

ANTERO RESOURCES CORPORATION

Location: Tyler County, WV

Field: Tyler

Facility: Hogue Pad

Well: Lancaster Unit 3H

Wellbore: Lancaster Unit 3H PWB

Slot: Slot #06

Wellbore: Lancaster Unit 3H PWB

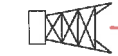
Grid System: NAD83 / UTM Zone 17 North, US feet
 True vertical depths are referenced to H&P 317 (RAD)
 North reference: Grid north
 Bore: True distance
 Reference wellbore measured depths are referenced to H&P 317 (RAD)
 H&P 317 (RAD) to Mean Sea Level: 1040 feet
 Coordinates are in feet referenced to Slot
 Depth error in feet
 Mean Sea Level to Ground level (At Slot Slot #06): -1014.5 feet
 H&P 317 (RAD) to Ground level (At Slot Slot #06)
 Mean Sea Level to Ground level (At Slot Slot #06)
 H&P 317 (RAD) to Mean Sea Level
 1040 feet
 Created by: dalek on 2020-06-10; Database: WA, WPA, EastmanUS, Dash

Location Information

Facility Name	Grid North (US ft)	Latitude	Longitude
Hogue Pad	1669140.410	39°28'17.1600"N	80°55'53.5810"W
Slot	Local N (ft)	Local E (ft)	Local S (ft)
Slot #06	54.80	51.30	25.91
H&P 317 (RAD) to Ground level (At Slot Slot #06)			
Mean Sea Level to Ground level (At Slot Slot #06)			
H&P 317 (RAD) to Mean Sea Level			

API: 47-095-02676-0000
 BHI Job #: 110308389B
 Rig: H&P 317
 Duration: 02/26/2020-05/06/2020

Slot	Well	Wellbore	Wellpath
Slot #06	Lancaster Unit 3H	Lancaster Unit 3H AWB	Lancaster Unit 3H AWIP Prot: 150889
Slot #06	Lancaster Unit 3H	Lancaster Unit 3H PWB	Lancaster Unit 3H PWP Rev-C.0

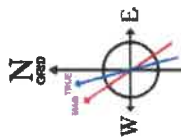


Gyrodata MS Gyro <13-1/2°>(125-472°): 0.47° Inc, 125.00R MD, 125.00R TVD, 0.14R VS

APS EM <-9-7/8°>(472°)(778-2726°): 6.01° Inc, 778.00R MD, 777.43R TVD, -15.33R VS

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (1/100ft)	VS (ft)
Tile On	2726.00	18.599	117.830	2691.27	-326.35	606.26	4.17	-505.17
Pro. To Bottom	2799.00	18.590	117.830	2690.46	-336.21	626.96	0.00	-522.15
Drill Out Log	2899.00	18.590	117.830	2755.24	-351.10	655.08	0.00	-545.41
Hold Transport	3108.23	24.853	118.979	2949.52	-388.01	723.08	3.00	-602.47
Curve KOP	5932.20	24.853	118.979	5511.86	-983.03	1761.36	0.00	-1454.48
POE	7088.80	73.699	340.976	6402.00	-436.47	1802.46	8.00	-1000.06
Landing Pl.	7263.31	90.000	340.976	6431.00	-245.75	1736.70	8.00	-786.32
BHL	15078.68	90.000	340.976	6431.00	7114.42	-801.02	0.00	6987.08

APS EM <-6-3/4°>(2726°)(2801°-5618°): 14.79° Inc, 2801.00R MD, 2663.10R TVD, -520.45R VS

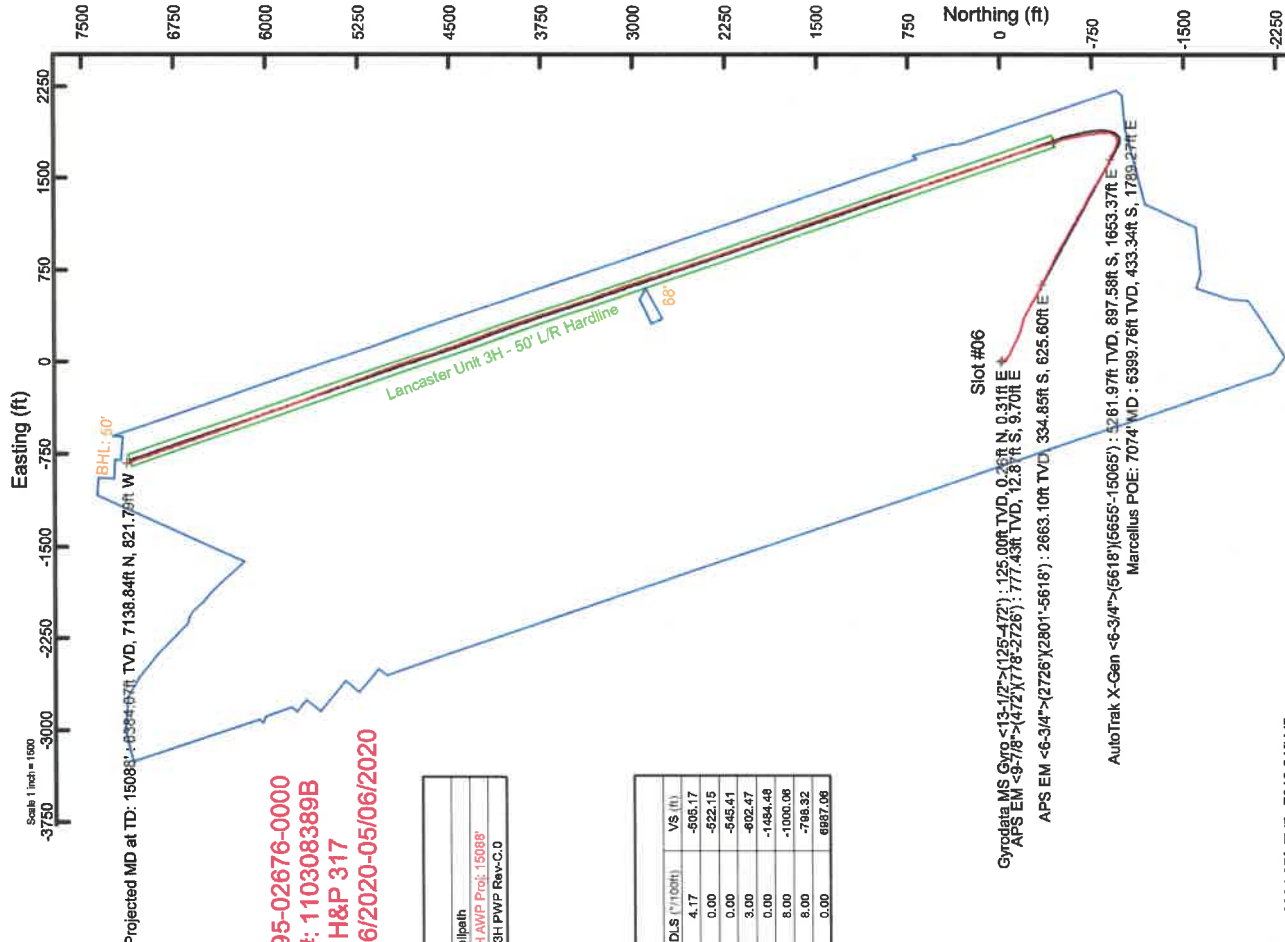


User specified (HDCM) Dip: 66.46° Field: 51730 nT
 Magnetic North is 7.60 degrees West of True North (at 4/26/2020)
 Grid North is 0.00 degrees East of True North
 To correct azimuth from Grid subtract 0.00 degrees
 To correct azimuth from Magnetic to Grid subtract 7.66 degrees

AutoTrak X-Gen <-6-3/4°>(5618°)(5655°-15065°): 23.23° Inc, 5655.00R MD, 5261.97R TVD, -1387.40R VS

Projected MD at TD: 15088° : 90.11° Inc, 15088.00R MD, 6384.07R TVD, 7016.91R VS

Marcellus POE: 7074° MD, 6399.76R TVD, -992.80R VS



04/02/2021



Scale 1 inch = 1000

Vertical Section (ft)
 Azimuth 340.98° with reference 0.00 N, 0.00 E



Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088'
Page 1 of 10



REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Field	TVler
Facility	Hogue Pad
Slot	Slot #06
Well	Lancaster Unit 3H
API	47-095-02676-0000
Wellbore	Lancaster Unit 3H AWB

REPORT SETUP INFORMATION	
Projection System	NAD27 / UTM Zone 17 North, US feet
North Reference	Grid
Scale	0.999601
Convergence at slot	0.06° East
Software System	WellArchitect® 6.0
User	Delaset
Report Generated	5/10/2020 at 8:33:47 PM
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	54.69	51.30	1669191.69	14333658.93	39°28'17.7380"N	80°53'52.9260"W
Facility Reference Pt			1669140.41	14333604.26	39°28'17.1980"N	80°53'53.5810"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.3013"W

WELLPATH DATUM	
Calculation method	Minimum curvature
Horizontal Reference Pt	Slot
Vertical Reference Pt	H&P 317 (RKB)
MD Reference Pt	H&P 317 (RKB)
Field Vertical Reference	Mean Sea Level
	H&P 317 (RKB) to Facility Vertical Datum
	H&P 317 (RKB) to Mean Sea Level
	H&P 317 (RKB) to Ground Level at Slot (Slot #06)
	Section Origin
	Section Azimuth
	25.50ft
	1040.00ft
	25.50ft
	N 0.00, E 0.00 ft
	340.98°

Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088'
Page 2 of 10

REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Field	Tyler
Facility	Hogue Pad
Slot	Slot #06
Well	Lancaster Unit 3H
API	47-095-02676-0000
Wellbore	Lancaster Unit 3H AWB

WELLPATH DATA (171 stations) † = interpolated, ‡ = extrapolated station																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Comments
0.00	0.00	50.350	0.00	0.00	0.00	0.00	1669191.69	14333656.93	39°28'17.7380"N	80°53'52.9260"W	0.00	0.000	0.00	0.00	0.00	
25.50	0.00	50.350	25.50	0.00	0.00	0.00	1669191.69	14333656.93	39°28'17.7380"N	80°53'52.9260"W	0.00	0.000	0.00	0.00	0.00	
125.00	0.470	50.350	125.00	0.14	0.26	0.31	1669192.01	14333659.19	39°28'17.7406"N	80°53'52.9220"W	0.41	50.350	0.47	0.47	0.00	Gyrodata MS Gyro <13-1/2">(125-472')
175.00	0.370	51.320	175.00	0.27	0.49	0.60	1669192.29	14333659.42	39°28'17.7429"N	80°53'52.9184"W	0.77	50.552	0.20	-0.20	1.94	
225.00	0.390	61.110	225.00	0.35	0.68	0.87	1669192.57	14333659.61	39°28'17.7447"N	80°53'52.9149"W	1.10	52.283	0.14	0.04	19.58	
275.00	0.390	61.720	275.00	0.41	0.84	1.17	1669192.87	14333659.77	39°28'17.7463"N	80°53'52.9110"W	1.44	54.432	0.01	0.00	1.22	
325.00	0.360	66.780	324.99	0.45	0.98	1.47	1669193.16	14333659.91	39°28'17.7477"N	80°53'52.9073"W	1.76	56.224	0.09	-0.06	10.12	
375.00	0.330	61.380	374.99	0.48	1.11	1.74	1669193.43	14333660.04	39°28'17.7490"N	80°53'52.9038"W	2.06	57.383	0.09	-0.06	-10.80	
425.00	0.440	58.430	424.99	0.55	1.28	2.03	1669193.72	14333660.21	39°28'17.7506"N	80°53'52.9001"W	2.40	57.707	0.22	0.22	-5.90	
472.00	0.410	67.840	471.99	0.60	1.44	2.34	1669194.03	14333660.37	39°28'17.7522"N	80°53'52.8962"W	2.74	58.372	0.16	-0.06	20.02	
778.00	6.010	156.690	777.43	-15.33	-12.87	9.70	1669201.39	14333646.06	39°28'17.6107"N	80°53'52.8025"W	16.12	143.013	1.97	1.83	29.04	APS EIM <9-7/8">(472')(778-2728')
869.00	9.600	148.680	867.57	-27.50	-23.73	15.53	1669207.22	14333635.21	39°28'17.5033"N	80°53'52.7283"W	28.36	146.806	4.11	3.95	-8.80	
961.00	12.030	143.080	957.93	-44.12	-37.96	25.28	1669216.96	14333620.99	39°28'17.3626"N	80°53'52.6042"W	45.60	146.338	2.87	2.64	-6.03	
1056.00	12.210	134.270	1050.82	-62.52	-52.88	38.42	1669230.10	14333606.07	39°28'17.2149"N	80°53'52.4369"W	65.37	144.003	1.95	0.19	-9.27	
1151.00	13.630	121.230	1143.44	-80.10	-65.70	55.19	1669246.86	14333593.25	39°28'17.0880"N	80°53'52.2232"W	85.81	139.972	3.40	1.45	-13.71	
1246.00	14.640	113.250	1235.57	-96.78	-76.25	75.79	1669267.46	14333582.72	39°28'16.9836"N	80°53'51.9606"W	107.51	135.172	2.31	1.06	-8.40	
1341.00	16.710	112.860	1327.03	-113.98	-86.29	99.41	1669291.06	14333572.67	39°28'16.8840"N	80°53'51.6596"W	131.64	130.960	2.18	2.18	-0.41	
1435.00	19.590	116.410	1416.35	-134.23	-98.56	125.98	1669317.63	14333560.42	39°28'16.7625"N	80°53'51.3210"W	159.95	128.036	3.28	3.06	3.78	
1530.00	21.960	119.840	1505.17	-158.96	-114.48	155.66	1669347.29	14333544.50	39°28'16.6048"N	80°53'50.9428"W	193.22	126.333	2.80	2.49	3.61	
1625.00	23.300	117.480	1592.85	-185.97	-131.99	187.74	1669379.36	14333527.00	39°28'16.4314"N	80°53'50.5340"W	229.49	125.109	1.70	1.41	-2.48	
1720.00	24.350	113.100	1679.76	-212.73	-148.35	222.43	1669414.03	14333510.65	39°28'16.2893"N	80°53'50.0919"W	267.36	123.701	2.16	1.11	-4.61	
1815.00	23.630	105.440	1766.58	-236.65	-161.10	258.80	1669450.39	14333497.90	39°28'16.1429"N	80°53'49.6282"W	304.85	121.902	3.36	-0.78	-8.03	
1909.00	23.650	105.200	1852.69	-257.91	-171.06	295.15	1669486.73	14333487.94	39°28'16.0440"N	80°53'49.1648"W	341.14	120.095	0.10	0.02	-0.23	
2004.00	25.940	110.770	1938.94	-281.93	-183.43	332.98	1669524.54	14333475.58	39°28'15.9214"N	80°53'48.6827"W	380.16	118.849	3.44	2.41	5.88	
2099.00	27.630	115.280	2023.75	-310.62	-200.21	372.33	1669563.88	14333458.81	39°28'15.7651"N	80°53'48.1811"W	422.75	118.267	2.78	1.75	4.71	
2194.00	27.280	116.620	2108.05	-341.57	-219.37	411.72	1669603.25	14333439.65	39°28'15.6663"N	80°53'47.8792"W	466.51	118.049	0.75	-0.37	1.41	
2289.00	26.680	118.010	2192.71	-372.74	-239.14	450.01	1669641.52	14333419.89	39°28'15.3694"N	80°53'47.1912"W	509.60	117.987	0.92	-0.63	1.48	
2384.00	25.570	118.170	2278.00	-403.39	-258.83	486.91	1669678.41	14333400.20	39°28'15.1743"N	80°53'46.7209"W	551.44	117.994	1.17	-1.17	0.17	
2479.00	25.220	119.370	2363.83	-433.56	-278.44	522.63	1669714.11	14333380.60	39°28'14.9802"N	80°53'46.2668"W	592.17	118.047	0.66	-0.37	1.28	
2573.00	24.520	120.110	2449.11	-463.29	-298.05	556.95	1669748.42	14333361.00	39°28'14.7860"N	80°53'45.8284"W	631.69	118.153	0.81	-0.74	0.78	



Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088'
Page 3 of 10



REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Field	Tyler
Facility	Hogue Pad
Slot	Slot #06
Well	Lancaster Unit 3H
API	47-095-02676-0000
Wellbore	Lancaster Unit 3H AWB

WELLPATH DATA (171 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (1"/100ft)	Build Rate (1"/100ft)	Turn Rate (1"/100ft)	Comments
2568.00	21.000	118.520	2536.70	-490.76	-316.07	585.97	1669780.43	14333342.99	39°28'14.6075"N	80°53'45.4203"W	668.42	118.220	3.76	-3.71	-1.67	
2726.00	18.596	117.830	2591.27	-505.17	-325.35	606.28	1669797.73	14333333.71	39°28'14.5156"N	80°53'45.1997"W	698.06	118.219	4.17	-4.16	-1.19	
2801.00	14.790	114.120	2663.10	-520.45	-334.85	625.60	1669817.04	14333324.22	39°28'14.4215"N	80°53'44.9536"W	709.58	118.158	5.26	-5.07	-4.95	APS EM <6-3/4"> (2801'-5618')
2897.00	17.090	114.500	2755.40	-538.54	-345.70	649.62	1669841.06	14333313.37	39°28'14.3139"N	80°53'44.6474"W	735.88	118.020	2.40	2.40	0.40	
2992.00	19.850	118.740	2845.50	-560.10	-359.25	676.47	1669867.90	14333299.82	39°28'14.1797"N	80°53'44.3052"W	765.95	117.971	3.23	2.91	4.46	
3091.00	23.030	115.800	2937.64	-586.20	-375.77	708.65	1669900.06	14333283.32	39°28'14.0161"N	80°53'43.8951"W	802.12	117.935	3.39	3.21	-2.97	
3186.00	24.960	117.670	3024.43	-613.89	-393.17	743.14	1669934.54	14333265.92	39°28'13.8438"N	80°53'43.4556"W	840.74	117.861	2.18	2.03	1.97	
3280.00	24.810	116.790	3109.70	-642.46	-411.26	778.31	1669969.69	14333247.83	39°28'13.6645"N	80°53'43.0074"W	880.29	117.852	0.43	-0.16	-0.94	
3375.00	26.470	113.620	3195.35	-671.10	-428.73	815.51	1670006.87	14333230.37	39°28'13.4914"N	80°53'42.5534"W	921.34	117.732	2.27	1.75	-3.34	
3470.00	26.060	116.160	3280.54	-700.24	-446.42	853.63	1670044.99	14333212.69	39°28'13.3162"N	80°53'42.0875"W	963.32	117.608	1.26	-0.43	2.67	
3565.00	26.830	120.260	3365.61	-731.30	-466.42	890.89	1670082.22	14333192.70	39°28'13.1180"N	80°53'41.5728"W	1005.60	117.634	2.09	0.81	4.32	
3660.00	27.840	119.570	3450.00	-764.18	-488.17	928.70	1670120.02	14333170.95	39°28'12.9026"N	80°53'41.0909"W	1049.19	117.729	1.11	1.06	-0.73	
3755.00	28.350	123.680	3533.81	-798.77	-511.63	966.77	1670158.07	14333147.51	39°28'12.6704"N	80°53'40.6059"W	1093.80	117.869	2.11	0.54	4.33	
3849.00	25.480	115.420	3617.65	-830.69	-532.70	1003.62	1670194.91	14333126.45	39°28'12.4617"N	80°53'40.1362"W	1136.23	117.958	5.01	-3.05	-8.79	
3944.00	23.810	118.170	3704.00	-859.07	-550.52	1038.98	1670230.26	14333108.63	39°28'12.2851"N	80°53'39.6956"W	1175.83	117.918	2.13	-1.73	2.89	
4039.00	24.010	119.520	3790.84	-887.62	-569.10	1072.71	1670263.97	14333090.06	39°28'12.1011"N	80°53'39.2558"W	1214.32	117.947	0.61	0.21	1.42	
4134.00	23.970	119.770	3877.64	-916.63	-586.21	1106.28	1670297.53	14333070.96	39°28'11.9119"N	80°53'38.8281"W	1252.93	117.989	0.11	-0.04	0.26	
4229.00	23.550	120.760	3964.59	-945.63	-607.49	1139.34	1670330.57	14333051.68	39°28'11.7209"N	80°53'38.4068"W	1291.18	118.067	0.61	-0.44	1.04	
4323.00	24.350	117.490	4050.50	-974.03	-626.04	1172.67	1670363.89	14333033.14	39°28'11.5372"N	80°53'37.9821"W	1329.31	118.096	1.65	0.85	-3.48	
4418.00	22.800	122.890	4137.57	-1002.74	-645.08	1206.50	1670396.71	14333014.11	39°28'11.3486"N	80°53'37.5637"W	1367.25	118.152	2.80	-1.63	5.68	
4513.00	25.430	121.470	4224.28	-1032.96	-665.73	1236.36	1670429.56	14332993.47	39°28'11.1442"N	80°53'37.1450"W	1405.96	118.262	2.83	2.77	-1.49	
4608.00	25.930	118.660	4309.90	-1064.06	-686.34	1273.99	1670465.17	14332972.87	39°28'10.9401"N	80°53'36.6911"W	1447.10	118.313	1.39	0.53	-2.96	
4703.00	23.670	117.920	4396.13	-1093.35	-705.23	1309.07	1670500.23	14332953.98	39°28'10.7529"N	80°53'36.2440"W	1486.95	118.313	2.40	-2.38	-0.78	
4797.00	25.160	115.030	4481.73	-1121.04	-722.53	1343.85	1670535.00	14332936.70	39°28'10.5816"N	80°53'35.8008"W	1525.77	118.265	2.03	1.59	-3.07	
4892.00	26.590	120.780	4567.21	-1151.32	-741.95	1380.42	1670571.56	14332917.28	39°28'10.3892"N	80°53'35.3347"W	1567.18	118.257	3.04	1.51	6.05	
4987.00	26.110	123.190	4652.34	-1184.08	-764.28	1416.18	1670607.31	14332894.96	39°28'10.1681"N	80°53'34.8791"W	1609.25	118.355	1.23	-0.51	2.54	
5082.00	24.960	120.740	4738.07	-1215.91	-785.97	1450.90	1670642.02	14332873.28	39°28'9.9533"N	80°53'34.4366"W	1650.11	118.445	1.64	-1.21	-2.58	
5176.00	23.640	120.450	4823.74	-1245.37	-805.66	1484.20	1670675.30	14332853.60	39°28'9.7583"N	80°53'34.0124"W	1688.77	118.494	1.41	-1.40	-0.31	
5271.00	24.010	122.440	4910.64	-1274.97	-825.68	1516.93	1670708.02	14332833.58	39°28'9.5601"N	80°53'33.5953"W	1727.09	118.560	0.93	0.39	2.09	
5366.00	25.280	124.010	4996.99	-1306.29	-847.39	1550.06	1670741.13	14332811.88	39°28'9.3451"N	80°53'33.1732"W	1766.57	118.665	1.50	1.34	1.65	

Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088'
Page 4 of 10

REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Field	Tyler
Facility	Hogue Pad
Slot	Slot #06
Well	Lancaster Unit 3H
API	47-095-02676-0000
Wellbore	Lancaster Unit 3H AWB

WELLPATH DATA (171 stations) † = interpolated, ‡ = extrapolated station															
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dir (ft)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
6461.00	24.780	117.590	5083.08	-1336.97	-867.96	1584.53	1670775.59	14332791.32	39°28'9.1413"N	80°53'32.7340"W	1806.68	118.713	2.91	-0.53	-6.76
5555.00	22.260	112.560	5169.27	-1363.11	-883.92	1616.44	1670809.48	14332775.36	39°28'8.9832"N	80°53'32.3019"W	1844.09	118.642	3.43	-2.68	-3.35
5618.00	21.450	110.570	5227.75	-1378.37	-892.55	1640.24	1670831.28	14332766.74	39°28'8.8977"N	80°53'32.0240"W	1867.36	118.553	1.74	-1.29	-3.16
5655.00	23.230	111.300	5261.97	-1387.40	-897.58	1653.37	1670844.41	14332761.72	39°28'8.8479"N	80°53'31.8566"W	1881.30	118.496	4.87	4.81	1.97
5689.00	23.550	111.460	5293.17	-1396.15	-902.50	1665.94	1670856.97	14332756.80	39°28'8.7891"N	80°53'31.6964"W	1894.69	118.446	0.96	0.94	-0.47
5784.00	25.840	117.780	5379.49	-1423.57	-919.10	1701.93	1670892.95	14332740.21	39°28'8.6346"N	80°53'31.2377"W	1934.25	118.370	3.68	2.41	6.65
5879.00	25.790	118.300	5465.02	-1453.85	-938.54	1738.44	1670929.44	14332720.77	39°28'8.4420"N	80°53'30.7725"W	1975.61	118.363	0.25	-0.06	0.55
5974.00	20.480	108.660	5552.38	-1479.23	-953.67	1772.41	1670963.40	14332705.65	39°28'8.2921"N	80°53'30.3396"W	2012.69	118.283	6.84	-5.58	-10.15
6069.00	16.200	94.000	5642.58	-1494.58	-959.91	1801.41	1670992.38	14332699.40	39°28'8.2300"N	80°53'29.9700"W	2041.20	118.052	6.59	-4.51	-15.43
6163.00	14.920	67.720	5733.25	-1499.03	-956.24	1825.72	1671016.68	14332703.08	39°28'8.2661"N	80°53'29.6600"W	2060.98	117.644	7.56	-1.36	-27.96
6258.00	16.950	41.250	5824.71	-1491.45	-941.17	1846.19	1671037.15	14332718.14	39°28'8.4148"N	80°53'29.3986"W	2072.25	117.012	7.87	2.14	-27.86
6353.00	18.910	24.020	5915.16	-1473.32	-916.67	1861.60	1671052.55	14332742.63	39°28'8.6566"N	80°53'29.2018"W	2075.05	116.216	5.93	2.06	-18.14
6448.00	25.000	5.990	6003.33	-1443.82	-882.58	1869.98	1671060.92	14332776.71	39°28'8.9935"N	80°53'29.0945"W	2067.79	115.266	9.50	6.41	-18.99
5543.00	31.890	354.170	6086.87	-1401.10	-837.56	1869.52	1671060.46	14332821.71	39°28'9.4385"N	80°53'29.0996"W	2048.56	114.133	9.33	7.25	-12.43
6637.00	38.630	351.890	6163.59	-1348.05	-783.75	1862.84	1671053.79	14332875.50	39°28'9.9704"N	80°53'29.1839"W	2021.00	112.818	7.31	7.17	-2.44
6732.00	45.700	351.890	6233.96	-1285.48	-720.65	1853.85	1671044.80	14332938.57	39°28'10.5941"N	80°53'29.2976"W	1988.99	111.243	7.44	7.44	0.01
6759.00	48.050	351.109	6252.42	-1266.10	-701.17	1850.93	1671041.88	14332958.05	39°28'10.7867"N	80°53'29.3345"W	1979.29	110.748	8.96	8.70	-2.89
6827.00	53.990	349.370	6295.17	-1213.95	-649.10	1841.94	1671032.90	14333010.09	39°28'11.3014"N	80°53'29.4483"W	1952.97	109.413	8.96	8.71	-2.56
6874.00	57.640	348.000	6321.58	-1175.43	-610.99	1834.31	1671025.26	14333048.19	39°28'11.6782"N	80°53'29.5451"W	1933.39	108.422	8.13	7.77	-2.91
6916.00	62.268	347.371	6342.60	-1139.33	-575.48	1826.55	1671017.51	14333083.68	39°28'12.0292"N	80°53'29.6435"W	1915.06	107.488	11.10	11.02	-1.50
6921.00	62.820	347.300	6344.91	-1134.92	-571.15	1825.58	1671016.54	14333088.01	39°28'12.0720"N	80°53'29.6558"W	1912.84	107.373	11.10	11.02	-1.42
6966.00	66.391	345.881	6364.20	-1094.47	-531.62	1816.14	1671007.11	14333127.53	39°28'12.4629"N	80°53'29.7755"W	1892.35	106.316	8.43	7.94	-3.15
6968.00	66.550	345.820	6365.00	-1092.64	-529.84	1815.70	1671006.66	14333129.31	39°28'12.4804"N	80°53'29.7812"W	1891.42	106.268	8.43	7.95	-3.06
7016.00	70.930	344.570	6382.40	-1048.04	-486.60	1804.26	1670995.23	14333172.52	39°28'13.4345"N	80°53'29.9263"W	1868.73	105.093	9.44	9.13	-2.60
7074.00	74.232	344.002	6399.76	-992.80	-433.34	1789.27	1670980.25	14333225.77	39°28'14.4345"N	80°53'30.1166"W	1841.00	103.614	5.77	5.69	-0.98
7111.00	76.340	343.650	6409.16	-957.06	-388.97	1779.30	1670970.28	14333260.12	39°28'13.7743"N	80°53'30.2432"W	1823.49	102.638	5.77	5.70	-0.95
7206.00	84.460	343.380	6424.99	-863.56	-309.23	1752.74	1670943.74	14333349.83	39°28'14.6616"N	80°53'30.5805"W	1779.81	100.005	8.55	8.55	-0.28
7300.00	90.570	344.300	6429.06	-769.81	-219.07	1726.62	1670917.62	14333439.95	39°28'15.5529"N	80°53'30.9123"W	1740.46	97.231	6.57	6.50	0.98
7395.00	90.570	342.080	6428.12	-674.89	-128.14	1699.15	1670890.16	14333530.84	39°28'16.4520"N	80°53'31.2612"W	1703.97	94.313	2.34	0.00	-2.34
7490.00	90.480	337.720	6427.25	-579.94	-38.95	1666.51	1670857.54	14333620.00	39°28'17.3338"N	80°53'31.6760"W	1666.97	91.339	4.59	-0.05	-4.59



Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088'
Page 5 of 10



REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Field	Tyler
Facility	Hogue Pad
Slot	Slot #06
Well	Lancaster Unit 3H
API	47-095-02676-0000
Wellbore	Lancaster Unit 3H AWB

WELLPATH DATA (171 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (°/100ft)	Comments
7585.00	90.350	340.430	6426.56	-485.00	49.77	1632.59	1670823.03	14333708.68	39°28'18.2111"N	80°53'32.1072"W	1633.34	88.254	2.86	-0.14	-2.85	
7680.00	90.480	341.550	6425.87	-390.01	139.59	1601.64	1670792.70	14333798.46	39°28'19.0992"N	80°53'32.5004"W	1607.71	85.019	1.19	0.14	-1.18	
7774.00	90.230	339.050	6425.29	-296.02	228.08	1509.96	1670761.02	14333896.92	39°28'19.9741"N	80°53'32.9031"W	1586.44	81.734	2.67	-0.27	-2.66	
7869.00	91.430	341.870	6423.91	-201.05	317.59	1538.19	1670729.27	14333976.39	39°28'20.8592"N	80°53'33.3068"W	1570.64	78.334	3.23	1.26	2.97	
7964.00	90.350	341.010	6422.44	-106.06	407.63	1507.96	1670699.05	14334066.40	39°28'21.7495"N	80°53'33.6910"W	1562.08	74.873	1.45	-1.14	-0.91	
8059.00	90.570	341.200	6421.67	-11.07	497.51	1477.19	1670668.30	14334156.24	39°28'22.6381"N	80°53'34.0819"W	1568.72	71.387	0.31	0.23	0.20	
8153.00	90.800	342.560	6420.71	82.91	586.84	1447.96	1670639.08	14334245.54	39°28'23.5214"N	80°53'34.4533"W	1562.36	67.938	1.45	0.03	1.45	
8248.00	90.540	343.630	6419.77	177.84	677.73	1420.34	1670611.46	14334336.39	39°28'24.4200"N	80°53'34.8042"W	1573.75	64.491	1.13	-0.06	1.13	
8343.00	90.510	343.750	6418.90	272.73	768.90	1393.66	1670584.80	14334427.53	39°28'25.3214"N	80°53'35.1430"W	1591.70	61.114	0.13	-0.03	0.13	
8532.00	90.320	341.480	6417.83	461.64	949.30	1337.33	1670557.69	14334517.49	39°28'26.2112"N	80°53'35.4879"W	1614.05	57.850	1.15	-0.30	-1.11	
8627.00	90.260	342.020	6417.35	556.63	1039.52	1307.58	1670528.49	14334607.85	39°28'27.1050"N	80°53'35.8586"W	1640.01	54.631	1.30	0.09	-1.29	
8723.00	90.350	340.840	6416.85	651.62	1129.57	1277.33	1670488.51	14334788.05	39°28'27.9970"N	80°53'36.2366"W	1670.44	51.516	0.57	-0.06	-1.24	
8817.00	90.350	340.860	6416.27	746.62	1219.31	1246.17	1670437.36	14334877.75	39°28'29.7747"N	80°53'37.0171"W	1743.46	48.513	1.25	0.00	0.02	
8912.00	90.320	340.920	6415.71	841.62	1309.07	1215.07	1670406.27	14334967.48	39°28'30.6622"N	80°53'37.4123"W	1786.07	42.867	0.07	-0.03	0.06	
9007.00	90.260	341.440	6415.23	936.61	1398.99	1184.42	1670375.64	14335057.36	39°28'31.5513"N	80°53'37.8018"W	1833.04	40.252	0.55	-0.06	0.55	
9102.00	90.260	341.920	6414.80	1031.61	1489.18	1154.56	1670345.79	14335147.51	39°28'32.4430"N	80°53'38.1812"W	1884.32	37.786	0.51	0.00	0.51	
9196.00	90.320	340.790	6414.32	1125.60	1578.24	1124.51	1670315.76	14335236.03	39°28'33.3236"N	80°53'38.5631"W	1937.88	35.470	1.20	0.06	-1.21	
9291.00	90.260	340.140	6413.84	1220.60	1667.77	1092.74	1670284.00	14335326.03	39°28'34.2088"N	80°53'38.9669"W	1993.88	33.233	0.69	-0.06	-0.68	
9385.00	90.540	340.600	6413.19	1314.59	1756.30	1061.17	1670252.43	14335414.53	39°28'35.0842"N	80°53'39.3682"W	2051.99	31.141	0.57	0.30	0.49	
9480.00	90.540	340.690	6412.29	1409.58	1846.93	1029.68	1670220.96	14335504.12	39°28'35.9704"N	80°53'39.7684"W	2113.70	29.153	0.09	0.00	0.09	
9575.00	90.570	340.470	6411.37	1504.57	1935.52	988.10	1670189.39	14335593.68	39°28'36.8562"N	80°53'40.1698"W	2177.72	27.279	0.23	0.03	-0.23	
9670.00	90.510	340.100	6410.48	1599.56	2024.95	966.06	1670157.36	14335683.07	39°28'37.7404"N	80°53'40.5772"W	2243.59	25.505	0.39	-0.06	-0.39	
9765.00	90.480	340.580	6409.66	1694.55	2114.41	934.09	1670125.41	14335772.49	39°28'38.6249"N	80°53'40.9834"W	2311.55	23.835	0.51	-0.03	0.51	
9859.00	90.630	340.740	6408.75	1788.55	2203.10	902.96	1670094.29	14335861.15	39°28'39.5019"N	80°53'41.3791"W	2380.96	22.287	0.23	0.16	0.17	
9954.00	90.800	341.170	6407.73	1883.54	2292.89	871.96	1670063.31	14335950.91	39°28'40.3897"N	80°53'41.7730"W	2453.10	20.821	0.45	-0.03	0.45	
10049.00	90.750	341.930	6406.61	1978.53	2383.00	841.90	1670033.26	14336040.98	39°28'41.2806"N	80°53'42.1551"W	2527.35	19.458	0.29	0.16	0.81	
10143.00	90.780	341.680	6405.35	2072.51	2472.29	812.54	1670003.90	14336130.23	39°28'42.1634"N	80°53'42.5282"W	2602.39	18.193	0.29	0.03	-0.29	
10237.00	90.540	340.420	6404.27	2166.50	2561.18	782.00	1669973.38	14336219.09	39°28'43.0423"N	80°53'42.9164"W	2677.91	16.979	1.34	-0.26	-1.34	
10332.00	90.540	340.660	6403.37	2261.50	2650.75	750.35	1669941.74	14336308.62	39°28'43.9279"N	80°53'43.3186"W	2754.91	15.805	0.26	0.00	0.26	



Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088'

Page 6 of 10



REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Field	Tyler
Facility	Hogue Pad
Slot	Slot #06
Well	Lancaster Unit 3H
API	47-095-02676-0000
Wellbore	Lancaster Unit 3H AWB

WELLPATH DATA (171 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
10427.00	90.000	342.070	6402.43	2356.49	2740.77	720.00	1669911.40	14336398.60	39°28'44.8179"N	80°53'43.7044"W	2833.76	14.719	1.49	0.06	0.06	1.48
10521.00	90.540	342.410	6401.49	2450.46	2830.28	691.32	1669882.74	14336488.08	39°28'45.7030"N	80°53'44.0667"W	2913.49	13.726	0.37	-0.08	0.36	0.36
10616.00	90.230	342.080	6400.85	2545.43	2920.75	662.36	1669853.78	14336578.51	39°28'46.5975"N	80°53'44.4368"W	2994.91	12.777	0.48	-0.33	-0.35	-0.35
10711.00	89.950	341.370	6400.71	2640.43	3010.96	632.57	1669824.01	14336668.69	39°28'47.4894"N	80°53'44.8154"W	3076.69	11.865	0.80	-0.28	-0.28	-0.28
10806.00	90.050	340.990	6400.74	2735.42	3100.88	601.92	1669793.37	14336758.57	39°28'48.3784"N	80°53'45.2049"W	3158.76	10.985	0.41	0.41	0.41	0.41
10900.00	89.950	340.220	6400.71	2829.42	3189.55	570.70	1669762.17	14336847.20	39°28'49.2651"N	80°53'45.6017"W	3240.20	10.145	0.83	-0.11	-0.82	-0.82
10995.00	89.980	340.250	6400.76	2924.41	3278.95	538.58	1669730.06	14336936.57	39°28'50.1391"N	80°53'46.0101"W	3322.89	9.328	0.04	0.03	0.03	0.03
11090.00	90.170	340.170	6400.64	3019.40	3368.34	506.41	1669697.91	14337025.92	39°28'51.0229"N	80°53'46.4139"W	3406.20	8.550	0.22	0.20	0.08	0.08
11184.00	90.050	341.230	6400.46	3113.40	3457.06	475.35	1669666.85	14337114.60	39°28'51.9001"N	80°53'46.8139"W	3489.58	7.829	1.13	-0.13	1.13	1.13
11279.00	90.110	341.400	6400.33	3208.40	3547.05	444.91	1669636.43	14337204.56	39°28'52.7899"N	80°53'47.2007"W	3574.84	7.149	0.19	0.06	0.18	0.18
11374.00	90.050	341.230	6400.19	3303.40	3637.04	414.48	1669606.01	14337294.51	39°28'53.6796"N	80°53'47.5875"W	3660.58	6.501	0.19	-0.06	-0.18	-0.18
11469.00	90.140	340.660	6400.04	3398.40	3726.83	383.46	1669575.00	14337384.27	39°28'54.5675"N	80°53'47.9818"W	3746.51	5.875	0.61	0.09	-0.60	-0.60
11563.00	90.050	341.660	6399.88	3492.40	3815.80	353.11	1669544.66	14337473.20	39°28'55.4471"N	80°53'48.3676"W	3832.10	5.287	1.07	-0.10	1.06	1.06
11658.00	89.930	341.120	6399.93	3587.39	3905.83	322.79	1669514.36	14337563.20	39°28'56.3372"N	80°53'48.7529"W	3919.15	4.724	0.59	-0.17	-0.57	-0.57
11753.00	89.980	340.970	6400.04	3682.39	3995.88	291.93	1669483.51	14337653.01	39°28'57.2256"N	80°53'49.1452"W	4006.33	4.179	0.18	0.09	-0.16	-0.16
11848.00	89.860	340.340	6400.17	3777.39	4085.31	260.46	1669452.05	14337742.61	39°28'58.1118"N	80°53'49.5452"W	4093.61	3.648	0.68	-0.13	-0.68	-0.68
11942.00	90.050	340.400	6400.24	3871.39	4173.85	228.88	1669420.49	14337831.11	39°28'58.9872"N	80°53'49.9467"W	4180.12	3.139	0.21	0.20	0.06	0.06
12037.00	90.080	341.030	6400.14	3966.38	4263.52	197.51	1669389.12	14337920.74	39°28'59.8738"N	80°53'50.3455"W	4268.09	2.652	0.66	0.03	0.66	0.66
12131.00	90.140	341.180	6399.96	4060.38	4352.45	167.07	1669358.70	14338009.64	39°29'00.7631"N	80°53'50.7324"W	4355.66	2.198	0.17	0.08	0.16	0.16
12226.00	89.890	340.240	6399.93	4155.38	4442.12	135.69	1669327.33	14338099.27	39°29'01.6397"N	80°53'51.1314"W	4444.19	1.750	1.02	-0.26	-0.99	-0.99
12321.00	89.740	340.510	6400.24	4250.38	4531.80	103.78	1669295.43	14338188.72	39°29'02.5244"N	80°53'51.5370"W	4532.79	1.312	0.33	-0.16	0.28	0.28
12415.00	90.910	341.310	6399.70	4344.37	4620.43	73.04	1669264.70	14338277.51	39°29'03.4027"N	80°53'51.9278"W	4621.00	0.906	1.51	1.24	0.85	0.85
12510.00	90.320	342.460	6398.68	4439.35	4710.71	43.50	1669235.18	14338367.75	39°29'04.2953"N	80°53'52.3032"W	4710.91	0.529	1.36	-0.62	1.21	1.21
12605.00	90.380	342.640	6398.10	4534.32	4801.34	15.01	1669206.70	14338458.34	39°29'05.1913"N	80°53'52.6652"W	4801.36	0.179	0.20	0.06	0.19	0.19
12699.00	90.320	340.650	6397.53	4628.30	4890.55	-14.58	1669177.12	14338547.52	39°29'06.0734"N	80°53'53.0414"W	4890.57	359.829	2.12	-0.06	-2.12	-2.12
12794.00	90.290	339.780	6397.02	4723.29	4979.84	-46.74	1669144.97	14338636.87	39°29'06.9572"N	80°53'53.4503"W	4980.16	359.462	0.92	-0.03	-0.92	-0.92
12889.00	90.420	339.670	6396.44	4818.27	5069.05	-79.66	1669112.07	14338725.95	39°29'07.8363"N	80°53'53.8688"W	5069.68	359.100	0.18	0.14	-0.12	-0.12
12983.00	90.480	339.080	6395.70	4912.23	5157.02	-112.77	1669078.97	14338813.89	39°29'08.7081"N	80°53'54.2899"W	5158.26	358.747	0.63	0.06	-0.63	-0.63
13078.00	90.230	339.940	6395.11	5007.19	5246.01	-146.02	1669045.73	14338902.84	39°29'09.5880"N	80°53'54.7127"W	5248.04	358.406	0.94	-0.26	0.91	0.91
13173.00	90.320	340.400	6394.65	5102.18	5335.38	-178.25	1669013.52	14338992.17	39°29'10.4716"N	80°53'55.1224"W	5338.35	358.087	0.49	0.09	0.48	0.48



Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088*
Page 7 of 10



REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Field	Tyler
Facility	Hogue Pad
Slot	Slot #06
Well	Lancaster Unit 3H
API	47-095-02676-0000
Wellbore	Lancaster Unit 3H AWB

WELLPATH DATA (171 stations) † = interpolated, ‡ = extrapolated station																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (1/100ft)	Build Rate (1/100ft)	Turn Rate (1/100ft)	Comments
13267.00	90.450	339.480	6394.02	5196.16	5423.67	-210.48	1668981.29	14339080.43	39°29'11.3446"N	80°53'55.5324"W	5427.75	357.777	0.99	0.14	-0.98	
13361.00	90.420	340.390	6393.31	5290.14	5511.96	-242.74	1668949.05	14339168.68	39°29'12.2176"N	80°53'55.9424"W	5517.30	357.478	0.97	-0.03	0.97	
13456.00	90.480	339.910	6392.56	5385.13	5601.31	-275.00	1668916.81	14339258.00	39°29'13.1010"N	80°53'56.3526"W	5608.06	357.189	0.51	0.06	-0.51	
13550.00	90.510	339.470	6391.75	5479.10	5689.47	-307.62	1668884.19	14339346.12	39°29'13.9726"N	80°53'56.7674"W	5697.78	356.905	0.47	0.03	-0.47	
13645.00	90.480	339.770	6390.93	5574.07	5778.52	-340.70	1668851.13	14339435.13	39°29'14.8531"N	80°53'57.1881"W	5789.55	356.626	0.32	-0.03	0.32	
13740.00	90.290	339.960	6390.29	5669.05	5867.71	-373.41	1668818.44	14339524.29	39°29'15.7350"N	80°53'57.6039"W	5879.58	356.359	0.28	-0.20	0.20	
13834.00	90.720	341.650	6389.46	5763.04	5956.48	-404.31	1668787.55	14339613.02	39°29'16.6127"N	80°53'57.9968"W	5970.18	356.117	1.86	0.46	1.80	
13929.00	90.570	341.400	6388.39	5858.03	6046.57	-434.41	1668757.46	14339703.08	39°29'17.5035"N	80°53'58.3795"W	6062.16	355.891	0.31	-0.16	-2.66	
14023.00	90.450	338.900	6387.56	5952.01	6134.98	-466.33	1668725.55	14339791.45	39°29'18.3775"N	80°53'58.7653"W	6152.68	355.653	2.66	-0.13	-2.66	
14118.00	90.480	340.240	6386.78	6046.98	6224.00	-499.49	1668692.41	14339880.43	39°29'19.2577"N	80°53'59.2070"W	6244.01	355.412	1.41	0.03	1.41	
14213.00	90.320	339.590	6386.12	6141.96	6313.22	-532.11	1668659.80	14339969.62	39°29'20.1399"N	80°53'59.6218"W	6335.60	355.182	0.70	-0.17	-0.68	
14307.00	90.290	339.540	6385.62	6235.93	6401.30	-564.93	1668626.99	14340057.67	39°29'21.0108"N	80°54'0.0391"W	6426.18	354.957	0.06	-0.03	-0.05	
14402.00	90.290	341.020	6385.14	6330.92	6490.73	-596.98	1668594.95	14340147.05	39°29'21.8950"N	80°54'0.4467"W	6518.12	354.745	1.56	0.00	1.56	
14496.00	90.110	340.260	6384.81	6424.92	6579.41	-628.14	1668563.80	14340235.70	39°29'22.7718"N	80°54'0.8429"W	6609.33	354.546	0.83	-0.19	-0.81	
14591.00	90.050	341.150	6384.68	6519.91	6669.07	-659.53	1668532.42	14340325.33	39°29'23.6583"N	80°54'1.2420"W	6701.60	354.352	0.94	-0.06	0.94	
14686.00	90.080	340.990	6384.57	6614.91	6758.93	-690.35	1668501.62	14340415.16	39°29'24.5468"N	80°54'1.6339"W	6794.10	354.168	0.17	0.03	-0.17	
14781.00	90.050	340.600	6384.46	6709.91	6848.65	-721.60	1668470.38	14340504.83	39°29'25.4338"N	80°54'2.0312"W	6886.56	353.985	0.41	-0.03	-0.41	
14875.00	90.020	341.500	6384.41	6803.91	6937.55	-752.13	1668439.87	14340593.70	39°29'26.3128"N	80°54'2.4193"W	6978.20	353.812	0.96	-0.03	0.96	
14970.00	90.110	340.600	6384.30	6898.91	7027.40	-782.98	1668409.03	14340683.51	39°29'27.2012"N	80°54'2.8115"W	7070.89	353.642	0.95	0.05	-0.95	
15065.00	90.110	340.930	6384.12	6993.91	7117.10	-814.28	1668377.74	14340773.18	39°29'28.0880"N	80°54'3.2095"W	7163.53	353.473	0.35	0.00	0.35	
15088.00H	90.110	340.930	6384.07	7016.91	7138.54	-821.79	1668370.23	14340794.90	39°29'28.3029"N	80°54'3.3060"W	7165.98	353.433	0.00	0.00	0.00	Projected MD at TD: 15088*



Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088'
Page 8 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Well	Lancaster Unit 3H
Field	Tyler	API	47-095-02676-0000
Facility	Hogue Pad	Wellbore	Lancaster Unit 3H AWB
Slot	Slot #06		

HOLE & CASING SECTIONS - Ref Wellbore: Lancaster Unit 3H AWB Ref Wellpath: Lancaster Unit 3H AWP Proj: 15088'

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]
16in Conductor	25.50	105.50	80.00	25.50	105.50	0.00	0.00	0.17	0.20
13.5in Open Hole	105.50	580.90	475.40	105.50	580.86	0.17	0.20	-0.19	3.73
10.75in Casing Surface	25.50	580.90	555.40	25.50	580.86	0.00	0.00	-0.19	3.73
9.875in Open Hole	580.90	2799.00	2218.10	580.86	2661.16	-0.19	3.73	-334.64	625.13
7.625in Casing Intermediate	25.50	2776.00	2750.50	25.50	2639.00	0.00	0.00	-332.05	619.57
6.75in Open Hole	2799.00	15088.00	12289.00	2661.16	6384.07	-334.64	625.13	7138.84	-821.79
5in Casing Production	25.50	15088.00	15082.50	25.50	6384.07	0.00	0.00	7138.84	-821.79

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Lancaster Unit 3H - POE - Rev-2	6402.00	-436.47	1802.46	1670993.43	14333222.64	39°28'13.4034"N	80°53'29.9486"W	point
Lancaster Unit 3H - BHL - Rev-2	6431.00	7114.42	-801.02	1668391.00	14340770.50	39°28'15.2892"N	80°54'3.0404"W	point
Lancaster Unit 3H - LP - Rev-2	6431.00	-245.75	1736.70	1670927.70	14333413.28	39°28'15.2892"N	80°53'30.7841"W	point
Lancaster Unit 3H - 50' LJR Hardline	6500.00	3338.99	500.72	1669692.22	14336996.57	39°28'50.7328"N	80°53'46.4920"W	rectangle

2D Rectangle 7989.89 x 100.



Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088'
Page 9 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Lancaster Unit 3H
Field	Tyler	API	47-095-02676-0000
Facility	Hogue Pad	Wellbore	Lancaster Unit 3H AWB
Slot	Slot #06		

WELLPATH COMPOSITION - Ref Wellbore: Lancaster Unit 3H AWB Ref Wellpath: Lancaster Unit 3H AWP Proj: 15088'					
Start MD (ft)	End MD (ft)	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
25.50	472.00	Gyrodata 2015 - GC+WIR+DPIPE	01 Gyrodata MS Gyro <13-1/2>(125-472)	Lancaster Unit 3H AWB	2/26/2020
472.00	2726.00	BH Navitrak (2019) (Axial)	02 APS EM <9-7/8>(472)(778-2726)	Lancaster Unit 3H AWB	2/26/2020
2726.00	5618.00	BH Navitrak (2019) (Axial)	03 APS EM <6-3/4>(2726)(2801-5618)	Lancaster Unit 3H AWB	2/26/2020
5618.00	15088.00	BH OnTrak (2019) (Short spacing)	04 AutoTrak X-Gen <6-3/4>(5618)(6665-150665)	Lancaster Unit 3H AWB	2/26/2020



Actual Wellpath Report

Lancaster Unit 3H AWP Proj: 15088'
Page 10 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Lancaster Unit 3H
Field	Tyler	API	47-095-02676-0000
Facility	Hogue Pad	Wellbore	Lancaster Unit 3H AWB
Slot	Slot #06		

COMMENTS
<p>Wellpath general comments</p> <p>API: 47-095-02676-0000</p> <p>BHI Job #: 110308389B</p> <p>Rig: H&P 317</p> <p>Duration: 02/26/2020-05/06/2020</p> <p>Gyrodatta MS Gyro <13-1/2">(125'-472')</p> <p>APS EM <9-7/8">(472')(778'-2726')</p> <p>APS EM <6-3/4">(2726')(2801'-5618')</p> <p>AutoTrak X-Gen <6-3/4">(5618')(5655'-15065')</p> <p>Middlesex: 6759' MD</p> <p>Burkett: 6916' MD</p> <p>Tully: 6966' MD</p> <p>Marcellus POE: 7074' MD</p> <p>Projected MD at TD: 15088'</p>