



ANTERO RESOURCES CORPORATION

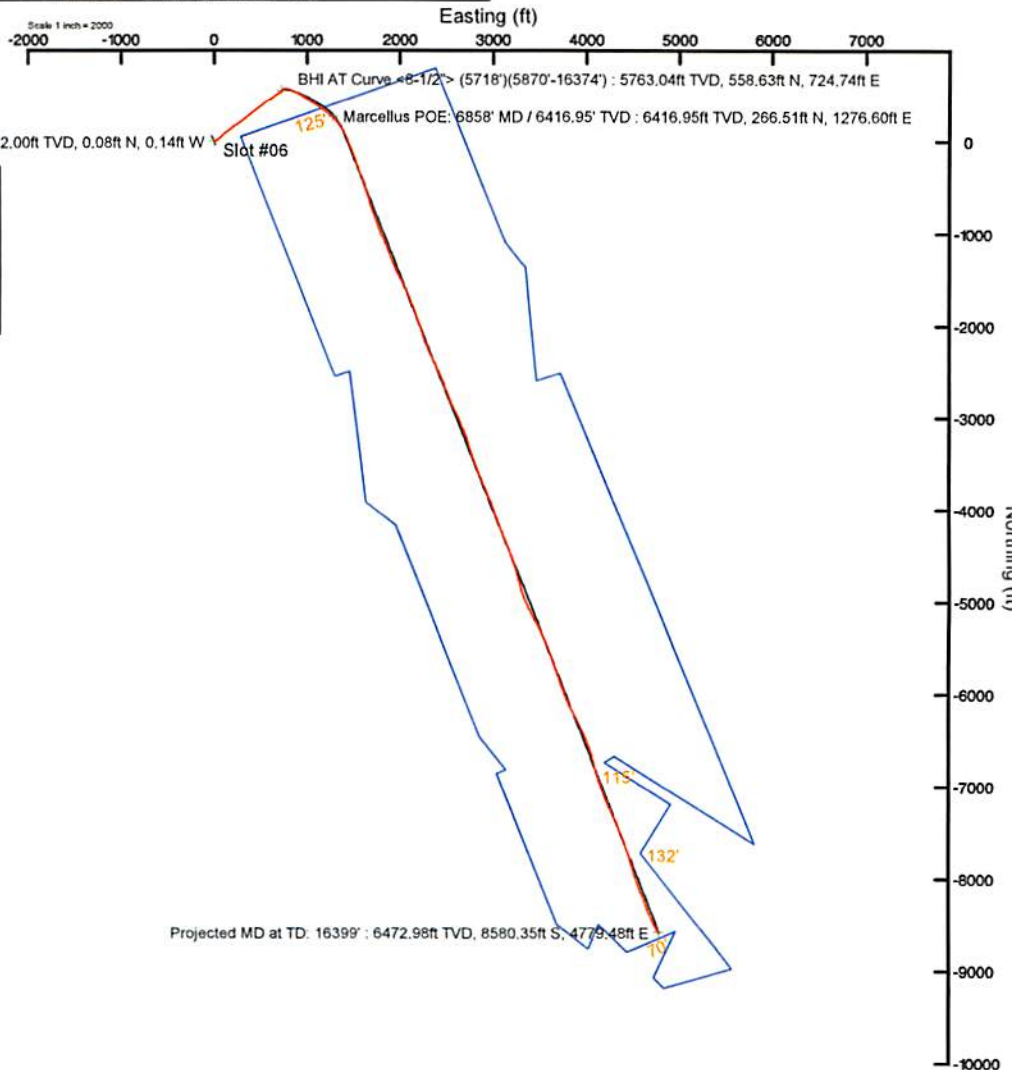
Location: Tyler County, WV
 Field: Tyler
 Facility: Terry Snider Pad

Slot: Slot #06
 Well: Dillon Unit 2H
 Wellbore: Dillon Unit 2H PWB



Plot reference wellpath is Dillon Unit 2H PWP Rev-B.0	Grid System: NAD27 / UTM Zone 17 North US feet
True vertical depths are referenced to Patterson 342 (RKB)	* = Wellbore was transformed from a different geoidic datum
Measured depths are referenced to Patterson 342 (RKB)	North Reference: Grid north
Patterson 342 (RKB) to Mean Sea Level: 1172 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot #06): -1147 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ehsayan on 2016-11-12
	Database: WA_MPL_EASTERNUS_Data

Gyrodata MS Gyro <8-3/4"> (100'-5706') : 112.00ft TVD, 0.08ft N, 0.14ft W



Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Terry Snider Pad	1650540.845	14295934.525	39°22'04.880"N	80°57'51.040"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
Slot #06	-9.11	3.93	1650544.770	14295925.420	39°22'04.790"N
Comment	Dillon Unit 2H				
Patterson 342 (RKB) to Mud line (At Slot: Slot #06)	25ft				
Mean Sea Level to Mud line (At Slot: Slot #06)	-1147ft				
Patterson 342 (RKB) to Mean Sea Level	1172ft				

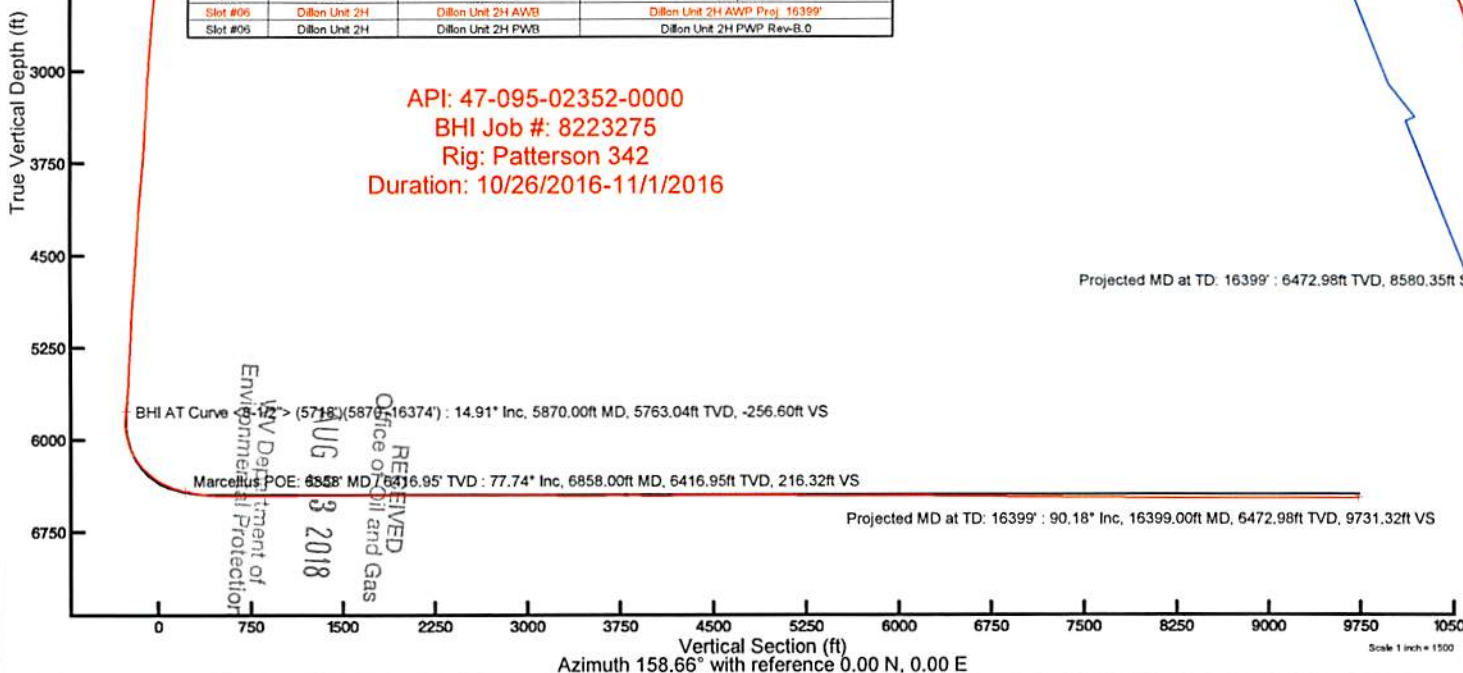
Scale 1 inch = 1500

Gyrodata MS Gyro <8-3/4"> (100'-5706') : 0.21° Inc, 112.00ft MD, 112.00ft TVD, -0.13ft VS

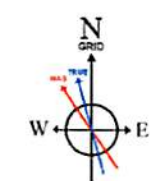
Well Profile Data								
Design Comment	MD (ft)	Inc. (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	5718.00	12.230	48.810	5615.28	533.20	699.86	0.00	-241.96
Proj. to Bottom / KOP	5898.00	12.230	48.810	5791.20	558.31	728.55	0.00	-254.91
End of 3D Arc	6990.90	71.571	123.288	6382.46	364.06	1163.96	8.57	65.84
POE	6790.67	75.799	131.690	6408.00	331.07	1232.96	10.00	140.31
Landing Pt.	7093.22	90.000	158.658	6446.00	86.99	1401.51	10.00	428.99
BHL	16403.22	90.000	158.658	6446.00	-8584.60	4789.69	0.00	9738.99

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #06	Dillon Unit 2H	Dillon Unit 2H AWB	Dillon Unit 2H AWP Proj. 16399'
Slot #06	Dillon Unit 2H	Dillon Unit 2H PWB	Dillon Unit 2H PWP Rev-B.0

API: 47-095-02352-0000
 BHI Job #: 8223275
 Rig: Patterson 342
 Duration: 10/26/2016-11/1/2016



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User specified Dip: 66.70° Field: 52035 nT
 Magnetic North is 7.76 degrees West of True North (at 10/25/2016)
 Grid North is 0.02 degrees East of True North
 To correct azimuth from True to Grid subtract 0.02 degrees
 To correct azimuth from Magnetic to Grid subtract 7.78 degrees



Actual Wellpath Report

Dillon Unit 2H AWP Proj: 16399'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Tyler County, WV	Well	Dillon Unit 2H
Field	Tyler	Wellbore	Dillon Unit 2H AWB
Facility	Terry Snider Pad		

REPORT SETUP INFORMATION

Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect@ 5.0
North Reference	Grid	User	Edsaryar
Scale	0.999600	Report Generated	11/12/2016 at 12:31:39 PM
Convergence at slot	0.03° East	Database/Source file	WA_MPL_EASTERNUS_Defn/Dillon_Unit_2H_AWP_Proj_16399_.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-9.11	3.93	1650544.77	14295925.42	39°22'04.790"N	80°57'50.990"W
Facility Reference Pt			1650540.85	14295934.53	39°22'04.880"N	80°57'51.040"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM

Calculation method	Minimum curvature	Patterson 342 (RKB) to Facility Vertical Datum	25.00ft
Horizontal Reference Pt	Slot	Patterson 342 (RKB) to Mean Sea Level	1172.00ft
Vertical Reference Pt	Patterson 342 (RKB)	Patterson 342 (RKB) to Mud Line at Slot (Slot #06)	25.00ft
MD Reference Pt	Patterson 342 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	158.66°

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Dillon Unit 2H AWP Proj: 16399'

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Area	Tyler County, WV	Well	Dillon Unit 2H
Field	Tyler	Wellbore	Dillon Unit 2H AWB
Facility	Terry Snider Pad		

WELLPATH DATA (193 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	0.00	301.570	0.00	0.00	0.00	0.00	1650544.77	14295925.42	39°22'04.790"N	80°57'50.990"W	0.00	0.000	0.00	0.00	0.00	
25.00	0.00	301.570	25.00	0.00	0.00	0.00	1650544.77	14295925.42	39°22'04.790"N	80°57'50.990"W	0.00	0.000	0.00	0.00	0.00	
112.00	0.210	301.570	112.00	-0.13	0.08	-0.14	1650544.63	14295925.50	39°22'04.791"N	80°57'50.992"W	0.16	301.570	0.24	0.24	-67.16	Gyrodata MS Gyro <8-3/4"> (100'-5706')
212.00	0.210	344.260	212.00	-0.46	0.36	-0.34	1650544.43	14295925.78	39°22'04.793"N	80°57'50.994"W	0.49	316.159	0.15	0.00	42.69	
312.00	0.130	350.400	312.00	-0.75	0.64	-0.41	1650544.36	14295926.06	39°22'04.796"N	80°57'50.995"W	0.76	327.499	0.08	-0.08	6.14	
412.00	0.050	44.940	412.00	-0.88	0.79	-0.40	1650544.37	14295926.21	39°22'04.798"N	80°57'50.995"W	0.88	333.143	0.11	-0.08	54.54	
512.00	0.100	205.060	512.00	-0.84	0.74	-0.40	1650544.37	14295926.16	39°22'04.797"N	80°57'50.995"W	0.84	331.289	0.15	0.05	160.12	
612.00	0.340	157.100	612.00	-0.48	0.39	-0.33	1650544.44	14295925.81	39°22'04.794"N	80°57'50.994"W	0.51	319.829	0.28	0.24	-47.96	
712.00	0.630	158.410	711.99	0.37	-0.40	-0.01	1650544.76	14295925.02	39°22'04.786"N	80°57'50.990"W	0.40	181.197	0.29	0.29	1.31	
812.00	1.080	162.630	811.98	1.86	-1.81	0.48	1650545.25	14295923.61	39°22'04.772"N	80°57'50.984"W	1.87	165.277	0.45	0.45	4.22	
912.00	1.060	160.770	911.97	3.72	-3.58	1.06	1650545.83	14295921.84	39°22'04.755"N	80°57'50.977"W	3.74	163.495	0.04	-0.02	-1.86	
1012.00	0.900	134.020	1011.95	5.36	-5.00	1.93	1650546.70	14295920.42	39°22'04.741"N	80°57'50.965"W	5.36	158.889	0.48	-0.16	-26.75	
1112.00	0.650	80.660	1111.94	6.19	-5.45	3.06	1650547.82	14295919.97	39°22'04.736"N	80°57'50.951"W	6.25	150.746	0.73	-0.25	-53.36	
1212.00	0.690	8.310	1211.94	5.79	-4.77	3.70	1650548.47	14295920.66	39°22'04.743"N	80°57'50.943"W	6.04	142.166	0.79	0.04	-72.35	
1312.00	1.300	332.030	1311.92	4.14	-3.17	3.26	1650548.03	14295922.25	39°22'04.759"N	80°57'50.949"W	4.54	134.216	0.85	0.61	-36.28	
1412.00	1.320	327.250	1411.90	1.88	-1.20	2.10	1650546.87	14295924.22	39°22'04.778"N	80°57'50.963"W	2.42	119.691	0.11	0.02	-4.78	
1512.00	0.790	320.770	1511.88	0.10	0.30	1.04	1650545.81	14295925.72	39°22'04.793"N	80°57'50.977"W	1.09	73.729	0.54	-0.53	-6.48	
1612.00	0.420	7.110	1611.87	-0.88	1.20	0.65	1650545.42	14295926.62	39°22'04.802"N	80°57'50.982"W	1.37	28.478	0.59	-0.37	46.34	
1712.00	1.900	73.930	1711.85	-1.05	2.02	2.29	1650547.06	14295927.44	39°22'04.810"N	80°57'50.961"W	3.06	48.525	1.78	1.48	66.82	
1812.00	3.260	63.140	1811.75	-1.17	3.77	6.42	1650551.19	14295929.19	39°22'04.827"N	80°57'50.908"W	7.44	59.590	1.44	1.36	-10.79	
1912.00	5.220	53.980	1911.47	-2.60	7.73	12.64	1650557.40	14295933.15	39°22'04.866"N	80°57'50.829"W	14.81	58.551	2.07	1.96	-9.16	
2012.00	7.220	54.170	2010.88	-5.33	14.08	21.41	1650566.17	14295939.50	39°22'04.929"N	80°57'50.717"W	25.63	56.667	2.00	2.00	0.19	
2112.00	9.290	59.740	2109.84	-8.15	21.83	33.48	1650578.24	14295947.24	39°22'05.006"N	80°57'50.564"W	39.97	56.895	2.22	2.07	5.57	
2212.00	10.730	59.060	2208.31	-10.95	30.68	48.44	1650593.19	14295956.09	39°22'05.093"N	80°57'50.373"W	57.34	57.647	1.44	1.44	-0.68	
2312.00	11.120	52.310	2306.51	-15.22	41.37	64.05	1650608.80	14295966.77	39°22'05.199"N	80°57'50.174"W	76.25	57.145	1.34	0.39	-6.75	
2412.00	12.090	46.270	2404.46	-21.93	54.50	79.25	1650623.99	14295979.90	39°22'05.328"N	80°57'49.981"W	96.18	55.484	1.55	0.97	-6.04	
2512.00	12.600	44.920	2502.15	-30.31	69.46	94.52	1650639.25	14295994.86	39°22'05.476"N	80°57'49.786"W	117.30	53.688	0.59	0.51	-1.35	
2612.00	12.380	43.320	2599.79	-39.28	84.99	109.58	1650654.30	14296010.37	39°22'05.630"N	80°57'49.594"W	138.67	52.203	0.41	-0.22	-1.60	
2712.00	14.860	52.780	2696.98	-47.38	100.55	127.15	1650671.87	14296025.93	39°22'05.783"N	80°57'49.371"W	162.10	51.664	3.33	2.48	9.46	
2812.00	14.780	52.480	2793.65	-54.45	116.07	147.48	1650692.19	14296041.44	39°22'05.937"N	80°57'49.112"W	187.67	51.796	0.11	-0.08	-0.30	

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Dillon Unit 2H AWP Proj: 16399'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #06
Area	Tyler County, WV		Well	Dillon Unit 2H
Field	Tyler		Wellbore	Dillon Unit 2H AWB
Facility	Terry Snider Pad			

WELLPATH DATA (193 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]	[US ft]	[US ft]			[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]	
2912.00	15.180	52.800	2890.25	-61.58	131.76	168.02	1650712.72	14296057.12	39°22'06.092"N	80°57'48.850"W	213.52	51.898	0.41	0.40	0.32	
3012.00	14.700	51.650	2986.87	-68.87	147.54	188.40	1650733.10	14296072.90	39°22'06.247"N	80°57'48.590"W	239.30	51.934	0.56	-0.48	-1.15	
3112.00	13.920	50.720	3083.77	-76.29	163.03	207.66	1650752.35	14296088.39	39°22'06.400"N	80°57'48.345"W	264.01	51.865	0.81	-0.78	-0.93	
3212.00	13.280	57.500	3180.97	-82.21	176.82	226.66	1650771.34	14296102.17	39°22'06.537"N	80°57'48.103"W	287.47	52.042	1.72	-0.64	6.78	
3312.00	12.310	54.930	3278.49	-86.97	189.12	245.07	1650789.75	14296114.46	39°22'06.658"N	80°57'47.869"W	309.56	52.344	1.12	-0.97	-2.57	
3412.00	13.900	52.310	3375.88	-92.88	202.59	263.30	1650807.97	14296127.92	39°22'06.791"N	80°57'47.636"W	332.22	52.425	1.70	1.59	-2.62	
3512.00	13.120	55.330	3473.11	-98.88	216.39	282.14	1650826.80	14296141.72	39°22'06.928"N	80°57'47.396"W	355.57	52.514	1.05	-0.78	3.02	
3612.00	13.100	54.740	3570.51	-104.22	229.38	300.73	1650845.38	14296154.71	39°22'07.056"N	80°57'47.160"W	378.23	52.665	0.14	-0.02	-0.59	
3712.00	14.450	56.360	3667.63	-109.60	242.84	320.37	1650865.02	14296168.16	39°22'07.189"N	80°57'46.910"W	402.01	52.838	1.40	1.35	1.62	
3812.00	15.020	50.720	3764.35	-116.25	257.96	340.79	1650885.43	14296183.27	39°22'07.338"N	80°57'46.649"W	427.41	52.877	1.54	0.57	-5.64	
3912.00	14.170	47.290	3861.12	-124.71	274.46	359.82	1650904.44	14296199.77	39°22'07.501"N	80°57'46.407"W	452.55	52.664	1.21	-0.85	-3.43	
4012.00	14.150	49.050	3958.08	-133.27	290.78	378.04	1650922.66	14296216.08	39°22'07.662"N	80°57'46.175"W	476.93	52.434	0.43	-0.02	1.76	
4112.00	14.320	47.450	4055.01	-141.84	307.15	396.39	1650941.00	14296232.45	39°22'07.824"N	80°57'45.941"W	501.46	52.229	0.43	0.17	-1.60	
4212.00	14.120	51.130	4151.95	-149.99	323.17	414.99	1650959.60	14296248.46	39°22'07.982"N	80°57'45.704"W	525.98	52.091	0.93	-0.20	3.68	
4312.00	13.290	54.470	4249.10	-156.48	337.50	433.84	1650978.44	14296262.79	39°22'08.124"N	80°57'45.464"W	549.66	52.120	1.15	-0.83	3.34	
4412.00	13.530	52.630	4346.38	-162.53	351.28	452.50	1650997.08	14296276.56	39°22'08.260"N	80°57'45.227"W	572.84	52.177	0.49	0.24	-1.84	
4512.00	13.080	48.620	4443.70	-169.64	365.86	470.28	1651014.86	14296291.13	39°22'08.404"N	80°57'45.000"W	595.84	52.118	1.03	-0.45	-4.01	
4612.00	13.460	56.010	4541.03	-176.07	379.85	488.42	1651033.00	14296305.12	39°22'08.542"N	80°57'44.769"W	618.74	52.128	1.74	0.38	7.39	
4712.00	13.250	51.500	4638.33	-182.00	393.49	507.04	1651051.61	14296318.75	39°22'08.677"N	80°57'44.532"W	641.82	52.187	1.06	-0.21	-4.51	
4812.00	15.370	51.750	4735.22	-189.23	408.83	526.42	1651070.98	14296334.09	39°22'08.829"N	80°57'44.285"W	666.53	52.166	2.12	2.12	0.25	
4912.00	15.580	53.100	4831.60	-196.69	425.10	547.57	1651092.12	14296350.35	39°22'08.989"N	80°57'44.016"W	693.21	52.176	0.42	0.21	1.35	
5012.00	14.540	51.150	4928.16	-204.07	441.04	568.08	1651112.63	14296366.28	39°22'09.147"N	80°57'43.754"W	719.19	52.176	1.16	-1.04	-1.95	
5112.00	14.470	59.620	5024.99	-209.81	455.23	588.64	1651133.17	14296380.47	39°22'09.287"N	80°57'43.493"W	744.13	52.283	2.12	-0.07	8.47	
5212.00	14.910	58.500	5121.72	-214.04	468.27	610.39	1651154.91	14296393.50	39°22'09.416"N	80°57'43.216"W	769.32	52.506	0.52	0.44	-1.12	
5312.00	15.190	56.410	5218.29	-219.09	482.24	632.27	1651176.79	14296407.47	39°22'09.554"N	80°57'42.937"W	795.19	52.667	0.61	0.28	-2.09	
5412.00	11.940	50.610	5315.49	-225.08	496.06	651.19	1651195.69	14296421.28	39°22'09.690"N	80°57'42.696"W	818.61	52.701	3.52	-3.25	-5.80	
5512.00	10.470	54.130	5413.58	-230.56	507.95	666.54	1651211.05	14296433.16	39°22'09.808"N	80°57'42.500"W	838.03	52.690	1.62	-1.47	3.52	
5612.00	12.030	54.390	5511.66	-235.41	519.34	682.38	1651226.88	14296444.55	39°22'09.920"N	80°57'42.299"W	857.53	52.726	1.56	1.56	0.26	
5712.00	12.280	49.150	5609.42	-241.53	532.36	698.90	1651243.39	14296457.57	39°22'10.049"N	80°57'42.088"W	878.56	52.703	1.13	0.25	-5.24	
5718.00	12.230	48.810	5615.28	-241.96	533.20	699.86	1651244.35	14296458.41	39°22'10.057"N	80°57'42.076"W	879.83	52.697	1.46	-0.83	-5.67	

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Field	Tyler	Wellbore	Dillon Unit 2H AWB
Facility	Terry Snider Pad		

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5870.00	14.910	40.720	5763.04	-256.60	558.63	724.74	1651269.22	14296483.83	39°22'10.308"N	80°57'41.759"W	915.05	52.375	2.16	1.76	-5.32	BHI AT Curve <8-1/2"> (5718')(5870'-16374')
5912.00	14.860	42.880	5803.63	-261.47	566.67	731.93	1651276.40	14296491.86	39°22'10.388"N	80°57'41.668"W	925.65	52.252	1.33	-0.12	5.14	
5965.00	16.360	65.090	5854.72	-264.89	574.80	743.33	1651287.80	14296499.99	39°22'10.468"N	80°57'41.522"W	939.65	52.286	11.55	2.83	41.91	
6012.00	18.880	84.640	5899.55	-263.21	578.31	756.92	1651301.39	14296503.49	39°22'10.503"N	80°57'41.349"W	952.56	52.619	13.61	5.36	41.60	
6059.00	20.700	97.070	5943.79	-257.16	577.99	772.74	1651317.20	14296503.18	39°22'10.499"N	80°57'41.148"W	964.99	53.204	9.73	3.87	26.45	
6105.00	23.000	103.930	5986.49	-248.10	574.83	789.54	1651333.99	14296500.02	39°22'10.468"N	80°57'40.934"W	976.63	53.943	7.46	5.00	14.91	
6152.00	26.750	108.200	6029.13	-236.06	569.31	808.51	1651352.95	14296494.50	39°22'10.414"N	80°57'40.692"W	988.84	54.849	8.84	7.98	9.09	
6199.00	31.110	112.500	6070.26	-220.91	561.36	829.79	1651374.22	14296486.55	39°22'10.335"N	80°57'40.422"W	1001.83	55.921	10.27	9.28	9.15	
6247.00	35.240	115.600	6110.43	-202.19	550.62	853.74	1651398.17	14296475.82	39°22'10.229"N	80°57'40.117"W	1015.91	57.180	9.30	8.60	6.46	
6294.00	39.540	118.390	6147.76	-180.86	537.64	879.15	1651423.56	14296462.85	39°22'10.100"N	80°57'39.793"W	1030.51	58.552	9.83	9.15	5.94	
6341.00	41.980	119.150	6183.36	-157.31	522.87	906.04	1651450.45	14296448.08	39°22'09.954"N	80°57'39.451"W	1046.09	60.011	5.30	5.19	1.62	
6351.00†	43.081	119.619	6190.73	-152.08	519.55	911.93	1651456.33	14296444.77	39°22'09.921"N	80°57'39.376"W	1049.55	60.329	11.46	11.01	4.69	Sycamore: 6351' MD / 6190.7' TVD
6388.00	47.170	121.200	6216.83	-131.49	506.27	934.53	1651478.93	14296431.49	39°22'09.790"N	80°57'39.088"W	1062.86	61.554	11.46	11.05	4.27	
6435.00	51.080	122.800	6247.58	-102.98	487.43	964.65	1651509.04	14296412.66	39°22'09.604"N	80°57'38.705"W	1080.81	63.193	8.71	8.32	3.40	
6480.00	54.160	122.960	6274.90	-73.97	468.02	994.68	1651539.05	14296393.26	39°22'09.412"N	80°57'38.323"W	1099.29	64.802	6.85	6.84	0.36	
6495.00†	55.198	122.988	6283.57	-64.03	461.36	1004.95	1651549.31	14296386.60	39°22'09.346"N	80°57'38.192"W	1105.79	65.341	6.92	6.92	0.19	Middlesex: 6495' MD / 6283.6' TVD
6530.00	57.620	123.050	6302.93	-40.34	445.48	1029.39	1651573.75	14296370.72	39°22'09.189"N	80°57'37.881"W	1121.65	66.599	6.92	6.92	0.18	
6575.00	61.510	122.970	6325.72	-8.81	424.34	1061.92	1651606.26	14296349.59	39°22'08.980"N	80°57'37.467"W	1143.57	68.218	8.65	8.64	-0.18	
6624.00	65.240	123.400	6347.68	26.85	400.37	1098.57	1651642.90	14296325.63	39°22'08.743"N	80°57'37.000"W	1169.26	69.976	7.65	7.61	0.88	
6671.00	68.970	124.020	6365.96	62.34	376.34	1134.58	1651678.90	14296301.61	39°22'08.505"N	80°57'36.542"W	1195.37	71.649	8.03	7.94	1.32	
6709.00†	71.812	124.608	6378.71	91.89	356.16	1164.14	1651708.45	14296281.44	39°22'08.305"N	80°57'36.165"W	1217.41	72.989	7.62	7.48	1.55	Burket: 6709' MD / 6378.7' TVD
6719.00	72.560	124.760	6381.77	99.78	350.75	1171.97	1651716.27	14296276.02	39°22'08.252"N	80°57'36.066"W	1223.33	73.339	7.62	7.48	1.52	
6766.00	74.990	127.730	6394.91	137.88	324.06	1208.36	1651752.64	14296249.35	39°22'07.988"N	80°57'35.603"W	1251.06	74.987	7.97	5.17	6.32	
6812.00†	75.920	129.776	6406.46	176.47	296.19	1243.08	1651787.35	14296221.49	39°22'07.712"N	80°57'35.161"W	1277.88	76.598	4.76	2.02	4.45	Tully: 6812' MD / 6406.5' TVD
6813.00	75.940	129.820	6406.70	177.32	295.57	1243.82	1651788.09	14296220.87	39°22'07.706"N	80°57'35.151"W	1278.46	76.633	4.76	2.04	4.43	
6858.00†	77.739	133.284	6416.95	216.32	266.51	1276.60	1651820.86	14296191.82	39°22'07.419"N	80°57'34.734"W	1304.13	78.208	8.49	4.00	7.70	Marcellus POE: 6858' MD / 6416.95' TVD
6859.00	77.780	133.360	6417.16	217.20	265.84	1277.31	1651821.57	14296191.15	39°22'07.412"N	80°57'34.725"W	1304.69	78.243	8.49	4.05	7.64	
6907.00	79.410	137.310	6426.66	260.40	232.38	1310.38	1651854.62	14296157.71	39°22'07.081"N	80°57'34.304"W	1330.82	79.944	8.75	3.40	8.23	
6953.00	79.570	142.200	6435.05	303.18	197.87	1339.59	1651883.82	14296123.21	39°22'06.740"N	80°57'33.932"W	1354.12	81.598	10.46	0.35	10.63	
7001.00	82.160	147.320	6442.68	349.16	159.17	1366.92	1651911.14	14296084.53	39°22'06.357"N	80°57'33.585"W	1376.15	83.358	11.83	5.40	10.67	

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Actual Wellpath Report

Dillon Unit 2H AWP Proj: 16399'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Tyler County, WV	Well	Dillon Unit 2H
Field	Tyler	Wellbore	Dillon Unit 2H AWB
Facility	Terry Snider Pad		

WELLPATH DATA (193 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
7047.00	84.080	152.000	6448.19	394.25	119.77	1389.97	1651934.18	14296045.14	39°22'05.968"N	80°57'33.291"W	1395.12	85.075	10.93	4.17	10.17	
7096.00	86.950	156.200	6452.03	442.93	75.84	1411.30	1651955.50	14296001.23	39°22'05.534"N	80°57'33.020"W	1413.34	86.924	10.36	5.86	8.57	
7142.00	87.970	157.130	6454.06	488.86	33.65	1429.50	1651973.70	14295959.05	39°22'05.117"N	80°57'32.788"W	1429.90	88.652	3.00	2.22	2.02	
7190.00	90.280	157.500	6454.80	536.84	-10.63	1448.01	1651992.20	14295914.79	39°22'04.679"N	80°57'32.553"W	1448.05	90.421	4.87	4.81	0.77	
7284.00	90.280	157.840	6454.34	630.82	-97.58	1483.73	1652027.90	14295827.88	39°22'03.819"N	80°57'32.099"W	1486.93	93.763	0.36	0.00	0.36	
7379.00	90.090	158.890	6454.03	725.82	-185.89	1518.75	1652062.91	14295739.61	39°22'02.946"N	80°57'31.653"W	1530.08	96.978	1.12	-0.20	1.11	
7472.00	89.820	161.230	6454.10	818.78	-273.31	1550.46	1652094.61	14295652.22	39°22'02.082"N	80°57'31.250"W	1574.37	99.997	2.53	-0.29	2.52	
7567.00	90.220	159.790	6454.07	913.73	-362.86	1582.16	1652126.29	14295562.71	39°22'01.197"N	80°57'30.847"W	1623.24	102.917	1.57	0.42	-1.52	
7661.00	90.030	162.050	6453.87	1007.65	-451.69	1612.89	1652157.01	14295473.91	39°22'00.319"N	80°57'30.456"W	1674.94	105.645	2.41	-0.20	2.40	
7755.00	90.580	163.240	6453.36	1101.42	-541.41	1640.92	1652185.03	14295384.23	39°21'59.432"N	80°57'30.100"W	1727.93	108.260	1.39	0.59	1.27	
7849.00	90.030	161.500	6452.86	1195.22	-630.99	1669.39	1652213.49	14295294.69	39°21'58.546"N	80°57'29.738"W	1784.66	110.705	1.94	-0.59	-1.85	
7943.00	89.880	162.310	6452.94	1289.07	-720.34	1698.59	1652242.67	14295205.37	39°21'57.663"N	80°57'29.367"W	1845.02	112.981	0.88	-0.16	0.86	
8038.00	90.220	162.560	6452.86	1383.86	-810.91	1727.26	1652271.33	14295114.84	39°21'56.768"N	80°57'29.002"W	1908.14	115.149	0.44	0.36	0.26	
8132.00	90.060	159.480	6452.63	1477.77	-899.79	1757.83	1652301.89	14295026.00	39°21'55.889"N	80°57'28.614"W	1974.73	117.107	3.28	-0.17	-3.28	
8227.00	90.310	156.690	6452.32	1572.76	-987.91	1793.28	1652337.33	14294937.90	39°21'55.018"N	80°57'28.163"W	2047.39	118.850	2.95	0.26	-2.94	
8321.00	89.820	156.230	6452.21	1666.69	-1074.09	1830.82	1652374.86	14294851.76	39°21'54.166"N	80°57'27.685"W	2122.63	120.399	0.71	-0.52	-0.49	
8415.00	90.150	159.340	6452.24	1760.66	-1161.10	1866.36	1652410.38	14294764.79	39°21'53.306"N	80°57'27.233"W	2198.05	121.887	3.33	0.35	3.31	
8509.00	90.340	159.330	6451.83	1854.66	-1249.05	1899.53	1652443.54	14294676.87	39°21'52.437"N	80°57'26.811"W	2273.40	123.327	0.20	0.20	-0.01	
8604.00	90.250	157.640	6451.35	1949.65	-1337.43	1934.37	1652478.36	14294588.53	39°21'51.563"N	80°57'26.368"W	2351.70	124.660	1.78	-0.09	-1.78	
8698.00	90.830	154.090	6450.46	2043.52	-1423.19	1972.80	1652516.77	14294502.80	39°21'50.715"N	80°57'25.880"W	2432.57	125.807	3.83	0.62	-3.78	
8793.00	90.280	151.810	6449.54	2138.04	-1507.79	2015.99	1652559.95	14294418.23	39°21'49.879"N	80°57'25.330"W	2517.47	126.793	2.47	-0.58	-2.40	
8887.00	90.180	154.830	6449.16	2231.62	-1591.77	2058.20	1652602.14	14294334.29	39°21'49.049"N	80°57'24.793"W	2601.90	127.718	3.21	-0.11	3.21	
8981.00	90.030	157.690	6448.99	2325.52	-1677.81	2096.03	1652639.96	14294248.28	39°21'48.198"N	80°57'24.312"W	2684.85	128.676	3.05	-0.16	3.04	
9075.00	90.030	158.680	6448.94	2419.52	-1765.08	2130.97	1652674.88	14294161.05	39°21'47.335"N	80°57'23.868"W	2767.04	129.635	1.05	0.00	1.05	
9170.00	90.090	159.410	6448.84	2514.52	-1853.79	2164.94	1652708.84	14294072.37	39°21'46.458"N	80°57'23.436"W	2850.18	130.573	0.77	0.06	0.77	
9264.00	90.310	161.830	6448.51	2608.45	-1942.46	2196.13	1652740.02	14293983.74	39°21'45.582"N	80°57'23.039"W	2931.92	131.493	2.59	0.23	2.57	
9358.00	89.510	161.350	6448.66	2702.33	-2031.65	2225.82	1652769.69	14293894.59	39°21'44.700"N	80°57'22.662"W	3013.61	132.389	0.99	-0.85	-0.51	
9451.00	89.750	161.380	6449.26	2795.23	-2119.77	2255.53	1652799.40	14293806.50	39°21'43.829"N	80°57'22.284"W	3095.30	133.223	0.26	0.26	0.03	
9545.00	90.150	159.110	6449.34	2889.18	-2208.23	2287.30	1652831.15	14293718.08	39°21'42.955"N	80°57'21.880"W	3179.31	133.992	2.45	0.43	-2.41	
9639.00	89.750	155.410	6449.42	2983.14	-2294.91	2323.63	1652867.47	14293631.43	39°21'42.098"N	80°57'21.418"W	3265.87	134.644	3.96	-0.43	-3.94	

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Actual Wellpath Report

Dillon Unit 2H AWP Proj: 16399'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Tyler County, WV	Well	Dillon Unit 2H
Field	Tyler	Wellbore	Dillon Unit 2H AWB
Facility	Terry Snider Pad		

WELLPATH DATA (193 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]	[US ft]	[US ft]			[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]	
9733.00	89.010	153.640	6450.44	3076.88	-2379.76	2364.06	1652907.88	14293546.61	39°21'41.259"N	80°57'20.904"W	3354.41	135.190	2.04	-0.79	-1.88	
9827.00	89.170	154.150	6451.94	3170.55	-2464.16	2405.41	1652949.22	14293462.25	39°21'40.425"N	80°57'20.378"W	3443.56	135.691	0.57	0.17	0.54	
9922.00	88.740	157.610	6453.67	3265.40	-2550.84	2444.22	1652988.01	14293375.61	39°21'39.568"N	80°57'19.884"W	3532.85	136.223	3.67	-0.45	3.64	
10016.00	90.090	161.230	6454.63	3359.37	-2638.82	2477.26	1653021.03	14293287.66	39°21'38.698"N	80°57'19.464"W	3619.42	136.809	4.11	1.44	3.85	
10110.00	90.460	159.210	6454.18	3453.33	-2727.27	2509.07	1653052.83	14293199.25	39°21'37.824"N	80°57'19.060"W	3705.86	137.386	2.18	0.39	-2.15	
10205.00	90.030	157.910	6453.77	3548.33	-2815.69	2543.79	1653087.54	14293110.86	39°21'36.950"N	80°57'18.619"W	3794.60	137.904	1.44	-0.45	-1.37	
10299.00	91.020	154.100	6452.91	3642.21	-2901.55	2582.01	1653125.74	14293025.04	39°21'36.101"N	80°57'18.133"W	3884.04	138.335	4.19	1.05	-4.05	
10393.00	89.260	155.260	6452.68	3735.97	-2986.51	2622.21	1653165.92	14292940.11	39°21'35.261"N	80°57'17.621"W	3974.32	138.716	2.24	-1.87	1.23	
10488.00	90.430	158.510	6452.94	3830.91	-3073.87	2659.49	1653203.20	14292852.78	39°21'34.397"N	80°57'17.147"W	4064.68	139.134	3.64	1.23	3.42	
10582.00	89.420	158.900	6453.06	3924.91	-3161.45	2693.63	1653237.32	14292765.24	39°21'33.531"N	80°57'16.713"W	4153.36	139.568	1.15	-1.07	0.41	
10677.00	89.570	162.460	6453.90	4019.83	-3251.08	2725.06	1653268.73	14292675.64	39°21'32.645"N	80°57'16.314"W	4242.11	140.030	3.75	0.16	3.75	
10771.00	90.520	163.070	6453.82	4113.59	-3340.86	2752.91	1653296.57	14292585.90	39°21'31.758"N	80°57'15.960"W	4328.96	140.511	1.20	1.01	0.65	
10865.00	90.890	158.350	6452.67	4207.50	-3429.55	2783.95	1653327.60	14292497.25	39°21'30.881"N	80°57'15.565"W	4417.26	140.932	5.04	0.39	-5.02	
10959.00	89.820	160.400	6452.08	4301.48	-3517.52	2817.06	1653360.69	14292409.31	39°21'30.012"N	80°57'15.144"W	4506.52	141.310	2.46	-1.14	2.18	
11054.00	90.060	160.270	6452.18	4396.44	-3606.98	2849.03	1653392.65	14292319.89	39°21'29.127"N	80°57'14.738"W	4596.44	141.696	0.29	0.25	-0.14	
11148.00	90.000	156.080	6452.13	4490.42	-3694.22	2883.97	1653427.58	14292232.68	39°21'28.265"N	80°57'14.293"W	4686.63	142.022	4.46	-0.06	-4.46	
11242.00	89.910	156.870	6452.21	4584.35	-3780.41	2921.48	1653465.08	14292146.53	39°21'27.413"N	80°57'13.816"W	4777.72	142.303	0.85	-0.10	0.84	
11336.00	89.940	159.750	6452.33	4678.34	-3867.74	2956.22	1653499.80	14292059.23	39°21'26.549"N	80°57'13.375"W	4868.13	142.608	3.06	0.03	3.06	
11431.00	89.850	159.330	6452.50	4773.32	-3956.75	2989.43	1653533.00	14291970.26	39°21'25.670"N	80°57'12.952"W	4959.09	142.928	0.45	-0.09	-0.44	
11525.00	89.940	160.710	6452.68	4867.30	-4045.09	3021.55	1653565.10	14291881.95	39°21'24.796"N	80°57'12.544"W	5049.01	143.241	1.47	0.10	1.47	
11619.00	89.940	159.120	6452.78	4961.27	-4133.37	3053.83	1653597.37	14291793.71	39°21'23.924"N	80°57'12.134"W	5139.13	143.542	1.69	0.00	-1.69	
11713.00	89.970	159.620	6452.85	5055.26	-4221.34	3086.95	1653630.48	14291705.77	39°21'23.054"N	80°57'11.713"W	5229.63	143.823	0.53	0.03	0.53	
11807.00	89.910	159.180	6452.95	5149.25	-4309.33	3120.02	1653663.54	14291617.82	39°21'22.184"N	80°57'11.292"W	5320.23	144.095	0.47	-0.06	-0.47	
11901.00	89.780	159.450	6453.20	5243.25	-4397.27	3153.22	1653696.73	14291529.91	39°21'21.315"N	80°57'10.870"W	5410.99	144.356	0.32	-0.14	0.29	
11996.00	89.940	160.500	6453.43	5338.22	-4486.53	3185.75	1653729.24	14291440.70	39°21'20.432"N	80°57'10.457"W	5502.54	144.623	1.12	0.17	1.11	
12090.00	89.970	159.420	6453.51	5432.19	-4574.84	3217.96	1653761.44	14291352.42	39°21'19.560"N	80°57'10.047"W	5593.25	144.877	1.15	0.03	-1.15	
12184.00	89.970	166.060	6453.56	5525.90	-4664.55	3245.84	1653789.31	14291262.74	39°21'18.673"N	80°57'09.693"W	5682.74	145.168	7.06	0.00	7.06	
12278.00	89.660	165.830	6453.86	5619.14	-4755.74	3268.67	1653812.12	14291171.59	39°21'17.771"N	80°57'09.403"W	5770.72	145.499	0.41	-0.33	-0.24	
12372.00	89.600	163.280	6454.47	5712.64	-4846.33	3293.70	1653837.14	14291081.03	39°21'16.876"N	80°57'09.085"W	5859.64	145.799	2.71	-0.06	-2.71	
12467.00	89.660	160.020	6455.08	5807.49	-4936.49	3323.60	1653867.04	14290990.92	39°21'15.985"N	80°57'08.705"W	5951.07	146.049	3.43	0.06	-3.43	

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Actual Wellpath Report

Dillon Unit 2H AWP Proj: 16399'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #06
Area	Tyler County, WV		Well	Dillon Unit 2H
Field	Tyler		Wellbore	Dillon Unit 2H AWB
Facility	Terry Snider Pad			

WELLPATH DATA (193 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
12561.00	89.660	155.220	6455.64	5901.45	-5023.38	3359.38	1653902.80	14290904.06	39°21'15.126"N	80°57'08.250"W	6043.16	146.227	5.11	0.00	-5.11	
12655.00	89.630	153.660	6456.22	5995.19	-5108.18	3399.94	1653943.34	14290819.30	39°21'14.287"N	80°57'07.734"W	6136.21	146.353	1.66	-0.03	-1.66	
12749.00	89.660	151.320	6456.80	6088.64	-5191.54	3443.35	1653986.74	14290735.96	39°21'13.463"N	80°57'07.182"W	6229.67	146.445	2.49	0.03	-2.49	
12843.00	89.690	152.510	6457.34	6181.98	-5274.47	3487.60	1654030.97	14290653.07	39°21'12.643"N	80°57'06.619"W	6323.24	146.526	1.27	0.03	1.27	
12937.00	89.660	155.870	6457.87	6275.68	-5359.08	3528.52	1654071.87	14290568.49	39°21'11.807"N	80°57'06.099"W	6416.40	146.638	3.57	-0.03	3.57	
13031.00	89.690	157.520	6458.40	6369.62	-5445.41	3565.71	1654109.05	14290482.20	39°21'10.953"N	80°57'05.626"W	6508.97	146.783	1.76	0.03	1.76	
13125.00	89.630	159.440	6458.96	6463.62	-5532.85	3600.19	1654143.51	14290394.80	39°21'10.089"N	80°57'05.188"W	6601.04	146.948	2.04	-0.06	2.04	
13220.00	89.420	160.710	6459.75	6558.58	-5622.16	3632.56	1654175.87	14290305.52	39°21'09.206"N	80°57'04.776"W	6693.59	147.133	1.35	-0.22	1.34	
13314.00	89.380	160.850	6460.73	6652.51	-5710.91	3663.51	1654206.80	14290216.80	39°21'08.329"N	80°57'04.383"W	6784.97	147.320	0.15	-0.04	0.15	
13408.00	89.450	161.130	6461.69	6746.43	-5799.78	3694.12	1654237.41	14290127.97	39°21'07.450"N	80°57'03.994"W	6876.34	147.505	0.31	0.07	0.30	
13502.00	89.450	160.670	6462.60	6840.35	-5888.60	3724.88	1654268.15	14290039.19	39°21'06.572"N	80°57'03.603"W	6967.81	147.684	0.49	0.00	-0.49	
13597.00	89.230	159.320	6463.69	6935.32	-5977.86	3757.38	1654300.64	14289949.96	39°21'05.690"N	80°57'03.190"W	7060.64	147.849	1.44	-0.23	-1.42	
13691.00	89.450	156.020	6464.77	7029.29	-6064.79	3793.08	1654336.33	14289863.06	39°21'04.830"N	80°57'02.736"W	7153.27	147.977	3.52	0.23	-3.51	
13785.00	89.320	153.220	6465.78	7123.04	-6149.71	3833.37	1654376.60	14289778.18	39°21'03.991"N	80°57'02.224"W	7246.63	148.063	2.98	-0.14	-2.98	
13880.00	89.450	152.220	6466.80	7217.52	-6234.14	3876.91	1654420.12	14289693.79	39°21'03.156"N	80°57'01.670"W	7341.31	148.123	1.06	0.14	-1.05	
13974.00	89.380	154.270	6467.76	7311.09	-6318.06	3919.22	1654462.41	14289609.90	39°21'02.326"N	80°57'01.132"W	7434.93	148.188	2.18	-0.07	2.18	
14068.00	89.540	154.540	6468.65	7404.83	-6402.84	3959.83	1654503.00	14289525.16	39°21'01.488"N	80°57'00.616"W	7528.38	148.265	0.33	0.17	0.29	
14162.00	89.350	157.060	6469.56	7498.70	-6488.56	3998.35	1654541.52	14289439.46	39°21'00.641"N	80°57'00.126"W	7621.57	148.358	2.69	-0.20	2.68	
14256.00	89.420	161.340	6470.57	7592.67	-6576.41	4031.72	1654574.87	14289351.65	39°20'59.772"N	80°56'59.702"W	7713.88	148.489	4.55	0.07	4.55	
14350.00	89.380	163.900	6471.55	7686.43	-6666.11	4059.80	1654602.94	14289261.99	39°20'58.886"N	80°56'59.345"W	7805.06	148.658	2.72	-0.04	2.72	
14444.00	89.350	167.120	6472.60	7779.74	-6757.10	4083.31	1654626.44	14289171.03	39°20'57.986"N	80°56'59.046"W	7895.05	148.855	3.43	-0.03	3.43	
14538.00	89.570	164.350	6473.48	7873.01	-6848.19	4106.47	1654649.59	14289079.98	39°20'57.086"N	80°56'58.752"W	7985.04	149.051	2.96	0.23	-2.95	
14632.00	89.690	160.690	6474.09	7966.78	-6937.83	4134.70	1654677.81	14288990.38	39°20'56.200"N	80°56'58.393"W	8076.46	149.207	3.90	0.13	-3.89	
14727.00	89.510	160.140	6474.75	8061.73	-7027.33	4166.55	1654709.64	14288900.91	39°20'55.315"N	80°56'57.989"W	8169.67	149.336	0.61	-0.19	-0.58	
14821.00	89.850	157.990	6475.28	8155.72	-7115.12	4200.13	1654743.21	14288813.16	39°20'54.447"N	80°56'57.562"W	8262.33	149.446	2.32	0.36	-2.29	
14915.00	89.750	155.700	6475.60	8249.67	-7201.54	4237.09	1654780.16	14288726.77	39°20'53.593"N	80°56'57.092"W	8355.55	149.529	2.44	-0.11	-2.44	
15009.00	89.910	156.010	6475.88	8343.56	-7287.32	4275.54	1654818.59	14288641.03	39°20'52.745"N	80°56'56.603"W	8448.98	149.599	0.37	0.17	0.33	
15104.00	89.780	156.100	6476.14	8438.46	-7374.14	4314.10	1654857.13	14288554.24	39°20'51.886"N	80°56'56.113"W	8543.38	149.671	0.17	-0.14	0.09	
15198.00	90.180	156.650	6476.17	8532.38	-7460.26	4351.77	1654894.79	14288468.16	39°20'51.035"N	80°56'55.634"W	8636.75	149.744	0.72	0.43	0.59	
15292.00	90.120	158.840	6475.93	8626.36	-7547.25	4387.37	1654930.37	14288381.20	39°20'50.175"N	80°56'55.182"W	8729.84	149.830	2.33	-0.06	2.33	

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Actual Wellpath Report

Dillon Unit 2H AWP Proj: 16399

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Operator	Area	Field	Facility
ANTERO RESOURCES CORPORATION	Tyler County, WV	Tyler	Terry Snider Pad
Slot #06	Well	Dillon Unit 2H	Dillon Unit 2H AWP

WELLPATH DATA (193 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)	(US ft)	(US ft)	(ft)	(ft)	(ft)	(°)	(/100ft)	(/100ft)	(/100ft)	
15386.00	89.910	161.070	6475.90	8720.33	-7635.55	4419.58	1654962.58	14288292.93	39°20'49.30"N	80°56'54.72"W	8822.38	149.937	2.38	-0.22	2.37	
15480.00	90.280	160.990	6475.75	8814.25	-7724.45	4450.14	1654993.12	14288204.07	39°20'48.42"N	80°56'54.384"W	8914.64	150.053	0.40	-0.39	-0.09	
15574.00	90.090	163.180	6475.44	8908.08	-7813.89	4479.05	1655022.02	14288114.67	39°20'47.539"N	80°56'54.017"W	9006.59	150.178	2.34	-0.20	2.33	
15669.00	90.220	164.370	6475.19	9002.70	-7905.10	4505.60	1655048.55	14288023.50	39°20'46.637"N	80°56'53.679"W	9098.96	150.319	1.26	0.14	1.25	
15763.00	90.220	161.520	6474.83	9096.43	-7994.96	4533.16	1655076.11	14287933.68	39°20'45.749"N	80°56'53.329"W	9190.70	150.447	3.03	0.00	-3.03	
15858.00	90.150	158.280	6474.52	9191.39	-8084.16	4565.80	1655108.74	14287844.51	39°20'44.867"N	80°56'52.914"W	9284.41	150.543	3.41	-0.07	-3.41	
15952.00	90.220	159.350	6474.22	9285.39	-8171.80	4599.77	1655142.70	14287756.90	39°20'44.001"N	80°56'52.483"W	9377.44	150.626	1.14	0.07	1.14	
16046.00	90.090	160.070	6473.96	9379.37	-8259.97	4632.37	1655175.28	14287668.77	39°20'43.129"N	80°56'52.068"W	9470.27	150.715	0.78	-0.14	0.77	
16141.00	90.150	157.710	6473.76	9474.36	-8348.59	4666.58	1655209.48	14287580.19	39°20'42.253"N	80°56'51.633"W	9564.30	150.796	2.49	0.06	-2.48	
16235.00	90.180	155.530	6473.49	9568.30	-8434.86	4703.88	1655246.76	14287493.95	39°20'41.400"N	80°56'51.159"W	9657.82	150.853	2.32	0.03	-2.32	
16329.00	90.180	151.350	6473.20	9661.89	-8518.93	4745.90	1655288.77	14287409.92	39°20'40.569"N	80°56'50.625"W	9751.70	150.878	4.45	0.00	-4.45	
16374.00	90.180	151.330	6473.05	9706.52	-8558.41	4767.49	1655310.34	14287370.45	39°20'40.179"N	80°56'50.351"W	9796.70	150.880	0.04	0.00	-0.04	
16399.00	90.180	151.330	6472.98	9731.32	-8580.35	4779.48	1655322.33	14287348.52	39°20'39.962"N	80°56'50.198"W	9821.70	150.881	0.00	0.00	0.00	Projected MD at TD: 16399'

HOLE & CASING SECTIONS - Ref Wellbore: Dillon Unit 2H AWP Proj: 16399'									
String/Diameter	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	Start EW	End N/S	End EW
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
20in Conductor	25.00	65.00	40.00	25.00	65.00	0.00	0.00	0.00	-0.03
13.375in Casing Surface	25.00	512.00	487.00	25.00	512.00	0.00	0.00	0.00	-0.40
9.625in Casing Intermediate	25.00	2496.00	2471.00	25.00	2486.54	0.00	0.00	0.00	92.06

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Actual Wellpath Report

Dillon Unit 2H AWP Proj: 16399
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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Tyler County, WV
Field	Tyler
Facility	Terry Snider Pad
Well	Dillon Unit 2H
Wellbore	Dillon Unit 2H AWB
Slot	Slot #06

WELLPATH DATA (193 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)	(US ft)	(US ft)	(ft)	(ft)	(ft)	(°)	(/100ft)	(/100ft)	(/100ft)	
15386.00	161.070	6475.90	8720.33	-7635.55	4419.58	1654962.58	14288292.93	39°20'49.302"N	80°56'54.772"W	8822.38	149.937	2.38	-0.22	2.37		
15480.00	160.990	6475.75	8814.25	-7724.45	4450.14	1654993.12	14288204.07	39°20'48.423"N	80°56'54.384"W	8914.64	150.053	0.40	-0.39	-0.09		
15574.00	163.180	6475.44	8908.08	-7813.89	4479.05	1655022.02	14288114.67	39°20'47.539"N	80°56'54.017"W	9006.59	150.178	2.34	-0.20	2.33		
15669.00	164.370	6475.19	9002.70	-7905.10	4505.60	1655048.55	14288023.50	39°20'46.637"N	80°56'53.679"W	9098.96	150.319	1.26	0.14	1.25		
15763.00	161.520	6474.83	9096.43	-7994.96	4533.16	1655076.11	14287933.68	39°20'45.749"N	80°56'53.329"W	9190.70	150.447	3.03	0.00	-3.03		
15858.00	158.280	6474.52	9191.39	-8084.16	4565.80	1655108.74	14287844.51	39°20'44.867"N	80°56'52.914"W	9284.41	150.543	3.41	-0.07	-3.41		
15952.00	159.350	6474.22	9285.39	-8171.80	4599.77	1655142.70	14287756.90	39°20'44.001"N	80°56'52.483"W	9377.44	150.626	1.14	0.07	1.14		
16046.00	160.070	6473.96	9379.37	-8259.97	4632.37	1655175.28	14287668.77	39°20'43.129"N	80°56'52.068"W	9470.27	150.715	0.78	-0.14	0.77		
16141.00	157.710	6473.76	9474.36	-8348.59	4666.58	1655209.48	14287580.19	39°20'42.253"N	80°56'51.633"W	9564.30	150.796	2.49	0.06	-2.48		
16235.00	155.530	6473.49	9568.30	-8434.86	4703.88	1655246.76	14287493.95	39°20'41.400"N	80°56'51.159"W	9657.82	150.853	2.32	0.03	-2.32		
16329.00	151.350	6473.20	9661.89	-8518.93	4745.90	1655288.77	14287409.92	39°20'40.569"N	80°56'50.625"W	9751.70	150.878	4.45	0.00	-4.45		
16374.00	151.330	6473.05	9706.52	-8558.41	4767.49	1655310.34	14287370.45	39°20'40.179"N	80°56'50.351"W	9796.70	150.880	0.04	0.00	-0.04		
16399.00	151.330	6472.98	9731.32	-8580.35	4779.48	1655322.33	14287348.52	39°20'39.962"N	80°56'50.198"W	9821.70	150.881	0.00	0.00	0.00		Projected MD at TD: 16399'

HOLE & CASING SECTIONS - Ref Wellbore: Dillon Unit 2H AWP

String/Diameter	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	End N/S	Start E/W	End E/W
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
20in Conductor	25.00	65.00	40.00	25.00	65.00	0.00	0.00	0.00	-0.03
13.375in Casing Surface	25.00	512.00	487.00	25.00	512.00	0.00	0.00	0.00	-0.40
9.625in Casing Intermediate	25.00	2496.00	2471.00	25.00	2486.54	0.00	0.00	0.00	92.06

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Actual Wellpath Report

Dillon Unit 2H AWP Proj: 16399'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Tyler County, WV	Well	Dillon Unit 2H
Field	Tyler	Wellbore	Dillon Unit 2H AWB
Facility	Terry Snider Pad		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Dillon Unit 2H POE Rev-2	6404.00	331.07	1232.96	1651777.23	14296256.35	39°22'08.057"N	80°57'35.289"W	point
Dillon Unit 2H POE Rev-3	6408.00	331.07	1232.96	1651777.23	14296256.35	39°22'08.057"N	80°57'35.289"W	point
Dillon Unit 2H BHL Rev-2	6442.00	-8584.60	4789.69	1655332.53	14287344.27	39°20'39.920"N	80°56'50.068"W	point
Dillon Unit 2H LP Rev-2	6442.00	86.99	1401.51	1651945.72	14296012.37	39°22'05.644"N	80°57'33.145"W	point
Dillon Unit 2H BHL Rev-3	6446.00	-8584.60	4789.69	1655332.53	14287344.27	39°20'39.920"N	80°56'50.068"W	point
Dillon Unit 2H LP Rev-3	6446.00	86.99	1401.51	1651945.72	14296012.37	39°22'05.644"N	80°57'33.145"W	point

WELLPATH COMPOSITION - Ref Wellbore: Dillon Unit 2H AWB Ref Wellpath: Dillon Unit 2H AWP Proj: 16399'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
25.00	5718.00	Gyrodata standard - Drop gyro or Multi-shot	01 Gyrodata MS Gyro (100'-5706')	Dillon Unit 2H AWB	
5718.00	16374.00	BHI AutoTrak Curve (Short)	02 BHI AT Curve <8-1/2"> (5718')(5870'-16374')	Dillon Unit 2H AWB	
16374.00	16399.00	Blind Drilling (std)	Projection to bit	Dillon Unit 2H AWB	

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Dillon Unit 2H AWP Proj: 16399'

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Tyler County, WV	Well	Dillon Unit 2H
Field	Tyler	Wellbore	Dillon Unit 2H AWB
Facility	Terry Snider Pad		

COMMENTS

Wellpath general comments

API: 47-095-02352-0000

BHI Job #: 8223275

Rig: Patterson 342

Duration: 10/26/2016-11/1/2016

Gyrodata MS Gyro <8-3/4"> (100'-5706')

BHI AT Curve <8-1/2"> (5718')(5870'-16374')

Sycamore: 6351' MD

Middlesex: 6495' MD

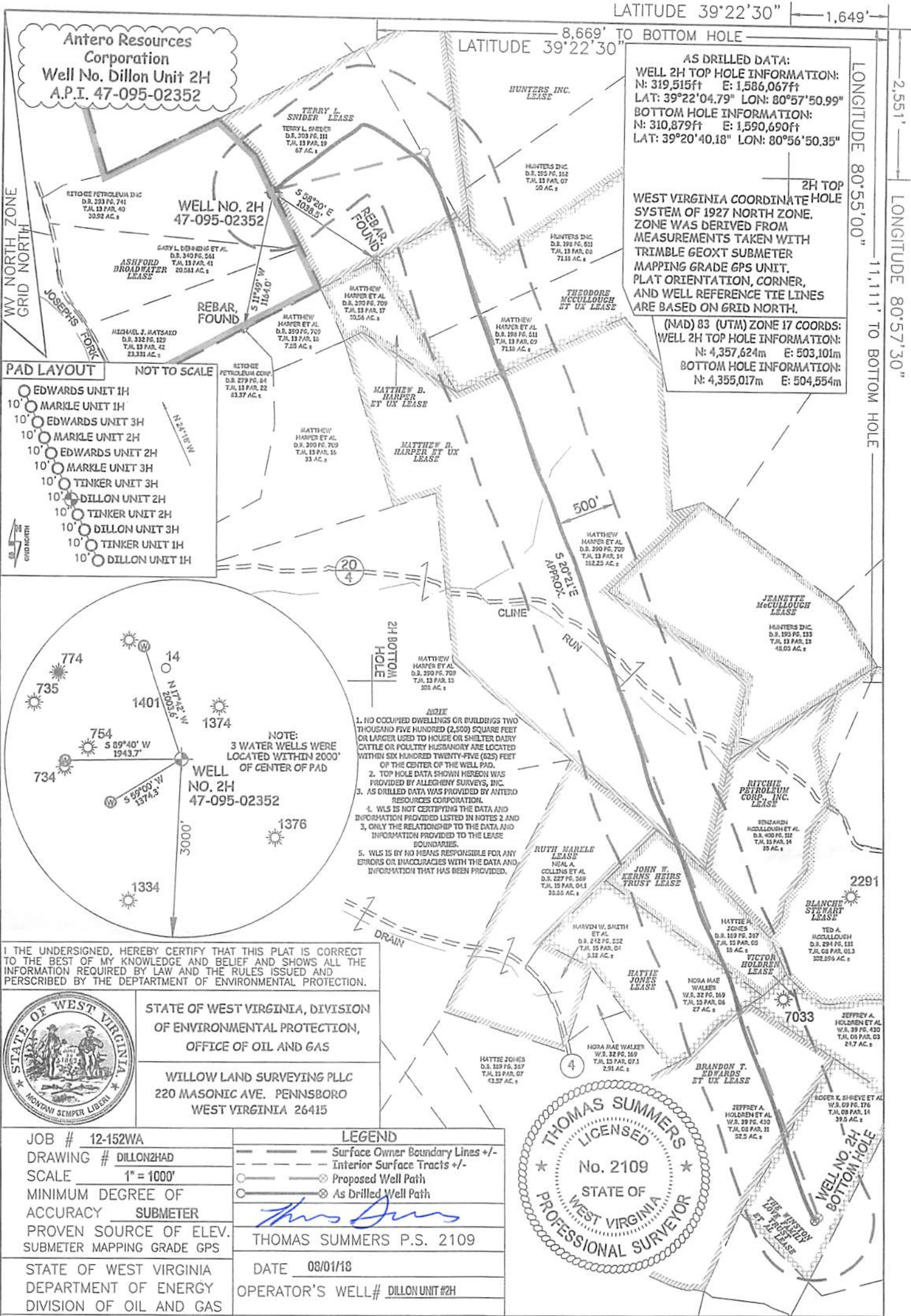
Burket: 6709' MD

Tully: 6812' MD

Marcellus POE: 6858' MD

Projected MD at TD: 16399'

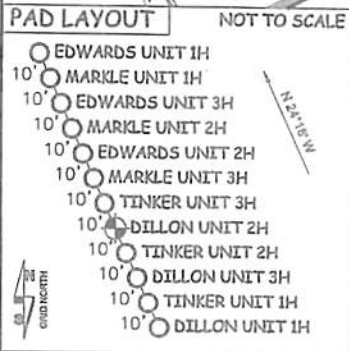
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AS DRILLED DATA:
 WELL 2H TOP HOLE INFORMATION:
 N: 319,515ft E: 1,586,067ft
 LAT: 39°22'04.79" LON: 80°57'50.99"
 BOTTOM HOLE INFORMATION:
 N: 310,879ft E: 1,590,690ft
 LAT: 39°20'40.18" LON: 80°56'50.35"

WEST VIRGINIA COORDINATE HOLE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
 WELL 2H TOP HOLE INFORMATION:
 N: 4,357,624m E: 503,101m
 BOTTOM HOLE INFORMATION:
 N: 4,355,017m E: 504,554m



- NOTE**
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
 2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
 3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
 4. WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES.
 5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC
 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

JOB # 12-152WA
 DRAWING # DILLON2HAD
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

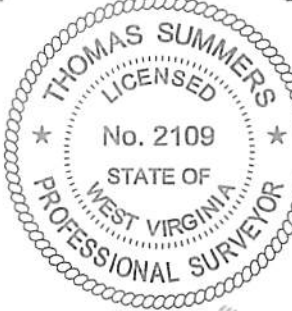
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

LEGEND

- Surface Owner Boundary Lines +/-
- Interior Surface Tracts +/-
- Proposed Well Path
- As Drilled Well Path

Thomas Summers
 THOMAS SUMMERS P.S. 2109

DATE 08/01/18
 OPERATOR'S WELL# DILLON UNIT #2H

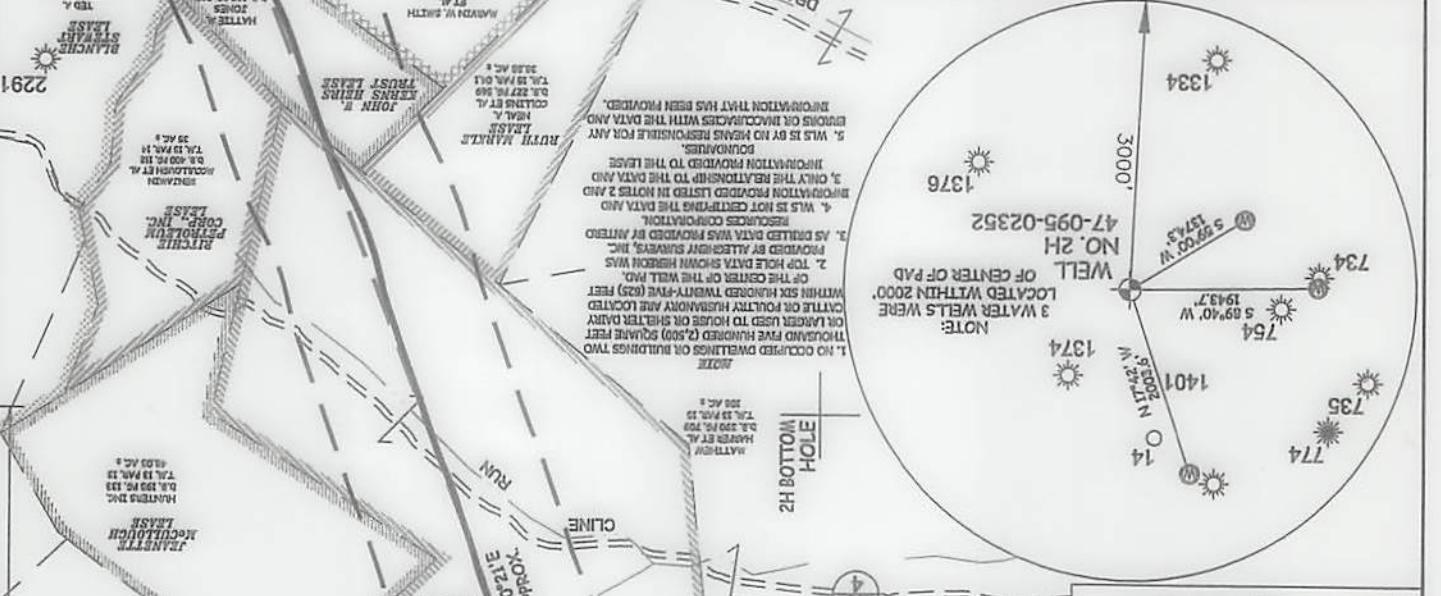


WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 - 095 - 02352
 (IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X STATE COUNTY PERMIT
 LOCATION: ELEVATION 1,146.5' AS-BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK
 QUADRANGLE PENNSBORO 7.5' DISTRICT MEADE COUNTY TYLER
 SURFACE OWNER RITCHIE PETROLEUM INC. ACREAGE 30.92 ACRES +/-
 OIL & GAS ROYALTY OWNER ASHFORD BROADWATER; TERRY L. SNIDER; THEODORE MCCULLOUGH ET UX; LEASE ACREAGE 583.712 ACRES±; 67 ACRES±; 188.72 ACRES±; MATTHEW B. HARPER ET UX; JOHN W. KERNS HEIRS TRUST; HATTIE JONES; BRANDON T. EDWARDS ET UX; THE WINSTON LOVE FAMILY TRUST ET AL 102.25 ACRES±; 18 ACRES±; 27 ACRES±; 52.5 ACRES±; 39.5 ACRES±
 PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___
 PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AS DRILLED PLUG & ABANDON CLEAN OUT & REPLUG
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,473' TVD 16,399' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
 ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
 DENVER, CO 80202 CHARLESTON, WV 25313

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
 COUNTY NAME COUNTY TYLER DISTRICT MEADE
 LOCATION: ELEVATION 1,166' AS-BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK
 QUADRANGLE PENNSBORO 7.5
 SURFACE OWNER RITCHIE PETROLEUM INC.
 OIL & GAS ROYALTY OWNER ASHFORD BROADWATER, TERRY L. SNIDER, THEODORE MCCULLOUGH ET UX, LEASE ACRES: 693.712 ACRES; 67 ACRES; 189.72 ACRES;
 MATTHEW B. HARPER ET UX, JOHN W. KERNIS HEIRS TRUST; HATTIE JONES, BRANDON J. ADWARDS ET UX, THE WINSTON LOVE FAMILY TRUST ET UX, 182.25 ACRES; 27 ACRES; 52 ACRES; 39.5 ACRES;
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL
 (SPECIFY) AS DRILLED
 TARGET FORMATION MARCELLUS
 WELL OPERATOR ANTERO RESOURCES CORP.
 DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
 ADDRESS 1615 WYNKOOP STREET DENVER, CO 80202
 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313
 PERMIT COUNTY PERMIT 02352

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 DIVISION OF OIL AND GAS
 JOB # 12-152WA
 DRAWING # DILLOMHAD
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER
 THOMAS SUMMERS P.S. 2109
 DATE 08/01/18
 OPERATOR'S WELL # DILLOM UNIT #2H

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 WILLOW LAND SURVEYING PLLC
 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415
 I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND DESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



Antero Resources Corporation
 Well No. Dillon Unit 2H
 A.P.I. 47-095-02352

AS DRILLED DATA:
 WELL 2H TOP HOLE INFORMATION: N: 319.515ft E: 1586.067ft LON: 80°57'50.99" LAT: 39°22'04.79" LON: 80°57'50.99" BOTTOM HOLE INFORMATION: N: 310.679ft E: 1590.690ft LON: 80°56'50.35" LAT: 39°20'40.18" LON: 80°56'50.35"

WEST VIRGINIA COORDINATE HOLE 2H TOP
 SYSTEM OF 1927 NORTH ZONE. MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER. MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD 83 (UTM) ZONE 17 COORDS:
 WELL 2H TOP HOLE INFORMATION: N: 4,357,624m E: 503,101m BOTTOM HOLE INFORMATION: N: 4,355,017m E: 504,554m

PAD LAYOUT
 NOT TO SCALE
 EDWARDS UNIT 1H, EDWARDS UNIT 2H, EDWARDS UNIT 3H, MARKLE UNIT 1H, MARKLE UNIT 2H, MARKLE UNIT 3H, TINKER UNIT 2H, TINKER UNIT 3H, DILLOM UNIT 2H, DILLOM UNIT 3H, TINKER UNIT 1H, DILLOM UNIT 1H

LONGITUDE 80°55'00"
LONGITUDE 80°57'30"
LATITUDE 39°22'30"
LATITUDE 39°22'30"
2,551'
11,111' TO BOTTOM HOLE
8,669' TO BOTTOM HOLE
1,649'

