



ANTERO RESOURCES CORPORATION

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

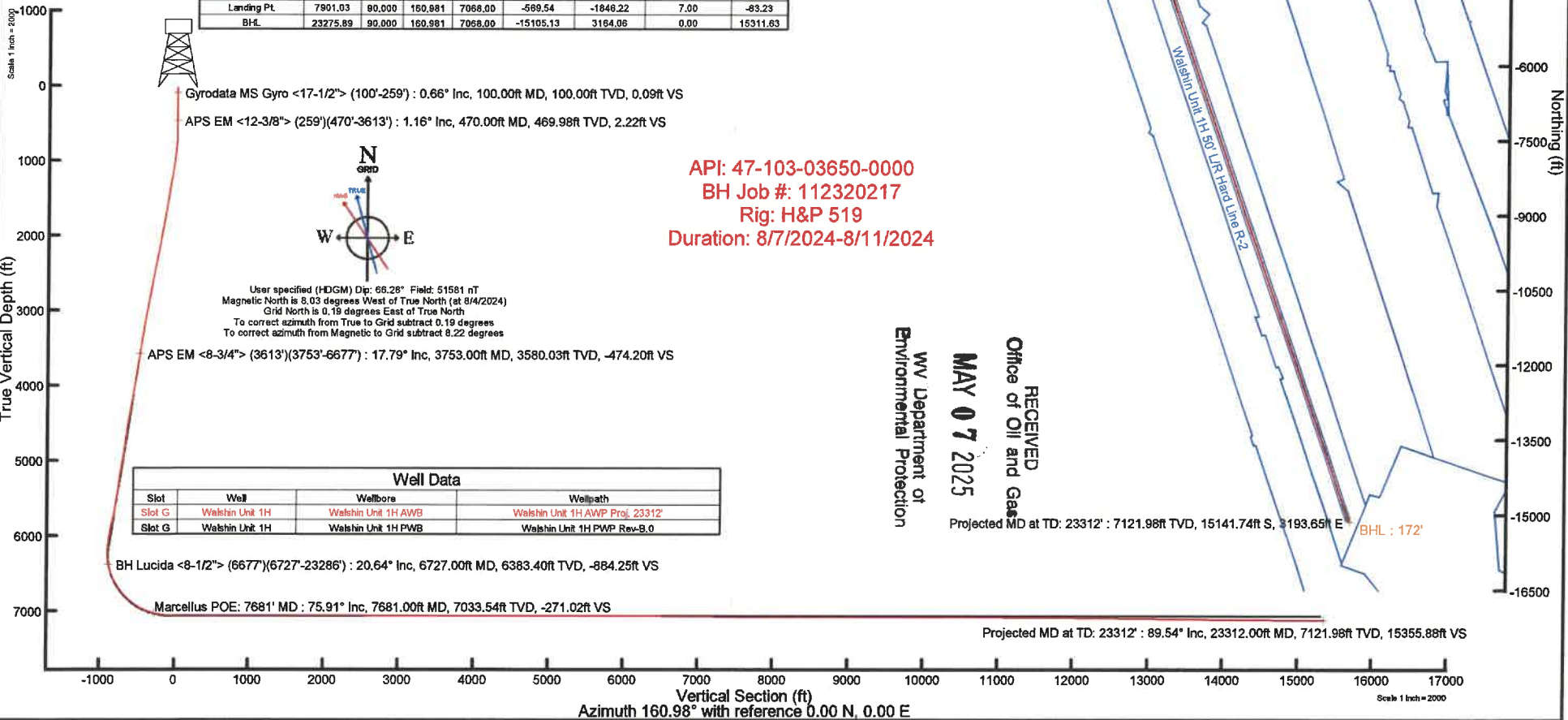
Slot: Slot G
Well: Walshin Unit 1H
Wellbore: Walshin Unit 1H PWB



Plot reference wellpath is Walshin Unit 1H PWB Rev-8.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 519 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 519 (RKB)	Scale: True distance
H&P 519 (RKB) to Mean Sea Level: 1191 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot G): -1161 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: edward on 2024-06-29; Database: WA, MPL, EASTERNUS, Data

Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Galmish Pad	1728216.430	14372266.790	39°34'38.1900"N	80°41'43.8200"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
Slot G	-11.08	11.78	1728228.210	14372255.710	39°34'38.0600"N
Comment: Walshin Unit 1H					
H&P 519 (RKB) to Ground level (At Slot: Slot G)	30ft				
Mean Sea Level to Ground level (At Slot: Slot G)	-1161ft				
H&P 519 (RKB) to Mean Sea Level	1191ft				

Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	3813.00	17.030	280.510	3446.44	153.06	-950.14	0.23	-454.35
Proj. to Bottom	3688.00	17.030	280.510	3516.24	158.96	-971.16	0.00	-484.89
Drill Out	3756.00	17.030	280.510	3592.73	161.23	-994.19	0.00	-476.43
End of 3D Arc	3881.20	19.708	277.138	3702.06	166.72	-1030.06	2.50	-493.32
Curve KOP	6483.06	19.708	277.138	6151.50	275.75	-1900.88	0.00	-880.12
POE	7686.32	74.970	160.981	7040.00	-368.88	-1915.39	7.00	-275.48
Landing Pt.	7901.03	90.000	160.981	7068.00	-569.54	-1848.22	7.00	-63.23
BHL	23275.89	90.000	160.981	7068.00	-15105.13	3184.06	0.00	15311.63





Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWB
Slot	Slot G		

REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999608	Report Generated	8/29/2024 at 10:51:03 PM
Convergence at slot	0.19° 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	-11.08	11.78	1726228.21	14372255.71	39°34'38.0800"N	80°41'43.6700"W
Facility Reference Pt			1726216.43	14372266.79	39°34'38.1900"N	80°41'43.8200"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 519 (RKB) to Facility Vertical Datum	1191.00ft
Horizontal Reference Pt	Slot	H&P 519 (RKB) to Mean Sea Level	1191.00ft
Vertical Reference Pt	H&P 519 (RKB)	H&P 519 (RKB) to Ground Level at Slot (Slot G)	30.00ft
MD Reference Pt	H&P 519 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	160.98°

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Environmental Protection



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Slot	Slot G		

WELLPATH DATA (256 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	83.290	0.00	0.00	0.00	0.00	1726228.21	14372255.71	39°34'38.0800"N	80°41'43.6700"W	0.00	0.000	0.00	0.00	0.00	
30.00	0.000	83.290	30.00	0.00	0.00	0.00	1726228.21	14372255.71	39°34'38.0800"N	80°41'43.6700"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.660	83.290	100.00	0.09	0.05	0.40	1726228.61	14372255.76	39°34'38.0805"N	80°41'43.6649"W	0.40	83.290	0.94	0.94	0.00	Gyrodata MS Gyro <17-1/2"> (100'-259')
200.00	0.450	119.420	199.99	0.50	-0.08	1.31	1726229.52	14372255.63	39°34'38.0792"N	80°41'43.6532"W	1.32	93.417	0.40	-0.21	36.13	
259.00	0.390	117.330	258.99	0.82	-0.28	1.69	1726229.90	14372255.43	39°34'38.0771"N	80°41'43.6484"W	1.72	99.530	0.10	-0.10	-3.54	
470.00	1.160	226.820	469.98	2.22	-2.08	0.78	1726228.98	14372253.64	39°34'38.0595"N	80°41'43.6602"W	2.22	159.523	0.64	0.36	51.89	APS EM <12-3/8"> (259')(470'-3613')
559.00	2.850	250.180	558.92	2.61	-3.44	-1.96	1726226.25	14372252.27	39°34'38.0461"N	80°41'43.6952"W	3.96	209.699	2.07	1.90	26.25	
648.00	4.840	256.950	647.72	2.26	-5.04	-7.70	1726220.51	14372250.67	39°34'38.0304"N	80°41'43.7686"W	9.21	236.801	2.29	2.24	7.61	
737.00	7.000	273.610	736.24	-0.22	-5.55	-16.78	1726211.44	14372250.17	39°34'38.0257"N	80°41'43.8845"W	17.67	251.702	3.08	2.43	18.72	
827.00	9.330	282.780	825.33	-6.18	-3.59	-29.37	1726198.86	14372252.12	39°34'38.0455"N	80°41'44.0452"W	29.58	263.034	2.96	2.59	10.19	
918.00	11.560	285.880	914.82	-15.28	0.54	-45.33	1726182.90	14372256.25	39°34'38.0869"N	80°41'44.2489"W	45.33	270.682	2.53	2.45	3.41	
1008.00	13.930	286.030	1002.59	-26.67	6.00	-64.42	1726163.82	14372261.71	39°34'38.1415"N	80°41'44.4924"W	64.70	275.320	2.63	2.63	0.17	
1102.00	16.340	285.640	1093.33	-40.69	12.69	-88.03	1726140.21	14372268.39	39°34'38.2084"N	80°41'44.7937"W	88.94	278.202	2.57	2.56	-0.41	
1197.00	18.710	281.870	1183.91	-56.11	19.43	-115.82	1726112.44	14372275.13	39°34'38.2759"N	80°41'45.1482"W	117.43	279.522	2.76	2.49	-3.97	
1291.00	20.770	280.200	1272.38	-71.99	25.48	-146.98	1726081.29	14372281.18	39°34'38.3368"N	80°41'45.5459"W	149.17	279.835	2.27	2.19	-1.78	
1385.00	20.480	278.250	1360.36	-87.66	30.79	-179.66	1726048.63	14372286.49	39°34'38.3903"N	80°41'45.9630"W	182.27	279.726	0.79	-0.31	-2.07	
1480.00	20.350	276.260	1449.39	-102.33	34.98	-212.52	1726015.77	14372290.67	39°34'38.4326"N	80°41'46.3826"W	215.38	279.346	0.74	-0.14	-2.09	
1574.00	20.710	279.260	1537.43	-117.18	39.43	-245.18	1725983.13	14372295.13	39°34'38.4779"N	80°41'46.7994"W	248.33	279.137	1.18	0.38	3.19	
1669.00	21.270	279.810	1626.12	-133.45	45.07	-278.73	1725949.59	14372300.77	39°34'38.5348"N	80°41'47.2277"W	282.35	279.186	0.62	0.59	0.58	
1763.00	21.370	278.400	1713.69	-149.56	50.48	-312.48	1725915.86	14372306.17	39°34'38.5894"N	80°41'47.6584"W	316.53	279.177	0.56	0.11	-1.50	
1858.00	21.440	275.750	1802.14	-164.81	54.75	-346.88	1725881.47	14372310.44	39°34'38.6327"N	80°41'48.0976"W	351.17	278.969	1.02	0.07	-2.79	
1952.00	20.690	279.400	1889.86	-179.91	59.18	-380.35	1725848.01	14372314.87	39°34'38.6776"N	80°41'48.5249"W	384.93	278.844	1.61	-0.80	3.88	
2046.00	20.390	281.020	1977.89	-196.01	65.02	-412.81	1725815.56	14372320.71	39°34'38.7364"N	80°41'48.9391"W	417.90	278.952	0.68	-0.32	1.72	
2140.00	20.360	278.980	2066.01	-211.88	70.71	-445.04	1725783.35	14372326.39	39°34'38.7937"N	80°41'49.3504"W	450.62	279.028	0.76	-0.03	-2.17	
2235.00	20.740	280.180	2154.96	-227.85	76.26	-477.92	1725750.48	14372331.94	39°34'38.8496"N	80°41'49.7701"W	483.96	279.066	0.60	0.40	1.26	
2329.00	21.190	279.360	2242.74	-244.04	81.96	-511.06	1725717.35	14372337.64	39°34'38.9071"N	80°41'50.1932"W	517.59	279.112	0.57	0.48	-0.87	
2423.00	21.660	278.600	2330.24	-260.16	87.32	-544.98	1725683.45	14372343.00	39°34'38.9612"N	80°41'50.6261"W	551.93	279.103	0.58	0.50	-0.81	
2518.00	22.160	278.260	2418.38	-276.50	92.52	-580.04	1725648.40	14372348.19	39°34'39.0137"N	80°41'51.0737"W	587.37	279.062	0.54	0.53	-0.36	
2612.00	22.070	277.640	2505.46	-292.55	97.41	-615.09	1725613.36	14372353.08	39°34'39.0633"N	80°41'51.5210"W	622.75	278.999	0.27	-0.10	-0.66	
2706.00	22.320	276.450	2592.50	-308.15	101.77	-650.33	1725578.14	14372357.44	39°34'39.1075"N	80°41'51.9709"W	658.24	278.894	0.55	0.27	-1.27	



Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'
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Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWB
Slot	Slot G		

WELLPATH DATA (256 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
2801.00	22.380	276.810	2680.36	-323.79	105.94	-686.21	1725542.27	14372361.60	39°34'39.1499"N	80°41'52.4290"W	694.34	278.776	0.16	0.08	0.38	
2895.00	21.220	279.000	2767.64	-339.58	110.72	-720.78	1725507.71	14372366.39	39°34'39.1983"N	80°41'52.8703"W	729.24	278.733	1.51	-1.23	2.33	
2989.00	20.600	280.140	2855.45	-355.63	116.29	-753.87	1725474.64	14372371.96	39°34'39.2545"N	80°41'53.2925"W	762.78	278.769	0.79	-0.66	1.21	
3084.00	20.000	280.200	2944.55	-371.70	122.11	-786.31	1725442.21	14372377.77	39°34'39.3131"N	80°41'53.7066"W	795.73	278.827	0.63	-0.63	0.06	
3178.00	20.430	278.070	3032.76	-387.02	127.26	-818.37	1725410.16	14372382.92	39°34'39.3650"N	80°41'54.1158"W	828.21	278.839	0.91	0.46	-2.27	
3272.00	18.760	280.680	3121.32	-401.98	132.37	-849.47	1725379.07	14372388.02	39°34'39.4165"N	80°41'54.5128"W	859.72	278.857	2.01	-1.78	2.78	
3367.00	17.720	283.140	3211.54	-417.25	138.48	-878.56	1725349.99	14372394.14	39°34'39.4779"N	80°41'54.8841"W	889.41	278.958	1.36	-1.09	2.59	
3461.00	17.410	282.000	3301.16	-432.11	144.66	-906.25	1725322.32	14372400.31	39°34'39.5399"N	80°41'55.2374"W	917.72	279.069	0.49	-0.33	-1.21	
3555.00	16.930	280.210	3390.97	-446.04	150.01	-933.48	1725295.10	14372405.66	39°34'39.5937"N	80°41'55.5848"W	945.45	279.129	0.76	-0.51	-1.90	
3613.00	17.030	280.510	3446.44	-454.35	153.06	-950.14	1725278.45	14372408.71	39°34'39.6243"N	80°41'55.7975"W	962.39	279.151	0.23	0.17	0.52	
3753.00	17.790	278.100	3580.03	-474.20	159.81	-991.47	1725237.13	14372415.46	39°34'39.6924"N	80°41'56.3251"W	1004.27	279.156	0.75	0.54	-1.72	APS EM <8-3/4"> (3613)(3753-6677)
3848.00	19.130	276.840	3670.14	-487.61	163.71	-1021.29	1725207.32	14372419.35	39°34'39.7319"N	80°41'56.7058"W	1034.33	279.107	1.47	1.41	-1.33	
3941.00	18.270	274.090	3758.23	-499.98	166.56	-1050.97	1725177.66	14372422.21	39°34'39.7611"N	80°41'57.0846"W	1064.08	279.006	1.32	-0.92	-2.96	
4035.00	19.090	275.930	3847.28	-512.24	169.20	-1080.95	1725147.68	14372424.85	39°34'39.7882"N	80°41'57.4674"W	1094.11	278.896	1.07	0.87	1.96	
4130.00	21.040	281.560	3936.52	-527.48	174.23	-1113.12	1725115.53	14372429.87	39°34'39.8389"N	80°41'57.8780"W	1126.67	278.896	2.89	2.05	5.93	
4224.00	20.090	277.710	4024.53	-543.32	179.77	-1145.65	1725083.01	14372435.41	39°34'39.8948"N	80°41'58.2932"W	1159.67	278.918	1.76	-1.01	-4.10	
4319.00	20.040	280.240	4113.77	-558.62	184.86	-1177.84	1725050.84	14372440.49	39°34'39.9461"N	80°41'58.7041"W	1192.26	278.920	0.92	-0.05	2.66	
4413.00	20.850	283.660	4201.85	-575.52	191.67	-1209.94	1725018.74	14372447.30	39°34'40.0145"N	80°41'59.1138"W	1225.03	279.002	1.54	0.86	3.64	
4507.00	19.660	279.540	4290.04	-592.12	198.24	-1241.80	1724986.90	14372453.87	39°34'40.0805"N	80°41'59.5203"W	1257.52	279.070	1.98	-1.27	-4.38	
4602.00	19.480	278.870	4379.55	-607.17	203.33	-1273.21	1724955.51	14372458.96	39°34'40.1319"N	80°41'59.9212"W	1289.34	279.074	0.30	-0.19	-0.71	
4696.00	19.270	281.050	4468.23	-622.27	208.72	-1303.92	1724924.81	14372464.35	39°34'40.1862"N	80°42'0.3132"W	1320.52	279.094	0.80	-0.22	2.32	
4791.00	19.510	279.780	4557.84	-637.77	214.42	-1334.93	1724893.80	14372470.05	39°34'40.2435"N	80°42'0.7091"W	1352.05	279.125	0.51	0.25	-1.34	
4885.00	20.510	278.110	4646.16	-652.84	219.41	-1366.71	1724862.04	14372475.03	39°34'40.2939"N	80°42'1.1147"W	1384.21	279.120	1.23	1.06	-1.78	
4979.00	17.980	272.670	4734.91	-665.71	222.41	-1397.51	1724831.25	14372478.03	39°34'40.3245"N	80°42'1.5079"W	1415.10	279.043	3.30	-2.69	-5.79	
5074.00	17.170	272.000	4825.48	-676.16	223.58	-1426.17	1724802.60	14372479.21	39°34'40.3371"N	80°42'1.8739"W	1443.59	278.910	0.88	-0.85	-0.71	
5168.00	20.190	279.490	4914.53	-688.89	226.74	-1456.05	1724772.74	14372482.36	39°34'40.3693"N	80°42'2.2553"W	1473.60	278.851	4.10	3.21	7.97	
5262.00	20.360	279.690	5002.70	-704.49	232.17	-1488.17	1724740.63	14372487.79	39°34'40.4240"N	80°42'2.6653"W	1506.17	278.867	0.20	0.18	0.21	
5357.00	19.960	277.340	5091.88	-719.62	237.02	-1520.54	1724708.27	14372492.64	39°34'40.4730"N	80°42'3.0785"W	1538.90	278.860	0.95	-0.42	-2.47	
5451.00	20.720	278.570	5180.02	-734.45	241.55	-1552.89	1724675.93	14372497.17	39°34'40.5188"N	80°42'3.4915"W	1571.57	278.841	0.93	0.81	1.31	
5546.00	18.250	272.830	5269.58	-747.77	244.79	-1584.38	1724644.46	14372500.40	39°34'40.5519"N	80°42'3.8934"W	1603.18	278.783	3.29	-2.60	-6.04	



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5640.00	16.690	268.040	5359.25	-757.21	245.06	-1612.57	1724616.27	14372500.67	39°34'40.5554"N	80°42'4.2535"W	1631.09	278.641	2.26	-1.66	-5.10	
5734.00	20.020	279.130	5448.48	-768.77	247.15	-1641.97	1724586.89	14372502.76	39°34'40.5770"N	80°42'4.6288"W	1660.46	278.560	5.12	3.54	11.80	
5828.00	19.600	278.130	5536.92	-783.55	251.93	-1673.46	1724555.41	14372507.54	39°34'40.6254"N	80°42'5.0308"W	1692.32	278.561	0.57	-0.45	-1.06	
5922.00	17.960	278.000	5625.91	-797.33	256.18	-1703.42	1724525.46	14372511.79	39°34'40.6683"N	80°42'5.4133"W	1722.58	278.553	1.75	-1.74	-0.14	
6016.00	20.530	285.090	5714.66	-813.17	262.49	-1733.70	1724495.20	14372518.09	39°34'40.7317"N	80°42'5.7996"W	1753.45	278.609	3.69	2.73	7.54	
6111.00	21.280	287.100	5803.41	-832.67	271.89	-1766.26	1724462.65	14372527.50	39°34'40.8257"N	80°42'6.2151"W	1787.06	278.751	1.09	0.79	2.12	
6205.00	19.100	284.060	5891.63	-851.12	280.65	-1797.48	1724431.43	14372536.25	39°34'40.9132"N	80°42'6.6135"W	1819.26	278.874	2.57	-2.32	-3.23	
6299.00	18.700	276.750	5980.58	-866.07	286.16	-1827.37	1724401.56	14372541.75	39°34'40.9686"N	80°42'6.9950"W	1849.64	278.900	2.55	-0.43	-7.78	
6394.00	20.840	276.270	6069.97	-879.91	289.79	-1859.30	1724369.65	14372545.39	39°34'41.0056"N	80°42'7.4025"W	1881.74	278.859	2.26	2.25	-0.51	
6488.00	20.450	270.960	6157.94	-892.67	291.89	-1892.34	1724336.62	14372547.49	39°34'41.0275"N	80°42'7.8244"W	1914.72	278.769	2.03	-0.41	-5.65	
6583.00	18.830	249.540	6247.53	-897.96	286.80	-1923.34	1724305.63	14372542.40	39°34'40.9782"N	80°42'8.2205"W	1944.61	278.481	7.72	-1.71	-22.55	
6677.00	19.480	229.340	6336.42	-891.79	271.27	-1949.47	1724279.51	14372526.88	39°34'40.8255"N	80°42'8.5549"W	1968.25	277.922	7.05	0.69	-21.49	
6727.00	20.640	220.510	6383.40	-884.25	259.14	-1961.52	1724267.46	14372514.75	39°34'40.7060"N	80°42'8.7093"W	1978.57	277.526	6.48	2.32	-17.66	BH Lucida <8-1/2"> (6677')(6727'-23286')
6822.00	23.570	200.170	6471.54	-861.00	228.53	-1978.98	1724250.01	14372484.15	39°34'40.4040"N	80°42'8.9336"W	1992.13	276.587	8.58	3.08	-21.41	
6916.00	26.290	186.730	6556.84	-827.65	190.17	-1987.91	1724241.09	14372445.81	39°34'40.0253"N	80°42'9.0492"W	1996.98	275.465	6.67	2.89	-14.30	
7011.00	31.780	180.950	6639.88	-785.14	144.22	-1990.79	1724238.20	14372399.88	39°34'39.5712"N	80°42'9.0880"W	1996.01	274.144	6.48	5.78	-6.08	
7059.00†	34.396	178.917	6680.10	-760.36	118.02	-1990.74	1724238.25	14372373.69	39°34'39.3123"N	80°42'9.0885"W	1994.24	273.393	5.92	5.45	-4.23	Sycamore: 7059' MD
7105.00	36.930	177.210	6717.47	-734.73	91.23	-1989.82	1724239.17	14372346.90	39°34'39.0474"N	80°42'9.0779"W	1991.91	272.625	5.92	5.51	-3.71	
7199.00	44.350	173.290	6788.76	-675.42	30.29	-1984.60	1724244.39	14372285.99	39°34'38.4451"N	80°42'9.0138"W	1984.83	270.875	8.34	7.89	-4.17	
7233.00†	45.955	171.793	6812.74	-651.80	6.40	-1981.47	1724247.52	14372262.10	39°34'38.2088"N	80°42'8.9748"W	1981.48	270.185	5.66	4.72	-4.40	Middlesex: 7233' MD
7293.00	48.830	169.340	6853.35	-608.27	-37.15	-1974.21	1724254.77	14372218.57	39°34'37.7781"N	80°42'8.8839"W	1974.56	268.922	5.66	4.79	-4.09	
7386.00†	55.046	169.487	6910.66	-535.87	-109.09	-1960.77	1724268.21	14372146.66	39°34'37.0667"N	80°42'8.7153"W	1963.80	266.815	6.69	6.68	0.16	Burkett: 7386' MD
7388.00	55.180	169.490	6911.81	-534.25	-110.71	-1960.47	1724268.51	14372145.05	39°34'37.0507"N	80°42'8.7115"W	1963.59	266.768	6.69	6.68	0.15	
7446.00†	59.143	168.021	6943.25	-485.98	-158.49	-1950.96	1724278.02	14372097.28	39°34'36.5782"N	80°42'8.5921"W	1957.38	265.356	7.16	6.83	-2.53	Tully: 7446' MD
7482.00	61.610	167.170	6961.05	-454.89	-189.05	-1944.23	1724284.74	14372066.73	39°34'36.2759"N	80°42'8.5075"W	1953.40	264.446	7.16	6.85	-2.36	
7577.00	68.170	167.200	7001.34	-369.42	-272.88	-1925.16	1724303.80	14371982.93	39°34'35.4468"N	80°42'8.2675"W	1944.41	261.932	6.91	6.91	0.03	
7671.00	74.990	165.380	7031.03	-280.67	-359.46	-1904.01	1724324.95	14371896.39	39°34'34.5904"N	80°42'8.0010"W	1937.65	259.309	7.48	7.26	-1.94	
7681.00†	75.914	165.461	7033.54	-271.02	-368.83	-1901.58	1724327.38	14371887.02	39°34'34.4977"N	80°42'7.9703"W	1937.02	259.023	9.27	9.24	0.81	Marcellus POE: 7681' MD
7721.00	79.610	165.780	7042.01	-232.07	-406.69	-1891.87	1724337.08	14371849.18	39°34'34.1232"N	80°42'7.8480"W	1935.09	257.868	9.27	9.24	0.80	
7765.00	80.760	165.260	7049.52	-188.85	-448.67	-1881.03	1724347.92	14371807.22	39°34'33.7080"N	80°42'7.7113"W	1933.80	256.584	2.86	2.61	-1.18	



Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWB
Slot	Slot G		

WELLPATH DATA (256 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
7860.00	87.510	164.270	7059.22	-94.61	-539.80	-1856.21	1724372.73	14371716.13	39°34'32.8066"N	80°42'7.3982"W	1933.10	253.785	7.18	7.11	-1.04	
7954.00	90.090	163.720	7061.19	-0.77	-630.12	-1830.30	1724398.63	14371625.83	39°34'31.9130"N	80°42'7.0711"W	1935.73	251.003	2.81	2.74	-0.59	
8048.00	90.030	162.190	7061.09	93.17	-719.99	-1802.74	1724426.18	14371536.00	39°34'31.0239"N	80°42'6.7230"W	1941.20	248.229	1.63	-0.06	-1.63	
8142.00	90.060	161.610	7061.01	187.16	-809.34	-1773.54	1724455.37	14371446.69	39°34'30.1399"N	80°42'6.3539"W	1949.48	245.471	0.62	0.03	-0.62	
8237.00	90.060	161.790	7060.91	282.15	-899.54	-1743.71	1724485.19	14371356.53	39°34'29.2475"N	80°42'5.9768"W	1962.06	242.712	0.19	0.00	0.19	
8331.00	90.000	160.650	7060.86	376.15	-988.53	-1713.45	1724515.43	14371267.57	39°34'28.3670"N	80°42'5.5941"W	1978.16	240.018	1.21	-0.06	-1.21	
8425.00	90.000	160.680	7060.86	470.15	-1077.23	-1682.33	1724546.55	14371178.90	39°34'27.4893"N	80°42'5.2004"W	1997.66	237.368	0.03	0.00	0.03	
8520.00	89.880	160.770	7060.96	565.15	-1166.90	-1650.97	1724577.89	14371089.27	39°34'26.6020"N	80°42'4.6037"W	2021.72	234.747	0.16	-0.13	0.09	
8614.00	89.940	159.900	7061.11	659.14	-1255.42	-1619.33	1724609.51	14371000.78	39°34'25.7262"N	80°42'4.4035"W	2048.98	232.215	0.93	0.06	-0.93	
8709.00	89.910	160.610	7061.24	754.13	-1344.83	-1587.24	1724641.59	14370911.41	39°34'24.8414"N	80°42'3.9975"W	2080.36	229.726	0.75	-0.03	0.75	
8803.00	89.750	160.370	7061.52	848.13	-1433.44	-1555.85	1724672.97	14370822.84	39°34'23.9647"N	80°42'3.6003"W	2115.51	227.345	0.31	-0.17	-0.26	
8897.00	89.940	160.400	7061.77	942.12	-1521.98	-1524.29	1724704.52	14370734.33	39°34'23.0886"N	80°42'3.2011"W	2154.04	225.043	0.20	0.20	0.03	
8992.00	89.910	160.430	7061.89	1037.12	-1611.49	-1492.45	1724736.35	14370644.86	39°34'22.2029"N	80°42'2.7983"W	2196.43	222.804	0.04	-0.03	0.03	
9086.00	89.720	159.950	7062.20	1131.11	-1699.92	-1460.58	1724768.19	14370556.46	39°34'21.3278"N	80°42'2.3952"W	2241.22	220.670	0.55	-0.20	-0.51	
9180.00	89.970	160.640	7062.45	1225.10	-1788.42	-1428.90	1724799.88	14370468.00	39°34'20.4522"N	80°42'1.9943"W	2289.14	218.624	0.78	0.27	0.73	
9275.00	90.060	160.350	7062.43	1320.10	-1877.96	-1397.18	1724831.58	14370378.49	39°34'19.5661"N	80°42'1.5930"W	2340.70	216.649	0.32	0.09	-0.31	
9369.00	89.940	160.210	7062.43	1414.09	-1966.45	-1365.46	1724863.29	14370290.03	39°34'18.6906"N	80°42'1.1917"W	2394.04	214.775	0.20	-0.13	-0.15	
9463.00	90.030	160.320	7062.45	1508.08	-2054.93	-1333.72	1724895.02	14370201.59	39°34'17.8151"N	80°42'0.7902"W	2449.80	212.985	0.15	0.10	0.12	
9558.00	90.090	161.010	7062.35	1603.08	-2144.57	-1302.27	1724926.46	14370111.98	39°34'16.9281"N	80°42'0.3923"W	2509.00	211.268	0.73	0.06	0.73	
9652.00	90.030	160.900	7062.25	1697.08	-2233.43	-1271.59	1724957.12	14370023.16	39°34'16.0489"N	80°42'0.0044"W	2570.05	209.655	0.13	-0.06	-0.12	
9746.00	89.780	159.640	7062.41	1791.07	-2321.91	-1239.86	1724988.84	14369934.72	39°34'15.1734"N	80°41'59.6030"W	2632.20	208.101	1.37	-0.27	-1.34	
9841.00	89.970	160.480	7062.62	1886.06	-2411.21	-1207.46	1725021.22	14369845.45	39°34'14.2897"N	80°41'59.1931"W	2696.64	206.600	0.91	0.20	0.88	
9935.00	89.850	160.130	7062.76	1980.05	-2499.71	-1175.78	1725052.89	14369756.98	39°34'13.4140"N	80°41'58.7923"W	2762.43	205.191	0.39	-0.13	-0.37	
10029.00	89.940	160.370	7062.94	2074.04	-2588.18	-1144.02	1725084.64	14369668.55	39°34'12.5386"N	80°41'58.3905"W	2829.74	203.846	0.27	0.10	0.26	
10123.00	89.970	161.090	7063.01	2168.04	-2676.91	-1113.00	1725115.65	14369579.85	39°34'11.6606"N	80°41'57.9981"W	2899.07	202.576	0.77	0.03	0.77	
10217.00	89.940	160.470	7063.08	2262.04	-2765.67	-1082.05	1725146.58	14369491.13	39°34'10.7823"N	80°41'57.6068"W	2969.81	201.368	0.66	-0.03	-0.66	
10312.00	90.000	160.520	7063.13	2357.04	-2855.22	-1050.33	1725178.29	14369401.61	39°34'9.8963"N	80°41'57.2056"W	3042.28	200.197	0.08	0.06	0.05	
10406.00	90.030	158.990	7063.11	2451.01	-2943.41	-1017.81	1725210.80	14369313.46	39°34'9.0236"N	80°41'56.7940"W	3114.42	199.075	1.63	0.03	-1.63	
10500.00	89.630	159.720	7063.39	2544.98	-3031.37	-984.66	1725243.93	14369225.53	39°34'8.1532"N	80°41'56.3746"W	3187.29	197.995	0.89	-0.43	0.78	
10594.00	89.720	159.790	7063.92	2638.95	-3119.57	-952.14	1725276.45	14369137.37	39°34'7.2805"N	80°41'55.9630"W	3261.63	196.973	0.12	0.10	0.07	



Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWB
Slot	Slot G		

WELLPATH DATA (256 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
10688.00	89.690	160.150	7064.41	2732.94	-3207.88	-919.94	1725308.63	14369049.09	39°34'6.4066"N	80°41'55.5557"W	3337.18	196.002	0.38	-0.03	0.38	
10782.00	89.850	160.640	7064.78	2826.93	-3296.43	-888.40	1725340.16	14368960.58	39°34'5.5304"N	80°41'55.1567"W	3414.04	195.083	0.55	0.17	0.52	
10876.00	89.910	160.490	7064.98	2920.93	-3385.07	-857.13	1725371.42	14368871.97	39°34'4.6533"N	80°41'54.7611"W	3491.90	194.209	0.17	0.06	-0.16	
10970.00	89.630	160.100	7065.36	3014.92	-3473.57	-825.43	1725403.10	14368783.51	39°34'3.7776"N	80°41'54.3602"W	3570.29	193.367	0.51	-0.30	-0.41	
11064.00	89.910	160.840	7065.73	3108.91	-3562.16	-794.01	1725434.52	14368694.96	39°34'2.9010"N	80°41'53.9627"W	3649.58	192.566	0.84	0.30	0.79	
11159.00	90.060	160.710	7065.76	3203.91	-3651.86	-762.73	1725465.78	14368605.29	39°34'2.0134"N	80°41'53.5671"W	3730.66	191.797	0.21	0.16	-0.14	
11253.00	89.910	159.080	7065.78	3297.89	-3740.13	-730.41	1725498.08	14368517.05	39°34'1.1400"N	80°41'53.1584"W	3810.78	191.050	1.74	-0.16	-1.73	
11347.00	90.000	160.670	7065.86	3391.87	-3828.39	-698.07	1725530.41	14368428.83	39°34'0.2666"N	80°41'52.7492"W	3891.51	190.334	1.69	0.10	1.69	
11441.00	90.000	160.270	7065.86	3485.87	-3916.98	-666.65	1725561.82	14368340.27	39°33'59.3900"N	80°41'52.3517"W	3973.30	189.659	0.43	0.00	-0.43	
11534.00	90.000	160.220	7065.86	3578.86	-4004.50	-635.22	1725593.24	14368252.78	39°33'58.5239"N	80°41'51.9541"W	4054.57	189.013	0.05	0.00	-0.05	
11628.00	89.970	160.230	7065.88	3672.85	-4092.96	-603.41	1725625.03	14368164.36	39°33'57.6487"N	80°41'51.5518"W	4137.20	188.387	0.03	-0.03	0.01	
11722.00	89.880	162.000	7066.01	3766.85	-4181.90	-572.99	1725655.45	14368075.46	39°33'56.7687"N	80°41'51.1672"W	4220.97	187.802	1.89	-0.10	1.88	
11817.00	90.090	163.140	7066.03	3861.81	-4272.53	-544.53	1725683.89	14367984.86	39°33'55.8719"N	80°41'50.8077"W	4307.09	187.263	1.22	0.22	1.20	
11911.00	90.030	162.440	7065.93	3955.76	-4362.32	-516.72	1725711.69	14367895.10	39°33'54.9836"N	80°41'50.4564"W	4392.82	186.755	0.75	-0.06	-0.74	
12006.00	90.000	162.940	7065.91	4050.72	-4453.02	-488.45	1725739.95	14367804.44	39°33'54.0863"N	80°41'50.0994"W	4479.73	186.260	0.53	-0.03	0.53	
12100.00	89.820	162.020	7066.05	4144.69	-4542.66	-460.16	1725768.23	14367714.84	39°33'53.1994"N	80°41'49.7420"W	4565.91	185.784	1.00	-0.19	-0.98	
12193.00	89.940	162.550	7066.25	4237.66	-4631.25	-431.86	1725796.52	14367626.28	39°33'52.3229"N	80°41'49.3844"W	4651.34	185.327	0.58	0.13	0.57	
12287.00	89.910	162.360	7066.37	4331.63	-4720.88	-403.52	1725824.85	14367536.69	39°33'51.4362"N	80°41'49.0265"W	4738.09	184.886	0.20	-0.03	-0.20	
12381.00	89.940	162.220	7066.50	4425.61	-4810.42	-374.93	1725853.43	14367447.18	39°33'50.5503"N	80°41'48.6652"W	4825.01	184.457	0.15	0.03	-0.15	
12475.00	90.090	162.450	7066.47	4519.58	-4899.99	-346.40	1725881.94	14367357.65	39°33'49.6641"N	80°41'48.3049"W	4912.22	184.044	0.29	0.16	0.24	
12569.00	90.090	162.330	7066.32	4613.55	-4989.58	-317.97	1725910.37	14367268.09	39°33'48.7777"N	80°41'47.9456"W	4999.70	183.646	0.13	0.00	-0.13	
12663.00	90.060	162.480	7066.20	4707.52	-5079.19	-289.55	1725938.77	14367178.52	39°33'47.8912"N	80°41'47.5867"W	5087.43	183.263	0.16	-0.03	0.16	
12757.00	89.970	161.260	7066.18	4801.51	-5168.52	-260.30	1725968.01	14367089.23	39°33'47.0073"N	80°41'47.2170"W	5175.07	182.883	1.30	-0.10	-1.30	
12852.00	89.910	160.780	7066.28	4896.51	-5258.35	-229.40	1725998.90	14366999.43	39°33'46.1184"N	80°41'46.8264"W	5263.35	182.498	0.51	-0.06	-0.51	
12946.00	89.970	161.020	7066.37	4990.51	-5347.18	-198.64	1726029.64	14366910.84	39°33'45.2395"N	80°41'46.4375"W	5350.87	182.128	0.26	0.06	0.26	
13040.00	90.150	160.900	7066.28	5084.51	-5436.03	-167.98	1726060.30	14366821.81	39°33'44.3603"N	80°41'46.0498"W	5438.63	181.770	0.23	0.19	-0.13	
13134.00	90.150	161.580	7066.03	5178.51	-5525.04	-137.75	1726090.52	14366732.84	39°33'43.4796"N	80°41'45.6676"W	5526.76	181.428	0.72	0.00	0.72	
13228.00	89.940	159.810	7065.96	5272.50	-5613.75	-106.67	1726121.58	14366644.17	39°33'42.6018"N	80°41'45.2747"W	5614.76	181.089	1.90	-0.22	-1.88	
13322.00	89.880	160.300	7066.10	5366.49	-5702.11	-74.61	1726153.63	14366555.84	39°33'41.7275"N	80°41'44.8691"W	5702.60	180.750	0.53	-0.06	0.52	
13417.00	90.090	161.270	7066.13	5461.49	-5791.82	-43.34	1726184.88	14366466.17	39°33'40.8398"N	80°41'44.4738"W	5791.98	180.429	1.04	0.22	1.02	



Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWP
Slot	Slot G		

WELLPATH DATA (256 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
13511.00	89.820	160.800	7066.20	5555.49	-5880.72	-12.79	1726215.42	14366377.31	39°33'39.9602"N	80°41'44.0876"W	5880.73	180.125	0.58	-0.29	-0.50	
13605.00	89.970	161.090	7066.37	5649.49	-5969.57	17.89	1726246.10	14366288.49	39°33'39.0811"N	80°41'43.6996"W	5969.59	179.828	0.35	0.16	0.31	
13699.00	90.030	161.140	7066.37	5743.49	-6058.51	48.32	1726276.51	14366199.59	39°33'38.2011"N	80°41'43.3150"W	6058.70	179.543	0.08	0.06	0.05	
13792.00	89.910	161.310	7066.42	5836.49	-6146.56	78.25	1726306.43	14366111.57	39°33'37.3298"N	80°41'42.9366"W	6147.05	179.271	0.22	-0.13	0.18	
13886.00	89.940	161.400	7066.55	5930.48	-6235.62	108.30	1726336.47	14366022.54	39°33'36.4486"N	80°41'42.5568"W	6236.56	179.005	0.10	0.03	0.10	
13980.00	89.660	161.200	7066.87	6024.48	-6324.66	138.44	1726366.60	14365933.54	39°33'35.5676"N	80°41'42.1759"W	6326.18	178.746	0.37	-0.30	-0.21	
14075.00	89.660	161.320	7067.44	6119.48	-6414.62	168.96	1726397.11	14365843.61	39°33'34.6774"N	80°41'41.7901"W	6416.85	178.491	0.13	0.00	0.13	
14169.00	89.690	161.180	7067.97	6213.48	-6503.63	199.18	1726427.31	14365754.64	39°33'33.7967"N	80°41'41.4082"W	6506.68	178.246	0.15	0.03	-0.15	
14263.00	89.660	161.290	7068.50	6307.47	-6592.63	229.41	1726457.53	14365665.67	39°33'32.9161"N	80°41'41.0260"W	6596.62	178.007	0.12	-0.03	0.12	
14358.00	89.780	161.110	7068.97	6402.47	-6682.56	260.03	1726488.14	14365575.78	39°33'32.0263"N	80°41'40.6390"W	6687.62	177.772	0.23	0.13	-0.19	
14452.00	89.230	160.080	7069.78	6496.47	-6771.22	291.26	1726519.35	14365487.15	39°33'31.1490"N	80°41'40.2441"W	6777.48	177.537	1.24	-0.59	-1.10	
14547.00	89.380	160.820	7070.93	6591.45	-6860.74	323.05	1726551.13	14365397.67	39°33'30.2632"N	80°41'39.8421"W	6868.34	177.304	0.79	0.16	0.78	
14641.00	89.510	161.450	7071.84	6685.45	-6949.68	353.44	1726581.51	14365308.76	39°33'29.3832"N	80°41'39.4580"W	6958.66	177.089	0.68	0.14	0.67	
14735.00	89.480	160.930	7072.67	6779.44	-7038.66	383.75	1726611.80	14365219.82	39°33'28.5028"N	80°41'39.0749"W	7049.11	176.879	0.55	-0.03	-0.55	
14829.00	89.540	161.250	7073.48	6873.44	-7127.58	414.21	1726642.25	14365130.93	39°33'27.6229"N	80°41'38.6898"W	7139.61	176.674	0.35	0.06	0.34	
14923.00	89.380	159.740	7074.36	6967.43	-7216.18	445.59	1726673.63	14365042.37	39°33'26.7462"N	80°41'38.2930"W	7229.92	176.467	1.62	-0.17	-1.61	
15017.00	89.480	161.390	7075.30	7061.42	-7304.82	476.87	1726704.89	14364953.77	39°33'25.8691"N	80°41'37.8976"W	7320.37	176.265	1.76	0.11	1.76	
15112.00	89.450	160.770	7076.18	7156.41	-7394.68	507.67	1726735.68	14364863.94	39°33'24.9800"N	80°41'37.5082"W	7412.09	176.073	0.65	-0.03	-0.65	
15206.00	89.450	161.220	7077.09	7250.41	-7483.55	538.28	1726766.28	14364775.10	39°33'24.1006"N	80°41'37.1213"W	7502.89	175.886	0.48	0.00	0.48	
15300.00	89.910	161.590	7077.61	7344.41	-7572.64	568.25	1726796.24	14364686.05	39°33'23.2191"N	80°41'36.7425"W	7593.93	175.709	0.63	0.49	0.39	
15394.00	89.690	161.020	7077.94	7438.40	-7661.68	598.38	1726826.36	14364597.04	39°33'22.3381"N	80°41'36.3617"W	7685.01	175.534	0.65	-0.23	-0.61	
15489.00	90.000	162.280	7078.20	7533.39	-7751.85	628.29	1726856.25	14364506.91	39°33'21.4459"N	80°41'35.9838"W	7777.27	175.366	1.37	0.33	1.33	
15583.00	89.720	161.100	7078.43	7627.38	-7841.09	657.82	1726885.77	14364417.71	39°33'20.5630"N	80°41'35.6107"W	7868.63	175.204	1.29	-0.30	-1.26	
15678.00	89.780	161.170	7078.84	7722.38	-7930.98	688.54	1726916.47	14364327.85	39°33'19.6735"N	80°41'35.2224"W	7960.82	175.038	0.10	0.06	0.07	
15772.00	89.600	161.300	7079.35	7816.38	-8019.99	718.77	1726946.70	14364238.88	39°33'18.7928"N	80°41'34.8402"W	8052.13	174.879	0.24	-0.19	0.14	
15866.00	89.820	160.910	7079.82	7910.38	-8108.92	749.21	1726977.13	14364149.98	39°33'17.9129"N	80°41'34.4555"W	8143.46	174.721	0.48	0.23	-0.41	
15960.00	89.940	160.750	7080.02	8004.38	-8197.71	780.08	1727007.98	14364061.23	39°33'17.0343"N	80°41'34.0653"W	8234.74	174.564	0.21	0.13	-0.17	
16055.00	90.060	161.140	7080.02	8099.38	-8287.50	811.10	1727038.99	14363971.47	39°33'16.1456"N	80°41'33.6733"W	8327.10	174.410	0.43	0.13	0.41	
16149.00	90.030	161.400	7079.95	8193.38	-8376.52	841.28	1727069.16	14363882.48	39°33'15.2650"N	80°41'33.2918"W	8418.66	174.265	0.28	-0.03	0.28	
16243.00	89.720	159.590	7080.15	8287.37	-8465.12	872.66	1727100.53	14363793.92	39°33'14.3882"N	80°41'32.8950"W	8509.99	174.114	1.95	-0.33	-1.93	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWB
Slot	Slot G		

WELLPATH DATA (256 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
16338.00	90.180	161.190	7080.24	8382.36	-8554.61	904.55	1727132.40	14363704.47	39°33'13.5027"N	80°41'32.4919"W	8602.30	173.964	1.75	0.48	1.68	
16432.00	89.780	160.560	7080.27	8476.36	-8643.42	935.34	1727163.18	14363615.69	39°33'12.6240"N	80°41'32.1026"W	8693.88	173.824	0.79	-0.43	-0.67	
16527.00	89.850	160.960	7080.58	8571.36	-8733.12	966.65	1727194.48	14363526.03	39°33'11.7364"N	80°41'31.7068"W	8786.45	173.684	0.43	0.07	0.42	
16621.00	89.850	160.910	7080.82	8665.36	-8821.96	997.35	1727225.17	14363437.22	39°33'10.8573"N	80°41'31.3187"W	8878.16	173.550	0.05	0.00	-0.05	
16715.00	90.030	161.250	7080.92	8759.36	-8910.88	1027.83	1727255.64	14363348.34	39°33'9.9775"N	80°41'30.9335"W	8969.96	173.420	0.41	0.19	0.36	
16810.00	89.970	161.180	7080.92	8854.36	-9000.82	1058.42	1727286.22	14363258.43	39°33'9.0876"N	80°41'30.5469"W	9062.84	173.293	0.10	-0.06	-0.07	
16904.00	89.910	161.160	7081.02	8948.36	-9089.79	1088.76	1727316.54	14363169.50	39°33'8.2072"N	80°41'30.1635"W	9154.76	173.170	0.07	-0.06	-0.02	
16999.00	89.820	160.780	7081.24	9043.36	-9179.60	1119.74	1727347.51	14363079.73	39°33'7.3186"N	80°41'29.7720"W	9247.64	173.045	0.41	-0.09	-0.40	
17093.00	89.820	160.960	7081.54	9137.36	-9268.41	1150.54	1727378.30	14362990.95	39°33'6.4398"N	80°41'29.3826"W	9339.54	172.924	0.19	0.00	0.19	
17188.00	89.970	161.110	7081.71	9232.36	-9358.25	1181.42	1727409.16	14362901.14	39°33'5.5509"N	80°41'28.9924"W	9432.53	172.805	0.22	0.16	0.16	
17282.00	90.000	161.320	7081.74	9326.35	-9447.24	1211.69	1727439.42	14362812.19	39°33'4.6703"N	80°41'28.6099"W	9524.63	172.691	0.23	0.03	0.22	
17376.00	89.780	160.920	7081.92	9420.35	-9536.18	1242.10	1727469.82	14362723.28	39°33'3.7902"N	80°41'28.2254"W	9616.74	172.579	0.49	-0.23	-0.43	
17471.00	90.000	161.170	7082.10	9515.35	-9626.03	1272.96	1727500.67	14362633.47	39°33'2.9012"N	80°41'27.8354"W	9709.84	172.467	0.35	0.23	0.26	
17565.00	90.150	161.100	7081.98	9609.35	-9714.98	1303.36	1727531.05	14362544.55	39°33'2.0210"N	80°41'27.4513"W	9802.02	172.359	0.18	0.16	-0.07	
17659.00	90.000	161.030	7081.85	9703.35	-9803.90	1333.86	1727561.54	14362455.67	39°33'1.1413"N	80°41'27.0658"W	9894.22	172.252	0.18	-0.16	-0.07	
17754.00	90.030	161.100	7081.83	9798.35	-9893.76	1364.69	1727592.36	14362365.85	39°33'0.2521"N	80°41'26.6763"W	9987.43	172.147	0.08	0.03	0.07	
17849.00	89.910	160.890	7081.88	9893.35	-9983.58	1395.62	1727623.28	14362276.06	39°32'59.3633"N	80°41'26.2853"W	10080.65	172.042	0.25	-0.13	-0.22	
17943.00	90.000	161.140	7081.95	9987.35	-10072.46	1426.20	1727653.85	14362187.21	39°32'58.4838"N	80°41'25.8988"W	10172.93	171.941	0.28	0.10	0.27	
18037.00	90.000	160.930	7081.95	10081.35	-10161.36	1456.75	1727684.39	14362098.35	39°32'57.6042"N	80°41'25.5127"W	10265.25	171.842	0.22	0.00	-0.22	
18132.00	89.880	160.800	7082.05	10176.35	-10251.11	1487.89	1727715.52	14362008.63	39°32'56.7161"N	80°41'25.1191"W	10358.53	171.742	0.19	-0.13	-0.14	
18226.00	90.030	160.960	7082.12	10270.35	-10339.93	1518.68	1727746.29	14361919.85	39°32'55.8373"N	80°41'24.7300"W	10450.86	171.644	0.23	0.16	0.17	
18321.00	89.720	160.180	7082.33	10365.35	-10429.51	1550.28	1727777.88	14361830.30	39°32'54.9508"N	80°41'24.3305"W	10544.11	171.545	0.88	-0.33	-0.82	
18416.00	90.120	161.480	7082.46	10460.35	-10519.24	1581.48	1727809.07	14361740.61	39°32'54.0629"N	80°41'23.9362"W	10637.46	171.450	1.43	0.42	1.37	
18510.00	89.940	161.080	7082.42	10554.34	-10608.27	1611.65	1727839.22	14361651.61	39°32'53.1820"N	80°41'23.5550"W	10730.00	171.361	0.47	-0.19	-0.43	
18605.00	89.940	161.310	7082.51	10649.34	-10698.20	1642.27	1727869.83	14361561.72	39°32'52.2922"N	80°41'23.1681"W	10823.52	171.273	0.24	0.00	0.24	
18699.00	89.940	161.340	7082.61	10743.34	-10787.25	1672.37	1727899.92	14361472.70	39°32'51.4110"N	80°41'22.7878"W	10916.12	171.187	0.03	0.00	0.03	
18793.00	89.910	161.230	7082.74	10837.34	-10876.28	1702.53	1727930.07	14361383.71	39°32'50.5301"N	80°41'22.4067"W	11008.73	171.103	0.12	-0.03	-0.12	
18888.00	89.750	161.330	7083.02	10932.34	-10966.25	1733.02	1727960.55	14361293.77	39°32'49.6398"N	80°41'22.0214"W	11102.35	171.020	0.20	-0.17	0.11	
18982.00	89.850	161.220	7083.35	11026.34	-11055.28	1763.19	1727990.71	14361204.78	39°32'48.7590"N	80°41'21.6401"W	11195.00	170.938	0.16	0.11	-0.12	
19076.00	89.690	161.120	7083.72	11120.34	-11144.25	1793.53	1728021.04	14361115.85	39°32'47.8786"N	80°41'21.2568"W	11287.65	170.857	0.20	-0.17	-0.11	



Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWB
Slot	Slot G		

WELLPATH DATA (256 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
19171.00	89.690	161.160	7084.24	11215.33	-11234.15	1824.24	1728051.74	14361025.99	39°32'46.9891"N	80°41'20.8687"W	11381.30	170.777	0.04	0.00	0.04	
19265.00	89.970	162.020	7084.52	11309.33	-11323.33	1853.93	1728081.41	14360936.83	39°32'46.1066"N	80°41'20.4937"W	11474.10	170.702	0.96	0.30	0.91	
19360.00	89.630	161.110	7084.85	11404.32	-11413.46	1883.97	1728111.44	14360846.75	39°32'45.2149"N	80°41'20.1142"W	11567.90	170.627	1.02	-0.36	-0.96	
19454.00	90.030	161.340	7085.13	11498.32	-11502.45	1914.22	1728141.68	14360757.78	39°32'44.3343"N	80°41'19.7320"W	11660.65	170.551	0.49	0.43	0.24	
19549.00	89.600	161.040	7085.43	11593.32	-11592.38	1944.86	1728172.30	14360667.89	39°32'43.4445"N	80°41'19.3449"W	11754.39	170.476	0.55	-0.45	-0.32	
19643.00	89.380	161.270	7086.27	11687.31	-11681.34	1975.22	1728202.65	14360578.97	39°32'42.5642"N	80°41'18.9613"W	11847.16	170.403	0.34	-0.23	0.24	
19738.00	89.450	160.640	7087.24	11782.31	-11771.13	2006.21	1728233.63	14360489.21	39°32'41.6757"N	80°41'18.5696"W	11940.87	170.328	0.67	0.07	-0.66	
19832.00	89.320	160.720	7088.25	11876.30	-11859.83	2037.31	1728264.72	14360400.54	39°32'40.7980"N	80°41'18.1765"W	12033.55	170.253	0.16	-0.14	0.09	
19926.00	89.420	161.230	7089.28	11970.29	-11948.69	2067.95	1728295.35	14360311.72	39°32'39.9187"N	80°41'17.7893"W	12126.32	170.181	0.55	0.11	0.54	
20020.00	89.230	161.420	7090.39	12064.29	-12037.74	2098.05	1728325.43	14360222.71	39°32'39.0377"N	80°41'17.4091"W	12219.20	170.113	0.29	-0.20	0.20	
20114.00	89.380	160.420	7091.53	12158.28	-12126.57	2128.77	1728356.15	14360133.92	39°32'38.1587"N	80°41'17.0208"W	12312.00	170.043	1.08	0.16	-1.06	
20209.00	89.320	161.010	7092.61	12253.27	-12216.23	2160.15	1728387.51	14360044.29	39°32'37.2715"N	80°41'16.6243"W	12405.74	169.972	0.62	-0.06	0.62	
20303.00	89.480	160.840	7093.59	12347.27	-12305.06	2190.86	1728418.21	14359955.49	39°32'36.3924"N	80°41'16.2362"W	12498.58	169.905	0.25	0.17	-0.18	
20398.00	89.350	161.010	7094.56	12442.26	-12394.84	2221.91	1728449.25	14359865.75	39°32'35.5041"N	80°41'15.8439"W	12592.42	169.837	0.23	-0.14	0.18	
20492.00	89.200	160.980	7095.75	12536.25	-12483.71	2252.52	1728479.84	14359776.91	39°32'34.6247"N	80°41'15.4571"W	12685.30	169.772	0.16	-0.16	-0.03	
20586.00	89.320	160.980	7096.97	12630.25	-12572.57	2283.15	1728510.46	14359688.09	39°32'33.7454"N	80°41'15.0700"W	12778.20	169.707	0.13	0.13	0.00	
20681.00	89.260	161.200	7098.14	12725.24	-12662.44	2313.94	1728541.24	14359598.26	39°32'32.8562"N	80°41'14.6811"W	12872.13	169.644	0.24	-0.06	0.23	
20775.00	89.200	160.910	7099.41	12819.23	-12751.34	2344.45	1728571.74	14359509.39	39°32'31.9765"N	80°41'14.2955"W	12965.07	169.582	0.32	-0.06	-0.31	
20869.00	89.050	160.980	7100.84	12913.22	-12840.18	2375.14	1728602.41	14359420.59	39°32'31.0975"N	80°41'13.9078"W	13058.00	169.520	0.18	-0.16	0.07	
20964.00	89.320	160.720	7102.19	13008.21	-12929.91	2406.30	1728633.56	14359330.89	39°32'30.2095"N	80°41'13.5140"W	13151.91	169.458	0.39	0.28	-0.27	
21058.00	89.290	161.010	7103.33	13102.20	-13018.71	2437.11	1728664.36	14359242.12	39°32'29.3309"N	80°41'13.1247"W	13244.86	169.397	0.31	-0.03	0.31	
21152.00	89.290	160.980	7104.50	13196.19	-13107.58	2467.72	1728694.96	14359153.29	39°32'28.4515"N	80°41'12.7379"W	13337.85	169.338	0.03	0.00	-0.03	
21246.00	89.230	161.310	7105.71	13290.18	-13196.53	2498.09	1728725.32	14359064.38	39°32'27.5713"N	80°41'12.3541"W	13430.89	169.281	0.36	-0.06	0.35	
21341.00	89.660	161.000	7106.63	13385.18	-13286.43	2528.78	1728755.99	14358974.51	39°32'26.6818"N	80°41'11.9665"W	13524.94	169.224	0.56	0.45	-0.33	
21434.00	89.570	161.240	7107.26	13478.18	-13374.42	2558.87	1728786.07	14358886.55	39°32'25.8111"N	80°41'11.5863"W	13617.01	169.169	0.28	-0.10	0.26	
21529.00	89.600	161.190	7107.95	13573.17	-13464.36	2589.46	1728816.65	14358796.65	39°32'24.9211"N	80°41'11.1998"W	13711.10	169.114	0.06	0.03	-0.05	
21623.00	89.350	160.570	7108.81	13667.17	-13553.17	2620.25	1728847.43	14358707.87	39°32'24.0423"N	80°41'10.8108"W	13804.14	169.058	0.71	-0.27	-0.66	
21717.00	89.540	161.300	7109.72	13761.16	-13642.01	2650.95	1728878.12	14358619.07	39°32'23.1633"N	80°41'10.4228"W	13897.19	169.003	0.80	0.20	0.78	
21812.00	89.570	161.320	7110.46	13856.16	-13732.00	2681.39	1728908.55	14358529.12	39°32'22.2728"N	80°41'10.0383"W	13991.34	168.951	0.04	0.03	0.02	
21906.00	89.510	160.190	7111.21	13950.15	-13820.74	2712.37	1728939.52	14358440.41	39°32'21.3947"N	80°41'9.6468"W	14084.38	168.897	1.20	-0.06	-1.20	



Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWP
Slot	Slot G		

WELLPATH DATA (256 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
22000.00	89.570	159.790	7111.96	14044.14	-13909.06	2744.54	1728971.67	14358352.12	39°32'20.5207"N	80°41'9.2402"W	14177.26	168.838	0.43	0.06	-0.43	
22094.00	89.510	159.950	7112.72	14138.12	-13997.32	2776.89	1729004.00	14358263.90	39°32'19.6473"N	80°41'8.8312"W	14270.11	168.779	0.18	-0.06	0.17	
22189.00	89.570	159.880	7113.48	14233.10	-14086.54	2809.51	1729036.62	14358174.72	39°32'18.7644"N	80°41'8.4188"W	14363.98	168.721	0.10	0.06	-0.07	
22283.00	89.570	160.050	7114.19	14327.08	-14174.85	2841.71	1729068.81	14358086.44	39°32'17.8905"N	80°41'8.0117"W	14456.89	168.664	0.18	0.00	0.18	
22377.00	89.540	160.280	7114.92	14421.07	-14263.27	2873.61	1729100.69	14357998.06	39°32'17.0156"N	80°41'7.6086"W	14549.86	168.609	0.25	-0.03	0.24	
22471.00	89.510	160.160	7115.70	14515.06	-14351.72	2905.42	1729132.48	14357909.64	39°32'16.1403"N	80°41'7.2065"W	14642.86	168.555	0.13	-0.03	-0.13	
22565.00	89.510	160.260	7116.50	14609.04	-14440.16	2937.24	1729164.30	14357821.23	39°32'15.2651"N	80°41'6.8043"W	14735.87	168.502	0.11	0.00	0.11	
22660.00	89.570	160.230	7117.26	14704.03	-14529.57	2969.35	1729196.39	14357731.86	39°32'14.3803"N	80°41'6.3984"W	14829.88	168.450	0.07	0.06	-0.03	
22754.00	89.570	159.820	7117.97	14798.02	-14617.91	3001.46	1729228.49	14357643.55	39°32'13.5061"N	80°41'5.9925"W	14922.87	168.397	0.44	0.00	-0.44	
22849.00	89.630	160.150	7118.63	14893.00	-14707.17	3033.98	1729260.99	14357554.33	39°32'12.6228"N	80°41'5.5815"W	15016.86	168.344	0.35	0.06	0.35	
22943.00	89.600	160.120	7119.26	14986.99	-14795.58	3065.92	1729292.92	14357465.96	39°32'11.7480"N	80°41'5.1778"W	15109.90	168.293	0.05	-0.03	-0.03	
23037.00	89.600	160.090	7119.92	15080.97	-14883.97	3097.90	1729324.89	14357377.60	39°32'10.8733"N	80°41'4.7735"W	15202.94	168.242	0.03	0.00	-0.03	
23132.00	89.600	160.120	7120.58	15175.96	-14973.29	3130.23	1729357.21	14357288.31	39°32'9.9893"N	80°41'4.3649"W	15296.99	168.192	0.03	0.00	0.03	
23226.00	89.540	159.140	7121.29	15269.93	-15061.41	3162.95	1729389.92	14357200.23	39°32'9.1173"N	80°41'3.9512"W	15389.94	168.140	1.04	-0.06	-1.04	
23286.00	89.540	159.050	7121.77	15329.90	-15117.46	3184.36	1729411.32	14357144.20	39°32'8.5626"N	80°41'3.6805"W	15449.20	168.105	0.15	0.00	-0.15	
23312.00†	89.540	159.050	7121.98	15355.88	-15141.74	3193.65	1729420.61	14357119.93	39°32'8.3223"N	80°41'3.5630"W	15474.87	168.090	0.00	0.00	0.00	Projected MD at TD: 23312'



Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWB
Slot	Slot G		

HOLE & CASING SECTIONS - Ref Wellbore: Walshin Unit 1H AWB Ref Wellpath: Walshin Unit 1H AWP Proj: 23312'									
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	30.00	130.00	100.00	30.00	130.00	0.00	0.00	0.06	0.72
17.5in Open Hole	130.00	377.00	247.00	130.00	376.99	0.06	0.72	-1.01	1.72
13.375in Casing Surface	30.00	357.00	327.00	30.00	356.99	0.00	0.00	-0.83	1.81
12.375in Open Hole	377.00	3686.00	3309.00	376.99	3516.17	-1.01	1.72	156.76	-971.44
9.625in Casing Intermediate	30.00	3656.00	3626.00	30.00	3487.53	0.00	0.00	155.28	-962.62
8.75in Open Hole	3686.00	6753.00	3067.00	3516.17	6407.69	156.76	-971.44	251.78	-1967.16
8.5in Open Hole	6753.00	23312.00	16559.00	6407.69	7121.98	251.78	-1967.16	-15141.74	3193.65
5.5in Casing Production	30.00	23292.00	23262.00	30.00	7121.82	0.00	0.00	-15123.06	3186.50



Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWB
Slot	Slot G		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Walshin Unit 1H POE Rev-3	7040.00	-368.88	-1915.39	1724313.57	14371886.98	39°34'34.4977"N	80°42'8.1468"W	point
Walshin Unit 1H BHL Rev-2	7044.00	-15341.49	3245.53	1729472.46	14356920.26	39°32'6.3464"N	80°41'2.9098"W	point
Walshin Unit 1H BHL Rev-3	7068.00	-15105.13	3164.06	1729391.02	14357156.52	39°32'8.6851"N	80°41'3.9390"W	point
Walshin Unit 1H LP Rev-3	7068.00	-569.54	-1846.22	1724382.71	14371686.39	39°34'32.5122"N	80°42'7.2719"W	point
Walshin Unit 1H 50' L/R Hard Line R-2	7500.00	-7737.01	624.33	1726852.30	14364521.75	39°33'21.5928"N	80°41'36.0336"W	rectangle
2D Rectangle 15587.1 x 100.								

WELLPATH COMPOSITION - Ref Wellbore: Walshin Unit 1H AWB Ref Wellpath: Walshin Unit 1H AWP Proj: 23312'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
30.00	259.00	Gyrodata 2015 - GC+WR+DPIPE	01 Gyrodata MS Gyro <17-1/2"> (100'-259')	Walshin Unit 1H AWB	7/22/2024
259.00	3613.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02 APS EM <12-3/8"> (259')(470'-3613')	Walshin Unit 1H AWB	7/22/2024
3613.00	6677.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03 APS EM <8-3/4"> (3613')(3753'-6677')	Walshin Unit 1H AWB	8/3/2024
6677.00	23312.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04 BH Lucida <8-1/2"> (6677')(6727'-23286')	Walshin Unit 1H AWB	8/3/2024



Actual Wellpath Report

Walshin Unit 1H AWP Proj: 23312'
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Walshin Unit 1H
Field	Wetzel	API	47-103-03650-0000
Facility	Galmish Pad	Wellbore	Walshin Unit 1H AWB
Slot	Slot G		

COMMENTS

Wellpath general comments

API: 47-103-03650-0000
BH Job #: 112320217
Rig: H&P 519
Duration: 8/7/2024-8/11/2024
Gyrodata MS Gyro <17-1/2"> (100'-259')
APS EM <12-3/8"> (259')(470'-3613')
APS EM <8-3/4"> (3613')(3753'-6677')
BH Lucida <8-1/2"> (6677')(6727'-23286')
Sycamore: 7059' MD
Middlesex: 7233' MD
Burkett: 7386' MD
Tully: 7446' MD
Marcellus POE: 7681' MD
Projected MD at TD: 23312'