



ANTERO RESOURCES CORPORATION



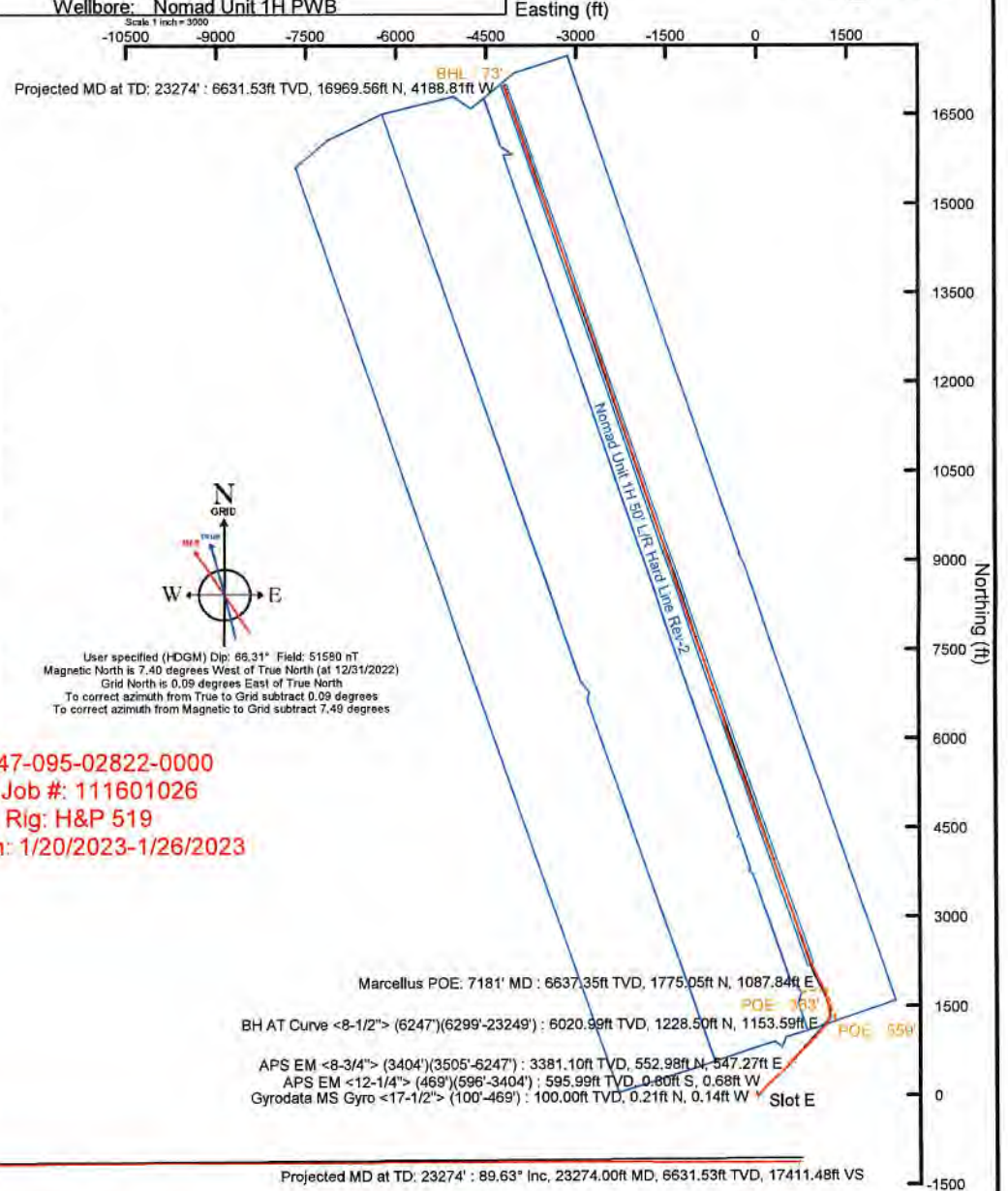
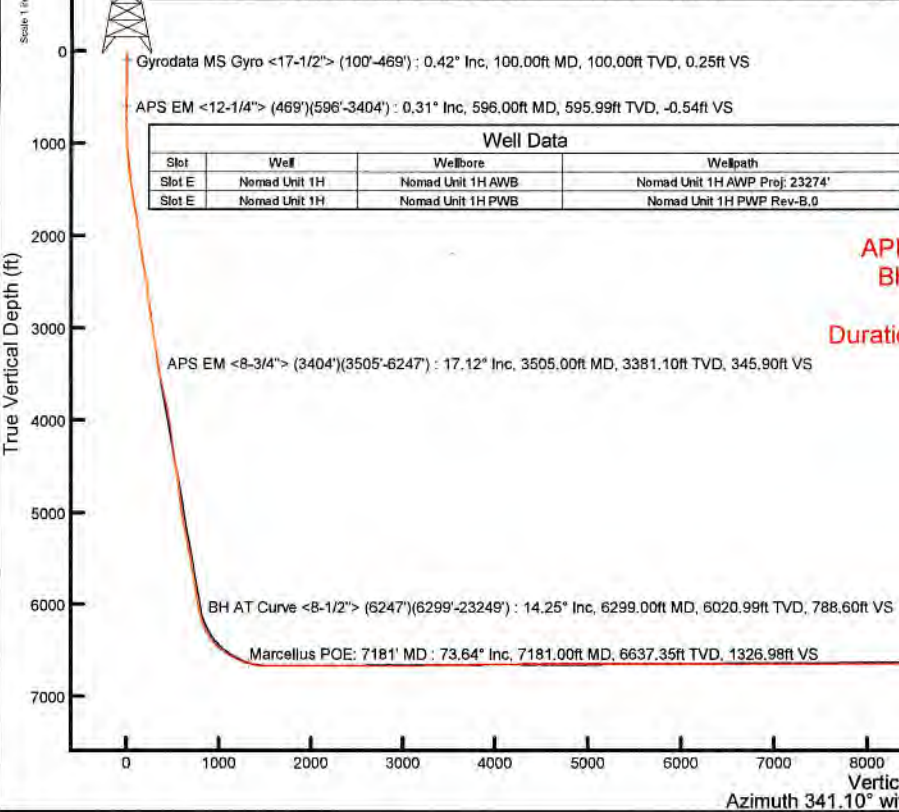
Location: Tyler County, WV
 Field: Tyler
 Facility: Heintzman Pad

Slot: Slot E
 Well: Nomad Unit 1H
 Wellbore: Nomad Unit 1H PWB

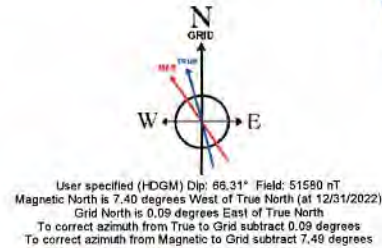
Plot reference wellbore is Nomad Unit 1H PWP Rev-B.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 519 (RKB)	North Reference: Grid north
Reference wellbore measured depths are referenced to H&P 519 (RKB)	Scale: True distance
H&P 519 (RKB) to Mean Sea Level: 1223 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot E): -1193 feet	Depths are in feet
Offset wellbore MDs are referenced to each path's default MD datum	Created by: edcaynor on 2023-02-09; Database: WA_MPL_EASTERNUS_Deft

Location Information						
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
Heintzman Pad	1681067.630	14359649.490	39°51'20.8980"N	80°51'20.8980"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	
Slot E	-26.33	14.37	1681081.990	14359623.170	39°51'20.7151"N	
Comment	Nomad Unit 1H					
H&P 519 (RKB) to Ground level (At Slot: Slot E)					30ft	
Mean Sea Level to Ground level (At Slot: Slot E)					-1193ft	
H&P 519 (RKB) to Mean Sea Level					1223ft	

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	3404.00	17.310	42.340	3284.62	530.85	527.18	0.59	331.47
Proj. to Bottom	3477.00	17.310	42.340	3354.32	546.91	541.81	0.00	341.92
Drill Out	3557.00	17.310	42.340	3430.69	564.60	557.84	0.00	353.37
End of 3D Arc	3661.89	19.390	41.485	3520.24	589.08	579.89	2.00	369.48
Curve KOP	6334.96	19.390	41.485	6051.69	1253.92	1167.77	0.00	808.05
POE	7174.01	73.355	333.366	6636.00	1779.03	1068.19	8.00	1337.11
Landing Pt.	7385.82	90.300	333.366	6666.00	1965.76	974.54	8.00	1544.11
On AZI	7843.46	90.300	341.095	6664.65	2203.14	874.91	3.00	1800.96
BHL	23281.46	90.300	341.095	6582.77	16997.40	-4191.66	0.00	17438.75



API: 47-095-02822-0000
 BH Job #: 111601026
 Rig: H&P 519
 Duration: 1/20/2023-1/26/2023





Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Nomad Unit 1H
Field	Tyler	API	47-095-02822-0000
Facility	Heintzman Pad	Wellbore	Nomad Unit 1H AWB
Slot	Slot E		

REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999602	Report Generated	2/6/2023 at 6:01:12 PM
Convergence at slot	0.09° East	Database	WA_MPL_EASTERNU_S_Defn

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-26.33	14.37	1681081.99	14359623.17	39°32'34.2935"N	80°51'20.7151"W
Facility Reference Pt			1681067.63	14359649.49	39°32'34.5540"N	80°51'20.8980"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	1223.00ft
Horizontal Reference Pt	Slot	H&P 519 (RKB) to Mean Sea Level	1223.00ft
Vertical Reference Pt	H&P 519 (RKB)	H&P 519 (RKB) to Ground Level at Slot (Slot E)	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	341.10°



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'
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Field	Tyler		API	47-095-02822-0000
Facility	Heintzman Pad		Wellbore	Nomad Unit 1H AWB
Slot	Slot E			

WELLPATH DATA (255 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	326.540	0.00	0.00	0.00	0.00	1681081.99	14359623.17	39°32'34.2935"N	80°51'20.7151"W	0.00	0.000	0.00	0.00	0.00	
30.00	0.000	326.540	30.00	0.00	0.00	0.00	1681081.99	14359623.17	39°32'34.2935"N	80°51'20.7151"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.420	326.540	100.00	0.25	0.21	-0.14	1681081.85	14359623.38	39°32'34.2956"N	80°51'20.7169"W	0.26	326.540	0.60	0.60	0.00	Gyrodata MS Gyro <17-1/2"> (100'-469')
200.00	0.250	325.040	200.00	0.81	0.70	-0.47	1681081.52	14359623.87	39°32'34.3004"N	80°51'20.7211"W	0.84	326.151	0.17	-0.17	-1.50	
300.00	0.330	183.520	300.00	0.76	0.59	-0.61	1681081.38	14359623.78	39°32'34.2994"N	80°51'20.7229"W	0.85	313.986	0.55	0.08	-141.52	
400.00	0.350	184.050	400.00	0.21	0.00	-0.65	1681081.34	14359623.17	39°32'34.2935"N	80°51'20.7234"W	0.65	269.813	0.02	0.02	0.53	
469.00	0.370	213.590	468.99	-0.12	-0.40	-0.79	1681081.20	14359622.77	39°32'34.2896"N	80°51'20.7252"W	0.88	243.225	0.27	0.03	42.81	
596.00	0.310	100.780	595.99	-0.54	-0.80	-0.68	1681081.31	14359622.37	39°32'34.2856"N	80°51'20.7238"W	1.05	220.148	0.45	-0.05	-88.83	APS EM <12-1/4"> (469')(596'-3404')
685.00	1.790	69.640	684.98	-0.62	-0.37	0.86	1681082.85	14359622.80	39°32'34.2899"N	80°51'20.7041"W	0.94	112.965	1.72	1.66	-34.99	
775.00	3.830	58.730	774.86	0.06	1.68	4.75	1681086.74	14359624.85	39°32'34.3101"N	80°51'20.6545"W	5.04	70.473	2.33	2.27	-12.12	
866.00	5.320	51.050	865.57	2.15	5.91	10.63	1681092.61	14359629.08	39°32'34.3518"N	80°51'20.5793"W	12.16	60.906	1.77	1.64	-8.44	
956.00	6.020	39.110	955.13	6.08	12.20	16.85	1681098.83	14359635.36	39°32'34.4138"N	80°51'20.4998"W	20.80	54.096	1.52	0.78	-13.27	
1047.00	6.150	35.280	1045.62	11.46	19.88	22.68	1681104.66	14359643.04	39°32'34.4896"N	80°51'20.4253"W	30.16	48.757	0.47	0.14	-4.21	
1142.00	7.750	35.950	1139.92	18.13	29.22	29.38	1681111.35	14359652.38	39°32'34.5819"N	80°51'20.3396"W	41.43	45.151	1.69	1.68	0.71	
1236.00	10.200	38.650	1232.76	26.25	40.85	38.30	1681120.27	14359664.01	39°32'34.6967"N	80°51'20.2255"W	56.00	43.149	2.64	2.61	2.87	
1331.00	12.430	42.360	1325.91	35.68	54.98	50.44	1681132.41	14359678.13	39°32'34.8361"N	80°51'20.0702"W	74.61	42.534	2.47	2.35	3.91	
1426.00	14.860	40.570	1418.22	46.78	71.79	65.25	1681147.22	14359694.93	39°32'35.0020"N	80°51'19.8807"W	97.02	42.269	2.60	2.56	-1.88	
1520.00	17.930	39.300	1508.39	60.53	92.15	82.26	1681164.22	14359715.28	39°32'35.2029"N	80°51'19.6632"W	123.53	41.756	3.29	3.27	-1.35	
1615.00	19.850	38.440	1598.27	76.95	116.10	101.55	1681183.50	14359739.22	39°32'35.4394"N	80°51'19.4165"W	154.25	41.176	2.04	2.02	-0.91	
1709.00	20.870	43.170	1686.40	93.40	140.81	122.93	1681204.87	14359763.93	39°32'35.6833"N	80°51'19.1431"W	186.93	41.121	2.06	1.09	5.03	
1804.00	21.300	45.210	1775.04	108.86	165.31	146.76	1681228.69	14359788.42	39°32'35.9250"N	80°51'18.8385"W	221.06	41.597	0.90	0.45	2.15	
1898.00	19.910	48.330	1863.03	122.51	187.98	170.83	1681252.75	14359811.08	39°32'36.1487"N	80°51'18.5307"W	254.01	42.263	1.88	-1.48	3.32	
1993.00	20.050	48.440	1952.31	135.05	209.54	195.10	1681277.01	14359832.63	39°32'36.3614"N	80°51'18.2205"W	286.31	42.956	0.15	0.15	0.12	
2087.00	20.340	48.290	2040.53	147.59	231.10	219.35	1681301.25	14359854.18	39°32'36.5741"N	80°51'17.9104"W	318.63	43.506	0.31	0.31	-0.16	
2182.00	21.010	48.240	2129.42	160.61	253.43	244.38	1681326.27	14359876.50	39°32'36.7943"N	80°51'17.5905"W	352.06	43.959	0.71	0.71	-0.05	
2276.00	21.420	47.710	2217.04	173.97	276.20	269.65	1681351.53	14359899.26	39°32'37.0190"N	80°51'17.2675"W	386.00	44.312	0.48	0.44	-0.56	
2371.00	21.720	48.450	2305.39	187.62	299.53	295.64	1681377.51	14359922.58	39°32'37.2492"N	80°51'16.9353"W	420.86	44.625	0.43	0.32	0.78	
2465.00	21.970	47.170	2392.64	201.45	323.02	321.55	1681403.41	14359946.06	39°32'37.4809"N	80°51'16.6040"W	455.78	44.869	0.57	0.27	-1.36	
2560.00	20.120	46.710	2481.30	215.41	346.31	346.48	1681428.33	14359969.34	39°32'37.7107"N	80°51'16.2854"W	489.87	45.014	1.96	-1.95	-0.48	
2654.00	20.160	46.490	2569.55	228.83	368.55	369.99	1681451.83	14359991.57	39°32'37.9301"N	80°51'15.9847"W	522.23	45.112	0.09	0.04	-0.23	



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Nomad Unit 1H
Field	Tyler	API	47-095-02822-0000
Facility	Heintzman Pad	Wellbore	Nomad Unit 1H AWB
Slot	Slot E		

WELLPATH DATA (255 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
2749.00	18.130	46.530	2659.30	241.80	389.99	392.59	1681474.43	14360013.00	39°32'38.1416"N	80°51'15.6958"W	553.37	45.191	2.14	-2.14	0.04	
2843.00	17.690	44.680	2748.74	254.23	410.21	413.25	1681495.08	14360033.21	39°32'38.3411"N	80°51'15.4317"W	582.28	45.212	0.77	-0.47	-1.97	
2938.00	17.200	44.790	2839.37	266.88	430.44	433.30	1681515.11	14360053.44	39°32'38.5408"N	80°51'15.1754"W	610.76	45.189	0.52	-0.52	0.12	
3033.00	17.210	43.260	2930.12	279.67	450.64	452.82	1681534.63	14360073.63	39°32'38.7401"N	80°51'14.9257"W	638.85	45.138	0.48	0.01	-1.61	
3127.00	16.630	40.600	3020.05	292.99	470.98	471.11	1681552.91	14360093.96	39°32'38.9409"N	80°51'14.6919"W	666.16	45.008	1.03	-0.62	-2.83	
3222.00	17.310	43.850	3110.92	306.36	491.50	489.75	1681571.54	14360114.47	39°32'39.1433"N	80°51'14.4536"W	693.84	44.898	1.23	0.72	3.42	
3317.00	17.420	44.010	3201.59	319.31	511.92	509.42	1681591.20	14360134.88	39°32'39.3448"N	80°51'14.2020"W	722.19	44.860	0.13	0.12	0.17	
3404.00	17.310	42.340	3284.62	331.47	530.85	527.18	1681608.96	14360153.81	39°32'39.5317"N	80°51'13.9749"W	748.15	44.801	0.59	-0.13	-1.92	
3505.00	17.120	42.120	3381.10	345.90	552.98	547.27	1681629.04	14360175.93	39°32'39.7501"N	80°51'13.7180"W	778.01	44.703	0.20	-0.19	-0.22	APS EM <8-3/4"> (3404')(3505'-6247')
3600.00	18.710	38.500	3471.49	360.88	575.28	566.14	1681647.90	14360198.22	39°32'39.9702"N	80°51'13.4767"W	807.13	44.541	2.04	1.67	-3.81	
3694.00	20.570	36.840	3560.02	378.31	600.30	585.43	1681667.18	14360223.23	39°32'40.2171"N	80°51'13.2300"W	838.50	44.281	2.07	1.98	-1.77	
3789.00	21.630	39.230	3648.65	396.95	627.22	606.51	1681688.25	14360250.14	39°32'40.4828"N	80°51'12.9603"W	872.50	44.038	1.44	1.12	2.52	
3883.00	22.710	42.950	3735.70	414.66	653.92	629.83	1681711.57	14360276.83	39°32'40.7464"N	80°51'12.6620"W	907.91	43.925	1.88	1.15	3.96	
3978.00	21.640	40.240	3823.68	432.29	680.72	653.64	1681735.37	14360303.62	39°32'41.0108"N	80°51'12.3575"W	943.73	43.837	1.56	-1.13	-2.85	
4072.00	19.860	37.750	3911.58	449.96	706.58	674.62	1681756.34	14360329.46	39°32'41.2660"N	80°51'12.0893"W	976.91	43.674	2.11	-1.89	-2.65	
4167.00	19.610	40.110	4001.00	467.04	731.53	694.77	1681776.48	14360354.41	39°32'41.5123"N	80°51'11.8315"W	1008.88	43.523	0.88	-0.26	2.48	
4261.00	21.180	50.870	4089.14	481.04	754.32	718.11	1681799.81	14360377.19	39°32'41.7372"N	80°51'11.5331"W	1041.48	43.591	4.32	1.67	11.45	
4356.00	21.330	52.170	4177.68	492.58	775.75	745.07	1681826.76	14360398.61	39°32'41.9485"N	80°51'11.1885"W	1075.60	43.844	0.52	0.16	1.37	
4451.00	19.500	49.510	4266.71	504.02	796.64	770.78	1681852.46	14360419.49	39°32'42.1546"N	80°51'10.8599"W	1108.48	44.055	2.16	-1.93	-2.80	
4545.00	17.810	45.000	4355.77	516.12	817.00	792.88	1681874.55	14360439.84	39°32'42.3554"N	80°51'10.5774"W	1138.48	44.142	2.36	-1.80	-4.80	
4639.00	18.020	43.010	4445.21	529.29	837.79	812.96	1681894.62	14360460.63	39°32'42.5606"N	80°51'10.3206"W	1167.39	44.138	0.69	0.22	-2.12	
4734.00	18.360	40.300	4535.47	543.87	859.95	832.66	1681914.32	14360482.77	39°32'42.7793"N	80°51'10.0686"W	1197.01	44.076	0.96	0.36	-2.85	
4829.00	16.830	44.710	4626.02	557.65	881.14	852.01	1681933.66	14360503.95	39°32'42.9884"N	80°51'9.8211"W	1225.70	44.037	2.14	-1.61	4.64	
4923.00	15.510	48.000	4716.31	568.63	899.22	870.93	1681952.57	14360522.03	39°32'43.1668"N	80°51'9.5793"W	1251.84	44.084	1.71	-1.40	3.50	
5018.00	16.100	44.600	4807.72	579.49	917.10	889.62	1681971.25	14360539.90	39°32'43.3432"N	80°51'9.3404"W	1277.69	44.129	1.16	0.62	-3.58	
5113.00	16.520	43.360	4898.89	591.65	936.30	908.14	1681989.77	14360559.09	39°32'43.5326"N	80°51'9.1035"W	1304.37	44.125	0.57	0.44	-1.31	
5207.00	17.110	40.170	4988.87	604.98	956.58	926.24	1682007.86	14360579.37	39°32'43.7328"N	80°51'8.8721"W	1331.53	44.077	1.16	0.63	-3.39	
5302.00	20.230	40.830	5078.86	620.45	979.69	946.00	1682027.61	14360602.47	39°32'43.9609"N	80°51'8.6194"W	1361.88	43.998	3.29	3.28	0.69	
5396.00	19.970	40.970	5167.14	636.70	1004.11	967.15	1682048.75	14360626.88	39°32'44.2019"N	80°51'8.3489"W	1394.13	43.926	0.28	-0.28	0.15	
5491.00	20.560	39.360	5256.26	653.62	1029.26	988.36	1682069.96	14360652.01	39°32'44.4501"N	80°51'8.0775"W	1426.96	43.839	0.85	0.62	-1.69	



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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Facility	Heintzman Pad		Wellbore	Nomad Unit 1H AWB
Slot	Slot E			

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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
5586.00	20.690	37.760	5345.17	671.62	1055.42	1009.22	1682090.80	14360678.17	39°32'44.7083"N	80°51'7.8108"W	1460.29	43.718	0.61	0.14	-1.68	
5680.00	20.100	40.010	5433.28	689.08	1080.92	1029.77	1682111.35	14360703.66	39°32'44.9600"N	80°51'7.5479"W	1492.92	43.612	1.04	-0.63	2.39	
5774.00	19.850	43.720	5521.63	704.76	1104.83	1051.19	1682132.76	14360727.56	39°32'45.1960"N	80°51'7.2740"W	1525.01	43.575	1.37	-0.27	3.95	
5869.00	20.360	43.330	5610.84	719.88	1128.51	1073.67	1682155.24	14360751.23	39°32'45.4296"N	80°51'6.9864"W	1557.66	43.574	0.56	0.54	-0.41	
5963.00	20.320	42.870	5698.98	735.22	1152.36	1096.00	1682177.55	14360775.07	39°32'45.6650"N	80°51'6.7009"W	1590.33	43.564	0.18	-0.04	-0.48	
6057.00	16.610	38.640	5788.13	750.16	1174.83	1115.50	1682197.04	14360797.53	39°32'45.8867"N	80°51'6.4515"W	1620.05	43.516	4.19	-3.95	-4.50	
6152.00	15.700	36.050	5879.38	764.83	1195.83	1131.54	1682213.08	14360818.52	39°32'46.0940"N	80°51'6.2463"W	1646.33	43.418	1.22	-0.96	-2.73	
6247.00	15.930	33.610	5970.78	780.14	1217.08	1146.32	1682227.86	14360839.76	39°32'46.3038"N	80°51'6.0572"W	1671.93	43.285	0.74	0.24	-2.57	
6299.00	14.250	31.170	6020.99	788.60	1228.50	1153.59	1682235.12	14360851.18	39°32'46.4165"N	80°51'5.9642"W	1685.22	43.199	3.45	-3.23	-4.68	BH AT Curve <8-1/2"> (6247')(6299'-23249')
6354.00	15.010	30.070	6074.20	797.62	1240.45	1160.66	1682242.19	14360863.13	39°32'46.5346"N	80°51'5.8737"W	1698.78	43.097	1.47	1.38	-2.00	
6448.00	22.580	25.840	6163.13	818.46	1267.27	1174.65	1682256.17	14360889.93	39°32'46.7994"N	80°51'5.6946"W	1727.94	42.828	8.18	8.05	-4.50	
6543.00	27.780	9.950	6249.17	850.86	1305.56	1186.44	1682267.96	14360928.21	39°32'47.1776"N	80°51'5.5432"W	1764.12	42.263	8.94	5.47	-16.73	
6637.00	33.990	355.610	6329.91	895.59	1353.45	1188.22	1682269.74	14360976.07	39°32'47.6509"N	80°51'5.5195"W	1801.02	41.281	10.21	6.61	-15.26	
6680.00†	37.081	354.047	6364.90	919.87	1378.33	1185.96	1682267.47	14361000.95	39°32'47.8969"N	80°51'5.5479"W	1818.32	40.710	7.49	7.19	-3.64	Sycamore: 6680' MD
6731.00	40.770	352.460	6404.57	951.19	1410.14	1182.17	1682263.69	14361032.75	39°32'48.2113"N	80°51'5.5955"W	1840.12	39.974	7.49	7.23	-3.11	
6826.00	49.040	351.330	6471.80	1017.02	1476.47	1172.68	1682254.20	14361099.05	39°32'48.8670"N	80°51'5.7153"W	1885.51	38.458	8.75	8.71	-1.19	
6830.00†	49.395	351.197	6474.41	1020.00	1479.46	1172.22	1682253.74	14361102.04	39°32'48.8966"N	80°51'5.7211"W	1887.57	38.391	9.22	8.87	-3.32	Middlesex: 6830' MD
6921.00	57.500	348.500	6528.57	1092.19	1551.33	1159.26	1682240.79	14361173.88	39°32'49.6071"N	80°51'5.8850"W	1936.63	36.770	9.22	8.91	-2.96	
6990.00†	61.975	345.675	6563.34	1151.44	1609.39	1145.91	1682227.45	14361231.92	39°32'50.1812"N	80°51'6.0542"W	1975.67	35.452	7.39	6.49	-4.09	Burkett: 6990' MD
7015.00	63.610	344.710	6574.77	1173.62	1630.89	1140.23	1682221.77	14361253.40	39°32'50.3937"N	80°51'6.1263"W	1989.95	34.959	7.39	6.54	-3.86	
7030.00†	64.252	343.781	6581.36	1187.07	1643.85	1136.57	1682218.11	14361266.37	39°32'50.5219"N	80°51'6.1727"W	1998.51	34.660	7.02	4.28	-6.19	Tully: 7030' MD
7110.00	67.770	338.990	6613.90	1260.12	1713.07	1113.22	1682194.76	14361335.55	39°32'51.2064"N	80°51'6.4694"W	2043.00	33.017	7.02	4.40	-5.99	
7181.00†	73.642	336.525	6637.35	1326.98	1775.05	1087.84	1682169.39	14361397.51	39°32'51.8194"N	80°51'6.7920"W	2081.88	31.502	8.89	8.27	-3.47	Marcellus POE: 7181' MD
7204.00	75.550	335.760	6643.46	1349.07	1795.33	1078.87	1682160.43	14361417.78	39°32'52.0199"N	80°51'6.9061"W	2094.56	31.003	8.89	8.30	-3.32	
7298.00	83.370	336.430	6660.64	1441.06	1879.75	1041.46	1682123.03	14361502.17	39°32'52.8549"N	80°51'7.3819"W	2148.98	28.988	8.35	8.32	0.71	
7393.00	91.200	336.180	6665.14	1535.55	1966.58	1003.35	1682084.94	14361588.96	39°32'53.7136"N	80°51'7.8665"W	2207.75	27.031	8.25	8.24	-0.26	
7487.00	90.150	332.420	6664.03	1628.86	2051.26	962.60	1682044.20	14361673.61	39°32'54.5512"N	80°51'8.3850"W	2265.89	25.139	4.15	-1.12	-4.00	
7582.00	90.090	335.100	6663.83	1723.07	2136.46	920.60	1682002.22	14361758.77	39°32'55.3940"N	80°51'8.9194"W	2326.36	23.311	2.82	-0.06	2.82	
7676.00	89.600	338.090	6664.08	1816.77	2222.72	883.27	1681964.90	14361845.00	39°32'56.2471"N	80°51'9.3942"W	2391.78	21.672	3.22	-0.52	3.18	
7771.00	89.780	338.140	6664.60	1911.64	2310.87	847.86	1681929.51	14361933.11	39°32'57.1189"N	80°51'9.8443"W	2461.50	20.148	0.20	0.19	0.05	



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Nomad Unit 1H
Field	Tyler	API	47-095-02822-0000
Facility	Heintzman Pad	Wellbore	Nomad Unit 1H AWB
Slot	Slot E		

WELLPATH DATA (255 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
7865.00	91.050	341.040	6663.92	2005.60	2398.95	815.08	1681896.74	14362021.16	39°32'57.9900"N	80°51'10.2609"W	2533.64	18.766	3.37	1.35	3.09	
7960.00	88.430	341.490	6664.35	2100.59	2488.91	784.57	1681856.24	14362111.08	39°32'58.8795"N	80°51'10.6485"W	2609.64	17.496	2.80	-2.76	0.47	
8054.00	91.880	342.280	6664.09	2194.56	2578.24	755.35	1681837.03	14362200.37	39°32'59.7628"N	80°51'11.0197"W	2686.61	16.329	3.77	3.67	0.84	
8148.00	89.820	338.570	6662.70	2288.52	2666.77	723.86	1681805.56	14362288.88	39°33'0.6384"N	80°51'11.4198"W	2763.27	15.186	4.51	-2.19	-3.95	
8243.00	90.280	341.200	6662.62	2383.49	2755.97	691.19	1681772.91	14362378.04	39°33'1.5205"N	80°51'11.8350"W	2841.32	14.079	2.81	0.48	2.77	
8337.00	89.290	340.380	6662.97	2477.49	2844.73	660.27	1681741.99	14362466.77	39°33'2.3982"N	80°51'12.2280"W	2920.35	13.067	1.37	-1.05	-0.87	
8432.00	91.540	342.440	6662.28	2572.47	2934.76	629.99	1681711.72	14362556.76	39°33'3.2885"N	80°51'12.6127"W	3001.62	12.115	3.21	2.37	2.17	
8527.00	88.990	338.250	6661.84	2667.44	3024.20	598.04	1681679.79	14362646.16	39°33'4.1729"N	80°51'13.0186"W	3082.77	11.186	5.16	-2.68	-4.41	
8621.00	89.780	340.840	6662.85	2761.39	3112.26	565.20	1681646.96	14362734.19	39°33'5.0438"N	80°51'13.4361"W	3163.16	10.293	2.88	0.84	2.76	
8716.00	89.970	340.420	6663.06	2856.38	3201.88	533.69	1681615.46	14362823.77	39°33'5.9301"N	80°51'13.8365"W	3246.06	9.463	0.49	0.20	-0.44	
8810.00	90.060	340.630	6663.03	2950.38	3290.50	502.35	1681584.14	14362912.36	39°33'6.8064"N	80°51'14.2347"W	3328.63	8.680	0.24	0.10	0.22	
8905.00	90.340	340.430	6662.70	3045.37	3380.07	470.68	1681552.49	14363001.89	39°33'7.6922"N	80°51'14.6371"W	3412.69	7.928	0.36	0.29	-0.21	
8999.00	90.830	340.560	6661.74	3139.36	3468.67	439.30	1681521.11	14363090.45	39°33'8.5683"N	80°51'15.0359"W	3496.38	7.218	0.54	0.52	0.14	
9094.00	90.680	340.690	6660.49	3234.35	3558.28	407.79	1681489.61	14363180.03	39°33'9.4545"N	80°51'15.4364"W	3581.57	6.538	0.21	-0.16	0.14	
9188.00	90.430	340.280	6659.58	3328.34	3646.88	376.39	1681458.23	14363268.59	39°33'10.3306"N	80°51'15.8354"W	3666.25	5.893	0.51	-0.27	-0.44	
9283.00	90.710	340.810	6658.63	3423.33	3736.45	344.75	1681426.60	14363358.13	39°33'11.2164"N	80°51'16.2375"W	3752.32	5.272	0.63	0.29	0.56	
9377.00	91.910	340.630	6656.49	3517.30	3825.15	313.72	1681395.58	14363446.79	39°33'12.0935"N	80°51'16.6318"W	3838.00	4.689	1.29	1.28	-0.19	
9472.00	90.280	338.930	6654.67	3612.25	3914.28	280.89	1681362.77	14363535.88	39°33'12.9749"N	80°51'17.0490"W	3924.34	4.105	2.48	-1.72	-1.79	
9566.00	90.120	341.020	6654.34	3706.23	4002.59	248.71	1681330.60	14363624.16	39°33'13.8482"N	80°51'17.4581"W	4010.31	3.556	2.23	-0.17	2.22	
9660.00	91.600	340.600	6652.93	3800.22	4091.35	217.81	1681299.72	14363712.89	39°33'14.7260"N	80°51'17.8507"W	4097.15	3.047	1.64	1.57	-0.45	
9755.00	90.830	341.930	6650.92	3895.19	4181.30	187.31	1681269.22	14363802.79	39°33'15.6154"N	80°51'18.2383"W	4185.49	2.565	1.62	-0.81	1.40	
9849.00	90.550	339.510	6649.78	3989.17	4270.01	156.27	1681238.20	14363891.47	39°33'16.4927"N	80°51'18.6326"W	4272.87	2.096	2.59	-0.30	-2.57	
9944.00	90.830	341.220	6648.64	4084.16	4359.48	124.36	1681206.30	14363980.90	39°33'17.3774"N	80°51'19.0383"W	4361.25	1.634	1.82	0.29	1.80	
10039.00	89.660	340.220	6648.23	4179.15	4449.15	92.99	1681174.94	14364070.54	39°33'18.2641"N	80°51'19.4369"W	4450.12	1.197	1.62	-1.23	-1.05	
10133.00	91.320	339.890	6647.43	4273.13	4537.50	60.93	1681142.89	14364158.86	39°33'19.1379"N	80°51'19.8444"W	4537.91	0.769	1.80	1.77	-0.35	
10228.00	89.750	340.940	6646.54	4368.11	4627.00	29.08	1681111.06	14364248.32	39°33'20.0229"N	80°51'20.2491"W	4627.09	0.360	1.99	-1.65	1.11	
10322.00	89.630	339.000	6647.05	4462.09	4715.31	-3.11	1681078.88	14364336.59	39°33'20.8962"N	80°51'20.6583"W	4715.31	359.962	2.07	-0.13	-2.06	
10417.00	91.290	341.080	6646.29	4557.06	4804.59	-35.54	1681046.47	14364425.84	39°33'21.7791"N	80°51'21.0705"W	4804.72	359.576	2.80	1.75	2.19	
10512.00	89.570	339.610	6645.58	4652.04	4894.04	-67.49	1681014.53	14364515.26	39°33'22.6637"N	80°51'21.4766"W	4894.51	359.210	2.38	-1.81	-1.55	
10606.00	90.120	342.120	6645.83	4746.03	4982.84	-98.30	1680983.73	14364604.02	39°33'23.5418"N	80°51'21.8681"W	4983.81	358.870	2.73	0.59	2.67	



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Nomad Unit 1H
Field	Tyler		API	47-095-02822-0000
Facility	Heintzman Pad		Wellbore	Nomad Unit 1H AWP
Slot	Slot E			

WELLPATH DATA (255 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
10701.00	89.820	338.150	6645.88	4841.00	5072.17	-130.57	1680951.47	14364693.31	39°33'24.4252"N	80°51'22.2783"W	5073.85	358.525	4.19	-0.32	-4.18	
10795.00	90.580	341.980	6645.55	4934.97	5160.52	-162.61	1680919.44	14364781.63	39°33'25.2989"N	80°51'22.6856"W	5163.08	358.195	4.15	0.81	4.07	
10890.00	89.690	339.590	6645.33	5029.96	5250.22	-193.88	1680888.19	14364871.29	39°33'26.1859"N	80°51'23.0830"W	5253.80	357.885	2.68	-0.94	-2.52	
10984.00	90.310	342.310	6645.33	5123.95	5339.07	-224.56	1680857.52	14364960.10	39°33'27.0644"N	80°51'23.4728"W	5343.79	357.592	2.97	0.66	2.89	
11079.00	90.030	338.200	6645.05	5218.92	5428.46	-256.64	1680825.45	14365049.46	39°33'27.9485"N	80°51'23.8807"W	5434.52	357.293	4.34	-0.29	-4.33	
11173.00	89.260	340.950	6645.63	5312.87	5516.54	-289.44	1680792.66	14365137.50	39°33'28.8195"N	80°51'24.2976"W	5524.13	356.997	3.04	-0.82	2.93	
11268.00	90.680	339.280	6645.68	5407.85	5605.87	-321.75	1680760.36	14365226.80	39°33'29.7029"N	80°51'24.7084"W	5615.10	356.715	2.31	1.49	-1.76	
11362.00	89.600	339.670	6645.45	5501.81	5693.90	-354.71	1680727.42	14365314.79	39°33'30.5734"N	80°51'25.1273"W	5704.94	356.435	1.22	-1.15	0.41	
11457.00	90.860	340.900	6645.07	5596.80	5783.33	-386.76	1680695.39	14365404.18	39°33'31.4578"N	80°51'25.5347"W	5796.25	356.174	1.85	1.33	1.29	
11552.00	89.480	342.280	6644.79	5691.79	5873.46	-416.76	1680665.40	14365494.28	39°33'32.3490"N	80°51'25.9159"W	5888.23	355.941	2.05	-1.45	1.45	
11646.00	90.740	340.820	6644.61	5785.78	5962.63	-446.51	1680635.66	14365583.41	39°33'33.2307"N	80°51'26.2939"W	5979.32	355.717	2.05	1.34	-1.55	
11741.00	90.620	343.220	6643.48	5880.76	6052.97	-475.83	1680606.35	14365673.72	39°33'34.1241"N	80°51'26.6664"W	6071.65	355.505	2.53	-0.13	2.53	
11835.00	90.150	342.900	6642.85	5974.70	6142.89	-503.21	1680578.98	14365763.60	39°33'35.0132"N	80°51'27.0143"W	6163.47	355.317	0.60	-0.50	-0.34	
11930.00	89.660	346.590	6643.00	6069.49	6234.53	-528.21	1680554.00	14365855.20	39°33'35.9193"N	80°51'27.3315"W	6256.86	355.157	3.92	-0.52	3.88	
12024.00	90.460	345.760	6642.90	6163.12	6325.80	-550.67	1680531.54	14365946.44	39°33'36.8217"N	80°51'27.6164"W	6349.73	355.025	1.23	0.85	-0.88	
12119.00	89.450	343.650	6642.98	6257.93	6417.43	-575.73	1680506.49	14366038.03	39°33'37.7277"N	80°51'27.9345"W	6443.21	354.874	2.46	-1.06	-2.22	
12213.00	90.370	342.110	6643.13	6351.88	6507.26	-603.40	1680478.84	14366127.83	39°33'38.6160"N	80°51'28.2860"W	6535.18	354.702	1.91	0.98	-1.64	
12308.00	89.820	341.530	6642.97	6446.87	6597.52	-633.04	1680449.21	14366218.05	39°33'39.5085"N	80°51'28.6626"W	6627.82	354.519	0.84	-0.58	-0.61	
12402.00	90.220	342.270	6642.94	6540.86	6686.87	-662.24	1680420.02	14366307.36	39°33'40.3920"N	80°51'29.0337"W	6719.58	354.344	0.89	0.43	0.79	
12497.00	88.830	342.130	6643.72	6635.84	6777.31	-691.28	1680390.99	14366397.77	39°33'41.2863"N	80°51'29.4026"W	6812.48	354.176	1.47	-1.46	-0.15	
12591.00	90.030	342.710	6644.66	6729.80	6866.92	-719.67	1680362.61	14366487.34	39°33'42.1723"N	80°51'29.7633"W	6904.53	354.017	1.42	1.28	0.62	
12686.00	89.380	340.350	6645.15	6824.79	6957.02	-749.76	1680332.53	14366577.40	39°33'43.0633"N	80°51'30.1457"W	6997.30	353.849	2.58	-0.68	-2.48	
12780.00	90.550	342.880	6645.21	6918.78	7046.21	-779.41	1680302.90	14366666.56	39°33'43.9453"N	80°51'30.5225"W	7089.19	353.688	2.97	1.24	2.69	
12875.00	91.020	340.330	6643.90	7013.76	7136.34	-809.38	1680272.93	14366756.65	39°33'44.8365"N	80°51'30.9033"W	7182.09	353.529	2.73	0.49	-2.68	
12969.00	89.050	338.550	6643.85	7107.71	7224.34	-842.39	1680239.94	14366844.62	39°33'45.7068"N	80°51'31.3230"W	7273.29	353.349	2.82	-2.10	-1.89	
13072.00	89.540	340.430	6645.11	7210.66	7320.80	-878.47	1680203.87	14366941.04	39°33'46.6607"N	80°51'31.7818"W	7373.32	353.157	1.89	0.48	1.83	
13166.00	89.540	340.070	6645.87	7304.64	7409.27	-910.24	1680172.12	14367029.48	39°33'47.5355"N	80°51'32.1856"W	7464.97	352.996	0.38	0.00	-0.38	
13260.00	89.880	340.580	6646.34	7398.63	7497.78	-941.88	1680140.48	14367117.95	39°33'48.4108"N	80°51'32.5879"W	7556.71	352.840	0.65	0.36	0.54	
13355.00	90.370	340.080	6646.14	7493.62	7587.24	-973.86	1680108.52	14367207.37	39°33'49.2954"N	80°51'32.9944"W	7649.48	352.686	0.74	0.52	-0.53	
13449.00	90.180	339.890	6645.69	7587.61	7675.56	-1006.03	1680076.36	14367295.66	39°33'50.1688"N	80°51'33.4035"W	7741.21	352.533	0.29	-0.20	-0.20	



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Nomad Unit 1H
Field	Tyler		API	47-095-02822-0000
Facility	Heintzman Pad		Wellbore	Nomad Unit 1H AWB
Slot	Slot E			

WELLPATH DATA (255 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
13544.00	90.310	340.750	6645.28	7682.59	7765.01	-1038.02	1680044.38	14367385.07	39°33'51.0533"N	80°51'33.8102"W	7834.08	352.386	0.92	0.14	0.91	
13638.00	90.030	340.190	6645.00	7776.59	7853.60	-1069.45	1680012.97	14367473.63	39°33'51.9294"N	80°51'34.2096"W	7926.08	352.246	0.67	-0.30	-0.60	
13733.00	90.250	340.050	6644.77	7871.57	7942.94	-1101.75	1679980.68	14367562.93	39°33'52.8128"N	80°51'34.6204"W	8018.98	352.103	0.27	0.23	-0.15	
13828.00	90.280	339.710	6644.33	7966.55	8032.14	-1134.43	1679948.01	14367652.10	39°33'53.6949"N	80°51'35.0358"W	8111.86	351.961	0.36	0.03	-0.36	
13922.00	90.280	339.720	6643.87	8060.52	8120.31	-1167.02	1679915.44	14367740.23	39°33'54.5668"N	80°51'35.4502"W	8203.74	351.822	0.01	0.00	0.01	
14017.00	90.680	340.090	6643.07	8155.50	8209.52	-1199.66	1679882.81	14367829.41	39°33'55.4490"N	80°51'35.8652"W	8296.71	351.686	0.57	0.42	0.39	
14111.00	90.340	340.780	6642.24	8249.49	8298.09	-1231.14	1679851.35	14367917.94	39°33'56.3249"N	80°51'36.2653"W	8388.92	351.561	0.82	-0.36	0.73	
14206.00	89.480	339.090	6642.39	8344.46	8387.32	-1263.73	1679818.77	14368007.13	39°33'57.2072"N	80°51'36.6797"W	8481.99	351.432	2.00	-0.91	-1.78	
14300.00	89.780	340.070	6642.99	8438.43	8475.41	-1296.52	1679785.99	14368095.19	39°33'58.0784"N	80°51'37.0967"W	8574.00	351.303	1.09	0.32	1.04	
14395.00	89.750	340.520	6643.38	8533.42	8564.85	-1328.55	1679753.97	14368184.59	39°33'58.9628"N	80°51'37.5040"W	8667.27	351.183	0.47	-0.03	0.47	
14489.00	90.920	343.050	6642.83	8627.40	8654.12	-1357.93	1679724.60	14368273.83	39°33'59.8456"N	80°51'37.8773"W	8760.01	351.082	2.97	1.24	2.69	
14584.00	90.180	343.210	6641.92	8722.33	8745.03	-1385.50	1679697.04	14368364.70	39°34'0.7445"N	80°51'38.2275"W	8854.11	350.997	0.80	-0.78	0.17	
14679.00	89.690	342.480	6642.03	8817.29	8835.80	-1413.52	1679669.03	14368455.44	39°34'1.6420"N	80°51'38.5835"W	8948.16	350.911	0.93	-0.52	-0.77	
14773.00	91.020	342.380	6641.45	8911.26	8925.42	-1441.90	1679640.67	14368545.01	39°34'2.5281"N	80°51'38.9441"W	9041.13	350.823	1.42	1.41	-0.11	
14868.00	90.000	342.750	6640.60	9006.22	9016.05	-1470.36	1679612.22	14368635.61	39°34'3.4243"N	80°51'39.3057"W	9135.15	350.738	1.14	-1.07	0.39	
14962.00	90.430	341.840	6640.25	9100.20	9105.59	-1498.95	1679583.64	14368725.12	39°34'4.3097"N	80°51'39.6690"W	9228.14	350.652	1.07	0.46	-0.97	
15056.00	90.650	342.530	6639.36	9194.18	9195.08	-1527.70	1679554.90	14368814.57	39°34'5.1946"N	80°51'40.0344"W	9321.12	350.567	0.77	0.23	0.73	
15151.00	90.710	343.910	6638.24	9289.11	9286.03	-1555.13	1679527.49	14368905.48	39°34'6.0938"N	80°51'40.3828"W	9415.34	350.493	1.45	0.06	1.45	
15246.00	90.060	342.950	6637.60	9384.02	9377.08	-1582.22	1679500.40	14368996.50	39°34'6.9941"N	80°51'40.7270"W	9509.63	350.423	1.22	-0.68	-1.01	
15340.00	90.150	341.560	6637.43	9478.00	9466.60	-1610.87	1679471.77	14369085.99	39°34'7.8794"N	80°51'41.0910"W	9602.68	350.343	1.48	0.10	-1.48	
15435.00	90.150	341.190	6637.18	9573.00	9556.63	-1641.21	1679441.44	14369175.97	39°34'8.7696"N	80°51'41.4767"W	9696.53	350.255	0.39	0.00	-0.39	
15529.00	90.150	341.570	6636.93	9667.00	9645.71	-1671.22	1679411.44	14369265.02	39°34'9.6504"N	80°51'41.8582"W	9789.41	350.170	0.40	0.00	0.40	
15624.00	90.120	341.360	6636.71	9762.00	9735.78	-1701.42	1679381.25	14369355.05	39°34'10.5411"N	80°51'42.2420"W	9883.33	350.087	0.22	-0.03	-0.22	
15719.00	90.580	340.890	6636.13	9856.99	9825.67	-1732.15	1679350.53	14369444.91	39°34'11.4299"N	80°51'42.6327"W	9977.18	350.002	0.69	0.48	-0.49	
15814.00	90.520	341.250	6635.21	9951.99	9915.53	-1762.97	1679319.73	14369534.73	39°34'12.3185"N	80°51'43.0245"W	10071.03	349.918	0.38	-0.06	0.38	
15908.00	90.400	341.630	6634.46	10045.98	10004.63	-1792.89	1679289.82	14369623.80	39°34'13.1996"N	80°51'43.4048"W	10164.01	349.840	0.42	-0.13	0.40	
16003.00	90.340	341.550	6633.85	10140.98	10094.77	-1822.89	1679259.83	14369713.90	39°34'14.0909"N	80°51'43.7861"W	10258.04	349.764	0.11	-0.06	-0.08	
16097.00	90.000	341.450	6633.57	10234.98	10183.91	-1852.72	1679230.01	14369803.01	39°34'14.9724"N	80°51'44.1653"W	10351.07	349.689	0.38	-0.36	-0.11	
16192.00	90.400	341.720	6633.24	10329.97	10274.05	-1882.73	1679200.02	14369893.11	39°34'15.8636"N	80°51'44.5467"W	10445.13	349.616	0.51	0.42	0.28	
16287.00	90.090	341.520	6632.83	10424.97	10364.20	-1912.68	1679170.07	14369983.22	39°34'16.7551"N	80°51'44.9275"W	10539.21	349.544	0.39	-0.33	-0.21	



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Nomad Unit 1H
Field	Tyler	API	47-095-02822-0000
Facility	Heintzman Pad	Wellbore	Nomad Unit 1H AWP
Slot	Slot E		

WELLPATH DATA (255 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
16381.00	89.940	341.400	6632.80	10518.97	10453.32	-1942.57	1679140.20	14370072.31	39°34'17.6364"N	80°51'45.3074"W	10632.28	349.473	0.20	-0.16	-0.13	
16476.00	89.660	341.350	6633.14	10613.96	10543.34	-1972.91	1679109.87	14370162.30	39°34'18.5265"N	80°51'45.6931"W	10726.35	349.401	0.30	-0.29	-0.05	
16570.00	90.180	341.810	6633.27	10707.96	10632.53	-2002.61	1679080.18	14370251.44	39°34'19.4084"N	80°51'46.0707"W	10819.48	349.333	0.74	0.55	0.49	
16665.00	90.280	341.150	6632.89	10802.96	10722.61	-2032.79	1679050.02	14370341.49	39°34'20.2991"N	80°51'46.4542"W	10913.59	349.265	0.70	0.11	-0.69	
16760.00	90.090	341.100	6632.58	10897.96	10812.50	-2063.52	1679019.30	14370431.34	39°34'21.1880"N	80°51'46.8449"W	11007.64	349.195	0.21	-0.20	-0.05	
16854.00	90.280	341.330	6632.28	10991.96	10901.49	-2093.79	1678989.04	14370520.30	39°34'22.0680"N	80°51'47.2298"W	11100.74	349.128	0.32	0.20	0.24	
16949.00	89.910	341.280	6632.12	11086.95	10991.48	-2124.24	1678958.60	14370610.25	39°34'22.9578"N	80°51'47.6169"W	11194.86	349.062	0.39	-0.39	-0.05	
17044.00	90.400	341.320	6631.86	11181.95	11081.46	-2154.70	1678928.15	14370700.20	39°34'23.8476"N	80°51'48.0041"W	11289.00	348.997	0.52	0.52	0.04	
17138.00	90.590	341.720	6631.05	11275.95	11170.61	-2184.49	1678898.37	14370789.31	39°34'24.7291"N	80°51'48.3828"W	11382.20	348.935	0.47	0.20	0.43	
17233.00	90.180	340.580	6630.41	11370.94	11260.51	-2215.18	1678867.69	14370879.18	39°34'25.6181"N	80°51'48.7730"W	11476.33	348.871	1.28	-0.43	-1.20	
17327.00	89.970	340.970	6630.29	11464.94	11349.27	-2246.14	1678836.75	14370967.90	39°34'26.4958"N	80°51'49.1666"W	11569.40	348.805	0.47	-0.22	0.41	
17421.00	89.880	341.460	6630.41	11558.94	11438.26	-2276.41	1678806.49	14371056.86	39°34'27.3758"N	80°51'49.5514"W	11662.58	348.744	0.53	-0.10	0.52	
17515.00	90.400	341.320	6630.18	11652.94	11527.35	-2306.40	1678776.51	14371145.90	39°34'28.2567"N	80°51'49.9328"W	11755.82	348.686	0.57	0.55	-0.15	
17610.00	89.970	341.400	6629.87	11747.94	11617.36	-2336.77	1678746.16	14371235.88	39°34'29.1468"N	80°51'50.3188"W	11850.05	348.627	0.46	-0.45	0.08	
17704.00	90.310	341.530	6629.64	11841.93	11706.49	-2366.65	1678716.29	14371324.97	39°34'30.0280"N	80°51'50.6986"W	11943.32	348.571	0.39	0.36	0.14	
17799.00	89.880	341.320	6629.49	11936.93	11796.54	-2396.91	1678686.04	14371414.99	39°34'30.9185"N	80°51'51.0834"W	12037.59	348.515	0.50	-0.45	-0.22	
17893.00	89.880	341.400	6629.68	12030.93	11885.61	-2426.95	1678656.01	14371504.02	39°34'31.7992"N	80°51'51.4653"W	12130.86	348.459	0.09	0.00	0.09	
17987.00	89.910	341.620	6629.86	12124.93	11974.75	-2456.77	1678626.21	14371593.13	39°34'32.6807"N	80°51'51.8443"W	12224.17	348.406	0.24	0.03	0.23	
18082.00	90.090	341.850	6629.86	12219.92	12064.97	-2486.54	1678596.45	14371683.31	39°34'33.5728"N	80°51'52.2228"W	12318.54	348.355	0.31	0.19	0.24	
18176.00	89.750	340.930	6629.99	12313.92	12154.05	-2516.54	1678566.46	14371772.36	39°34'34.4537"N	80°51'52.6042"W	12411.85	348.302	1.04	-0.36	-0.98	
18270.00	90.280	341.650	6629.96	12407.92	12243.08	-2546.69	1678536.32	14371861.35	39°34'35.3340"N	80°51'52.9876"W	12505.15	348.249	0.95	0.56	0.77	
18365.00	90.490	343.040	6629.32	12502.89	12333.60	-2575.50	1678507.52	14371951.84	39°34'36.2291"N	80°51'53.3537"W	12599.64	348.205	1.48	0.22	1.46	
18459.00	90.920	342.240	6628.17	12596.85	12423.31	-2603.55	1678479.49	14372041.51	39°34'37.1161"N	80°51'53.7102"W	12693.19	348.164	0.97	0.46	-0.85	
18554.00	90.120	340.090	6627.31	12691.84	12513.22	-2634.21	1678448.83	14372131.38	39°34'38.0051"N	80°51'54.1001"W	12787.48	348.112	2.41	-0.84	-2.26	
18648.00	90.180	340.400	6627.06	12785.83	12601.69	-2665.98	1678417.07	14372219.81	39°34'38.8799"N	80°51'54.5042"W	12880.60	348.055	0.34	0.06	0.33	
18743.00	90.920	340.760	6626.15	12880.82	12691.28	-2697.57	1678385.50	14372309.37	39°34'39.7659"N	80°51'54.9058"W	12974.80	348.000	0.87	0.78	0.38	
18837.00	89.600	339.890	6625.72	12974.81	12779.78	-2729.22	1678353.87	14372397.84	39°34'40.6411"N	80°51'55.3083"W	13067.96	347.945	1.68	-1.40	-0.93	
18931.00	89.940	340.870	6626.10	13068.80	12868.32	-2760.78	1678322.32	14372486.35	39°34'41.5166"N	80°51'55.7097"W	13161.14	347.891	1.10	0.36	1.04	
19026.00	90.030	340.270	6626.12	13163.79	12957.91	-2792.38	1678290.73	14372575.90	39°34'42.4025"N	80°51'56.1116"W	13255.37	347.839	0.64	0.09	-0.63	
19120.00	90.980	340.380	6625.30	13257.78	13046.42	-2824.03	1678259.09	14372664.37	39°34'43.2777"N	80°51'56.5140"W	13348.57	347.786	1.02	1.01	0.12	



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Well	Nomad Unit 1H
Field	Tyler		API	47-095-02822-0000
Facility	Heintzman Pad		Wellbore	Nomad Unit 1H AWB
Slot	Slot E			

WELLPATH DATA (255 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
19215.00	90.550	340.530	6624.03	13352.76	13135.94	-2855.81	1678227.33	14372753.85	39°34'44.1629"N	80°51'56.9182"W	13442.79	347.735	0.48	-0.45	0.16	
19309.00	90.250	340.590	6623.37	13446.76	13224.58	-2887.09	1678196.05	14372842.46	39°34'45.0394"N	80°51'57.3160"W	13536.05	347.685	0.33	-0.32	0.06	
19403.00	90.120	340.510	6623.07	13540.75	13313.21	-2918.39	1678164.77	14372931.06	39°34'45.9159"N	80°51'57.7141"W	13629.33	347.636	0.16	-0.14	-0.09	
19498.00	90.060	340.340	6622.92	13635.75	13402.72	-2950.22	1678132.95	14373020.53	39°34'46.8010"N	80°51'58.1189"W	13723.58	347.586	0.19	-0.06	-0.18	
19592.00	90.090	340.490	6622.79	13729.74	13491.28	-2981.73	1678101.45	14373109.06	39°34'47.6767"N	80°51'58.5196"W	13816.85	347.537	0.16	0.03	0.16	
19687.00	90.180	340.930	6622.57	13824.74	13580.95	-3013.11	1678070.08	14373198.69	39°34'48.5634"N	80°51'58.9187"W	13911.18	347.491	0.47	0.09	0.46	
19781.00	90.180	340.660	6622.28	13918.74	13669.72	-3044.03	1678039.17	14373287.42	39°34'49.4411"N	80°51'59.3119"W	14004.55	347.446	0.29	0.00	-0.29	
19876.00	90.650	340.480	6621.59	14013.73	13759.30	-3075.63	1678007.59	14373376.97	39°34'50.3270"N	80°51'59.7138"W	14098.87	347.400	0.53	0.49	-0.19	
19970.00	90.030	341.180	6621.03	14107.72	13848.09	-3106.50	1677976.73	14373465.72	39°34'51.2049"N	80°52'0.1064"W	14192.25	347.356	0.99	-0.66	0.74	
20065.00	89.380	340.630	6621.52	14202.72	13937.86	-3137.58	1677945.67	14373555.45	39°34'52.0926"N	80°52'0.5016"W	14286.65	347.314	0.90	-0.68	-0.58	
20160.00	89.570	339.160	6622.39	14297.69	14027.07	-3170.23	1677913.03	14373644.62	39°34'52.9747"N	80°52'0.9169"W	14380.85	347.265	1.56	0.20	-1.55	
20254.00	90.000	340.270	6622.74	14391.66	14115.23	-3202.82	1677880.45	14373732.76	39°34'53.8466"N	80°52'1.3315"W	14474.04	347.216	1.27	0.46	1.18	
20349.00	90.250	340.440	6622.53	14486.66	14204.70	-3234.76	1677848.53	14373822.19	39°34'54.7313"N	80°52'1.7377"W	14568.36	347.171	0.32	0.26	0.18	
20443.00	89.320	341.220	6622.89	14580.65	14293.49	-3265.62	1677817.67	14373910.94	39°34'55.6092"N	80°52'2.1302"W	14661.79	347.131	1.29	-0.99	0.83	
20538.00	89.880	340.430	6623.55	14675.65	14383.21	-3296.83	1677786.48	14374000.63	39°34'56.4965"N	80°52'2.5270"W	14756.22	347.090	1.02	0.59	-0.83	
20633.00	89.540	340.590	6624.03	14770.64	14472.77	-3328.52	1677754.80	14374090.15	39°34'57.3820"N	80°52'2.9302"W	14850.59	347.048	0.40	-0.36	0.17	
20727.00	89.880	340.390	6624.51	14864.64	14561.37	-3359.91	1677723.42	14374178.72	39°34'58.2581"N	80°52'3.3294"W	14943.98	347.007	0.42	0.36	-0.21	
20822.00	90.180	340.620	6624.46	14959.63	14650.93	-3391.62	1677691.73	14374268.23	39°34'59.1437"N	80°52'3.7327"W	15038.37	346.966	0.40	0.32	0.24	
20917.00	90.030	340.140	6624.28	15054.62	14740.41	-3423.52	1677659.84	14374357.68	39°35'0.0285"N	80°52'4.1384"W	15132.75	346.925	0.53	-0.16	-0.51	
21011.00	90.180	340.370	6624.11	15148.61	14828.88	-3455.27	1677628.10	14374446.12	39°35'0.8034"N	80°52'4.5423"W	15226.12	346.884	0.29	0.16	0.24	
21106.00	88.740	340.200	6625.01	15243.59	14918.31	-3487.32	1677596.07	14374535.51	39°35'1.7877"N	80°52'4.9499"W	15320.49	346.843	1.53	-1.52	-0.18	
21201.00	89.510	340.290	6626.46	15338.57	15007.70	-3519.42	1677563.97	14374624.87	39°35'2.6717"N	80°52'5.3583"W	15414.85	346.802	0.82	0.81	0.09	
21295.00	90.150	340.540	6626.74	15432.56	15096.27	-3550.93	1677532.48	14374713.40	39°35'3.5474"N	80°52'5.7591"W	15508.27	346.764	0.73	0.68	0.27	
21390.00	89.940	340.570	6626.66	15527.56	15185.85	-3582.56	1677500.86	14374802.94	39°35'4.4332"N	80°52'6.1614"W	15602.71	346.726	0.22	-0.22	0.03	
21485.00	89.820	340.830	6626.86	15622.56	15275.51	-3613.96	1677469.48	14374892.57	39°35'5.3198"N	80°52'6.5607"W	15697.19	346.689	0.30	-0.13	0.27	
21579.00	90.030	340.380	6626.98	15716.55	15364.17	-3645.17	1677438.28	14374981.20	39°35'6.1965"N	80°52'6.9577"W	15790.66	346.653	0.53	0.22	-0.48	
21674.00	89.780	340.450	6627.14	15811.55	15453.68	-3677.02	1677406.44	14375070.66	39°35'7.0816"N	80°52'7.3628"W	15885.11	346.616	0.27	-0.26	0.07	
21769.00	89.780	340.480	6627.51	15906.54	15543.21	-3708.78	1677374.69	14375160.16	39°35'7.9669"N	80°52'7.7669"W	15979.56	346.580	0.03	0.00	0.03	
21863.00	89.660	340.290	6627.97	16000.53	15631.75	-3740.34	1677343.15	14375248.67	39°35'8.8424"N	80°52'8.1683"W	16073.01	346.543	0.24	-0.13	-0.20	
21958.00	89.750	341.700	6628.45	16095.53	15721.57	-3771.27	1677312.23	14375338.45	39°35'9.7306"N	80°52'8.5617"W	16167.57	346.511	1.49	0.09	1.48	



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Nomad Unit 1H
Field	Tyler	API	47-095-02822-0000
Facility	Heintzman Pad	Wellbore	Nomad Unit 1H AWB
Slot	Slot E		

WELLPATH DATA (255 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
22053.00	89.630	341.500	6628.97	16190.52	15811.71	-3801.26	1677282.25	14375428.56	39°35'10.6219"N	80°52'8.9430"W	16262.22	346.482	0.25	-0.13	-0.21	
22147.00	89.780	341.610	6629.45	16284.52	15900.88	-3831.00	1677252.52	14375517.69	39°35'11.5036"N	80°52'9.3212"W	16355.87	346.454	0.20	0.16	0.12	
22241.00	90.000	341.560	6629.63	16378.52	15990.07	-3860.69	1677222.84	14375606.84	39°35'12.3855"N	80°52'9.6989"W	16449.54	346.426	0.24	0.23	-0.05	
22336.00	89.910	341.270	6629.71	16473.51	16080.11	-3890.97	1677192.57	14375696.85	39°35'13.2759"N	80°52'10.0839"W	16544.17	346.397	0.32	-0.09	-0.31	
22431.00	89.910	341.360	6629.86	16568.51	16170.11	-3921.41	1677162.15	14375786.81	39°35'14.1657"N	80°52'10.4710"W	16638.80	346.368	0.09	0.00	0.09	
22525.00	89.600	341.160	6630.26	16662.51	16259.12	-3951.61	1677131.96	14375875.79	39°35'15.0459"N	80°52'10.8551"W	16732.43	346.340	0.39	-0.33	-0.21	
22620.00	90.120	341.550	6630.49	16757.51	16349.14	-3981.98	1677101.61	14375965.76	39°35'15.9360"N	80°52'11.2413"W	16827.07	346.312	0.68	0.55	0.41	
22714.00	89.660	341.710	6630.67	16851.51	16438.34	-4011.60	1677071.99	14376054.94	39°35'16.8181"N	80°52'11.6181"W	16920.76	346.286	0.52	-0.49	0.17	
22809.00	89.880	341.340	6631.05	16946.50	16528.45	-4041.71	1677041.90	14376145.00	39°35'17.7090"N	80°52'12.0009"W	17015.43	346.259	0.45	0.23	-0.39	
22903.00	90.180	341.550	6631.00	17040.50	16617.56	-4071.62	1677012.00	14376234.08	39°35'18.5901"N	80°52'12.3813"W	17109.10	346.233	0.39	0.32	0.22	
22998.00	89.720	341.300	6631.09	17135.50	16707.61	-4101.88	1676981.75	14376324.10	39°35'19.4806"N	80°52'12.7662"W	17203.77	346.206	0.55	-0.48	-0.26	
23092.00	90.090	341.830	6631.24	17229.49	16796.79	-4131.61	1676952.04	14376413.24	39°35'20.3623"N	80°52'13.1442"W	17297.46	346.181	0.69	0.39	0.56	
23187.00	90.000	341.780	6631.17	17324.49	16887.04	-4161.27	1676922.39	14376503.45	39°35'21.2547"N	80°52'13.5215"W	17392.19	346.157	0.11	-0.09	-0.05	
23249.00	89.630	341.410	6631.37	17386.48	16945.87	-4180.84	1676902.82	14376562.26	39°35'21.8364"N	80°52'13.7704"W	17453.99	346.141	0.84	-0.60	-0.60	
23274.00‡	89.630	341.410	6631.53	17411.48	16969.56	-4188.81	1676894.85	14376585.94	39°35'22.0707"N	80°52'13.8718"W	17478.91	346.134	0.00	0.00	0.00	Projected MD at TD: 23274'



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Nomad Unit 1H
Field	Tyler	API	47-095-02822-0000
Facility	Heintzman Pad	Wellbore	Nomad Unit 1H AWB
Slot	Slot E		

HOLE & CASING SECTIONS - Ref Wellbore: Nomad Unit 1H AWB Ref Wellpath: Nomad Unit 1H AWP Proj: 23274'

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	0.39	-0.26
17.5in Open Hole	130.00	583.00	453.00	130.00	582.99	0.39	-0.26	-0.79	-0.74
13.375in Casing Surface	30.00	563.00	533.00	30.00	562.99	0.00	0.00	-0.75	-0.82
12.25in Open Hole	583.00	3477.00	2894.00	582.99	3354.34	-0.79	-0.74	546.86	541.73
9.625in Casing Intermediate	30.00	3439.00	3409.00	30.00	3318.04	0.00	0.00	538.54	534.18
8.75in Open Hole	3477.00	6325.00	2848.00	3354.34	6046.17	546.86	541.73	1234.06	1156.92
8.5in Open Hole	6325.00	23274.00	16949.00	6046.17	6631.53	1234.06	1156.92	16969.56	-4188.81
5.5in Casing Production	30.00	23254.00	23224.00	30.00	6631.40	0.00	0.00	16950.60	-4182.44



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Nomad Unit 1H
Field	Tyler	API	47-095-02822-0000
Facility	Heintzman Pad	Wellbore	Nomad Unit 1H AWB
Slot	Slot E		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Nomad Unit 1H BHL Rev-2	6582.51	17047.55	-4208.83	1676874.84	14376663.90	39°35'22.8418"N	80°52'14.1261"W	point
Nomad Unit 1H BHL Rev-3	6582.77	16997.40	-4191.66	1676892.01	14376613.77	39°35'22.3459"N	80°52'13.9076"W	point
Nomad Unit 1H POE Rev-2	6636.00	1779.03	1068.19	1682149.75	14361401.49	39°32'51.8590"N	80°51'7.0428"W	point
Nomad Unit 1H AZI Rev-2	6664.65	2203.14	874.91	1681956.55	14361825.43	39°32'56.0537"N	80°51'9.5013"W	point
Nomad Unit 1H LP Rev-2	6666.00	1965.76	974.54	1682056.14	14361588.15	39°32'53.7060"N	80°51'8.2343"W	point
Nomad Unit 1H 50' L/R Hard Line Rev-2	7000.00	9600.27	-1658.38	1679424.28	14369219.60	39°34'9.2012"N	80°51'41.6951"W	rectangle
2D Rectangle 15637.8 x 100.								

WELLPATH COMPOSITION - Ref Wellbore: Nomad Unit 1H AWB Ref Wellpath: Nomad Unit 1H AWP Proj: 23274'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
30.00	469.00	Gyrodata 2015 - GC+WIR+DPIPE	01_Gyrodata MS Gyro <17-1/2"> (100'-469')	Nomad Unit 1H AWB	12/1/2022
469.00	3404.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02_APS EM <12-1/4"> (469')(596'-3404')	Nomad Unit 1H AWB	12/1/2022
3404.00	6247.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03_APS EM <8-3/4"> (3404')(3505'-6247')	Nomad Unit 1H AWB	1/16/2023
6247.00	23274.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04_BH AT Curve <8-1/2"> (6247')(6299'-23249')	Nomad Unit 1H AWB	1/16/2023



Actual Wellpath Report

Nomad Unit 1H AWP Proj: 23274'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Nomad Unit 1H
Field	Tyler	API	47-095-02822-0000
Facility	Heintzman Pad	Wellbore	Nomad Unit 1H AWB
Slot	Slot E		

COMMENTS
<p>Wellpath general comments API: 47-095-02822-0000 BH Job #: 111601026 Rig: H&P 519 Duration: 1/20/2023-1/26/2023 Gyrodatta MS Gyro <17-1/2"> (100'-469') APS EM <12-1/4"> (469')(596'-3404') APS EM <8-3/4"> (3404')(3505'-6247') BH AT Curve <8-1/2"> (6247')(6299'-23249') Sycamore: 6680' MD Middlesex: 6830' MD Burkett: 6990' MD Tully: 7030' MD Marcellus POE: 7181' MD Projected MD at TD: 23274'</p>