027.00	89.540	341.400	6805.18	5368.44	5199.26	-1389.48	1691298.02	14375226.03	39°35'8.3795"N	80°49'9.8598"W	5381.73	345.038	0.65	-0.22	-0.61	
12122.00	89.690	342.960	6805.82	5463.41	5289.70	-1418.56	1691268.96	14375316.43	39°35'9.2739"N	80°49'10.2288"W	5476.61	344.988	1.65	0.16	1.64	
12216.00	89.020	342.720	6806.88	5557.36	5379.51	-1446.29	1691241.24	14375406.20	39°35'10.1620"N	80°49'10.5807"W	5570.54	344.952	0.76	-0.71	-0.26	
12311.00	89.200	342.900	6808.36	5652.30	5470.26	-1474.36	1691213.18	14375496.91	39°35'11.0594"N	80°49'10.9369"W	5665.46	344.916	0.27	0.19	0.19	
12406.00	89.260	341.380	6809.63	5747.27	5560.67	-1503.49	1691184.06	14375587.29	39°35'11.9536"N	80°49'11.3067"W	5760.34	344.870	1.60	0.06	-1.60	
12500.00	90.150	342.520	6810.12	5841.25	5650.04	-1532.62	1691154.94	14375676.62	39°35'12.8374"N	80°49'11.6764"W	5854.21	344.823	1.54	0.95	1.21	
12595.00	89.660	342.080	6810.28	5936.23	5740.54	-1561.50	1691126.07	14375767.09	39°35'13.7324"N	80°49'12.0430"W	5949.12	344.783	0.69	-0.52	-0.46	
12689.00	89.260	340.600	6811.16	6030.22	5829.59	-1591.57	1691096.01	14375856.11	39°35'14.6131"N	80°49'12.4249"W	6042.95	344.729	1.63	-0.43	-1.57	
12784.00	89.510	341.970	6812.18	6125.21	5919.56	-1622.05	1691065.54	14375946.04	39°35'15.5029"N	80°49'12.8119"W	6137.77	344.676	1.47	0.26	1.44	
12878.00	89.510	342.700	6812.98	6219.18	6009.12	-1650.58	1691037.03	14376035.57	39°35'16.3887"N	80°49'13.1739"W	6231.69	344.641	0.78	0.00	0.78	
12973.00	90.000	342.850	6813.39	6314.14	6099.86	-1678.71	1691008.91	14376126.27	39°35'17.2860"N	80°49'13.5309"W	6326.64	344.613	0.54	0.52	0.16	
13067.00	89.910	341.780	6813.46	6408.11	6189.42	-1707.26	1690980.37	14376215.79	39°35'18.1717"N	80°49'13.8934"W	6420.56	344.579	1.14	-0.10	-1.14	
13161.00	89.820	341.490	6813.69	6502.10	6278.63	-1736.88	1690950.76	14376304.97	39°35'19.0540"N	80°49'14.2694"W	6514.44	344.537	0.32	-0.10	-0.31	
13256.00	89.570	341.230	6814.19	6597.10	6368.65	-1767.24	1690920.41	14376394.95	39°35'19.9442"N	80°49'14.6549"W	6609.30	344.491	0.38	-0.26	-0.27	
13351.00	90.120	341.560	6814.45	6692.10	6458.68	-1797.55	1690890.12	14376484.94	39°35'20.8346"N	80°49'15.0398"W	6704.16	344.447	0.68	0.58	0.35	
13445.00	89.380	341.260	6814.66	6786.09	6547.77	-1827.52	1690860.16	14376574.00	39°35'21.7157"N	80°49'15.4202"W	6798.03	344.405	0.85	-0.79	-0.32	

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



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'

Page 7 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Galarraga Unit 1H
Field	Wetzel	API	47-103-03633-0000
Facility	Fiharty Pad	Wellbore	Galarraga Unit 1H AWB
Slot	Slot D		

WELLPATH DATA (261 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
13539.00	89.260	341.150	6815.97	6880.09	6636.76	-1857.80	1690829.89	14376662.95	39°35'22.5958"N	80°49'15.8048"W	6891.88	344.362	0.17	-0.13	-0.12	
13633.00	89.200	340.520	6817.24	6974.08	6725.54	-1888.66	1690799.05	14376751.70	39°35'23.4738"N	80°49'16.1967"W	6985.69	344.314	0.67	-0.06	-0.67	
13728.00	89.690	341.000	6818.16	7069.07	6815.23	-1919.96	1690767.76	14376841.35	39°35'24.3608"N	80°49'16.5942"W	7080.51	344.267	0.72	0.52	0.51	
13822.00	89.480	341.360	6818.84	7163.07	6904.20	-1950.28	1690737.45	14376930.29	39°35'25.2408"N	80°49'16.9793"W	7174.37	344.226	0.44	-0.22	0.38	
13916.00	89.630	341.470	6819.57	7257.06	6993.29	-1980.24	1690707.50	14377019.35	39°35'26.1219"N	80°49'17.3597"W	7268.25	344.190	0.20	0.16	0.12	
14010.00	89.450	341.130	6820.32	7351.06	7082.33	-2010.38	1690677.37	14377108.34	39°35'27.0024"N	80°49'17.7424"W	7362.13	344.153	0.41	-0.19	-0.36	
14105.00	89.600	340.900	6821.11	7446.06	7172.16	-2041.28	1690646.48	14377198.14	39°35'27.8908"N	80°49'18.1349"W	7456.99	344.113	0.29	0.16	-0.24	
14199.00	89.820	341.060	6821.59	7540.05	7261.03	-2071.92	1690615.86	14377286.97	39°35'28.7697"N	80°49'18.5239"W	7550.85	344.074	0.29	0.23	0.17	
14293.00	90.120	341.220	6821.64	7634.05	7349.98	-2102.30	1690585.49	14377375.89	39°35'29.6495"N	80°49'18.9098"W	7644.73	344.038	0.36	0.32	0.17	
14388.00	89.910	341.130	6821.61	7729.05	7439.90	-2132.96	1690554.84	14377465.77	39°35'30.5387"N	80°49'19.2991"W	7739.61	344.003	0.24	-0.22	-0.09	
14482.00	89.780	341.180	6821.87	7823.05	7528.86	-2163.32	1690524.49	14377554.69	39°35'31.4186"N	80°49'19.6847"W	7833.49	343.969	0.15	-0.14	0.05	
14577.00	89.940	341.290	6822.10	7918.05	7618.81	-2193.88	1690493.95	14377644.61	39°35'32.3081"N	80°49'20.0728"W	7928.39	343.936	0.20	0.17	0.12	
14672.00	89.660	341.160	6822.43	8013.05	7708.75	-2224.45	1690463.38	14377734.52	39°35'33.1977"N	80°49'20.4611"W	8023.28	343.904	0.32	-0.29	-0.14	
14766.00	89.600	341.290	6823.04	8107.05	7797.75	-2254.71	1690433.14	14377823.48	39°35'34.0778"N	80°49'20.8453"W	8117.18	343.873	0.15	-0.06	0.14	
14860.00	89.690	341.240	6823.62	8201.05	7886.77	-2284.90	1690402.96	14377912.46	39°35'34.9582"N	80°49'21.2287"W	8211.08	343.843	0.11	0.10	-0.05	
14955.00	90.030	341.420	6823.85	8296.04	7976.77	-2315.31	1690372.56	14378002.42	39°35'35.8483"N	80°49'21.6149"W	8305.99	343.814	0.40	0.36	0.19	
15049.00	89.940	340.530	6823.88	8390.04	8065.63	-2345.95	1690341.93	14378091.25	39°35'36.7271"N	80°49'22.0041"W	8399.87	343.783	0.95	-0.10	-0.95	
15144.00	89.880	341.060	6824.02	8485.04	8155.34	-2377.20	1690310.70	14378180.93	39°35'37.6144"N	80°49'22.4010"W	8494.75	343.749	0.56	-0.06	0.56	
15238.00	90.180	341.400	6823.98	8579.04	8244.34	-2407.45	1690280.46	14378269.90	39°35'38.4946"N	80°49'22.7851"W	8588.66	343.722	0.48	0.32	0.36	
15332.00	90.060	341.310	6823.78	8673.04	8333.41	-2437.50	1690250.42	14378358.93	39°35'39.3754"N	80°49'23.1668"W	8682.58	343.696	0.16	-0.13	-0.10	
15427.00	89.850	340.890	6823.85	8768.04	8423.29	-2468.27	1690219.66	14378448.77	39°35'40.2643"N	80°49'23.5576"W	8777.48	343.668	0.49	-0.22	-0.44	
15521.00	89.690	339.910	6824.23	8862.03	8511.84	-2499.80	1690188.14	14378537.28	39°35'41.1401"N	80°49'23.9581"W	8871.33	343.633	1.06	-0.17	-1.04	
15616.00	89.910	339.910	6824.56	8957.01	8601.06	-2532.44	1690155.52	14378626.47	39°35'42.0225"N	80°49'24.3727"W	8966.13	343.594	0.23	0.23	0.00	
15710.00	90.060	340.120	6824.59	9051.00	8689.40	-2564.56	1690123.41	14378714.77	39°35'42.8962"N	80°49'24.7809"W	9059.95	343.557	0.27	0.16	0.22	
15805.00	90.090	340.160	6824.46	9145.99	8778.75	-2596.84	1690091.15	14378804.09	39°35'43.7799"N	80°49'25.1910"W	9154.78	343.521	0.05	0.03	0.04	
15899.00	89.820	339.830	6824.54	9239.97	8867.08	-2628.99	1690059.00	14378892.38	39°35'44.6535"N	80°49'25.5995"W	9248.60	343.485	0.45	-0.29	-0.35	
15993.00	90.280	340.150	6824.45	9333.96	8955.40	-2661.16	1690026.85	14378980.67	39°35'45.5270"N	80°49'26.0082"W	9342.43	343.450	0.60	0.49	0.34	
16088.00	90.150	339.980	6824.10	9428.94	9044.71	-2693.55	1689994.47	14379069.94	39°35'46.4103"N	80°49'26.4197"W	9437.26	343.416	0.23	-0.14	-0.18	
16183.00	89.940	340.130	6824.02	9523.93	9134.01	-2725.96	1689962.08	14379159.21	39°35'47.2935"N	80°49'26.8315"W	9532.10	343.383	0.27	-0.22	0.16	
16277.00	89.910	340.300	6824.15	9617.92	9222.46	-2757.77	1689930.28	14379247.62	39°35'48.1683"N	80°49'27.2357"W	9625.96	343.352	0.18	-0.03	0.18	

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





# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'

Page 8 of 13



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Galarraga Unit 1H
Field	Wetzel		API	47-103-03633-0000
Facility	Fluharty Pad		Wellbore	Galarraga Unit 1H AWB
Slot	Slot D			

WELLPATH DATA (261 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
16371.00	90.280	339.510	6823.99	9711.90	9310.74	-2790.07	1689897.99	14379335.86	39°35'49.0414"N	80°49'27.6461"W	9719.79	343.319	0.93	0.39	-0.84	
16466.00	89.970	340.050	6823.78	9806.88	9399.88	-2822.90	1689865.17	14379424.97	39°35'49.9230"N	80°49'28.0633"W	9814.61	343.284	0.66	-0.33	0.57	
16560.00	89.750	339.900	6824.01	9900.86	9488.20	-2855.09	1689833.00	14379513.25	39°35'50.7965"N	80°49'28.4723"W	9908.46	343.253	0.28	-0.23	-0.16	
16655.00	89.780	339.790	6824.40	9995.84	9577.38	-2887.83	1689800.28	14379602.40	39°35'51.6786"N	80°49'28.8882"W	10003.29	343.221	0.12	0.03	-0.12	
16750.00	89.970	340.060	6824.61	10090.83	9666.61	-2920.43	1689767.68	14379691.59	39°35'52.5610"N	80°49'29.3026"W	10098.13	343.190	0.35	0.20	0.28	
16844.00	89.940	339.780	6824.68	10184.81	9754.90	-2952.71	1689735.42	14379779.84	39°35'53.4342"N	80°49'29.7126"W	10191.98	343.159	0.30	-0.03	-0.30	
16938.00	89.850	339.780	6824.86	10278.79	9843.10	-2985.20	1689702.94	14379868.02	39°35'54.3066"N	80°49'30.1255"W	10285.82	343.129	0.10	-0.10	0.00	
17033.00	90.220	340.220	6824.80	10373.77	9932.37	-3017.69	1689670.47	14379957.25	39°35'55.1895"N	80°49'30.5383"W	10380.68	343.100	0.61	0.39	0.46	
17127.00	90.150	340.170	6824.49	10467.76	10020.81	-3049.54	1689638.63	14380045.65	39°35'56.0642"N	80°49'30.9430"W	10474.56	343.074	0.09	-0.07	-0.05	
17221.00	90.000	339.990	6824.37	10561.75	10109.19	-3081.56	1689606.62	14380134.00	39°35'56.9382"N	80°49'31.3499"W	10568.43	343.047	0.25	-0.16	-0.19	
17315.00	90.280	339.890	6824.14	10655.73	10197.48	-3113.81	1689574.39	14380222.26	39°35'57.8115"N	80°49'31.7596"W	10662.29	343.020	0.32	0.30	-0.11	
17409.00	89.880	339.890	6824.01	10749.71	10285.75	-3146.13	1689542.08	14380310.49	39°35'58.6845"N	80°49'32.1703"W	10756.15	342.993	0.43	-0.43	0.00	
17504.00	90.150	340.210	6823.99	10844.70	10375.05	-3178.54	1689509.68	14380399.75	39°35'59.5677"N	80°49'32.5822"W	10851.03	342.967	0.44	0.28	0.34	
17598.00	90.400	340.030	6823.53	10938.69	10463.45	-3210.50	1689477.73	14380488.12	39°36'0.4419"N	80°49'32.9884"W	10944.91	342.942	0.33	0.27	-0.19	
17693.00	90.030	339.860	6823.18	11033.67	10552.89	-3243.08	1689445.16	14380577.32	39°36'1.3245"N	80°49'33.4023"W	11039.78	342.917	0.43	-0.39	-0.18	
17787.00	90.340	339.890	6822.87	11127.65	10640.95	-3275.42	1689412.83	14380665.54	39°36'2.1974"N	80°49'33.8133"W	11133.65	342.891	0.33	0.33	0.03	
17882.00	90.460	340.230	6822.21	11222.64	10730.25	-3307.82	1689380.45	14380754.81	39°36'3.0806"N	80°49'34.2250"W	11228.53	342.867	0.38	0.13	0.36	
17976.00	90.000	340.280	6821.83	11316.63	10818.72	-3339.58	1689348.71	14380843.25	39°36'3.9556"N	80°49'34.6285"W	11322.44	342.845	0.49	-0.49	0.05	
18071.00	90.030	340.050	6821.81	11411.62	10908.09	-3371.81	1689316.48	14380932.58	39°36'4.8394"N	80°49'35.0381"W	11417.33	342.823	0.24	0.03	-0.24	
18165.00	90.060	339.560	6821.73	11505.60	10996.31	-3404.26	1689284.05	14381020.76	39°36'5.7120"N	80°49'35.4505"W	11511.20	342.798	0.52	0.03	-0.52	
18260.00	90.060	339.330	6821.64	11600.56	11085.26	-3437.62	1689250.70	14381109.68	39°36'6.5917"N	80°49'35.8744"W	11606.04	342.771	0.24	0.00	-0.24	
18354.00	90.150	340.020	6821.46	11694.53	11173.41	-3470.27	1689218.07	14381197.79	39°36'7.4635"N	80°49'36.2894"W	11699.90	342.746	0.74	0.10	0.73	
18449.00	90.180	339.830	6821.19	11789.52	11262.63	-3502.88	1689185.47	14381286.98	39°36'8.3460"N	80°49'36.7038"W	11794.79	342.723	0.20	0.03	-0.20	
18543.00	90.150	339.510	6820.92	11883.49	11350.78	-3535.53	1689152.83	14381375.09	39°36'9.2177"N	80°49'37.1188"W	11888.66	342.699	0.34	-0.03	-0.34	
18638.00	90.740	340.060	6820.18	11978.46	11439.92	-3568.36	1689120.01	14381464.20	39°36'10.0994"N	80°49'37.5360"W	11983.53	342.676	0.85	0.62	0.58	
18732.00	90.060	341.190	6819.52	12072.46	11528.60	-3599.54	1689088.84	14381552.84	39°36'10.9764"N	80°49'37.9322"W	12077.47	342.660	1.40	-0.72	1.20	
18827.00	89.910	340.860	6819.55	12167.46	11618.43	-3630.43	1689057.97	14381642.64	39°36'11.8648"N	80°49'38.3246"W	12172.43	342.647	0.38	-0.16	-0.35	
18921.00	90.490	341.380	6819.22	12261.46	11707.37	-3660.85	1689027.56	14381731.54	39°36'12.7444"N	80°49'38.7110"W	12266.39	342.636	0.83	0.62	0.55	
19016.00	90.120	341.110	6818.72	12356.45	11797.33	-3691.39	1688997.03	14381821.46	39°36'13.6340"N	80°49'39.0991"W	12361.36	342.625	0.48	-0.39	-0.28	
19110.00	90.430	341.190	6818.26	12450.45	11886.29	-3721.76	1688966.67	14381910.39	39°36'14.5138"N	80°49'39.4849"W	12455.33	342.614	0.34	0.33	0.09	

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



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'

Page 9 of 13



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Galarraga Unit 1H
Field	Wetzel		API	47-103-03633-0000
Facility	Fluharty Pad		Wellbore	Galarraga Unit 1H AWB
Slot	Slot D			

WELLPATH DATA (261 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
19205.00	90.310	341.410	6817.65	12545.45	11976.27	-3752.22	1688936.23	14382000.33	39°36'15.4037"N	80°49'39.8718"W	12550.31	342.604	0.26	-0.13	0.23	
19299.00	89.910	341.040	6817.47	12639.45	12065.27	-3782.47	1688905.98	14382089.29	39°36'16.2838"N	80°49'40.2561"W	12644.28	342.594	0.58	-0.43	-0.39	
19394.00	89.600	340.780	6817.88	12734.45	12155.04	-3813.54	1688874.93	14382179.03	39°36'17.1717"N	80°49'40.6509"W	12739.24	342.581	0.43	-0.33	-0.27	
19488.00	90.090	341.070	6818.13	12828.45	12243.88	-3844.26	1688844.22	14382267.84	39°36'18.0503"N	80°49'41.0412"W	12833.20	342.569	0.61	0.52	0.31	
19582.00	90.120	341.590	6817.96	12922.44	12332.93	-3874.35	1688814.14	14382356.85	39°36'18.9310"N	80°49'41.4235"W	12927.17	342.560	0.55	0.03	0.55	
19677.00	89.910	341.080	6817.93	13017.44	12422.94	-3904.76	1688783.75	14382446.82	39°36'19.8211"N	80°49'41.8097"W	13022.15	342.551	0.58	-0.22	-0.54	
19771.00	90.460	341.040	6817.63	13111.44	12511.85	-3935.27	1688753.25	14382535.70	39°36'20.7003"N	80°49'42.1973"W	13116.12	342.540	0.59	0.59	-0.04	
19866.00	90.250	340.890	6817.04	13206.44	12601.65	-3966.25	1688722.28	14382625.46	39°36'21.5885"N	80°49'42.5910"W	13211.08	342.529	0.27	-0.22	-0.16	
19960.00	90.250	341.130	6816.63	13300.44	12690.53	-3996.84	1688691.71	14382714.31	39°36'22.4675"N	80°49'42.9796"W	13305.05	342.518	0.26	0.00	0.26	
20055.00	90.030	341.130	6816.40	13395.44	12780.43	-4027.56	1688660.99	14382804.17	39°36'23.3565"N	80°49'43.3700"W	13400.02	342.509	0.23	-0.23	0.00	
20149.00	89.970	340.820	6816.40	13489.44	12869.29	-4058.21	1688630.36	14382893.00	39°36'24.2354"N	80°49'43.7593"W	13493.99	342.498	0.34	-0.06	-0.33	
20243.00	90.620	341.550	6815.92	13583.44	12958.27	-4088.52	1688600.06	14382981.94	39°36'25.1153"N	80°49'44.1444"W	13587.96	342.489	1.04	0.69	0.78	
20338.00	90.090	341.020	6815.33	13678.43	13048.24	-4119.00	1688569.59	14383071.88	39°36'26.0051"N	80°49'44.5317"W	13682.94	342.480	0.79	-0.56	-0.56	
20432.00	90.180	341.140	6815.11	13772.43	13137.16	-4149.48	1688539.12	14383160.76	39°36'26.8845"N	80°49'44.9189"W	13776.91	342.471	0.16	0.10	0.13	
20526.00	90.000	340.870	6814.96	13866.43	13226.04	-4180.08	1688508.54	14383249.61	39°36'27.7635"N	80°49'45.3077"W	13870.88	342.461	0.35	-0.19	-0.29	
20621.00	90.310	341.100	6814.70	13961.43	13315.86	-4211.03	1688477.60	14383339.39	39°36'28.6517"N	80°49'45.7010"W	13965.85	342.451	0.41	0.33	0.24	
20715.00	90.090	340.830	6814.37	14055.43	13404.72	-4241.69	1688446.96	14383428.21	39°36'29.5305"N	80°49'46.0905"W	14059.81	342.441	0.37	-0.23	-0.29	
20810.00	90.430	340.940	6813.94	14150.43	13494.48	-4272.80	1688415.86	14383517.94	39°36'30.4182"N	80°49'46.4858"W	14154.78	342.431	0.38	0.36	0.12	
20904.00	90.430	340.760	6813.24	14244.43	13583.28	-4303.63	1688385.04	14383606.70	39°36'31.2964"N	80°49'46.8776"W	14248.74	342.420	0.19	0.00	-0.19	
20999.00	90.580	340.840	6812.40	14339.42	13672.99	-4334.87	1688353.81	14383696.37	39°36'32.1836"N	80°49'47.2746"W	14343.70	342.409	0.18	0.16	0.08	
21093.00	90.650	341.170	6811.39	14433.42	13761.86	-4365.47	1688323.23	14383785.21	39°36'33.0626"N	80°49'47.6633"W	14437.67	342.400	0.36	0.07	0.35	
21187.00	90.340	341.100	6810.58	14527.41	13850.81	-4395.86	1688292.85	14383874.13	39°36'33.9422"N	80°49'48.0495"W	14531.64	342.392	0.34	-0.33	-0.07	
21281.00	90.650	341.190	6809.77	14621.41	13939.76	-4426.24	1688262.48	14383963.04	39°36'34.8219"N	80°49'48.4355"W	14625.61	342.384	0.34	0.33	0.10	
21376.00	90.490	341.080	6808.82	14716.40	14029.66	-4456.95	1688231.78	14384052.90	39°36'35.7109"N	80°49'48.8258"W	14720.59	342.376	0.20	-0.17	-0.12	
21470.00	90.890	341.300	6807.59	14810.40	14118.63	-4487.26	1688201.48	14384141.84	39°36'36.5908"N	80°49'49.2108"W	14814.56	342.368	0.49	-0.43	0.23	
21565.00	90.620	341.390	6806.44	14905.39	14208.63	-4517.64	1688171.11	14384231.80	39°36'37.4809"N	80°49'49.5969"W	14909.54	342.362	0.30	-0.28	0.09	
21660.00	90.120	340.770	6805.82	15000.38	14298.49	-4548.44	1688140.32	14384321.63	39°36'38.3696"N	80°49'49.9883"W	15004.51	342.354	0.84	-0.53	-0.65	
21754.00	90.340	340.800	6805.45	15094.38	14387.26	-4579.38	1688109.40	14384410.36	39°36'39.2474"N	80°49'50.3814"W	15098.47	342.344	0.24	0.23	0.03	
21848.00	90.860	340.570	6804.46	15188.37	14475.96	-4610.47	1688078.32	14384499.03	39°36'40.1247"N	80°49'50.7765"W	15192.43	342.334	0.60	0.55	-0.24	
21943.00	91.020	341.490	6802.90	15283.36	14565.79	-4641.35	1688047.45	14384588.82	39°36'41.0130"N	80°49'51.1689"W	15287.39	342.326	0.98	0.17	0.97	

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



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'  
Page 10 of 13



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Galarraga Unit 1H
Field	Wetzel		API	47-103-03633-0000
Facility	Fluharty Pad		Wellbore	Galarraga Unit 1H AWB
Slot	Slot D			

WELLPATH DATA (261 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
22037.00	90.890	341.020	6801.34	15377.35	14654.79	-4671.55	1688017.26	14384677.78	39°36'41.8932"N	80°49'51.5527"W	15381.36	342.319	0.52	-0.14	-0.50	
22131.00	90.740	341.640	6800.00	15471.33	14743.83	-4701.64	1687987.19	14384766.79	39°36'42.7738"N	80°49'51.9350"W	15475.34	342.313	0.68	-0.16	0.66	
22226.00	90.620	341.490	6798.87	15566.32	14833.95	-4731.68	1687957.16	14384856.88	39°36'43.6650"N	80°49'52.3166"W	15570.32	342.309	0.20	-0.13	-0.16	
22320.00	90.620	341.250	6797.85	15660.32	14923.02	-4761.71	1687927.14	14384945.91	39°36'44.5458"N	80°49'52.6982"W	15664.30	342.303	0.26	0.00	-0.26	
22414.00	90.580	340.870	6796.87	15754.31	15011.93	-4792.21	1687896.65	14385034.78	39°36'45.4251"N	80°49'53.0859"W	15758.28	342.296	0.41	-0.04	-0.40	
22508.00	90.800	341.100	6795.74	15848.30	15100.79	-4822.84	1687866.03	14385123.61	39°36'46.3039"N	80°49'53.4750"W	15852.24	342.288	0.34	0.23	0.24	
22602.00	91.140	341.110	6794.15	15942.29	15189.71	-4853.27	1687835.61	14385212.49	39°36'47.1833"N	80°49'53.8618"W	15946.21	342.281	0.36	0.36	0.01	
22697.00	90.550	341.390	6792.75	16037.28	15279.66	-4883.81	1687805.09	14385302.41	39°36'48.0728"N	80°49'54.2498"W	16041.19	342.275	0.69	-0.62	0.29	
22791.00	90.400	340.010	6791.97	16131.27	15368.37	-4914.87	1687774.04	14385391.08	39°36'48.9502"N	80°49'54.6446"W	16135.14	342.265	1.48	-0.16	-1.47	
22885.00	90.400	340.870	6791.31	16225.26	15456.95	-4946.34	1687742.58	14385479.62	39°36'49.8261"N	80°49'55.0446"W	16229.09	342.255	0.91	0.00	0.91	
22980.00	90.830	340.960	6790.29	16320.26	15546.72	-4977.40	1687711.53	14385569.36	39°36'50.7139"N	80°49'55.4393"W	16324.06	342.247	0.46	0.45	0.09	
23074.00	90.710	340.790	6789.03	16414.25	15635.52	-5008.20	1687680.75	14385658.13	39°36'51.5922"N	80°49'55.8307"W	16418.03	342.239	0.22	-0.13	-0.18	
23168.00	90.950	341.140	6787.67	16508.24	15724.37	-5038.85	1687650.11	14385746.94	39°36'52.4708"N	80°49'56.2203"W	16511.99	342.232	0.45	0.26	0.37	
23263.00	90.770	341.280	6786.24	16603.23	15814.30	-5069.45	1687619.52	14385836.83	39°36'53.3602"N	80°49'56.6091"W	16606.97	342.226	0.24	-0.19	0.15	
23357.00	90.620	340.280	6785.10	16697.22	15903.05	-5100.39	1687588.59	14385925.55	39°36'54.2379"N	80°49'57.0023"W	16700.93	342.218	1.08	-0.16	-1.06	
23451.00	90.980	341.040	6783.79	16791.21	15991.74	-5131.52	1687557.48	14386014.20	39°36'55.1150"N	80°49'57.3979"W	16794.89	342.209	0.89	0.38	0.81	
23546.00	90.980	341.080	6782.16	16886.19	16081.58	-5162.35	1687526.66	14386104.01	39°36'56.0035"N	80°49'57.7898"W	16889.85	342.203	0.04	0.00	0.04	
23641.00	90.860	341.470	6780.64	16981.18	16171.54	-5192.84	1687496.18	14386193.93	39°36'56.8931"N	80°49'58.1773"W	16984.83	342.198	0.43	-0.13	0.41	
23735.00	90.650	340.920	6779.40	17075.17	16260.52	-5223.14	1687465.89	14386282.87	39°36'57.7730"N	80°49'58.5623"W	17078.80	342.192	0.63	-0.22	-0.59	
23779.00	90.830	341.160	6778.83	17119.17	16302.13	-5237.43	1687451.60	14386324.46	39°36'58.1845"N	80°49'58.7440"W	17122.79	342.189	0.68	0.41	0.55	
23804.00†	90.830	341.160	6778.47	17144.16	16325.78	-5245.51	1687443.54	14386348.11	39°36'58.4185"N	80°49'58.8465"W	17147.79	342.188	0.00	0.00	0.00	Projected MD at TD: 23804'

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



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'

Page 11 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Galarraga Unit 1H
Field	Wetzel	API	47-103-03633-0000
Facility	Fluharty Pad	Wellbore	Galarraga Unit 1H AWB
Slot	Slot D		

HOLE & CASING SECTIONS - Ref Wellbore: Galarraga Unit 1H AWB Ref Wellpath: Galarraga Unit 1H AWP Proj: 23804'									
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	-0.12	0.09
17.5in Open Hole	125.50	429.00	303.50	125.50	428.99	-0.12	0.09	-1.70	0.80
13.375in Casing Surface	25.50	409.00	383.50	25.50	408.99	0.00	0.00	-1.54	0.79
12.375in Open Hole	429.00	3065.00	2636.00	428.99	3064.81	-1.70	0.80	-19.52	-15.85
9.625in Casing Intermediate	25.50	3035.00	3009.50	25.50	3034.81	0.00	0.00	-19.46	-15.49
8.75in Open Hole	3065.00	6209.00	3144.00	3064.81	6191.84	-19.52	-15.85	15.58	295.66
8.5in Open Hole	6209.00	23804.00	17595.00	6191.84	6778.47	15.58	295.66	16325.78	-5245.51
5.5in Casing Production	25.50	23784.00	23758.50	25.50	6778.76	0.00	0.00	16306.86	-5239.05

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Galarraga Unit 1H POE Rev-3	6767.00	433.59	239.80	1692926.65	14370462.26	39°34'21.2465"N	80°48'49.1761"W	point
Galarraga Unit 1H BHL Rev-3	6793.00	16319.81	-5228.20	1687460.84	14386342.14	39°36'58.3591"N	80°49'58.6255"W	point
Galarraga Unit 1H LP Rev-3	6793.00	594.94	184.26	1692871.14	14370623.54	39°34'22.8423"N	80°48'49.8810"W	point
Galarraga Unit 1H 50' L/R Hard Line	7000.00	8376.70	-2494.20	1690193.74	14378402.20	39°35'39.8044"N	80°49'23.8899"W	rectangle
2D Rectangle 16800.9 x 100.								

RECEIVED  
 Department of Oil and Gas  
 Environmental Protection  
 DEC 20 2024



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'

Page 12 of 13



## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Galarraga Unit 1H
Field	Wetzel	API	47-103-03633-0000
Facility	Fluharty Pad	Wellbore	Galarraga Unit 1H AWB
Slot	Slot D		

## WELLPATH COMPOSITION - Ref Wellbore: Galarraga Unit 1H AWB Ref Wellpath: Galarraga Unit 1H AWP Proj: 23804'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
25.50	400.00	Gyrodata 2015 - GC+WIR+DPIPE	01 Gyrodata MS Gyro <17-1/2"> (100'-400')	Galarraga Unit 1H AWB	3/6/2024
400.00	468.00	Gyrodata 2015 - GC+WIR+DPIPE	02 Gyrodata MS Gyro <12-3/8"> (400')(468')	Galarraga Unit 1H AWB	3/8/2024
468.00	2993.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03 APS EM <12-3/8"> (468')(590'-2993')	Galarraga Unit 1H AWB	3/6/2024
2993.00	6134.00	BH NaviTrak (2019) (Axial Corr+HRGM)	04 APS EM <8-3/4"> (2993')(3113'-6134')	Galarraga Unit 1H AWB	4/5/2024
6134.00	23804.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	05 BH AT Curve <8-1/2"> (6134')(6186'-23779')	Galarraga Unit 1H AWB	4/5/2024

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



# Actual Wellpath Report

Galarraga Unit 1H AWP Proj: 23804'  
Page 13 of 13



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Galarraga Unit 1H
Field	Wetzel	API	47-103-03633-0000
Facility	Fluharty Pad	Wellbore	Galarraga Unit 1H AWB
Slot	Slot D		

COMMENTS
<p><b>Wellpath general comments</b>            API: 47-103-03633-0000            BH Job #: 112156748            Rig: H&amp;P 317            Duration: 4/8/2024-4/12/2024            Gyrodata MS Gyro &lt;17-1/2"&gt; (100'-400')            Gyrodata MS Gyro &lt;12-3/8"&gt; (400')(468')            APS EM &lt;12-3/8"&gt; (468')(590'-2993')            APS EM &lt;8-3/4"&gt; (2993')(3113'-6134')            BH AT Curve &lt;8-1/2"&gt; (6134')(6186'-23779')            Sycamore: 6507' MD            Middlesex: 6640' MD            Burkett: 6775' MD            Tully: 6813' MD            Marcellus POE: 6996' MD            Projected MD at TD: 23804'</p>

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