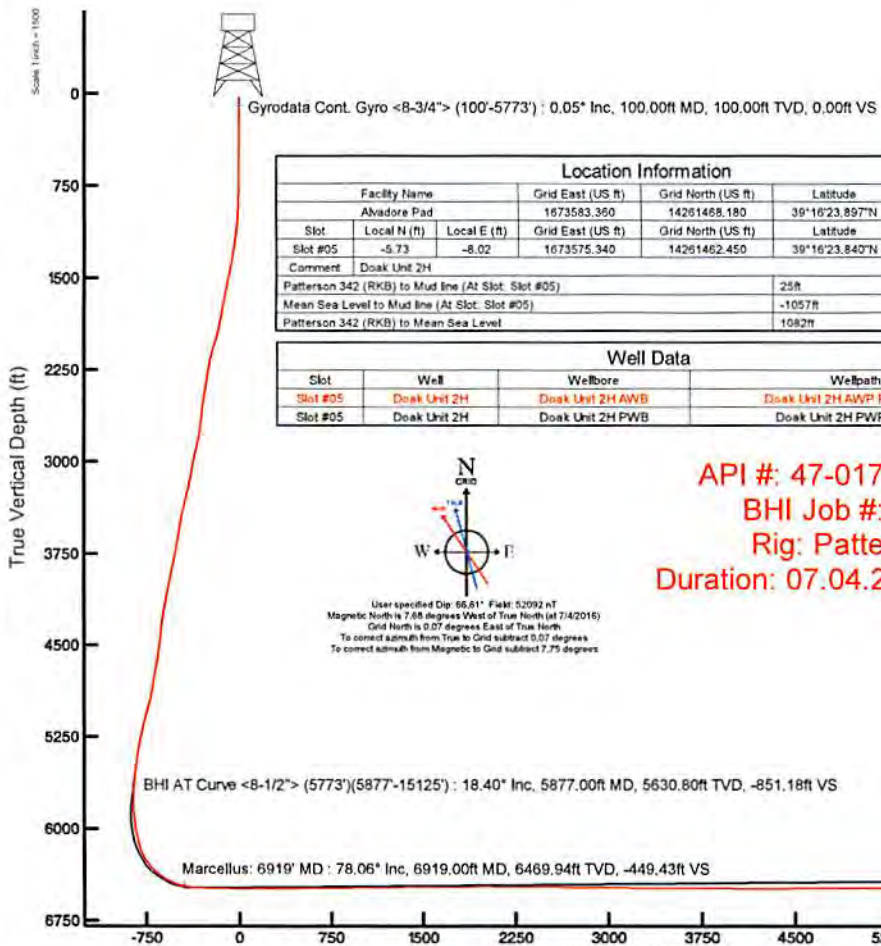




ANTERO RESOURCES CORPORATION

Location: Doddridge Co., WV Slot: Slot #05
 Field: Doddridge Well: Doak Unit 2H
 Facility: Alvadore Pad Wellbore: Doak Unit 2H PWB

Plot reference wellpath is Doak Unit 2H PWP Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to Patterson 342 (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to Patterson 342 (RKB)	North Reference: Grid north
Patterson 342 (RKB) to Mean Sea Level: 1082 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot #05): -1057 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: harekik on 2016-05-02
	Database: WA_MPL_EASTERNUS_Defn

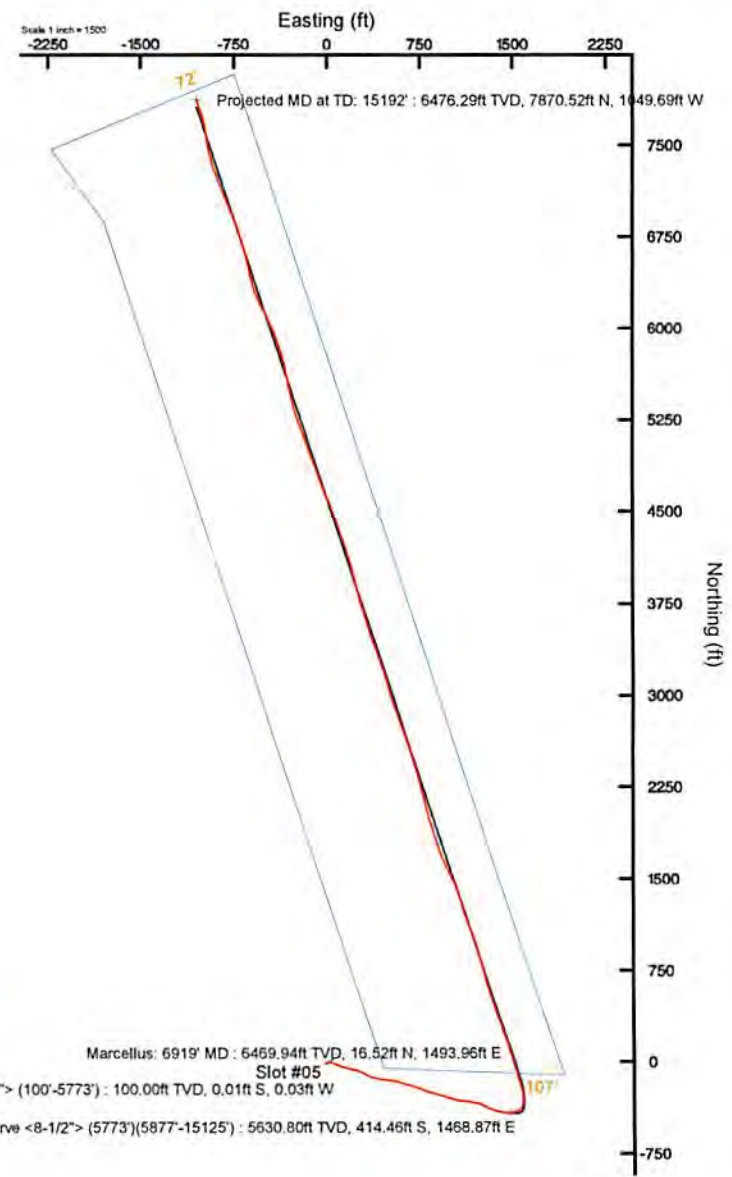


Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Alvadore Pad	1673583.360	14261468.180	39°16'23.897"N	80°52'58.068"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot #05	-5.73	-8.02	1673575.340	14261462.450
			39°16'23.840"N	80°52'58.200"W
Comment	Doak Unit 2H			
Patterson 342 (RKB) to Mud line (At Slot: Slot #05)	25ft			
Mean Sea Level to Mud line (At Slot: Slot #05)	-1057ft			
Patterson 342 (RKB) to Mean Sea Level	1082ft			

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #05	Doak Unit 2H	Doak Unit 2HAWB	Doak Unit 2HAWP Proj 15192'
Slot #05	Doak Unit 2H	Doak Unit 2H PWB	Doak Unit 2H PWP Rev-A.0



API #: 47-017-06767-0000
 BHI Job #: 8034582
 Rig: Patterson 342
 Duration: 07.04.2016-07.09.2016



Azimuth 341.86° with reference 0.00 N, 0.00 E

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Actual Wellpath Report

Doak Unit 2H AWP Proj: 15192'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Doak Unit 2H
Field	Doddridge	Wellbore	Doak Unit 2H AWB
Facility	Alvadore Pad		

WELLPATH DATA (176 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]	Comments
0.00	0.000	256.460	0.00	0.00	0.00	0.00	1673575.34	14261462.45	39°16'23.840"N	80°52'58.200"W	0.00	0.000	0.00	0.00	0.00	
25.00	0.000	256.460	25.00	0.00	0.00	0.00	1673575.34	14261462.45	39°16'23.840"N	80°52'58.200"W	0.00	0.000	0.00	0.00	0.00	
100.00	0.050	256.460	100.00	0.00	-0.01	-0.03	1673575.31	14261462.44	39°16'23.840"N	80°52'58.200"W	0.03	256.460	0.07	0.07	-138.05	Gyrodata Cont. Gyro <8-3/4"> (100'-5773')
200.00	0.050	295.180	200.00	0.04	0.00	-0.11	1673575.23	14261462.45	39°16'23.840"N	80°52'58.201"W	0.11	270.346	0.03	0.00	38.72	
300.00	0.150	319.270	300.00	0.19	0.12	-0.24	1673575.10	14261462.57	39°16'23.841"N	80°52'58.203"W	0.27	296.399	0.11	0.10	24.09	
400.00	0.180	311.900	400.00	0.44	0.32	-0.44	1673574.90	14261462.77	39°16'23.843"N	80°52'58.206"W	0.55	306.185	0.04	0.03	-7.37	
500.00	0.480	310.810	500.00	0.94	0.70	-0.87	1673574.47	14261463.15	39°16'23.847"N	80°52'58.211"W	1.12	308.711	0.30	0.30	-1.09	
600.00	0.800	38.130	599.99	1.69	1.52	-0.76	1673574.58	14261463.97	39°16'23.855"N	80°52'58.210"W	1.70	333.470	0.91	0.32	87.32	
700.00	1.890	76.950	699.97	1.93	2.45	1.28	1673576.62	14261464.89	39°16'23.864"N	80°52'58.184"W	2.76	27.566	1.36	1.09	38.82	
800.00	3.290	93.010	799.86	0.74	2.67	5.75	1673581.09	14261465.12	39°16'23.866"N	80°52'58.127"W	6.34	85.110	1.56	1.40	16.06	
900.00	5.270	98.800	899.58	-2.37	1.81	13.15	1673588.49	14261464.26	39°16'23.858"N	80°52'58.033"W	13.28	82.148	2.02	1.98	5.79	
1000.00	7.740	109.730	998.93	-8.59	-1.16	24.03	1673599.36	14261461.29	39°16'23.828"N	80°52'57.894"W	24.06	92.769	2.75	2.47	10.93	
1100.00	10.140	109.720	1097.71	-18.12	-6.41	38.66	1673613.98	14261456.05	39°16'23.776"N	80°52'57.709"W	39.19	99.410	2.40	2.40	-0.01	
1200.00	12.150	111.760	1195.82	-30.28	-13.28	56.72	1673632.04	14261449.18	39°16'23.708"N	80°52'57.479"W	58.26	103.176	2.05	2.01	2.04	
1300.00	14.010	113.850	1293.22	-45.13	-22.08	77.57	1673652.88	14261440.38	39°16'23.621"N	80°52'57.214"W	80.65	105.886	1.92	1.86	2.09	
1400.00	17.420	110.810	1389.47	-62.64	-32.29	102.64	1673677.94	14261430.17	39°16'23.520"N	80°52'56.895"W	107.60	107.464	3.51	3.41	-3.04	
1500.00	19.770	106.300	1484.25	-81.62	-42.36	132.87	1673708.16	14261420.11	39°16'23.420"N	80°52'56.511"W	139.46	107.682	2.75	2.35	-4.51	
1600.00	20.060	102.490	1578.27	-99.92	-50.81	165.85	1673741.12	14261411.66	39°16'23.336"N	80°52'56.092"W	173.46	107.034	1.33	0.29	-3.81	
1700.00	18.740	101.560	1672.59	-116.62	-57.74	198.33	1673773.59	14261404.73	39°16'23.267"N	80°52'55.679"W	206.57	106.232	1.36	-1.32	-0.93	
1800.00	16.840	106.970	1767.81	-132.91	-85.19	227.93	1673803.18	14261397.29	39°16'23.193"N	80°52'55.303"W	237.07	105.961	2.52	-1.90	5.41	
1900.00	16.260	113.210	1863.68	-150.50	-74.94	254.65	1673829.89	14261387.54	39°16'23.096"N	80°52'54.963"W	265.45	106.398	1.87	-0.58	6.24	
2000.00	19.620	118.710	1958.81	-172.00	-88.52	282.25	1673857.48	14261373.96	39°16'22.961"N	80°52'54.612"W	295.81	107.413	3.76	3.36	5.50	
2100.00	24.200	116.120	2051.56	-198.57	-105.62	315.40	1673890.61	14261356.87	39°16'22.792"N	80°52'54.191"W	332.62	108.515	4.68	4.58	-2.59	
2200.00	21.200	111.980	2143.81	-224.53	-121.42	350.58	1673925.78	14261341.08	39°16'22.635"N	80°52'53.744"W	371.01	109.103	3.40	-3.00	-4.14	
2300.00	18.120	100.990	2238.00	-243.76	-131.15	382.63	1673957.82	14261331.35	39°16'22.539"N	80°52'53.337"W	404.49	108.920	4.80	-3.08	-11.00	
2400.00	19.300	98.340	2332.72	-258.70	-136.51	414.25	1673989.42	14261325.99	39°16'22.485"N	80°52'52.935"W	436.16	108.239	1.45	1.18	-2.64	
2500.00	19.280	100.850	2427.11	-274.07	-142.02	446.82	1674021.98	14261320.49	39°16'22.431"N	80°52'52.521"W	468.84	107.632	0.83	-0.02	2.51	
2600.00	16.100	99.230	2522.37	-288.45	-147.35	476.72	1674051.87	14261315.16	39°16'22.378"N	80°52'52.141"W	498.98	107.176	3.22	-3.18	-1.62	
2700.00	15.220	92.770	2618.66	-299.51	-150.21	503.52	1674078.66	14261312.30	39°16'22.349"N	80°52'51.800"W	525.45	106.611	1.95	-0.88	-6.46	
2800.00	15.800	98.950	2715.03	-310.39	-152.96	530.09	1674105.21	14261309.55	39°16'22.321"N	80°52'51.462"W	551.71	106.096	1.75	0.58	6.18	

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Actual Wellpath Report

Doak Unit 2H AWP Proj: 15192'

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REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #05
Area	Doddridge Co., WV		Well	Doak Unit 2H
Field	Doddridge		Wellbore	Doak Unit 2H AWB
Facility	Alvadore Pad			

WELLPATH DATA (176 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 (ft/100ft)	Build Rate (ft/100ft)	Turn Rate (ft/100ft)	Comments
2900.00	20.400	104.990	2810.06	-326.13	-159.59	560.39	1674135.50	14261302.92	39°16'22.255"N	80°52'51.077"W	582.67	105.896	4.96	4.60	6.04	
3000.00	21.580	106.920	2903.42	-346.22	-169.45	594.82	1674169.92	14261293.07	39°16'22.158"N	80°52'50.639"W	618.48	105.901	1.37	1.18	1.93	
3100.00	19.110	106.770	2997.18	-366.15	-179.53	628.09	1674203.18	14261282.99	39°16'22.058"N	80°52'50.217"W	653.24	105.952	2.47	-2.47	-0.15	
3200.00	19.150	104.700	3091.66	-384.42	-188.41	659.63	1674234.71	14261274.11	39°16'21.969"N	80°52'49.816"W	686.01	105.941	0.68	0.04	-2.07	
3300.00	19.960	106.790	3185.89	-403.09	-197.51	691.84	1674266.90	14261265.02	39°16'21.879"N	80°52'49.406"W	719.48	105.933	1.07	0.81	2.09	
3400.00	21.000	111.630	3279.57	-424.32	-209.04	724.84	1674299.89	14261253.49	39°16'21.765"N	80°52'48.987"W	754.38	106.088	1.99	1.04	4.84	
3500.00	20.620	112.660	3373.05	-447.29	-222.43	757.74	1674332.78	14261240.11	39°16'21.632"N	80°52'48.569"W	789.72	106.359	0.53	-0.38	1.03	
3600.00	17.580	106.660	3467.54	-467.42	-233.55	788.47	1674363.49	14261229.00	39°16'21.521"N	80°52'48.178"W	822.33	106.500	3.62	-3.04	-6.00	
3700.00	15.650	104.440	3563.37	-483.31	-241.24	816.00	1674391.02	14261221.30	39°16'21.445"N	80°52'47.828"W	850.92	106.470	2.03	-1.93	-2.22	
3800.00	16.760	106.930	3659.39	-498.85	-248.80	842.86	1674417.86	14261213.75	39°16'21.370"N	80°52'47.487"W	878.82	106.446	1.31	1.11	2.48	
3900.00	18.790	108.920	3754.61	-516.85	-258.23	871.89	1674446.88	14261204.33	39°16'21.276"N	80°52'47.118"W	909.33	106.498	2.12	2.03	1.99	
4000.00	18.620	105.660	3849.33	-535.43	-267.76	902.50	1674477.48	14261194.80	39°16'21.182"N	80°52'46.729"W	941.38	106.525	1.06	-0.17	-3.26	
4100.00	18.770	106.940	3944.06	-553.56	-276.75	933.26	1674508.23	14261185.81	39°16'21.093"N	80°52'46.338"W	973.43	106.518	0.44	0.15	1.28	
4200.00	20.170	109.950	4038.34	-573.44	-287.33	964.86	1674539.81	14261175.24	39°16'20.988"N	80°52'45.936"W	1006.73	106.583	1.72	1.40	3.01	
4300.00	18.540	103.460	4132.70	-592.41	-296.91	996.53	1674571.47	14261165.66	39°16'20.892"N	80°52'45.534"W	1039.82	106.591	2.70	-1.63	-6.49	
4400.00	18.210	105.800	4227.60	-609.47	-304.87	1027.03	1674601.96	14261157.71	39°16'20.813"N	80°52'45.146"W	1071.32	106.533	0.81	-0.33	2.34	
4500.00	15.960	97.640	4323.19	-624.18	-310.95	1055.70	1674630.62	14261151.63	39°16'20.753"N	80°52'44.782"W	1100.54	106.412	3.28	-2.25	-8.16	
4600.00	15.450	96.470	4419.46	-635.70	-314.28	1082.56	1674657.47	14261148.30	39°16'20.720"N	80°52'44.440"W	1127.26	106.189	0.60	-0.51	-1.17	
4700.00	15.700	95.880	4515.79	-646.76	-317.17	1109.25	1674684.15	14261145.41	39°16'20.691"N	80°52'44.101"W	1153.71	105.957	0.30	0.25	-0.59	
4800.00	17.770	100.510	4611.55	-659.58	-321.34	1137.72	1674712.61	14261141.24	39°16'20.649"N	80°52'43.739"W	1182.23	105.772	2.46	2.07	4.63	
4900.00	18.890	103.760	4706.48	-675.45	-327.97	1168.45	1674743.32	14261134.61	39°16'20.583"N	80°52'43.348"W	1213.61	105.679	1.52	1.12	3.25	
5000.00	18.440	99.220	4801.23	-691.28	-334.35	1199.79	1674774.65	14261128.23	39°16'20.520"N	80°52'42.950"W	1245.50	105.572	1.52	-0.45	-4.54	
5100.00	19.150	110.030	4895.92	-708.69	-342.51	1230.82	1674805.66	14261120.08	39°16'20.439"N	80°52'42.555"W	1277.59	105.551	3.55	0.71	10.81	
5200.00	20.860	120.710	4989.92	-732.24	-357.23	1261.55	1674836.38	14261105.37	39°16'20.293"N	80°52'42.165"W	1311.15	105.810	4.03	1.71	10.68	
5300.00	20.030	115.140	5083.62	-757.39	-373.60	1292.36	1674867.18	14261089.00	39°16'20.131"N	80°52'41.773"W	1345.28	106.124	2.11	-0.83	-5.57	
5400.00	19.400	109.630	5177.77	-779.31	-386.45	1323.51	1674898.32	14261076.15	39°16'20.003"N	80°52'41.378"W	1378.78	106.277	1.96	-0.63	-5.51	
5500.00	19.090	108.270	5272.18	-799.18	-397.16	1354.68	1674929.48	14261065.45	39°16'19.897"N	80°52'40.981"W	1411.70	106.340	0.54	-0.31	-1.36	
5600.00	18.750	104.750	5366.78	-817.62	-406.38	1385.75	1674960.54	14261056.24	39°16'19.805"N	80°52'40.586"W	1444.11	106.344	1.19	-0.34	-3.52	
5700.00	17.010	95.640	5461.97	-832.25	-411.91	1415.86	1674990.63	14261050.71	39°16'19.750"N	80°52'40.204"W	1474.56	106.221	3.29	-1.74	-9.11	
5773.00	17.150	95.200	5531.75	-840.82	-413.93	1437.21	1675011.97	14261048.68	39°16'19.730"N	80°52'39.932"W	1495.63	106.067	0.26	0.19	-0.60	

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Actual Wellpath Report

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Doak Unit 2H AWP Proj: 15192



Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co., WV
Field	Doddridge
Facility	Alvadore Pad
Well	Doak Unit 2H
Wellbore	Doak Unit 2H AWP
Slot	Slot #05

REFERENCE WELLPATH IDENTIFICATION

MD	Inclination	Azimuth	TVD	Vert	North	East	Grid East	Grid North	Lat/Long	Comments
[m]	[°]	[°]	[m]	[m]	[m]	[m]	[m]	[m]	[N/E]	
5877.00	18.400	86.980	5630.80	851.18	414.46	1468.87	1675043.62	14261048.16	39°16'19.72"N	
5870.00	17.520	76.840	5719.29	856.22	410.50	1497.17	1675071.91	14261052.12	39°16'19.76"N	
5027.00	16.380	62.690	5773.81	857.08	406.15	1513.20	1675087.93	14261056.46	39°16'19.806"N	
6064.00	15.290	63.450	5809.41	856.45	402.42	1522.54	1675097.27	14261060.19	39°16'19.843"N	
8110.00	14.170	54.690	5853.91	853.80	396.45	1532.57	1675107.29	14261066.16	39°16'19.902"N	
8158.00	13.200	49.920	5900.54	850.11	389.53	1541.55	1675116.28	1426119.970"N	39°16'20.041"N	
8205.00	13.010	44.960	5946.32	845.71	382.33	1549.40	1675124.12	14261080.28	39°16'20.041"N	
8253.00	14.570	34.910	5992.94	839.64	373.55	1556.67	1675131.39	14261089.05	39°16'20.128"N	
8300.00	16.030	24.270	6038.29	831.29	362.78	1562.72	1675137.44	14261099.81	39°16'20.234"N	
8347.00	16.290	15.870	6083.44	821.04	350.53	1567.20	1675141.91	14261112.06	39°16'20.355"N	
8395.00	17.470	9.970	6129.37	809.10	336.95	1570.28	1675144.99	14261125.63	39°16'20.489"N	
8442.00	21.730	7.080	6173.64	795.00	321.36	1572.58	1675147.29	14261141.22	39°16'20.643"N	
8490.00	27.310	2.240	6217.30	776.62	301.53	1574.11	1675148.81	14261161.05	39°16'20.839"N	
8536.00	31.960	0.540	6257.28	754.81	278.85	1573.26	1675147.97	14261183.71	39°16'21.063"N	
8583.00	38.020	0.470	6295.76	728.22	252.31	1568.86	1675143.58	14261210.25	39°16'21.326"N	
8585.00	38.248	0.470	6329.36	726.99	251.10	1568.60	1675143.31	14261211.45	39°16'21.338"N	
8583.00	43.400	0.470	6363.89	663.83	189.61	1553.41	1675128.13	14261272.91	39°16'21.946"N	
8577.00	49.080	0.470	6393.45	626.11	153.00	1544.02	1675118.74	14261309.51	39°16'22.308"N	
8725.00	54.860	0.470	6439.45	626.11	153.00	1544.02	1675118.74	14261309.51	39°16'22.308"N	
8756.00	58.414	0.470	6410.50	600.27	127.98	1537.38	1675112.10	14261334.52	39°16'22.555"N	
8772.00	60.250	0.470	6418.66	586.52	114.71	1533.74	1675108.46	14261347.78	39°16'22.686"N	
8819.00	66.480	0.470	6439.72	544.56	74.35	1522.14	1675096.87	14261388.13	39°16'23.085"N	
8825.00	67.195	0.470	6442.08	539.05	69.07	1520.57	1675095.30	14261393.41	39°16'23.137"N	
8866.00	72.080	0.470	6456.34	500.63	32.34	1509.28	1675084.01	14261430.13	39°16'23.501"N	
8913.00	77.500	0.470	6468.67	455.30	10.92	1495.70	1675070.44	14261473.36	39°16'23.928"N	
8919.00	78.063	0.470	6469.94	449.43	16.52	1493.96	1675068.70	14261478.96	39°16'23.984"N	
8960.00	81.910	0.470	6477.06	409.07	55.10	1482.09	1675056.84	14261517.53	39°16'24.865"N	
7007.00	87.200	0.470	6481.51	362.32	99.92	1468.72	1675043.47	14261562.33	39°16'24.808"N	
7102.00	88.830	0.470	6484.78	267.39	190.49	1440.25	1675015.02	14261652.86	39°16'25.704"N	

WELLPATH DATA (176 stations) † = interpolated/extrapolated station

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 Doak Unit 2H AWP Proj: 15192
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Operator	ANTERO RESOURCES CORPORATION
Area	Doddridge Co, WV
Field	Doddridge
Facility	Alvadore Pad
Slot	Slot #05
Well	Doak Unit 2H
Wellbore	Doak Unit 2H AWP

WELLPATH DATA (176 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
7196.00	88.830	341.040	6486.70	-173.41	279.47	1410.01	1674984.79	14261741.81	39°16'26.58"N	80°52'40.266"W	1437.44	78.789	0.40	0.00	-0.40	
7291.00	88.490	340.840	6488.92	-78.45	369.24	1379.00	1674953.79	14261831.54	39°16'27.47"N	80°52'40.659"W	1427.58	75.010	0.42	-0.36	-0.21	
7385.00	89.320	341.400	6490.71	15.52	458.16	1348.59	1674923.39	14261920.43	39°16'28.351"N	80°52'41.044"W	1424.29	71.236	1.07	0.88	0.60	
7479.00	90.060	341.320	6491.22	109.52	547.23	1318.54	1674893.35	14262009.46	39°16'29.231"N	80°52'41.425"W	1427.59	67.460	0.79	-0.08	-1.82	
7574.00	90.180	343.050	6491.02	204.51	637.67	1289.48	1674864.30	14262099.87	39°16'30.126"N	80°52'41.793"W	1438.53	63.687	1.83	0.13	1.82	
7668.00	90.250	346.150	6490.67	298.39	728.28	1264.52	1674839.35	14262190.44	39°16'31.022"N	80°52'42.109"W	1459.25	60.061	3.30	0.07	3.30	
7763.00	90.550	345.470	6490.01	393.16	820.38	1241.23	1674816.08	14262282.50	39°16'31.932"N	80°52'42.403"W	1487.85	56.538	0.78	0.32	-0.72	
7857.00	90.550	342.940	6489.11	487.07	910.82	1215.65	1674790.50	14262372.91	39°16'32.827"N	80°52'42.727"W	1519.01	53.158	2.69	0.00	-2.69	
7952.00	90.430	340.930	6488.29	582.06	1001.13	1186.19	1674761.06	14262463.18	39°16'33.719"N	80°52'43.100"W	1552.20	49.836	2.12	-0.16	-2.12	
8046.00	90.620	338.700	6487.43	675.99	1089.35	1153.76	1674728.64	14262551.36	39°16'34.592"N	80°52'43.511"W	1586.77	46.645	2.38	0.20	-2.37	
8140.00	90.770	338.840	6486.29	769.85	1176.96	1119.73	1674694.62	14262638.94	39°16'35.458"N	80°52'43.942"W	1624.51	43.572	0.22	0.16	0.16	
8235.00	90.830	344.450	6484.96	864.80	1267.08	1089.82	1674664.73	14262729.03	39°16'36.349"N	80°52'44.321"W	1671.29	40.699	5.91	0.06	5.91	
8329.00	90.860	344.860	6483.58	968.68	1357.72	1064.95	1674639.87	14262819.63	39°16'37.246"N	80°52'44.636"W	1726.55	38.109	0.44	0.03	0.44	
8424.00	90.580	337.860	6482.38	1053.61	1447.68	1034.61	1674609.53	14262909.55	39°16'38.135"N	80°52'45.020"W	1779.38	35.552	7.37	-0.29	-7.37	
8518.00	91.020	332.250	6481.07	1146.90	1532.87	994.99	1674569.93	14262994.70	39°16'38.978"N	80°52'45.522"W	1827.48	32.988	5.99	0.47	-5.97	
8612.00	90.490	334.590	6479.83	1239.87	1616.92	952.93	1674527.89	14263078.72	39°16'39.806"N	80°52'46.056"W	1876.83	30.513	2.55	-0.56	2.49	
8707.00	90.580	340.960	6478.94	1334.57	1704.82	917.03	1674492.01	14263166.58	39°16'40.678"N	80°52'46.511"W	1935.81	28.276	6.73	0.09	6.73	
8801.00	90.520	341.680	6478.04	1428.57	1793.86	886.94	1674461.93	14263255.60	39°16'41.559"N	80°52'46.892"W	2001.16	26.309	0.75	-0.06	0.74	
8896.00	90.520	342.350	6477.18	1523.56	1884.22	857.61	1674432.61	14263345.91	39°16'42.452"N	80°52'47.263"W	2070.21	24.473	0.71	0.00	0.71	
8990.00	90.520	343.430	6476.32	1617.54	1974.05	829.96	1674404.97	14263435.71	39°16'43.340"N	80°52'47.613"W	2141.43	22.804	1.15	0.00	1.15	
9085.00	90.550	344.970	6475.44	1712.45	2065.46	804.09	1674379.11	14263527.08	39°16'44.244"N	80°52'47.941"W	2216.46	21.271	1.62	0.03	1.62	
9179.00	90.180	345.190	6474.84	1806.30	2156.29	779.89	1674354.92	14263617.87	39°16'45.142"N	80°52'48.247"W	2292.94	19.884	0.46	-0.39	0.23	
9274.00	90.620	347.480	6474.18	1901.01	2248.59	757.45	1674332.49	14263710.14	39°16'46.055"N	80°52'48.531"W	2372.74	18.616	2.45	0.46	2.41	
9368.00	89.970	344.570	6473.69	1994.75	2339.79	734.75	1674309.80	14263801.31	39°16'46.956"N	80°52'48.818"W	2452.45	17.434	3.17	-0.69	-3.10	
9463.00	89.290	342.870	6474.30	2089.69	2430.98	708.12	1674283.18	14263892.46	39°16'47.858"N	80°52'49.155"W	2532.02	16.240	1.93	-0.72	-1.79	
9557.00	89.350	341.930	6475.42	2183.68	2520.57	679.70	1674254.77	14263982.01	39°16'48.744"N	80°52'49.515"W	2610.61	15.092	1.00	0.06	-1.00	
9651.00	89.750	341.390	6476.16	2277.67	2609.79	650.13	1674225.21	14264071.20	39°16'49.626"N	80°52'49.890"W	2689.55	13.988	0.71	0.43	-0.57	
9745.00	89.450	340.180	6476.81	2371.65	2698.55	619.19	1674194.28	14264159.92	39°16'50.504"N	80°52'50.281"W	2768.68	12.923	1.33	-0.32	-1.29	
9840.00	89.110	338.580	6478.01	2466.55	2787.46	585.74	1674160.84	14264248.79	39°16'51.383"N	80°52'50.705"W	2848.33	11.867	1.72	-0.36	-1.68	
9934.00	89.970	339.380	6478.76	2560.43	2875.20	552.02	1674127.14	14264336.50	39°16'52.251"N	80°52'51.133"W	2927.71	10.668	1.25	0.91	0.85	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION		Slot #05
Area	Doddridge Co., WV		Well
Field	Doddridge		Doak Unit 2H
Facility	Alvadore Pad		Wellbore
			Doak Unit 2H AWP

WELLPATH DATA (176 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
10029.00	89.480	342.480	6479.22	2655.40	2964.97	520.99	1674096.12	14264426.23	39°16'53.138"N	80°52'51.526"W	3010.40	9.966	3.30	-0.52	3.26	
10123.00	89.880	344.950	6479.74	2749.35	3055.19	494.63	1674069.77	14264516.42	39°16'54.030"N	80°52'51.859"W	3094.97	9.196	2.66	0.43	2.63	
10217.00	89.420	343.240	6480.32	2843.27	3145.59	468.87	1674044.03	14264606.78	39°16'54.924"N	80°52'52.186"W	3180.34	8.478	1.88	-0.49	-1.82	
10311.00	89.660	341.510	6481.07	2937.26	3235.17	440.41	1674015.58	14264696.32	39°16'55.810"N	80°52'52.546"W	3265.01	7.752	1.86	0.26	-1.84	
10406.00	89.420	341.410	6481.84	3032.25	3325.24	410.21	1673985.38	14264786.35	39°16'56.700"N	80°52'52.929"W	3350.44	7.033	0.27	-0.25	-0.11	
10500.00	88.890	340.360	6483.22	3126.23	3414.04	379.43	1673954.62	14264875.12	39°16'57.579"N	80°52'53.319"W	3435.06	6.342	1.25	-0.56	-1.12	
10595.00	89.600	342.100	6484.47	3221.21	3503.98	348.87	1673924.07	14264965.02	39°16'58.468"N	80°52'53.706"W	3521.30	5.686	1.98	0.75	1.83	
10689.00	89.690	343.280	6485.06	3315.20	3593.72	320.90	1673896.11	14265054.73	39°16'59.355"N	80°52'54.060"W	3608.02	5.103	1.26	0.10	1.26	
10784.00	89.570	343.160	6485.67	3410.17	3684.67	293.47	1673868.70	14265145.64	39°17'00.255"N	80°52'54.407"W	3696.34	4.554	0.18	-0.13	-0.13	
10878.00	89.720	344.390	6486.25	3504.11	3774.92	267.21	1673842.44	14265235.86	39°17'01.147"N	80°52'54.740"W	3784.37	4.049	1.32	0.16	1.31	
10972.00	89.690	345.740	6486.74	3597.96	3865.74	242.98	1673818.23	14265326.65	39°17'02.045"N	80°52'55.046"W	3873.37	3.597	1.44	-0.03	1.44	
11067.00	89.690	346.930	6487.25	3692.67	3958.05	220.54	1673795.79	14265418.92	39°17'02.958"N	80°52'55.330"W	3964.19	3.189	1.25	0.00	1.25	
11161.00	89.690	345.350	6487.76	3786.40	4049.31	198.03	1673773.29	14265510.14	39°17'03.860"N	80°52'55.615"W	4054.15	2.800	1.68	0.00	-1.68	
11255.00	89.630	340.800	6488.32	3880.35	4139.21	170.67	1673745.94	14265600.01	39°17'04.749"N	80°52'55.961"W	4142.73	2.361	4.84	-0.06	-4.84	
11350.00	89.720	340.740	6488.86	3975.34	4228.91	139.38	1673714.66	14265689.67	39°17'05.636"N	80°52'56.358"W	4231.21	1.888	0.11	0.09	-0.06	
11444.00	89.690	341.600	6489.34	4069.33	4317.88	109.04	1673684.34	14265778.60	39°17'06.515"N	80°52'56.742"W	4319.26	1.447	0.92	-0.03	0.91	
11539.00	90.180	340.420	6489.45	4164.31	4407.71	78.13	1673653.44	14265868.39	39°17'07.404"N	80°52'57.134"W	4408.40	1.015	1.34	0.52	-1.24	
11633.00	90.060	338.120	6489.25	4258.21	4495.62	44.86	1673620.18	14265956.26	39°17'08.273"N	80°52'57.556"W	4495.84	0.572	2.45	-0.13	-2.45	
11727.00	90.090	338.410	6489.13	4352.03	4582.93	10.05	1673585.38	14266043.55	39°17'09.136"N	80°52'57.997"W	4582.94	0.126	0.31	0.03	0.31	
11822.00	90.090	338.860	6488.98	4446.88	4671.40	-24.56	1673550.79	14266131.98	39°17'10.011"N	80°52'58.435"W	4671.47	359.699	0.47	0.00	0.47	
11916.00	89.970	339.300	6488.93	4540.76	4759.21	-58.13	1673517.24	14266219.75	39°17'10.879"N	80°52'58.861"W	4759.56	359.300	0.49	-0.13	0.47	
12010.00	90.150	341.320	6488.83	4634.73	4847.71	-89.80	1673485.58	14266308.21	39°17'11.755"N	80°52'59.262"W	4848.54	358.939	2.16	0.19	2.15	
12105.00	90.180	339.850	6488.56	4729.70	4937.30	-121.37	1673454.02	14266397.77	39°17'12.641"N	80°52'59.662"W	4938.79	358.592	1.55	0.03	-1.55	
12199.00	90.120	339.320	6488.31	4823.62	5025.40	-154.16	1673421.24	14266485.83	39°17'13.512"N	80°53'00.078"W	5027.76	358.243	0.57	-0.06	-0.56	
12294.00	90.370	339.910	6487.91	4918.55	5114.45	-187.25	1673388.16	14266574.85	39°17'14.392"N	80°53'00.497"W	5117.87	357.903	0.67	0.26	0.62	
12388.00	90.400	339.400	6487.27	5012.48	5202.58	-219.93	1673355.50	14266662.94	39°17'15.264"N	80°53'00.911"W	5207.23	357.579	0.54	0.03	-0.54	
12483.00	90.490	342.620	6486.54	5107.45	5292.39	-250.84	1673324.60	14266752.72	39°17'16.152"N	80°53'01.303"W	5298.34	357.286	3.39	0.09	3.39	
12577.00	90.520	346.750	6485.71	5201.31	5383.03	-275.66	1673299.79	14266843.33	39°17'17.048"N	80°53'01.617"W	5390.09	357.068	4.39	0.03	4.39	
12671.00	90.460	348.240	6484.90	5294.85	5474.80	-296.01	1673279.44	14266935.05	39°17'17.955"N	80°53'01.875"W	5482.79	356.905	1.59	-0.06	1.59	
12765.00	90.680	348.540	6483.97	5388.24	5566.87	-314.93	1673260.54	14267027.09	39°17'18.865"N	80°53'02.114"W	5575.77	356.762	0.40	0.23	0.32	

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REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Doak Unit 2H
Field	Doddridge	Wellbore	Doak Unit 2H AWP
Facility	Alvadore Pad		

WELLPATH DATA (176 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
12860.00	89.880	346.770	6483.50	5482.75	5659.67	-335.24	1673240.23	14267119.85	39°17'19.83"N	80°53'02.37"W	5669.59	356.610	2.04	-0.84	-1.86	
12954.00	89.940	345.460	6483.65	5576.49	5750.92	-357.80	1673217.69	14267211.06	39°17'20.685"N	80°53'02.656"W	5762.04	356.440	1.40	0.06	-1.39	
13049.00	89.940	343.060	6483.75	5671.40	5842.35	-383.57	1673191.93	14267302.46	39°17'21.589"N	80°53'02.982"W	5854.93	356.244	2.53	0.00	-2.53	
13143.00	90.000	339.020	6483.80	5765.37	5931.23	-414.10	1673161.40	14267391.30	39°17'22.468"N	80°53'03.369"W	5945.67	356.006	4.30	0.06	-4.30	
13237.00	90.060	335.050	6483.75	5859.01	6017.76	-450.77	1673124.75	14267477.80	39°17'23.324"N	80°53'03.834"W	6034.62	355.716	4.22	0.06	-4.22	
13331.00	89.940	335.050	6483.75	5952.35	6102.99	-490.41	1673085.12	14267563.00	39°17'24.167"N	80°53'04.337"W	6122.67	355.406	0.13	-0.13	0.01	
13426.00	89.910	332.880	6483.87	6046.45	6188.35	-532.10	1673043.45	14267648.32	39°17'25.011"N	80°53'04.866"W	6211.19	355.086	2.29	-0.03	-2.29	
13520.00	90.280	336.820	6483.72	6139.73	6273.42	-572.04	1673003.53	14267733.96	39°17'25.852"N	80°53'05.372"W	6299.45	354.790	4.21	0.39	4.19	
13614.00	90.430	344.490	6483.14	6233.63	6362.05	-603.16	1672972.43	14267821.95	39°17'26.728"N	80°53'05.767"W	6390.58	354.584	8.16	0.16	8.16	
13708.00	90.310	350.930	6482.53	6327.09	6453.84	-623.15	1672952.44	14267913.71	39°17'27.636"N	80°53'06.019"W	6483.86	354.485	6.85	-0.13	6.85	
13803.00	90.430	346.950	6481.91	6421.35	6547.06	-641.37	1672934.22	14268006.89	39°17'28.558"N	80°53'06.250"W	6578.40	354.405	4.19	0.13	-4.19	
13897.00	90.340	343.190	6481.28	6515.18	6637.87	-665.59	1672910.02	14268097.66	39°17'29.455"N	80°53'06.556"W	6671.15	354.274	4.00	-0.10	-4.00	
13992.00	90.400	342.800	6480.67	6610.16	6728.71	-693.37	1672882.25	14268188.47	39°17'30.354"N	80°53'06.908"W	6764.34	354.177	0.42	0.06	-0.41	
14086.00	90.400	341.350	6480.01	6704.15	6818.15	-722.30	1672853.33	14268277.86	39°17'31.238"N	80°53'07.275"W	6856.30	353.953	1.54	0.00	-1.54	
14180.00	90.310	338.710	6479.43	6798.10	6906.48	-754.40	1672821.24	14268368.17	39°17'32.111"N	80°53'07.681"W	6947.56	353.766	2.81	-0.10	-2.81	
14275.00	90.310	336.900	6478.92	6892.85	6994.44	-790.29	1672785.37	14268454.09	39°17'32.981"N	80°53'08.136"W	7038.94	353.554	1.91	0.00	-1.91	
14369.00	90.180	337.680	6478.51	6986.55	7081.15	-826.57	1672749.10	14268540.76	39°17'33.839"N	80°53'08.597"W	7129.23	353.342	0.84	-0.14	0.83	
14464.00	90.280	339.320	6478.13	7081.39	7169.54	-861.39	1672714.29	14268629.11	39°17'34.713"N	80°53'09.038"W	7221.10	353.149	1.73	0.11	1.73	
14558.00	90.310	338.320	6477.65	7175.25	7257.18	-895.35	1672680.35	14268716.73	39°17'35.579"N	80°53'09.469"W	7312.21	352.967	1.06	0.03	-1.06	
14652.00	90.250	343.160	6477.19	7269.20	7345.90	-926.35	1672649.36	14268805.40	39°17'36.457"N	80°53'09.861"W	7404.07	352.813	5.15	-0.06	5.15	
14747.00	90.060	347.910	6476.93	7363.98	7437.86	-950.07	1672625.65	14268897.33	39°17'37.366"N	80°53'10.162"W	7498.29	352.721	5.00	-0.20	5.00	
14841.00	90.180	351.400	6476.74	7457.10	7530.32	-966.95	1672608.78	14268989.75	39°17'38.280"N	80°53'10.375"W	7592.14	352.683	3.71	0.13	3.71	
14935.00	90.150	350.730	6476.46	7549.89	7623.17	-981.55	1672594.18	14269082.57	39°17'39.198"N	80°53'10.559"W	7686.11	352.663	0.71	-0.03	-0.71	
15030.00	90.030	346.100	6476.32	7644.24	7716.21	-1000.62	1672575.12	14269175.57	39°17'40.118"N	80°53'10.800"W	7780.82	352.611	4.88	-0.13	-4.87	
15125.00	90.000	340.810	6476.29	7739.17	7807.25	-1027.66	1672548.09	14269266.57	39°17'41.018"N	80°53'11.143"W	7874.59	352.501	5.57	-0.03	-5.57	Projected MD at TD: 15192
15192.00	90.000	340.810	6476.29	7809.16	7870.52	-1049.69	1672526.07	14269329.82	39°17'41.643"N	80°53'11.422"W	7940.21	352.403	0.00	0.00	0.00	

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Actual Wellpath Report

Doak Unit 2H AWP Proj: 15192'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #05
Area	Doddridge Co., WV	Well	Doak Unit 2H
Field	Doddridge	Wellbore	Doak Unit 2H AWB
Facility	Alvadore Pad		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Doak Unit 2H BHL Rev-1	6412.23	7802.40	-1047.10	1672528.66	14269261.72	39°17'40.970"N	80°53'11.390"W	point
Doak Unit 2H POE Rev-1	6462.00	-41.15	1523.26	1675097.99	14261421.32	39°16'23.413"N	80°52'38.832"W	point
Doak Unit 2H LP - Rev-1	6483.00	95.95	1478.33	1675053.08	14261558.36	39°16'24.769"N	80°52'39.401"W	point
Doak Unit 2H 20' L/R HardLine	6500.00	3949.18	215.62	1673790.87	14265410.04	39°17'02.870"N	80°52'55.393"W	rectangle

WELLPATH COMPOSITION - Ref Wellbore: Doak Unit 2H AWB Ref Wellpath: Doak Unit 2H AWP Proj: 15192'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	5773.00	Gyrodata standard - Continuous gyro	01 Gyrodata Cont. Gyro <8-3/4"> (100'-5773')	Doak Unit 2H AWB
5773.00	15125.00	BHI AutoTrak Curve (Short)	02 BHI AT Curve <8-1/2"> (5773')(5877'-15125')	Doak Unit 2H AWB
15125.00	15192.00	Blind Drilling (std)	Projection to bit	Doak Unit 2H AWB

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