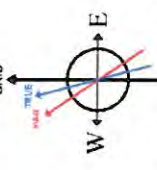
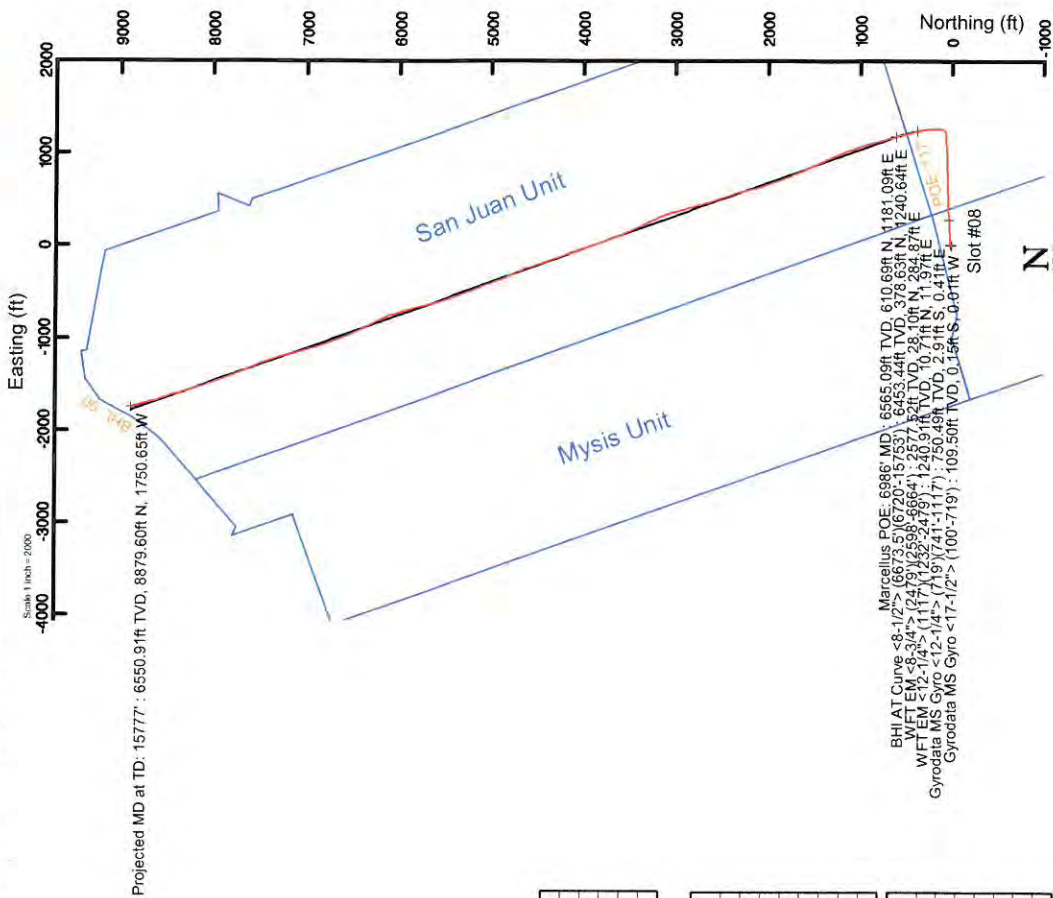


04/05/2019



ANTERO RESOURCES CORPORATION

Location: Tyler County, WV
Field: Tyler
Facility: Vera Pad
Slot: Slot #08
Well: San Juan Unit 2H
Wellbore: San Juan Unit 2H PWB



User specified Dip: 66.69° Field: 52000 nT
 Magnetic North is 7.62 degrees West of True North (at 30/Aug/2017)
 Grid North is 0.06 degrees East of True North
 To correct azimuth from True to Grid subtract 0.06 degrees
 To correct azimuth from Magnetic to Grid subtract 7.68 degrees

API: 47-095-02381-0000
 BHI Job #: 8740559
 Rig: Frontier 22
 Duration: 09/01/2017-09/04/2017

Gyrodatta MS Gyro <17-1/2"> : (1007-719) : 0.20° Inc, 109.50ft MD, 109.50ft TVD, -0.14ft VS
 Gyrodatta MS Gyro <12-1/4"> : (7197)(-1117) : 0.18° Inc, 750.50ft MD, 750.49ft TVD, -2.88ft VS
 WFT EM <12-1/4"> : (1117)(1232-2479) : 5.59° Inc, 1241.50ft MD, 1240.91ft TVD, 6.04ft VS
 WFT EM <8-3/4"> : (2479)(2598-6664) : 15.13° Inc, 2607.50ft MD, 2577.52ft TVD, -69.72ft VS

Prior reference wellpath is San Juan Unit 2H PWP Rev-A-0
 True vertical depths are referenced to Frontier 22 (RKB)
 Measured depths are referenced to Frontier 22 (RKB)
 Frontier 22 (RKB) to Mean Sea Level: 1169.0 feet
 Mean Sea Level to Mud line (At Slot Slot #08): -1145 feet
 Coordinates are in feet referenced to Slot
 Database: WA, MPL, EasternUS, Defn

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Vera Pad	1667510.600	14316789.487	39°25'31.060"N	80°54'14.600"W
Slot #08	-10.11	3.93	39°25'30.960"N	80°54'14.550"W

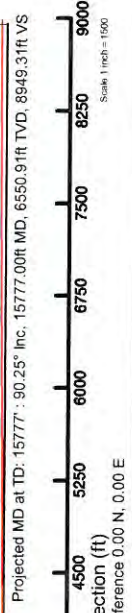
Comment: San Juan Unit 2H
 Frontier 22 (RKB) to Mud line (At Slot Slot #08): 24.5ft
 Mean Sea Level to Mud line (At Slot Slot #08): -1145ft
 Frontier 22 (RKB) to Mean Sea Level: 1169.0ft

Location Information									
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Local E (ft)	Local N (ft)	DLS (°100ft)	VS (ft)	
Vera Pad	1667510.600	14316789.487	39°25'31.060"N	80°54'14.600"W	342.97	1247.81	8.34	-98.42	
Slot #08	-10.11	3.93	39°25'30.960"N	80°54'14.550"W				-50.89	

Well Profile Data									
Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°100ft)	VS (ft)	
The On	6673.50	49.650	349.180	6424.49	342.97	1247.81	8.34	-98.42	
Proj. To Bottom	6734.50	54.260	347.990	6462.07	390.04	1238.29	7.71	-50.89	
End of 3D Arc	6851.70	63.125	347.612	6522.92	487.81	1217.14	7.57	48.28	
POE	6968.87	72.673	340.269	6567.00	591.86	1186.94	10.00	156.42	
Landing Pt.	7142.14	90.000	340.268	6593.00	752.48	1129.33	10.00	327.06	
BHL	15772.39	90.000	340.268	6593.00	875.95	-1784.49	0.00	8957.30	

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #08	San Juan Unit 2H	San Juan Unit 2H-AWB	San Juan Unit 2H-AWB Proj. 15777
Slot #08	San Juan Unit 2H	San Juan Unit 2H PWB	San Juan Unit 2H PWP Rev-A-0

BHI AT Curve <8-1/2"> : (6673.5)(6720-15753) : 53.32° Inc, 6720.00ft MD, 6453.44ft TVD, -62.42ft VS
 Marcellus POE: 6986 MD : 6565.09ft TVD, 176.11ft VS





Actual Wellpath Report

San Juan Unit 2H AWP Proj: 15777
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REFERENCE WELLPATH IDENTIFICATION	
Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Vera Pad
Slot	Slot #08
Well	San Juan Unit 2H
Wellbore	San Juan Unit 2H 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® 5.1
User	Delaset
Report Generated	31/Oct/2017 at 11:42
Database/Source file	WA_MPL_EasternUS_Defn/San_Juan_Unit_2H_AWP_Proj_15777_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-10.11	3.93	1667514.53	14316789.38	39°25'30.960"N	80°54'14.550"W
Facility Reference Pt			1667510.60	14316799.49	39°25'31.060"N	80°54'14.600"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM	
Calculation method	Minimum curvature
Horizontal Reference Pt	Slot
Vertical Reference Pt	Frontier 22 (RKB)
MD Reference Pt	Frontier 22 (RKB)
Field Vertical Reference	Mean Sea Level
	Frontier 22 (RKB) to Facility Vertical Datum
	Frontier 22 (RKB) to Mean Sea Level
	Frontier 22 (RKB) to Mud Line at Slot (Slot #08)
	Section Origin
	Section Azimuth
	24.50ft
	1169.50ft
	24.50ft
	N 0.00, E 0.00 ft
	340.27°



Actual Wellpath Report

San Juan Unit 2H AWP Proj: 15777

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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #08
Operator	ANTERO RESOURCES CORPORATION	Well	San Juan Unit 2H
Area	Tyler County, WV	Wellbore	San Juan Unit 2H AWB
Field	Tyler		
Facility	Vera Pad		

WELLPATH DATA (199 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 ft/100ft	Build Rate ft/100ft	Turn Rate ft/100ft	Comments
0.00	0.00	182.550	0.00	0.00	0.00	0.00	1667514.53	14316789.38	39°25'30.960"N	80°54'14.550"W	0.00	0.000	0.00	0.00	0.00	
24.50	0.000	182.550	24.50	0.00	0.00	0.00	1667514.53	14316789.38	39°25'30.960"N	80°54'14.550"W	0.00	0.000	0.00	0.00	0.00	
109.50	0.200	182.550	109.50	-0.14	-0.15	-0.01	1667514.53	14316789.23	39°25'30.959"N	80°54'14.550"W	0.15	182.550	0.24	-208.76	Gyrodatta MS Gyro <17-1/2"> (100'-719')	
209.50	0.070	193.860	209.50	-0.35	-0.38	-0.03	1667514.50	14316789.00	39°25'30.956"N	80°54'14.550"W	0.38	184.343	0.13	-0.13	-11.31	
309.50	0.200	181.820	309.50	-0.56	-0.62	-0.06	1667514.48	14316788.76	39°25'30.954"N	80°54'14.551"W	0.62	184.567	0.13	0.13	-12.04	
409.50	0.220	177.020	409.50	-0.91	-0.98	-0.04	1667514.49	14316788.40	39°25'30.950"N	80°54'14.551"W	0.98	182.609	0.03	0.02	-4.80	
509.50	0.290	171.960	509.50	-1.34	-1.42	0.00	1667514.53	14316787.95	39°25'30.946"N	80°54'14.550"W	1.42	179.974	0.07	0.07	-5.06	
609.50	0.320	171.550	609.50	-1.86	-1.95	0.08	1667514.61	14316787.43	39°25'30.941"N	80°54'14.549"W	1.95	177.738	0.03	0.03	-0.41	
709.50	0.490	154.870	709.49	-2.56	-2.61	0.30	1667514.83	14316786.76	39°25'30.934"N	80°54'14.546"W	2.63	173.460	0.21	0.17	-16.68	
728.50	0.560	160.120	728.49	-2.74	-2.78	0.37	1667514.90	14316786.60	39°25'30.933"N	80°54'14.545"W	2.80	172.492	0.45	0.37	27.63	
750.50	0.180	158.690	750.49	-2.88	-2.91	0.41	1667514.95	14316786.47	39°25'30.931"N	80°54'14.545"W	2.94	171.881	1.73	-1.73	-6.50 Gyrodatta MS Gyro <12-1/4"> (719')(741'-1117')	
840.50	0.580	4.360	840.49	-2.60	-2.59	0.50	1667515.03	14316786.79	39°25'30.934"N	80°54'14.544"W	2.63	169.037	0.83	0.44	-17.48	
870.50	1.040	359.700	870.49	-2.21	-2.16	0.51	1667515.04	14316787.22	39°25'30.939"N	80°54'14.544"W	2.22	166.703	1.55	1.53	-15.53	
900.50	1.780	357.190	900.48	-1.60	-1.53	0.49	1667515.02	14316787.85	39°25'30.945"N	80°54'14.544"W	1.60	162.145	1.18	1.17	-8.37	
937.50	1.780	358.790	937.47	-0.63	-0.50	0.46	1667514.99	14316788.87	39°25'30.955"N	80°54'14.544"W	0.68	137.752	1.06	1.05	4.32	
969.50	2.290	358.510	969.45	0.45	0.63	0.43	1667514.96	14316790.01	39°25'30.966"N	80°54'14.545"W	0.76	34.255	1.59	1.59	-0.88	
999.50	2.390	6.190	999.42	1.58	1.85	0.48	1667515.01	14316791.23	39°25'30.978"N	80°54'14.544"W	1.91	14.590	1.10	0.33	25.60	
1032.50	2.830	20.930	1032.39	2.71	3.16	0.80	1667515.33	14316792.54	39°25'30.991"N	80°54'14.540"W	3.26	14.125	1.84	-0.18	44.67	
1126.50	3.540	55.030	1126.28	4.92	6.61	3.86	1667518.39	14316795.99	39°25'31.025"N	80°54'14.501"W	7.65	30.257	2.21	1.29	36.28	
1241.50	5.590	68.390	1240.91	6.04	10.71	11.97	1667526.50	14316800.08	39°25'31.066"N	80°54'14.397"W	16.07	48.191	2.00	1.78	11.62 WFT EM <12-1/4"> (1117')(1232'-2479')	
1335.50	6.500	73.860	1334.39	5.86	13.88	21.34	1667535.87	14316803.25	39°25'31.097"N	80°54'14.278"W	25.46	56.971	1.14	0.97	5.82	
1430.50	7.290	86.960	1428.70	3.79	15.69	32.53	1667547.05	14316805.06	39°25'31.115"N	80°54'14.135"W	36.11	64.249	1.85	0.83	13.79	
1524.50	8.730	93.080	1521.79	-0.69	15.62	45.61	1667560.12	14316804.99	39°25'31.114"N	80°54'13.969"W	48.21	71.091	1.78	1.53	6.51	
1619.50	10.320	89.530	1615.47	-6.29	15.31	61.32	1667575.82	14316804.68	39°25'31.111"N	80°54'13.768"W	63.20	75.984	1.78	1.67	-3.74	
1714.50	12.010	88.850	1708.67	-12.25	15.57	79.71	1667594.21	14316804.94	39°25'31.113"N	80°54'13.534"W	81.22	78.945	1.78	1.78	-0.72	
1808.50	12.670	87.690	1800.50	-18.45	16.19	99.79	1667614.28	14316805.56	39°25'31.119"N	80°54'13.278"W	101.09	80.787	0.75	0.70	-1.23	
1903.50	12.700	83.640	1893.18	-23.99	17.76	120.58	1667635.06	14316807.13	39°25'31.134"N	80°54'13.013"W	121.88	81.620	0.94	0.03	-4.26	
1997.50	12.450	82.530	1984.93	-28.53	20.22	140.89	1667655.37	14316809.59	39°25'31.158"N	80°54'12.754"W	142.34	81.831	0.37	-0.27	-1.18	
2092.50	12.100	87.400	2077.76	-33.63	22.01	160.99	1667675.46	14316811.38	39°25'31.176"N	80°54'12.498"W	162.49	82.216	1.15	-0.37	5.13	
2187.50	13.360	91.160	2170.42	-40.48	22.24	181.91	1667696.37	14316811.61	39°25'31.178"N	80°54'12.232"W	183.27	83.031	1.59	1.33	3.96	



Actual Wellpath Report

San Juan Unit 2H AWP Proj: 15777

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REFERENCE WELLPATH IDENTIFICATION

Operator	Area	Field	Facility	Slot	Slot #08
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Vera Pad	Well	San Juan Unit 2H
				Wellbore	San Juan Unit 2H AWB

WELLPATH DATA (199 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
2282.50	14.480	90.820	2262.63	-48.56	21.84	204.76	1667719.21	14316811.21	39°25'31.174"N	80°54'11.940"W	205.93	83.911	1.18	1.18	-0.36	
2377.50	14.300	87.440	2354.65	-56.20	22.20	228.36	1667742.80	14316811.57	39°25'31.177"N	80°54'11.640"W	229.44	84.448	0.90	-0.19	-3.56	
2488.50	13.890	83.470	2462.31	-63.29	24.33	255.29	1667769.72	14316813.69	39°25'31.198"N	80°54'11.296"W	256.45	84.557	0.95	-0.37	-3.58	
2607.50	15.130	82.050	2577.52	-69.72	28.10	284.87	1667799.28	14316817.46	39°25'31.235"N	80°54'10.920"W	286.25	84.367	1.08	1.04	-1.19	WFT EM <8-3/4"> (2479)(2598-6664)
2701.50	14.820	87.910	2668.33	-75.87	30.23	309.03	1667823.44	14316819.60	39°25'31.256"N	80°54'10.612"W	310.51	84.412	1.64	-0.33	6.23	
2796.50	14.010	85.990	2760.34	-82.66	31.48	332.64	1667847.04	14316820.85	39°25'31.268"N	80°54'10.311"W	334.13	84.594	0.99	-0.85	-2.02	
2890.50	13.430	83.880	2851.66	-88.32	33.44	354.85	1667869.24	14316822.80	39°25'31.287"N	80°54'10.028"W	356.42	84.616	0.81	-0.62	-2.24	
2986.50	14.090	89.620	2944.90	-94.81	34.71	377.62	1667892.00	14316824.07	39°25'31.299"N	80°54'09.737"W	379.21	84.749	1.58	0.69	5.98	
3080.50	13.680	87.510	3036.16	-101.90	35.27	400.17	1667914.54	14316824.63	39°25'31.304"N	80°54'09.450"W	401.72	84.964	0.69	-0.44	-2.24	
3175.50	15.620	85.970	3128.07	-108.69	36.65	424.15	1667938.51	14316826.02	39°25'31.318"N	80°54'09.144"W	425.73	85.061	2.08	2.04	-1.62	
3269.50	17.210	87.320	3218.23	-116.19	38.19	450.67	1667965.02	14316827.55	39°25'31.333"N	80°54'08.807"W	452.28	85.156	1.74	1.69	1.44	
3364.50	17.120	91.780	3309.00	-125.44	38.42	478.68	1667993.02	14316828.22	39°25'31.338"N	80°54'08.450"W	480.22	85.412	1.39	-0.09	4.69	
3458.50	16.390	89.530	3399.01	-134.89	38.09	505.77	1668020.10	14316827.46	39°25'31.331"N	80°54'08.104"W	507.21	85.693	1.04	-0.78	-2.39	
3553.50	15.890	87.100	3490.27	-143.07	38.86	532.17	1668046.49	14316828.22	39°25'31.338"N	80°54'07.768"W	533.58	85.823	0.88	-0.53	-2.56	
3647.50	16.890	87.180	3580.45	-150.77	40.18	568.66	1668072.97	14316829.55	39°25'31.351"N	80°54'07.430"W	560.10	85.886	1.06	1.06	0.09	
3741.50	16.460	84.980	3670.50	-158.12	42.02	595.56	1668099.86	14316831.38	39°25'31.369"N	80°54'07.088"W	587.07	85.895	0.81	-0.46	-2.34	
3836.50	16.120	93.050	3761.70	-166.65	42.50	612.14	1668126.43	14316831.86	39°25'31.374"N	80°54'06.749"W	613.62	86.029	2.41	-0.36	8.49	
3930.50	15.340	90.120	3852.18	-175.92	41.78	637.61	1668151.89	14316831.14	39°25'31.366"N	80°54'06.424"W	638.98	86.251	1.18	-0.83	-3.12	
4025.50	14.570	87.940	3943.96	-183.82	42.18	662.12	1668176.38	14316831.54	39°25'31.370"N	80°54'06.112"W	663.46	86.355	1.00	-0.81	-2.29	
4119.50	16.220	88.510	4034.58	-191.52	42.95	687.06	1668201.31	14316832.31	39°25'31.377"N	80°54'05.794"W	688.40	86.423	1.76	1.76	0.61	
4214.50	15.580	87.570	4125.95	-199.46	43.83	713.07	1668227.31	14316833.19	39°25'31.386"N	80°54'05.463"W	714.41	86.482	0.73	-0.67	-0.99	
4309.50	16.260	88.560	4217.30	-207.43	44.71	739.11	1668259.35	14316834.07	39°25'31.394"N	80°54'05.131"W	740.46	86.538	0.77	0.72	1.04	
4403.50	15.470	86.880	4307.72	-215.14	45.72	764.78	1668279.01	14316835.08	39°25'31.404"N	80°54'04.804"W	766.15	86.579	0.97	-0.84	-1.79	
4498.50	16.850	88.980	4398.97	-223.18	46.66	791.20	1668305.42	14316836.01	39°25'31.413"N	80°54'04.467"W	792.58	86.625	1.58	1.45	2.21	
4593.50	16.120	86.510	4490.06	-231.29	47.70	818.13	1668332.34	14316837.06	39°25'31.423"N	80°54'04.124"W	819.52	86.663	1.07	-0.77	-2.60	
4687.50	17.230	89.820	4580.11	-239.60	48.54	845.08	1668359.28	14316837.90	39°25'31.431"N	80°54'03.780"W	846.48	86.712	1.55	1.18	3.52	
4782.50	16.560	87.090	4671.01	-248.22	49.27	872.67	1668386.86	14316838.63	39°25'31.438"N	80°54'03.429"W	874.06	86.768	1.09	-0.71	-2.87	
4877.50	16.160	85.560	4762.16	-255.63	50.98	899.38	1668413.55	14316840.34	39°25'31.454"N	80°54'03.088"W	900.82	86.755	0.62	-0.42	-1.61	
4971.50	16.750	90.990	4852.32	-263.87	51.76	925.96	1668440.12	14316841.12	39°25'31.462"N	80°54'02.750"W	927.41	86.800	1.75	0.63	5.78	
5066.50	16.290	89.300	4943.40	-273.06	51.69	952.97	1668467.12	14316841.05	39°25'31.461"N	80°54'02.405"W	954.37	86.895	0.70	-0.48	-1.78	



Actual Wellpath Report

San Juan Unit 2H AWP Proj: 15777

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04/05/2019

REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #08
ANTERO RESOURCES CORPORATION	Well	San Juan Unit 2H
Tyler	Wellbore	San Juan Unit 2H AWB
Vera Pad		

WELLPATH DATA (199 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
5161.50	15.570	86.420	5034.75	-280.95	52.65	979.02	1668493.16	14316842.00	39°25'31.470"N	80°54'02.073"W	980.44	86.922	1.13	-0.76	-3.03	
5256.50	17.310	88.980	5125.86	-289.03	53.70	1005.88	1668520.01	14316843.05	39°25'31.480"N	80°54'01.731"W	1007.31	86.944	1.98	1.83	2.69	
5350.50	17.630	86.300	5215.53	-297.45	54.86	1034.07	1668548.19	14316844.22	39°25'31.491"N	80°54'01.372"W	1035.52	86.963	0.92	0.34	-2.85	
5444.50	17.740	84.410	5305.09	-304.88	57.18	1062.53	1668576.63	14316846.53	39°25'31.514"N	80°54'01.009"W	1064.06	86.920	0.62	0.12	-2.01	
5539.50	17.500	86.050	5395.63	-312.30	59.57	1091.18	1668605.28	14316848.92	39°25'31.537"N	80°54'00.644"W	1092.81	86.875	0.58	-0.25	1.73	
5634.50	17.000	88.200	5486.36	-320.46	60.99	1119.31	1668633.39	14316850.34	39°25'31.551"N	80°54'00.286"W	1120.97	86.881	0.85	-0.53	2.26	
5728.50	16.930	86.520	5576.27	-328.52	62.25	1146.71	1668660.78	14316851.61	39°25'31.563"N	80°53'59.937"W	1148.40	86.893	0.53	-0.07	-1.79	
5822.50	16.790	91.370	5666.23	-337.23	62.76	1173.94	1668688.00	14316852.11	39°25'31.567"N	80°53'59.589"W	1175.62	86.940	1.50	-0.15	5.16	
5916.50	17.490	88.730	5756.06	-346.59	62.75	1201.64	1668715.69	14316852.10	39°25'31.567"N	80°53'59.237"W	1203.28	87.011	1.11	0.74	-2.81	
5948.50	16.590	89.090	5786.65	-349.59	62.93	1211.01	1668725.06	14316852.28	39°25'31.569"N	80°53'58.828"W	1212.65	87.025	2.83	-2.81	1.12	
5979.50	15.080	83.610	5816.48	-351.95	63.45	1219.45	1668733.49	14316852.80	39°25'31.574"N	80°53'59.010"W	1221.10	87.022	6.85	-4.87	-17.68	
6011.50	13.040	77.010	5847.52	-353.33	64.72	1227.10	1668741.14	14316854.07	39°25'31.586"N	80°53'58.912"W	1228.81	86.981	8.10	-6.38	-20.63	
6043.50	11.880	67.370	5878.77	-353.59	66.80	1233.66	1668747.70	14316856.15	39°25'31.607"N	80°53'58.828"W	1235.47	86.901	7.43	-3.62	-30.12	
6074.50	11.920	56.120	5909.11	-352.55	69.81	1239.27	1668753.30	14316859.16	39°25'31.637"N	80°53'58.757"W	1241.23	86.776	7.47	0.13	-36.29	
6106.50	13.020	48.100	5940.36	-350.48	74.06	1244.69	1668758.73	14316863.41	39°25'31.679"N	80°53'58.688"W	1246.89	86.595	6.40	3.44	-25.06	
6137.50	14.560	41.010	5970.46	-347.25	79.34	1249.85	1668763.88	14316868.68	39°25'31.731"N	80°53'58.622"W	1252.37	86.368	7.37	4.97	-22.87	
6169.50	15.990	32.540	6001.34	-342.59	86.09	1254.86	1668768.89	14316875.43	39°25'31.797"N	80°53'58.558"W	1257.81	86.075	8.27	4.47	-26.47	
6232.50	17.270	22.150	6032.00	-336.36	94.21	1259.02	1668773.05	14316883.55	39°25'31.878"N	80°53'58.505"W	1262.54	85.721	10.10	4.00	-32.47	
6264.50	20.450	8.060	6091.63	-319.59	113.83	1264.08	1668778.10	14316903.16	39°25'32.071"N	80°53'58.467"W	1266.23	85.320	9.09	4.90	-24.77	
6295.50	22.430	3.630	6120.48	-309.37	125.10	1265.21	1668779.24	14316914.42	39°25'32.183"N	80°53'58.420"W	1269.19	84.854	8.49	5.19	-20.03	
6326.50	24.890	0.300	6148.88	-297.81	137.53	1265.62	1668779.65	14316926.85	39°25'32.306"N	80°53'58.420"W	1273.07	83.798	9.03	6.39	-14.29	
6358.50	27.390	358.980	6177.60	-284.51	151.62	1265.53	1668779.55	14316940.94	39°25'32.445"N	80°53'58.421"W	1274.58	83.168	8.02	7.81	-4.12	
6420.50	31.020	357.760	6231.61	-255.56	182.03	1264.57	1668778.60	14316955.71	39°25'32.591"N	80°53'58.426"W	1276.04	82.507	7.20	7.06	-2.94	
6452.50	33.060	357.520	6258.74	-239.36	198.99	1263.87	1668777.90	14316987.33	39°25'32.745"N	80°53'58.433"W	1277.60	81.809	4.67	4.65	-1.00	
6483.50	35.520	357.230	6284.35	-222.67	216.44	1263.07	1668777.10	14317005.73	39°25'32.913"N	80°53'58.442"W	1279.44	81.052	6.39	6.38	-0.75	
6515.50	37.780	356.890	6310.02	-204.38	235.51	1262.09	1668776.11	14317024.79	39°25'33.086"N	80°53'58.452"W	1281.48	80.276	7.95	7.94	-0.94	
6547.50	39.900	355.040	6334.94	-185.06	255.53	1260.67	1668774.70	14317044.80	39°25'33.274"N	80°53'58.464"W	1283.87	79.430	7.09	7.06	-1.06	
6578.50	42.130	353.370	6358.33	-165.32	275.76	1258.61	1668772.64	14317065.03	39°25'33.672"N	80°53'58.508"W	1286.30	78.542	7.55	6.63	-5.78	
											1288.46	77.642	8.01	7.19	-5.39	



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REFERENCE WELLPATH IDENTIFICATION

Operator	Area	Field	Facility	Slot	Slot #08
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Vera Pad	Well	San Juan Unit 2H
				Wellbore	San Juan Unit 2H AWB

WELLPATH DATA (199 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
ft	°	°	ft	ft	ft	ft	ft	ft	°	°	ft	°	ft/100ft	ft/100ft	ft/100ft	
6609.50	44.460	351.640	6380.90	-144.54	296.84	1255.83	1668769.86	14317086.09	39°25'33.880"N	80°53'58.543"W	1290.43	76.701	8.43	7.52	-5.58	
6641.50	47.040	349.930	6403.22	-122.01	319.46	1252.15	1668766.18	14317108.71	39°25'34.104"N	80°53'58.589"W	1292.26	75.688	8.92	8.06	-5.34	
6649.00†	47.651	349.749	6408.31	-116.57	324.89	1251.18	1668765.21	14317114.13	39°25'34.158"N	80°53'58.601"W	1292.67	75.444	8.34	8.15	-2.42	Middlesex: 6649 MD
6673.50	49.650	349.180	6424.49	-98.42	342.97	1247.81	1668761.85	14317132.21	39°25'34.336"N	80°53'58.644"W	1294.09	74.632	8.34	8.16	-2.32	
6720.00	53.320	348.090	6453.44	-62.42	378.63	1240.64	1668754.67	14317167.85	39°25'34.689"N	80°53'58.735"W	1297.13	73.028	8.10	7.89	-2.34	BHI AT Curve <8-1/2"> (6673.5)-6720 (-15753)
6767.00	57.770	346.310	6480.03	-23.95	416.40	1232.04	1668746.08	14317205.61	39°25'35.062"N	80°53'58.844"W	1300.50	71.326	9.97	9.47	-3.79	
6815.00†	61.912	345.450	6503.67	16.45	455.79	1222.13	1668736.17	14317244.98	39°25'35.452"N	80°53'58.970"W	1304.35	69.547	8.76	8.62	-1.83	Burkett: 6815 MD
6862.00	66.240	345.640	6524.68	59.42	497.55	1211.32	1668735.95	14317245.83	39°25'35.460"N	80°53'58.973"W	1304.44	69.509	9.21	9.21	0.19	
6879.00†	67.622	345.500	6531.34	74.99	512.70	1207.41	1668721.46	14317286.73	39°25'35.865"N	80°53'59.107"W	1309.53	67.669	9.21	9.21	0.19	
6909.00	70.060	345.430	6542.17	102.85	539.78	1200.39	1668714.44	14317328.94	39°25'36.014"N	80°53'59.157"W	1311.75	66.993	8.13	8.13	-0.24	Tully: 6879 MD
6986.00†	73.780	344.700	6557.07	148.31	583.86	1188.63	1668702.68	14317373.00	39°25'36.282"N	80°53'59.246"W	1324.28	63.840	7.88	7.75	-1.52	
7004.00	74.290	343.450	6569.99	193.40	627.31	1176.23	1668695.15	14317399.82	39°25'36.983"N	80°53'59.491"W	1329.63	62.659	2.78	1.08	-2.66	Marcellus POE: 6986 MD
7052.00	79.510	343.150	6580.87	240.07	672.07	1162.80	1668676.86	14317416.43	39°25'37.147"N	80°53'59.552"W	1333.05	61.928	2.78	1.09	-2.66	
7099.00	84.080	344.560	6587.58	286.48	716.74	1149.87	1668663.94	14317505.83	39°25'37.590"N	80°53'59.723"W	1343.05	59.973	10.89	10.88	-0.62	
7146.00	89.880	345.800	6590.05	333.22	762.10	1137.87	1668651.95	14317551.17	39°25'38.032"N	80°53'59.887"W	1354.96	58.064	10.17	9.72	3.00	
7241.00	91.050	346.330	6589.28	427.73	854.30	1114.99	1668629.08	14317643.33	39°25'38.480"N	80°54'00.039"W	1369.50	56.188	12.62	12.34	2.64	
7335.00	90.060	342.780	6588.37	521.45	944.88	1099.97	1668604.06	14317733.88	39°25'39.391"N	80°54'00.329"W	1404.65	52.541	1.35	1.23	0.56	
7431.00	89.780	341.730	6588.50	617.39	1036.31	1060.71	1668574.81	14317825.27	39°25'41.191"N	80°54'01.019"W	1442.51	49.078	3.92	-1.05	-3.78	
7526.00	89.910	339.410	6588.71	712.38	1125.90	1029.11	1668543.23	14317914.82	39°25'42.077"N	80°54'01.420"W	1482.92	45.667	1.13	-0.29	-1.09	
7621.00	89.910	336.230	6588.81	807.28	1213.85	993.25	1668507.38	14318002.74	39°25'42.946"N	80°54'01.876"W	1525.35	42.428	2.45	0.20	-2.44	
7716.00	89.850	335.380	6589.01	902.00	1300.51	954.31	1668468.46	14318089.36	39°25'43.803"N	80°54'02.371"W	1568.43	39.292	3.35	-0.06	-3.35	
7811.00	89.910	336.740	6589.21	996.74	1387.33	915.77	1668429.93	14318176.15	39°25'44.662"N	80°54'02.861"W	1613.08	36.271	0.90	-0.06	-0.89	
7906.00	89.850	335.440	6589.41	1091.48	1474.18	877.26	1668391.44	14318262.96	39°25'45.521"N	80°54'03.350"W	1662.32	33.428	1.43	0.06	1.43	
8001.00	90.220	334.820	6589.35	1186.10	1560.37	837.31	1668351.51	14318349.12	39°25'46.373"N	80°54'03.858"W	1715.46	30.756	1.37	-0.06	-1.37	
8097.00	90.370	337.450	6588.85	1281.84	1648.15	798.47	1668312.69	14318436.87	39°25'47.241"N	80°54'04.352"W	1770.83	28.218	0.76	0.39	-0.65	
8193.00	90.000	338.590	6588.54	1377.76	1737.17	762.54	1668276.77	14318525.85	39°25'48.121"N	80°54'04.809"W	1831.38	25.849	2.74	0.16	2.74	
8287.00	89.630	339.030	6588.80	1471.73	1824.81	728.57	1668242.81	14318613.46	39°25'48.988"N	80°54'05.240"W	1897.17	23.699	1.25	-0.39	1.19	
8382.00	89.720	341.160	6589.29	1566.72	1914.13	686.22	1668210.48	14318702.74	39°25'49.871"N	80°54'05.651"W	1964.88	21.765	0.57	-0.33	0.47	
											2036.82	19.988	2.24	0.03	2.24	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION		
Operator	ANTERO RESOURCES CORPORATION	Slot #08
Area	Tyler County, WV	San Juan Unit 2H
Field	Tyler	Well
Facility	Vera Pad	Wellbore
		San Juan Unit 2H AWB

WELLPATH DATA (199 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
8477.00	89.600	339.850	1661.72	2003.68	664.52	1668178.79	14318792.26	39°25'50.756"N	80°54'06.054"W	2111.00	18.348	-0.13	-1.38	-0.13	-1.38	
8572.00	89.660	343.180	6590.47	1756.68	2093.77	634.41	1668148.68	14318882.30	39°25'51.647"N	80°54'06.437"W	2187.77	16.857	3.51	0.06	3.51	
8667.00	89.600	345.890	6591.08	1851.41	2185.32	609.08	1668123.37	14318973.82	39°25'52.552"N	80°54'06.758"W	2268.61	15.574	2.85	-0.06	2.85	
8762.00	89.690	344.930	6591.67	1946.02	2277.25	585.15	1668099.45	14319065.71	39°25'53.461"N	80°54'07.082"W	2351.23	14.411	1.01	0.09	-1.01	
8858.00	89.880	340.950	6592.03	2041.90	2369.01	556.99	1668071.30	14319157.43	39°25'54.368"N	80°54'07.419"W	2433.61	13.231	4.15	0.20	-4.15	
8953.00	89.570	340.010	6592.48	2136.90	2458.55	525.25	1668039.57	14319248.94	39°25'55.253"N	80°54'07.823"W	2514.03	12.059	1.04	-0.33	-0.99	
9048.00	89.290	341.020	6593.43	2231.89	2548.10	493.56	1668007.90	14319336.45	39°25'56.139"N	80°54'08.225"W	2595.46	10.962	1.10	-0.29	1.06	
9143.00	89.850	344.520	6594.14	2326.78	2638.82	465.43	1667979.77	14319427.14	39°25'57.942"N	80°54'08.583"W	2679.55	10.003	3.73	0.59	3.68	
9238.00	90.000	345.050	6594.27	2421.49	2730.49	440.50	1667954.85	14319518.77	39°25'57.942"N	80°54'08.899"W	2765.79	9.164	0.58	0.16	0.56	
9332.00	90.150	344.470	6594.14	2515.20	2821.18	415.79	1667930.15	14319609.43	39°25'58.839"N	80°54'09.213"W	2851.66	8.384	0.84	0.16	-0.62	
9427.00	90.180	345.400	6593.87	2609.88	2912.92	391.09	1667905.47	14319701.12	39°25'59.746"N	80°54'09.526"W	2939.05	7.647	0.98	0.03	0.98	
9521.00	90.060	343.530	6593.67	2703.62	3003.48	365.92	1667880.31	14319791.65	39°26'00.641"N	80°54'09.846"W	3025.69	6.946	1.99	-0.13	-1.99	
9615.00	90.060	341.580	6593.57	2797.55	3093.15	337.74	1667852.14	14319881.29	39°26'01.527"N	80°54'10.204"W	3111.53	6.231	2.07	0.00	-2.07	
9711.00	90.060	336.830	6593.47	2893.50	3182.87	303.67	1667818.08	14319970.97	39°26'02.415"N	80°54'10.637"W	3197.32	5.450	4.95	0.00	-4.95	
9806.00	90.060	333.000	6593.37	2988.07	3268.89	263.40	1667777.83	14320056.96	39°26'03.265"N	80°54'11.149"W	3279.49	4.607	4.03	0.00	-4.03	
9901.00	90.180	333.050	6593.18	3082.31	3353.56	220.31	1667734.75	14320141.59	39°26'04.102"N	80°54'11.697"W	3360.79	3.759	0.14	0.13	0.05	
9996.00	90.370	334.860	6592.72	3176.73	3438.91	178.60	1667693.06	14320226.90	39°26'04.946"N	80°54'12.227"W	3443.54	2.973	1.92	0.20	1.91	
10090.00	90.520	336.340	6591.99	3270.41	3524.51	139.77	1667654.24	14320312.47	39°26'05.793"N	80°54'12.719"W	3527.28	2.271	1.58	0.16	1.57	
10185.00	90.490	339.030	6591.15	3365.30	3612.38	103.70	1667618.19	14320400.31	39°26'06.662"N	80°54'13.179"W	3613.87	1.644	2.83	-0.03	2.83	
10280.00	90.620	340.830	6590.23	3460.29	3701.60	71.10	1667585.61	14320489.49	39°26'07.544"N	80°54'13.594"W	3702.29	1.100	1.90	0.14	1.89	
10375.00	90.430	341.350	6589.36	3555.28	3791.47	40.32	1667554.83	14320579.33	39°26'08.432"N	80°54'13.985"W	3791.69	0.609	0.58	-0.20	0.55	
10469.00	90.520	340.600	6588.58	3649.27	3880.33	9.68	1667524.20	14320668.15	39°26'09.311"N	80°54'14.374"W	3880.34	0.143	0.80	0.10	-0.80	
10564.00	90.590	339.710	6587.66	3744.26	3969.69	-22.57	1667491.97	14320757.47	39°26'10.195"N	80°54'14.784"W	3969.75	359.674	0.94	0.07	-0.94	
10659.00	90.430	339.850	6586.82	3839.25	4058.83	-55.41	1667459.15	14320846.58	39°26'11.076"N	80°54'15.201"W	4059.21	359.218	0.22	-0.17	0.15	
10754.00	90.520	340.300	6586.03	3934.25	4148.14	-87.78	1667426.79	14320935.85	39°26'11.959"N	80°54'15.613"W	4149.07	358.788	0.48	0.09	0.47	
10849.00	90.460	340.200	6585.22	4028.25	4236.60	-119.54	1667395.04	14321024.28	39°26'12.834"N	80°54'16.016"W	4238.29	358.384	0.12	-0.06	-0.11	
10944.00	90.460	340.090	6584.45	4124.24	4326.90	-152.15	1667362.45	14321114.54	39°26'13.726"N	80°54'16.430"W	4329.57	357.986	0.11	0.00	-0.11	
11039.00	90.460	341.350	6583.69	4219.24	4416.56	-183.51	1667331.09	14321204.17	39°26'14.613"N	80°54'16.829"W	4420.37	357.621	1.33	0.00	1.33	
11133.00	90.400	343.190	6582.99	4313.17	4506.09	-212.14	1667302.48	14321293.66	39°26'15.498"N	80°54'17.193"W	4511.08	357.305	1.96	-0.06	1.96	
11228.00	90.460	341.420	6582.27	4408.10	4596.59	-241.01	1667273.62	14321384.12	39°26'16.393"N	80°54'17.559"W	4602.90	356.989	1.86	0.06	-1.86	



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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot #08
Operator	ANTERO RESOURCES CORPORATION	Well	San Juan Unit 2H
Area	Tyler County, WV	Wellbore	San Juan Unit 2H AWB
Field	Tyler		
Facility	Vera Pad		

WELLPATH DATA (199 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
11324.00	90.490	336.830	6581.48	4504.06	4686.26	-275.21	1667239.44	14321473.76	39°26'17.279"N	80°54'17.994"W	4694.34	356.639	4.78	0.03	-4.78	
11418.00	90.310	335.510	6580.82	4597.81	4772.24	-313.18	1667201.47	14321559.71	39°26'18.130"N	80°54'18.477"W	4782.51	356.245	1.42	-0.19	-1.40	
11512.00	90.400	337.830	6580.24	4691.62	4858.55	-350.41	1667164.27	14321645.98	39°26'18.983"N	80°54'18.950"W	4871.17	355.875	2.47	0.10	2.47	
11607.00	90.490	339.580	6579.50	4786.58	4947.06	-384.91	1667129.78	14321734.45	39°26'19.858"N	80°54'19.389"W	4962.01	355.551	1.84	0.09	1.84	
11702.00	90.430	340.470	6578.74	4881.57	5036.34	-417.36	1667097.34	14321823.70	39°26'20.741"N	80°54'19.801"W	5053.60	355.263	0.94	-0.06	0.94	
11797.00	90.400	338.600	6578.05	4976.56	5125.34	-450.57	1667064.14	14321912.66	39°26'21.621"N	80°54'20.223"W	5145.10	354.976	1.97	-0.03	-1.97	
11893.00	90.550	339.130	6577.25	5072.52	5214.88	-485.18	1667029.54	14322002.16	39°26'22.506"N	80°54'20.663"W	5237.40	354.685	0.57	0.16	0.55	
11988.00	90.430	339.990	6576.44	5167.51	5303.89	-518.36	1666996.38	14322091.14	39°26'23.386"N	80°54'21.085"W	5329.16	354.418	0.91	-0.13	0.91	
12083.00	90.460	341.190	6575.70	5262.51	5393.49	-549.93	1666964.83	14322180.70	39°26'24.272"N	80°54'21.486"W	5421.45	354.178	1.26	0.03	1.26	
12179.00	90.580	342.080	6574.83	5358.47	5484.59	-580.17	1666934.59	14322271.77	39°26'25.173"N	80°54'21.870"W	5515.19	353.982	0.94	0.13	0.93	
12273.00	90.620	341.980	6573.85	5452.42	5574.00	-609.17	1666905.60	14322361.14	39°26'26.057"N	80°54'22.239"W	5607.19	353.763	0.11	0.04	-0.11	
12368.00	90.580	345.370	6572.85	5547.24	5665.15	-635.87	1666878.92	14322452.26	39°26'26.958"N	80°54'22.578"W	5700.73	353.596	3.57	-0.04	3.57	
12462.00	90.890	347.940	6571.65	5640.64	5756.60	-657.56	1666857.23	14322543.67	39°26'27.862"N	80°54'22.853"W	5794.04	353.483	2.75	0.33	2.73	
12557.00	90.460	345.090	6570.53	5735.06	5848.97	-679.71	1666835.09	14322636.00	39°26'28.775"N	80°54'23.134"W	5888.33	353.371	3.03	-0.45	-3.00	
12652.00	90.650	341.400	6569.61	5829.91	5939.91	-707.09	1666807.72	14322726.91	39°26'29.674"N	80°54'23.482"W	5981.85	353.211	3.89	0.20	-3.88	
12747.00	90.770	344.220	6568.43	5924.80	6030.65	-735.16	1666779.66	14322817.61	39°26'30.571"N	80°54'23.839"W	6075.30	353.050	2.97	0.13	2.97	
12842.00	90.680	339.220	6567.23	6019.73	6120.82	-764.95	1666749.89	14322907.74	39°26'31.463"N	80°54'24.217"W	6168.44	352.876	5.26	-0.09	-5.26	
12936.00	90.650	333.270	6566.22	6113.45	6206.82	-802.80	1666712.06	14322993.70	39°26'32.313"N	80°54'24.698"W	6258.52	352.630	6.33	-0.14	-6.33	
13031.00	90.680	332.880	6565.20	6207.70	6291.51	-845.81	1666669.06	14323078.37	39°26'33.151"N	80°54'25.246"W	6348.11	352.343	0.43	0.14	-0.41	
13126.00	90.460	334.020	6564.25	6302.02	6376.49	-888.27	1666626.62	14323163.31	39°26'33.991"N	80°54'25.786"W	6438.06	352.069	1.22	-0.23	1.20	
13221.00	90.480	336.200	6563.49	6396.63	6462.66	-928.25	1666586.65	14323249.44	39°26'34.843"N	80°54'26.294"W	6528.98	351.826	2.29	0.00	2.29	
13315.00	90.490	336.730	6562.71	6490.42	6548.83	-965.79	1666549.13	14323335.58	39°26'35.695"N	80°54'26.771"W	6619.67	351.611	0.56	0.03	0.56	
13410.00	90.680	337.910	6561.74	6585.28	6636.48	-1002.41	1666512.52	14323423.20	39°26'36.562"N	80°54'27.237"W	6711.76	351.411	1.26	0.20	1.24	
13505.00	90.580	339.420	6560.69	6680.24	6724.96	-1036.97	1666477.97	14323511.64	39°26'37.437"N	80°54'27.677"W	6804.44	351.234	1.59	-0.11	1.59	
13600.00	90.250	340.380	6560.01	6775.23	6814.17	-1069.62	1666445.34	14323600.82	39°26'38.319"N	80°54'28.092"W	6897.61	351.079	1.07	-0.35	1.01	
13695.00	90.340	344.810	6559.52	6870.13	6904.80	-1098.03	1666416.94	14323691.41	39°26'39.215"N	80°54'28.452"W	6991.56	350.964	4.66	0.09	4.66	
13790.00	90.370	344.840	6558.93	6964.83	6996.49	-1122.90	1666392.09	14323783.06	39°26'40.121"N	80°54'28.788"W	7086.02	350.882	0.04	0.03	0.03	
13884.00	90.400	343.750	6558.30	7058.59	7086.97	-1148.34	1666366.65	14323873.51	39°26'41.016"N	80°54'29.091"W	7179.41	350.796	1.16	0.03	-1.16	
13979.00	90.370	343.900	6557.66	7153.41	7178.21	-1174.80	1666340.20	14323964.71	39°26'41.918"N	80°54'29.428"W	7273.71	350.705	0.16	-0.03	0.16	
14075.00	90.490	344.120	6556.94	7249.20	7270.49	-1201.25	1666313.77	14324056.95	39°26'42.830"N	80°54'29.763"W	7369.06	350.618	0.26	0.12	0.23	



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REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot #08
ANTERO RESOURCES CORPORATION	Well	San Juan Unit 2H
Tyler County, WV	Wellbore	San Juan Unit 2H AWB
Tyler		
Vera Pad		

WELLPATH DATA (199 stations)

MD ft	Inclination °	Azimuth °	TVD ft	VertSect 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
14169.00	90.490	341.890	6556.13	7343.08	7360.38	-1228.72	1666286.30	14324146.80	39°26'43.719"N	80°54'30.112"W	7462.23	350.523	2.37	0.00	-2.37	
14263.00	90.310	339.460	6555.48	7437.07	7449.07	-1269.82	1666255.21	14324235.46	39°26'44.596"N	80°54'30.508"W	7554.86	350.401	2.59	-0.19	-2.59	
14357.00	90.280	336.790	6554.99	7531.00	7536.30	-1294.84	1666220.21	14324322.65	39°26'45.458"N	80°54'30.953"W	7646.73	350.251	2.84	-0.03	-2.84	
14452.00	90.180	335.910	6554.61	7625.77	7623.32	-1332.95	1666182.11	14324409.64	39°26'46.318"N	80°54'31.438"W	7738.97	350.082	0.93	-0.11	-0.93	
14547.00	90.370	337.950	6554.16	7720.60	7710.71	-1370.18	1666144.91	14324497.00	39°26'47.183"N	80°54'31.911"W	7831.51	349.924	2.16	0.20	2.15	
14642.00	90.180	339.520	6553.70	7815.57	7799.24	-1404.63	1666110.47	14324585.49	39°26'48.058"N	80°54'32.349"W	7924.72	349.791	1.66	-0.20	1.65	
14736.00	90.280	339.610	6553.32	7909.56	7887.33	-1437.45	1666077.66	14324673.54	39°26'48.929"N	80°54'32.766"W	8017.24	349.671	0.14	0.11	0.10	
14831.00	90.400	339.940	6552.76	8004.55	7976.47	-1470.29	1666044.83	14324762.64	39°26'49.810"N	80°54'33.184"W	8110.84	349.556	0.37	0.13	0.35	
14926.00	90.030	341.980	6552.40	8099.54	8066.26	-1501.28	1666013.85	14324852.41	39°26'50.698"N	80°54'33.578"W	8204.78	349.457	2.18	-0.39	2.15	
15021.00	90.150	342.320	6552.25	8194.49	8156.69	-1530.40	1665984.75	14324942.80	39°26'51.592"N	80°54'33.948"W	8298.02	349.373	0.38	0.13	0.36	
15116.00	90.000	341.950	6552.13	8289.44	8247.11	-1569.54	1665955.61	14325033.18	39°26'52.486"N	80°54'34.318"W	8393.27	349.292	0.42	-0.16	-0.39	
15211.00	90.030	342.510	6552.10	8384.38	8337.58	-1588.54	1665926.63	14325123.61	39°26'53.380"N	80°54'34.686"W	8487.56	349.213	0.59	0.03	0.59	
15306.00	90.090	342.610	6552.00	8479.31	8428.21	-1617.01	1665898.17	14325214.21	39°26'54.276"N	80°54'35.048"W	8581.92	349.139	0.12	0.06	0.11	
15400.00	90.120	341.620	6551.83	8573.26	8517.67	-1645.88	1665869.32	14325303.63	39°26'55.161"N	80°54'35.415"W	8675.23	349.063	1.05	0.03	-1.05	
15495.00	90.060	341.490	6551.68	8668.23	8607.79	-1675.93	1665839.27	14325393.71	39°26'56.052"N	80°54'35.797"W	8769.42	348.982	0.15	-0.06	-0.14	
15589.00	90.090	344.490	6551.56	8762.11	8697.66	-1703.43	1665811.79	14325483.55	39°26'56.940"N	80°54'36.146"W	8862.90	348.919	3.19	0.03	3.19	
15684.00	90.220	347.250	6551.30	8856.65	8789.78	-1726.62	1665788.61	14325575.63	39°26'57.851"N	80°54'36.441"W	8957.76	348.887	2.91	0.14	2.91	
15753.00	90.250	343.710	6551.02	8925.36	8856.56	-1743.92	1665771.32	14325665.42	39°26'58.739"N	80°54'36.661"W	9026.63	348.861	5.13	0.04	-5.13	
15777.00	90.250	343.710	6550.91	8949.31	8879.60	-1750.65	1665764.59	14325665.42	39°26'58.739"N	80°54'36.746"W	9050.53	348.847	0.00	0.00	0.00	Projected MD at ID: 15777



Actual Wellpath Report

San Juan Unit 2H AWP Proj: 15777'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Tyler County, WV	Well	San Juan Unit 2H
Field	Tyler	Wellbore	San Juan Unit 2H AWB
Facility	Vera Pad		

HOLE & CASING SECTIONS - Ref Wellbore: San Juan Unit 2H AWB Ref Wellpath: San Juan Unit 2H AWP Proj: 15777'											
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]	Start N/S [ft]	End E/W [ft]
20in Conductor	24.50	104.50	80.00	24.50	104.50	0.00	0.00	-0.13	0.00	0.00	-0.13
17.5in Open Hole	104.50	738.50	634.00	104.50	738.49	-0.13	-0.01	-2.85	-0.01	-2.85	0.39
13.375in Casing Surface	24.50	738.50	714.00	24.50	738.49	0.00	0.00	-2.85	0.00	-2.85	0.39
12.25in Open Hole	738.50	2571.50	1833.00	738.49	2542.73	-2.85	0.39	26.85	0.39	26.85	275.67
9.625in Casing Intermediate	24.50	2571.50	2547.00	24.50	2542.73	0.00	0.00	26.85	0.00	26.85	275.67
8.75in Open Hole	2571.50	6734.50	4163.00	2542.73	6461.96	26.85	275.67	390.09	275.67	390.09	1238.16
8.5in Open Hole	6734.50	15777.00	9042.50	6461.96	6550.91	390.09	1238.16	8879.60	1238.16	8879.60	-1750.65
5.5in Casing Production	24.50	15777.00	15752.50	24.50	6550.91	0.00	0.00	8879.60	0.00	8879.60	-1750.65

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
San Juan Unit 2H POE - Rev-2	6567.00	591.86	1186.94	1668701.00	14317381.00	39°25'36.797"N	80°53'59.416"W	point
San Juan Unit 2H BHL - Rev-3	6593.00	8875.95	-1784.49	1665730.76	14325661.77	39°26'58.703"N	80°54'37.177"W	point
San Juan Unit 2H LP - Rev-1	6593.00	752.48	1129.33	1668643.41	14317541.56	39°25'38.385"N	80°54'00.148"W	point

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Actual Wellpath Report

San Juan Unit 2H AWP Proj: 15777

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #08
Area	Tyler County, WV	Well	San Juan Unit 2H
Field	Tyler	Wellbore	San Juan Unit 2H AWB
Facility	Vera Pad		

WELLPATH COMPOSITION - Ref Wellbore: San Juan Unit 2H AWB Ref Wellpath: San Juan Unit 2H AWP Proj: 15777			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment
24.50	728.50	Gyrodata standard - Drop gyro or Multi-shot	01 Gyrodata MS Gyro <17-1/2">(100'-719')
728.50	1126.50	Gyrodata standard - Drop gyro or Multi-shot	02 Gyrodata MS Gyro <12-1/4">(719')(741'-1117')
1126.50	2488.50	ISWISA MWD, Rev. 4 (Standard)	03 WFT EM <12-1/4">(1117')(1232'-2479')
2488.50	6673.50	ISWISA MWD, Rev. 4 (Standard)	04 WFT EM <8-3/4">(2479')(2598'-6664')
6673.50	15753.00	BHI AutoTrak Curve (Short)	05 BHI AT Curve <8-1/2">(6673.5')(6720'-15753')
15753.00	15777.00	Blind Drilling (std)	Projection to bit
			Wellbore

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San Juan Unit 2H AWP Proj: 15777
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Slot	Slot #08	
ANTERO RESOURCES CORPORATION			
Tyler County, WV	Well	San Juan Unit 2H	
Tyler	Wellbore	San Juan Unit 2H AWB	
Vera Pad			

COMMENTS
<p>Wellpath general comments API: 47-095-02381-0000 BHI Job #: 8740559 Rig: Frontier 22 Duration: 09/01/2017-09/04/2017 Gyrodatta MS Gyro <17-1/2"> (100'-719') Gyrodatta MS Gyro <12-1/4"> (719')(741'-1117') WFT EM <12-1/4"> (1117')(1232'-2479') WFT EM <8-3/4"> (2479')(2598'-6664') BHI AT Curve <8-1/2"> (6673.5')(6720'-15753') Middlesex: 6649' MD Burkett: 6815' MD Tully: 6879' MD Marcellus POE: 6986' MD Projected MD at TD: 15777'</p>