



# ANTERO RESOURCES CORPORATION

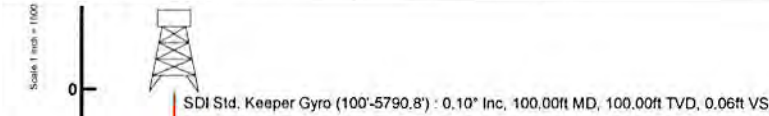
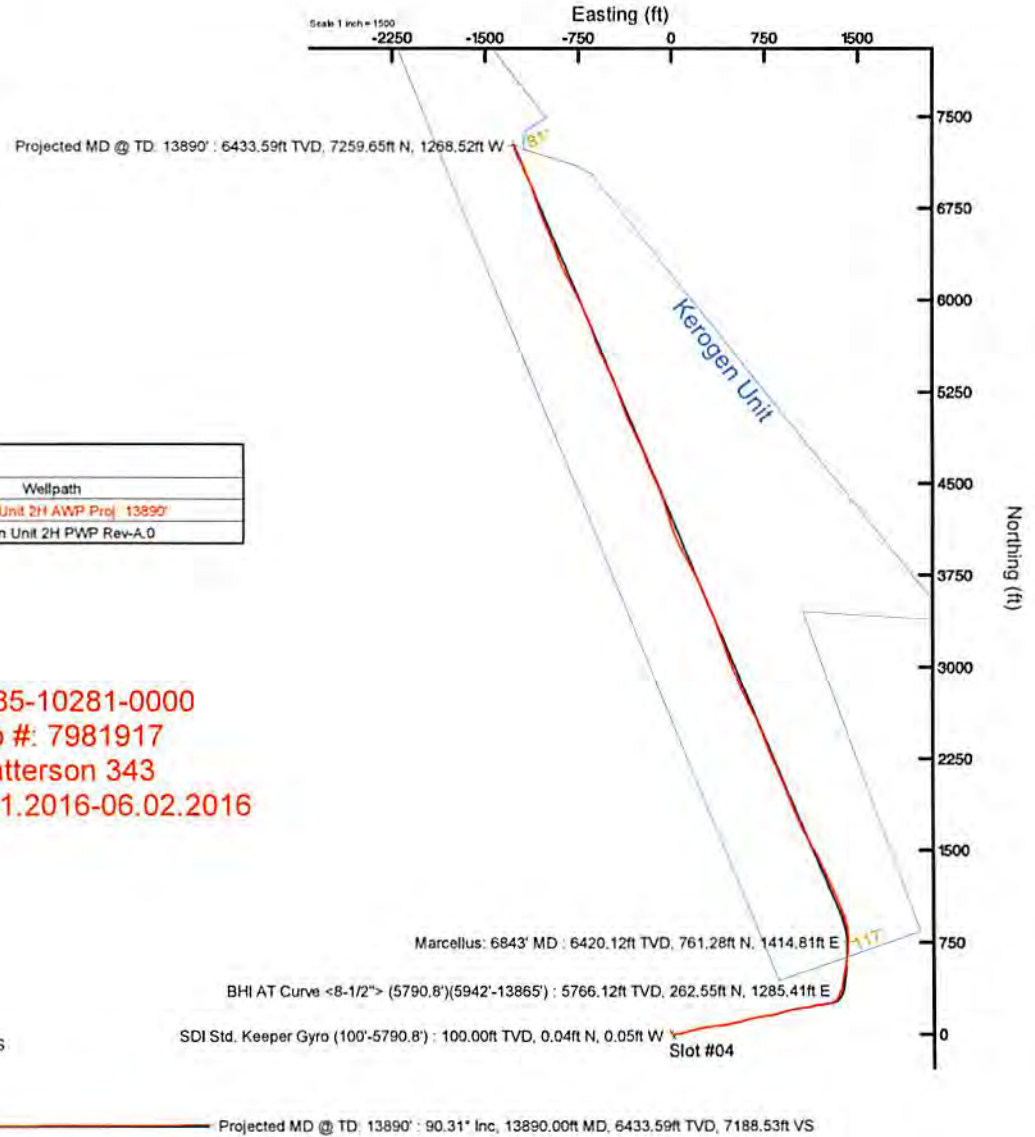
Location: Ritchie County, WV  
 Field: Ritchie  
 Facility: Zinn Pad

Slot: Slot #04  
 Well: Kerogen Unit 2H  
 Wellbore: Kerogen Unit 2H PWB



Plot reference wellpath is Kerogen Unit 2H PWP Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to Patterson 343 (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to Patterson 343 (RKB)	North Reference: Grid north
Patterson 343 (RKB) to Mean Sea Level: 1144 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot #04) -1119 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: harsluk on 2016-06-10
	Database: WA_MPL_EASTERNUS_Defn

Location Information							
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
Zinn Pad		1657882.100	14278491.400	39°19'12.370"N	80°56'17.680"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Slot #04	8.10	-5.50	1657876.600	14278499.500	39°19'12.450"N	80°56'17.750"W	
Patterson 343 (RKB) to Mud line (At Slot: Slot #04)				25ft			
Mean Sea Level to Mud line (At Slot: Slot #04)				-1119ft			
Patterson 343 (RKB) to Mean Sea Level				1144ft			



Well Data			
Slot	Well	Wellbore	Wellpath
Slot #04	Kerogen Unit 2H	Kerogen Unit 2H AWB	Kerogen Unit 2H AWP Proj 13890'
Slot #04	Kerogen Unit 2H	Kerogen Unit 2H PWB	Kerogen Unit 2H PWP Rev-A.0



BIGM (1945.0 to 2017.0) Dip: 68.71° Field: 52073.2 nT  
 Magnetic North is 8.45 degrees West of True North (at 5/27/2016)  
 Grid North is 0.04 degrees East of True North  
 To convert azimuth from True to Grid subtract 0.04 degrees  
 To correct azimuth from Magnetic to Grid subtract 8.49 degrees

API: 47-085-10281-0000  
 BHI Job #: 7981917  
 Rig: Patterson 343  
 Duration: 05.31.2016-06.02.2016

Azimuth 337.36° with reference 0.00 N, 0.00 E



## Actual Wellpath Report

Kerogen Unit 2H AWP Proj: 13890'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Kerogen Unit 2H
Field	Ritchie	Wellbore	Kerogen Unit 2H AWB
Facility	Zinn Pad		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Hareluk
Scale	0.999600	Report Generated	6/10/2016 at 4:18:58 PM
Convergence at slot	0.04° East	Database/Source file	WA_MPL_EASTERNUS_Defn/Kerogen_Unit_2H_AWP_Proj_13890_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	8.10	-5.50	1657876.60	14278499.50	39°19'12.450"N	80°56'17.750"W
Facility Reference Pt			1657882.10	14278491.40	39°19'12.370"N	80°56'17.680"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.301"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Patterson 343 (RKB) to Facility Vertical Datum	25.00ft
Horizontal Reference Pt	Slot	Patterson 343 (RKB) to Mean Sea Level	1144.00ft
Vertical Reference Pt	Patterson 343 (RKB)	Patterson 343 (RKB) to Mud Line at Slot (Slot #04)	25.00ft
MD Reference Pt	Patterson 343 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	337.36°



# Actual Wellpath Report

Kerogen Unit 2H AWP Proj: 13890

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Kerogen Unit 2H
Field	Ritchie		Kerogen Unit 2H AWP
Facility	Zinn Pad		

WELLPATH DATA (334 stations) † = interpolated/extrapolated station															
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)
0.00	309.790	0.00	0.00	0.00	0.00	0.00	0.00	1657876.60	14278499.50	39°19'12.450"N	80°56'17.750"W	0.00	0.00	0.00	
25.00	309.790	25.00	0.00	0.00	0.00	0.00	0.00	1657876.60	14278499.50	39°19'12.450"N	80°56'17.750"W	0.00	0.00	0.00	
100.00	309.790	100.00	0.06	0.04	-0.05	0.06	0.04	1657876.55	14278499.54	39°19'12.451"N	80°56'17.751"W	0.07	309.790	0.13	SDI Sid. Keeper Gyro (100°-5790.8)
125.00	3.060	125.00	0.08	0.08	-0.07	0.08	0.08	1657876.53	14278499.56	39°19'12.451"N	80°56'17.751"W	0.09	313.083	0.34	
150.00	292.630	150.00	0.11	0.08	-0.10	0.11	0.08	1657876.50	14278499.58	39°19'12.451"N	80°56'17.751"W	0.13	309.876	0.61	
175.00	21.400	175.00	0.14	0.10	-0.13	0.14	0.10	1657876.47	14278499.60	39°19'12.451"N	80°56'17.752"W	0.16	307.696	0.64	
200.00	337.560	200.00	0.16	0.12	-0.14	0.16	0.12	1657876.46	14278499.62	39°19'12.451"N	80°56'17.752"W	0.18	312.095	0.31	
225.00	349.720	225.00	0.19	0.15	-0.14	0.19	0.15	1657876.46	14278499.65	39°19'12.452"N	80°56'17.752"W	0.21	316.239	0.17	
250.00	117.610	250.00	0.20	0.16	-0.14	0.20	0.16	1657876.46	14278499.66	39°19'12.452"N	80°56'17.752"W	0.21	318.858	0.36	
275.00	354.670	275.00	0.20	0.16	-0.13	0.20	0.16	1657876.47	14278499.66	39°19'12.452"N	80°56'17.752"W	0.20	321.052	0.28	
300.00	356.740	300.00	0.21	0.17	-0.13	0.21	0.17	1657876.47	14278499.67	39°19'12.452"N	80°56'17.752"W	0.22	323.365	0.04	
325.00	302.430	325.00	0.24	0.19	-0.15	0.24	0.19	1657876.45	14278499.69	39°19'12.452"N	80°56'17.752"W	0.24	322.660	0.33	
350.00	23.010	350.00	0.26	0.22	-0.16	0.26	0.22	1657876.44	14278499.72	39°19'12.452"N	80°56'17.752"W	0.27	323.868	0.45	
375.00	271.370	375.00	0.28	0.23	-0.17	0.28	0.23	1657876.43	14278499.73	39°19'12.453"N	80°56'17.752"W	0.29	323.383	0.53	
400.00	11.410	400.00	0.29	0.24	-0.18	0.29	0.24	1657876.41	14278499.74	39°19'12.453"N	80°56'17.753"W	0.31	321.098	0.38	
425.00	339.560	425.00	0.31	0.26	-0.20	0.31	0.26	1657876.40	14278499.76	39°19'12.453"N	80°56'17.753"W	0.32	322.433	0.18	
450.00	7.010	450.00	0.33	0.27	-0.20	0.33	0.27	1657876.40	14278499.77	39°19'12.453"N	80°56'17.753"W	0.34	323.607	0.17	
475.00	22.350	475.00	0.34	0.29	-0.19	0.34	0.29	1657876.41	14278499.79	39°19'12.453"N	80°56'17.753"W	0.35	326.241	0.20	
500.00	15.480	500.00	0.36	0.31	-0.19	0.36	0.31	1657876.41	14278499.81	39°19'12.453"N	80°56'17.753"W	0.37	329.526	0.08	
525.00	51.640	525.00	0.37	0.33	-0.17	0.37	0.33	1657876.43	14278499.83	39°19'12.454"N	80°56'17.752"W	0.38	332.703	0.14	
550.00	49.840	550.00	0.39	0.37	-0.13	0.39	0.37	1657876.47	14278499.87	39°19'12.454"N	80°56'17.752"W	0.39	340.236	0.48	
575.00	33.030	575.00	0.46	0.46	-0.05	0.46	0.46	1657876.55	14278499.97	39°19'12.455"N	80°56'17.751"W	0.48	364.182	1.13	
600.00	70.140	600.00	0.51	0.57	0.04	0.51	0.57	1657876.64	14278500.07	39°19'12.456"N	80°56'17.750"W	0.57	3.819	1.35	
625.00	51.580	625.00	0.53	0.63	0.13	0.53	0.63	1657876.73	14278500.13	39°19'12.457"N	80°56'17.749"W	0.64	11.872	0.86	
650.00	61.300	650.00	0.58	0.79	0.40	0.58	0.79	1657877.00	14278500.29	39°19'12.458"N	80°56'17.745"W	0.89	26.922	2.95	
675.00	54.960	674.98	0.73	1.25	1.10	0.73	1.25	1657877.70	14278500.75	39°19'12.463"N	80°56'17.736"W	1.66	41.342	6.60	
700.00	57.570	699.96	0.95	1.89	2.05	0.95	1.89	1657878.65	14278501.39	39°19'12.469"N	80°56'17.724"W	2.79	47.405	0.93	
725.00	68.810	724.93	1.03	2.38	3.02	1.03	2.38	1657879.61	14278501.87	39°19'12.474"N	80°56'17.712"W	3.84	51.773	1.98	
750.00	68.380	749.91	1.01	2.79	4.08	1.01	2.79	1657880.68	14278502.29	39°19'12.478"N	80°56'17.698"W	4.95	55.617	1.44	
775.00	66.740	774.87	1.00	3.29	5.28	1.00	3.29	1657881.88	14278502.79	39°19'12.483"N	80°56'17.683"W	6.22	58.080	1.36	



# Actual Wellpath Report

Kerogen Unit 2H AWP Proj: 13890

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Richlie County, WV
Field	Richlie
Facility	Zinn Pad
Slot	Wellbore
Slot #04	Kerogen Unit 2H
	Kerogen Unit 2H AWB

MD	Inclination	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
500.00	3.310	66.950	799.83	1.02	3.84	6.58	1657883.17	14278503.34	39°19'12.48"N	80°56'17.66"W	7.62	
825.00	3.440	66.900	824.79	1.03	4.42	7.93	1657884.53	14278503.92	39°19'12.494"N	80°56'17.649"W	9.08	
850.00	3.530	69.140	849.74	1.01	4.99	9.34	1657885.93	14278504.49	39°19'12.500"N	80°56'17.631"W	10.59	
875.00	3.800	70.080	874.69	0.95	5.54	10.84	1657887.43	14278505.04	39°19'12.505"N	80°56'17.612"W	12.17	
900.00	3.930	71.890	889.63	0.84	6.09	12.43	1657888.02	14278505.59	39°19'12.510"N	80°56'17.592"W	13.84	
925.00	4.200	75.210	924.57	0.65	6.59	14.13	1657890.72	14278506.09	39°19'12.515"N	80°56'17.570"W	15.59	
950.00	4.360	78.250	949.50	0.34	7.02	15.94	1657892.54	14278506.52	39°19'12.520"N	80°56'17.547"W	17.42	
975.00	4.710	81.440	974.42	-0.09	7.37	17.89	1657894.48	14278506.87	39°19'12.523"N	80°56'17.523"W	19.35	
1000.00	4.960	84.440	999.33	-0.65	7.63	19.88	1657896.57	14278507.12	39°19'12.526"N	80°56'17.496"W	21.39	
1025.00	5.730	84.980	1024.23	-1.35	7.84	22.30	1657898.89	14278507.34	39°19'12.528"N	80°56'17.466"W	23.64	
1050.00	6.960	89.620	1049.07	-2.30	7.96	25.06	1657901.65	14278507.46	39°19'12.529"N	80°56'17.431"W	26.29	
1075.00	7.330	86.820	1073.88	-3.40	8.06	28.16	1657904.75	14278507.56	39°19'12.530"N	80°56'17.392"W	29.29	
1100.00	7.700	86.700	1098.66	-4.49	8.24	31.43	1657908.02	14278507.74	39°19'12.532"N	80°56'17.350"W	32.49	
1125.00	8.050	87.090	1123.43	-5.63	8.43	34.85	1657911.43	14278507.93	39°19'12.533"N	80°56'17.307"W	35.85	
1150.00	8.540	1148.14	-6.86	8.67	38.62	1657915.20	14278508.17	14278508.17	39°19'12.536"N	80°56'17.259"W	39.68	
1175.00	10.040	84.320	1172.78	-8.13	9.04	42.80	1657919.39	14278508.54	39°19'12.539"N	80°56'17.206"W	43.75	
1200.00	10.270	83.510	1197.39	-9.39	9.51	47.19	1657923.77	14278509.01	39°19'12.544"N	80°56'17.150"W	48.13	
1225.00	10.960	82.230	1221.97	-10.62	10.08	51.75	1657928.33	14278509.58	39°19'12.550"N	80°56'17.092"W	52.73	
1250.00	11.930	80.360	1246.47	-11.81	10.84	56.66	1657933.23	14278510.33	39°19'12.557"N	80°56'17.029"W	57.68	
1275.00	12.580	79.130	1270.90	-12.94	11.78	61.88	1657938.45	14278511.28	39°19'12.566"N	80°56'16.963"W	62.99	
1300.00	13.090	77.740	1295.27	-14.01	12.90	67.32	1657943.89	14278512.39	39°19'12.577"N	80°56'16.894"W	68.54	
1325.00	13.610	75.230	1319.60	-14.92	14.25	72.93	1657949.50	14278513.74	39°19'12.591"N	80°56'16.822"W	74.31	
1350.00	14.040	73.950	1343.87	-15.67	15.84	78.69	1657955.26	14278515.33	39°19'12.606"N	80°56'16.749"W	80.27	
1375.00	14.280	73.070	1368.11	-16.33	17.57	84.55	1657961.12	14278517.07	39°19'12.623"N	80°56'16.674"W	86.36	
1400.00	14.670	72.240	1392.32	-16.90	19.44	90.52	1657967.08	14278518.93	39°19'12.642"N	80°56'16.598"W	92.58	
1425.00	14.440	72.290	1416.52	-17.44	21.35	96.50	1657973.06	14278520.84	39°19'12.661"N	80°56'16.522"W	98.83	
1450.00	14.380	72.840	1440.73	-18.01	23.21	102.44	1657978.99	14278522.71	39°19'12.679"N	80°56'16.447"W	105.03	
1475.00	14.280	73.910	1464.95	-18.65	24.99	108.36	1657984.92	14278524.48	39°19'12.697"N	80°56'16.371"W	111.21	
1500.00	14.880	73.370	1489.15	-19.34	26.76	114.40	1657990.96	14278526.26	39°19'12.714"N	80°56'16.294"W	117.49	
1525.00	14.850	73.440	1513.31	-20.02	28.59	120.55	1657997.10	14278528.08	39°19'12.732"N	80°56'16.218"W	123.89	



## Actual Wellpath Report

Kerogen Unit 2H AWP Proj: 13890  
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### REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Ritchie County, WV
Field	Ritchie
Facility	Zinn Pad
Slot	Slot #04
Well	Kerogen Unit 2H
Wellbore	Kerogen Unit 2H AWB

### WELLPATH DATA (334 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)			(ft)	(°)	(ft)	
1550.00	15.110	73.620	1537.46	-20.71	30.42	126.75	1658003.30	14278529.91	39°19'12.750"N	80°56'16.137"W	130.35	76.503	1.05	
1575.00	15.250	74.020	1561.59	-21.45	32.25	133.03	1658009.58	14278531.73	39°19'12.768"N	80°56'16.057"W	136.89	76.375	0.70	
1600.00	15.250	74.580	1585.71	-22.24	34.03	139.36	1658015.91	14278533.51	39°19'12.786"N	80°56'15.977"W	143.46	76.280	0.59	
1625.00	15.270	73.300	1609.83	-23.00	35.85	145.69	1658022.23	14278535.33	39°19'12.804"N	80°56'15.896"W	150.03	76.177	1.35	
1650.00	14.860	73.560	1633.97	-23.68	37.70	151.91	1658028.45	14278537.18	39°19'12.822"N	80°56'15.817"W	156.52	76.063	1.66	
1675.00	14.660	74.180	1658.14	-24.41	39.47	158.03	1658034.57	14278538.95	39°19'12.839"N	80°56'15.739"W	162.89	75.977	1.02	
1700.00	14.330	76.220	1682.35	-25.26	41.07	164.08	1658040.62	14278540.55	39°19'12.855"N	80°56'15.662"W	169.14	75.948	2.43	
1725.00	14.200	77.380	1706.58	-26.27	42.48	170.08	1658046.61	14278541.96	39°19'12.869"N	80°56'15.586"W	175.30	75.978	1.26	
1750.00	14.160	78.240	1730.82	-27.38	43.77	176.06	1658052.59	14278543.25	39°19'12.882"N	80°56'15.510"W	181.42	76.040	0.86	
1775.00	14.390	78.730	1755.04	-28.57	45.00	182.10	1658058.63	14278544.48	39°19'12.894"N	80°56'15.433"W	187.58	76.120	1.04	
1800.00	14.660	78.770	1779.25	-29.81	46.22	188.25	1658064.78	14278545.70	39°19'12.906"N	80°56'15.354"W	193.85	76.205	1.08	
1825.00	14.990	78.640	1803.41	-31.06	47.47	194.53	1658071.05	14278546.96	39°19'12.918"N	80°56'15.275"W	200.24	76.285	1.33	
1850.00	15.250	79.110	1827.55	-32.37	48.73	200.93	1658077.44	14278548.21	39°19'12.931"N	80°56'15.193"W	206.75	76.367	1.15	
1875.00	15.570	78.830	1851.65	-33.70	50.00	207.45	1658083.96	14278549.48	39°19'12.943"N	80°56'15.110"W	213.39	76.448	1.31	
1900.00	16.030	78.840	1875.70	-35.06	51.32	214.12	1658090.64	14278550.80	39°19'12.956"N	80°56'15.025"W	220.19	76.521	1.84	
1925.00	16.330	78.920	1899.71	-36.45	52.66	220.96	1658097.47	14278552.14	39°19'12.969"N	80°56'14.938"W	227.15	76.594	1.20	
1950.00	16.520	78.810	1923.69	-37.86	54.03	227.90	1658104.40	14278553.51	39°19'12.983"N	80°56'14.850"W	234.21	76.663	0.77	
1975.00	16.400	78.650	1947.67	-39.26	55.41	234.84	1658111.35	14278554.89	39°19'12.996"N	80°56'14.762"W	241.29	76.723	0.51	
2000.00	16.240	78.320	1971.66	-40.61	56.82	241.73	1658118.23	14278556.29	39°19'13.010"N	80°56'14.674"W	248.31	76.773	0.74	
2025.00	16.420	78.530	1995.65	-41.96	58.23	248.61	1658125.11	14278557.70	39°19'13.024"N	80°56'14.586"W	255.34	76.819	0.76	
2050.00	16.840	79.420	2019.61	-43.40	59.59	255.64	1658132.13	14278559.07	39°19'13.038"N	80°56'14.497"W	262.49	76.877	1.96	
2075.00	17.060	80.330	2043.52	-44.98	60.87	262.81	1658139.30	14278560.35	39°19'13.050"N	80°56'14.406"W	269.77	76.959	1.38	
2100.00	17.640	80.570	2067.38	-46.67	62.11	270.16	1658146.65	14278561.59	39°19'13.062"N	80°56'14.312"W	277.21	77.052	2.34	
2125.00	17.520	81.860	2091.22	-48.48	63.27	277.62	1658154.11	14278562.74	39°19'13.074"N	80°56'14.217"W	284.74	77.163	1.63	
2150.00	17.610	81.920	2115.05	-50.37	64.33	285.09	1658161.58	14278563.80	39°19'13.084"N	80°56'14.122"W	292.26	77.285	0.37	
2175.00	17.590	82.430	2138.88	-52.30	65.36	292.58	1658169.06	14278564.83	39°19'13.094"N	80°56'14.027"W	299.79	77.408	0.62	
2200.00	17.440	82.150	2162.72	-54.24	66.37	300.04	1658176.52	14278565.84	39°19'13.104"N	80°56'13.932"W	307.29	77.527	0.69	
2225.00	17.140	81.990	2186.59	-56.13	67.39	307.40	1658183.87	14278566.87	39°19'13.114"N	80°56'13.838"W	314.70	77.634	1.21	
2250.00	16.440	81.310	2210.53	-57.91	68.44	314.54	1658191.02	14278567.91	39°19'13.125"N	80°56'13.747"W	321.90	77.724	2.91	
2275.00	16.630	79.960	2234.55	-59.50	69.56	321.55	1658197.83	14278569.03	39°19'13.136"N	80°56'13.661"W	328.80	77.786	3.57	



# Actual Wellpath Report

Kerogen Unit 2H AWP Proj: 13890

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Ritchie County, WV
Field	Ritchie
Facility	Zinn Pad
Slot	Slot #04
	Kerogen Unit 2H
	Kerogen Unit 2H AWP

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
2300.00	15.240	79.660	2258.65	-60.93	70.74	327.90	1658204.37	14278570.21	39°19'13.147"N	80°56'13.577"W	335.45	77.826	1.59	
2325.00	14.720	79.560	2282.80	-62.31	71.90	334.26	1658210.73	14278571.38	39°19'13.159"N	80°56'13.496"W	341.91	77.860	2.08	
2350.00	14.530	80.650	2306.99	-63.70	72.99	340.50	1658216.96	14278572.46	39°19'13.169"N	80°56'13.417"W	348.23	77.901	1.16	
2375.00	14.840	80.990	2331.16	-65.18	74.01	346.78	1658223.24	14278573.48	39°19'13.179"N	80°56'13.337"W	354.59	77.953	0.91	
2400.00	14.720	81.940	2355.34	-66.74	74.95	353.08	1658229.54	14278574.42	39°19'13.189"N	80°56'13.257"W	360.95	78.015	1.08	
2425.00	14.970	82.130	2379.50	-68.36	75.84	359.43	1658235.88	14278575.31	39°19'13.197"N	80°56'13.176"W	367.34	78.085	1.02	
2450.00	15.320	82.780	2403.63	-70.06	76.70	365.90	1658242.35	14278576.17	39°19'13.206"N	80°56'13.094"W	373.85	78.161	1.56	
2475.00	15.680	83.690	2427.72	-71.90	77.47	372.54	1658248.99	14278576.94	39°19'13.213"N	80°56'13.009"W	380.51	78.252	1.87	
2500.00	15.710	84.060	2451.79	-73.83	78.18	379.26	1658255.71	14278577.65	39°19'13.220"N	80°56'12.924"W	387.24	78.352	0.22	
2525.00	15.740	84.160	2475.86	-75.79	78.88	386.00	1658262.46	14278578.35	39°19'13.227"N	80°56'12.838"W	393.98	78.451	0.16	
2550.00	15.310	83.740	2499.94	-77.70	79.58	392.66	1658269.10	14278579.05	39°19'13.234"N	80°56'12.753"W	400.64	78.543	1.78	
2575.00	15.520	83.940	2524.05	-79.58	80.30	399.26	1658275.70	14278579.76	39°19'13.241"N	80°56'12.669"W	407.26	78.629	0.87	
2600.00	15.160	83.750	2548.15	-81.46	81.01	405.84	1658282.28	14278580.47	39°19'13.248"N	80°56'12.586"W	413.84	78.712	1.45	
2625.00	14.810	83.350	2572.30	-83.26	81.73	412.26	1658288.70	14278581.20	39°19'13.255"N	80°56'12.504"W	420.29	78.786	1.46	
2650.00	14.450	82.720	2596.49	-84.97	82.50	418.53	1658294.96	14278581.96	39°19'13.263"N	80°56'12.424"W	426.58	78.849	1.57	
2675.00	13.970	81.960	2620.73	-86.56	83.31	424.61	1658301.04	14278582.78	39°19'13.271"N	80°56'12.347"W	432.71	78.899	2.06	
2700.00	13.510	80.820	2645.01	-88.00	84.20	430.48	1658306.91	14278583.67	39°19'13.280"N	80°56'12.272"W	438.64	78.933	2.14	
2725.00	13.440	79.970	2669.32	-89.31	85.18	436.25	1658312.67	14278584.64	39°19'13.289"N	80°56'12.199"W	444.48	78.952	0.80	
2750.00	13.450	79.730	2693.63	-90.58	86.21	441.99	1658318.41	14278585.67	39°19'13.299"N	80°56'12.126"W	450.32	78.964	0.42	
2775.00	13.270	78.870	2717.85	-91.77	87.28	447.67	1658324.09	14278586.74	39°19'13.310"N	80°56'12.053"W	456.09	78.968	1.07	
2800.00	13.100	77.160	2742.29	-92.83	88.46	453.24	1658329.66	14278587.93	39°19'13.322"N	80°56'11.982"W	461.80	78.956	1.70	
2825.00	13.260	77.400	2766.64	-93.81	89.72	458.80	1658335.22	14278589.18	39°19'13.334"N	80°56'11.912"W	467.49	78.936	0.68	
2850.00	13.810	77.450	2790.94	-94.83	90.99	464.51	1658340.93	14278590.45	39°19'13.346"N	80°56'11.839"W	473.34	78.917	2.20	
2875.00	13.790	76.790	2815.22	-95.84	92.32	470.33	1658346.74	14278591.78	39°19'13.360"N	80°56'11.765"W	479.30	78.895	0.63	
2900.00	14.020	76.170	2839.49	-96.79	93.72	476.17	1658352.58	14278593.19	39°19'13.373"N	80°56'11.691"W	485.31	78.865	1.10	
2925.00	14.270	76.480	2863.73	-97.75	95.17	482.11	1658358.51	14278594.63	39°19'13.388"N	80°56'11.615"W	491.41	78.833	1.04	
2950.00	14.660	77.300	2887.94	-98.78	96.58	488.19	1658364.59	14278596.05	39°19'13.402"N	80°56'11.538"W	497.65	78.809	1.76	
2975.00	14.700	77.320	2912.12	-99.86	97.98	494.37	1658370.77	14278597.44	39°19'13.415"N	80°56'11.459"W	503.98	78.790	0.16	
3000.00	14.870	77.180	2936.29	-100.97	99.38	500.59	1658376.99	14278598.84	39°19'13.429"N	80°56'11.380"W	510.36	78.771	0.69	
3025.00	14.850	78.200	2960.46	-102.12	100.75	506.85	1658383.25	14278600.21	39°19'13.443"N	80°56'11.300"W	516.77	78.757	1.05	



# Actual Wellpath Report

Kerogen Unit 2H AWP Proj: 13890

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Kerogen Unit 2H
Field	Ritchie	Wellbore	Kerogen Unit 2H AWP
Facility	Zinn Pad		

## WELLPATH DATA (334 stations)

MD	Inclination	Azimuth	TVD	Vent Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
3050.00	15.100	79.110	2984.61	-103.39	102.02	513.19	1658389.58	14278601.48	39°19'13.455"N	80°56'11.219"W	523.23	78.756	1.37	
3075.00	14.890	79.460	3008.76	-104.72	103.22	519.54	1658395.93	14278602.68	39°19'13.467"N	80°56'11.139"W	529.70	78.763	0.91	
3100.00	14.660	79.480	3032.93	-106.06	104.39	525.81	1658402.20	14278603.85	39°19'13.478"N	80°56'11.059"W	536.07	78.771	0.92	
3125.00	14.840	79.560	3057.11	-107.40	105.55	532.07	1658408.46	14278605.00	39°19'13.490"N	80°56'10.979"W	542.44	78.780	0.72	
3150.00	14.800	79.290	3081.27	-108.74	106.72	538.36	1658414.74	14278606.18	39°19'13.501"N	80°56'10.899"W	548.83	78.787	0.32	
3175.00	14.540	78.850	3105.46	-110.02	107.92	544.57	1658420.95	14278607.38	39°19'13.513"N	80°56'10.820"W	555.16	78.791	1.13	
3200.00	14.740	78.220	3129.65	-111.25	109.18	550.77	1658422.14	14278608.63	39°19'13.526"N	80°56'10.741"W	561.48	78.788	1.02	
3225.00	15.440	76.310	3153.79	-112.36	110.61	557.11	1658433.49	14278610.07	39°19'13.540"N	80°56'10.661"W	567.99	78.770	3.43	
3250.00	15.790	74.370	3177.86	-113.30	112.32	563.62	1658439.99	14278611.77	39°19'13.557"N	80°56'10.578"W	574.70	78.730	2.51	
3275.00	15.610	73.470	3201.93	-114.07	114.19	570.12	1658446.49	14278613.65	39°19'13.575"N	80°56'10.495"W	581.44	78.674	1.21	
3300.00	15.770	72.970	3226.00	-114.76	116.15	576.59	1658452.96	14278615.60	39°19'13.594"N	80°56'10.413"W	588.17	78.611	0.87	
3325.00	15.960	72.840	3250.05	-115.42	118.16	583.12	1658459.49	14278617.61	39°19'13.614"N	80°56'10.329"W	594.98	78.545	0.77	
3350.00	16.130	72.690	3274.07	-116.07	120.21	589.72	1658466.09	14278619.66	39°19'13.634"N	80°56'10.245"W	601.85	78.479	0.70	
3375.00	15.860	72.310	3298.10	-116.68	122.28	596.29	1658472.65	14278621.73	39°19'13.655"N	80°56'10.162"W	608.70	78.412	1.16	
3400.00	15.550	72.890	3322.16	-117.29	124.32	602.78	1658479.15	14278623.77	39°19'13.675"N	80°56'10.078"W	615.48	78.346	0.60	
3425.00	16.650	74.990	3346.23	-118.06	126.21	609.28	1658485.64	14278625.66	39°19'13.693"N	80°56'09.997"W	622.22	78.297	2.52	
3450.00	15.400	74.770	3370.31	-118.93	127.95	615.74	1658492.10	14278627.40	39°19'13.711"N	80°56'09.914"W	628.90	78.261	1.03	
3475.00	15.400	74.670	3394.42	-119.78	129.70	622.15	1658498.50	14278629.15	39°19'13.728"N	80°56'09.833"W	635.52	78.224	0.11	
3500.00	15.490	75.240	3418.51	-120.66	131.43	628.58	1658504.93	14278630.88	39°19'13.745"N	80°56'09.751"W	642.17	78.190	0.71	
3525.00	15.960	76.700	3442.58	-121.68	133.07	635.15	1658511.50	14278632.52	39°19'13.761"N	80°56'09.667"W	648.94	78.167	2.48	
3550.00	15.930	76.770	3466.62	-122.80	134.65	641.84	1658518.18	14278634.09	39°19'13.777"N	80°56'09.582"W	655.81	78.152	0.14	
3575.00	15.750	77.020	3490.67	-123.93	136.19	648.48	1658524.82	14278635.64	39°19'13.792"N	80°56'09.498"W	662.63	78.139	0.77	
3600.00	15.990	78.120	3514.71	-125.14	137.67	655.16	1658531.49	14278637.11	39°19'13.806"N	80°56'09.413"W	669.47	78.133	1.54	
3625.00	16.060	78.960	3538.74	-126.48	139.04	661.92	1658538.26	14278638.48	39°19'13.820"N	80°56'09.327"W	676.37	78.137	0.96	
3650.00	16.910	78.220	3562.78	-127.82	140.40	668.67	1658545.00	14278639.84	39°19'13.833"N	80°56'09.241"W	683.25	78.142	1.00	
3675.00	16.070	77.860	3586.81	-129.09	141.83	675.41	1658551.74	14278641.27	39°19'13.847"N	80°56'09.155"W	690.14	78.141	0.75	
3700.00	16.140	79.110	3610.83	-130.43	143.21	682.20	1658558.53	14278642.65	39°19'13.861"N	80°56'09.069"W	697.07	78.144	1.41	
3725.00	16.880	79.020	3634.80	-131.87	144.56	689.18	1658565.50	14278644.00	39°19'13.874"N	80°56'08.980"W	704.18	78.154	2.96	
3750.00	16.580	78.290	3658.74	-133.28	145.97	696.23	1658572.55	14278645.42	39°19'13.888"N	80°56'08.890"W	711.37	78.159	1.47	
3775.00	16.700	77.810	3682.69	-134.61	147.46	703.24	1658579.55	14278646.90	39°19'13.903"N	80°56'08.801"W	718.53	78.158	0.73	



# Actual Wellpath Report

Kerogen Unit 2H AWP Proj: 13890

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION
Area	Ritchie County, WV
Field	Ritchie
Facility	Zinn Pad
Slot	Slot #04
Well	Kerogen Unit 2H
Wellbore	Kerogen Unit 2H AWP

## WELLPATH DATA (334 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
3800.00	16.810	79.890	3706.63	-136.05	148.85	710.31	1658586.62	14278648.29	39°19'13.917"N	80°56'08.711"W	725.74	78.165	2.44	
3825.00	16.840	80.800	3730.56	-137.67	150.06	717.44	1658593.75	14278649.50	39°19'13.929"N	80°56'08.620"W	732.97	78.186	1.06	
3850.00	17.220	80.510	3754.46	-139.36	151.25	724.67	1658600.97	14278650.69	39°19'13.940"N	80°56'08.528"W	740.28	78.210	1.56	
3875.00	17.150	81.320	3778.35	-141.09	152.42	731.96	1658608.26	14278651.86	39°19'13.952"N	80°56'08.435"W	747.66	78.237	1.00	
3900.00	16.990	85.070	3802.25	-143.09	153.29	739.24	1658615.54	14278652.73	39°19'13.960"N	80°56'08.343"W	754.97	78.285	4.45	
3925.00	16.980	85.840	3826.16	-145.36	153.87	746.52	1658622.82	14278653.31	39°19'13.966"N	80°56'08.250"W	762.21	78.354	0.90	
3950.00	16.770	85.450	3850.08	-147.63	154.42	753.76	1658630.05	14278653.86	39°19'13.971"N	80°56'08.158"W	769.41	78.422	0.95	
3975.00	16.800	85.290	3874.02	-149.86	155.00	760.95	1658637.25	14278654.44	39°19'13.977"N	80°56'08.066"W	776.58	78.487	0.22	
4000.00	16.840	85.170	3897.95	-152.08	155.60	768.16	1658644.45	14278655.04	39°19'13.983"N	80°56'07.975"W	783.76	78.549	0.21	
4025.00	16.990	82.800	3921.90	-154.13	156.35	775.27	1658651.56	14278655.79	39°19'13.990"N	80°56'07.884"W	790.88	78.598	3.25	
4050.00	16.020	3945.91	-155.82	157.40	782.17	1658658.45	14278656.83	39°19'14.001"N	80°56'07.796"W	797.85	78.622	3.54		
4075.00	15.330	78.030	3969.98	-157.18	158.68	788.80	1658665.08	14278658.12	39°19'14.013"N	80°56'07.712"W	804.60	78.625	3.43	
4100.00	14.780	76.360	3994.12	-158.29	160.12	795.13	1658671.41	14278659.56	39°19'14.027"N	80°56'07.632"W	811.09	78.614	2.80	
4125.00	14.390	74.590	4018.32	-159.18	161.70	801.22	1658677.50	14278661.13	39°19'14.043"N	80°56'07.554"W	817.38	78.590	2.37	
4150.00	14.990	4042.53	-159.99	163.33	807.22	1658683.49	14278662.76	39°19'14.059"N	80°56'07.478"W	823.57	78.561	0.40		
4175.00	76.880	4066.71	-160.94	164.87	813.40	1658689.67	14278664.31	39°19'14.074"N	80°56'07.399"W	829.94	78.541	3.53		
4200.00	77.350	4090.83	-162.05	166.34	819.80	1658696.07	14278665.77	39°19'14.089"N	80°56'07.318"W	836.50	78.530	0.97		
4225.00	77.220	4114.90	-163.22	167.83	826.39	1658702.66	14278667.26	39°19'14.103"N	80°56'07.234"W	843.26	78.520	2.72		
4250.00	16.670	77.160	4138.95	-164.38	169.34	833.05	1658709.31	14278668.77	39°19'14.118"N	80°56'07.149"W	850.08	78.510	1.40	
4275.00	15.960	77.110	4163.00	-165.54	170.86	839.69	1658715.95	14278670.29	39°19'14.133"N	80°56'07.064"W	856.89	78.499	1.16	
4300.00	16.080	77.080	4187.03	-166.70	172.40	846.41	1658722.67	14278671.83	39°19'14.148"N	80°56'06.979"W	863.79	78.487	0.48	
4325.00	15.490	75.970	4211.09	-167.79	173.98	853.03	1658729.28	14278673.41	39°19'14.164"N	80°56'06.895"W	870.59	78.472	2.65	
4350.00	14.740	74.340	4235.22	-168.68	175.65	859.33	1658735.58	14278675.08	39°19'14.180"N	80°56'06.815"W	877.10	78.448	3.45	
4375.00	13.960	72.520	4259.44	-169.33	177.41	865.27	1658741.52	14278676.84	39°19'14.198"N	80°56'06.739"W	883.27	78.413	3.60	
4400.00	13.500	72.100	4283.73	-169.85	179.22	870.92	1658747.17	14278678.64	39°19'14.216"N	80°56'06.667"W	889.17	78.372	1.88	
4425.00	13.140	71.860	4308.06	-170.31	181.00	876.40	1658752.65	14278680.43	39°19'14.233"N	80°56'06.597"W	894.89	78.331	1.46	
4450.00	13.300	73.380	4332.39	-170.83	182.71	881.85	1658758.10	14278682.13	39°19'14.250"N	80°56'06.528"W	900.58	78.295	1.53	
4475.00	13.630	74.850	4356.71	-171.52	184.30	887.45	1658763.70	14278683.72	39°19'14.266"N	80°56'06.457"W	906.39	78.268	1.90	
4500.00	13.900	74.500	4380.99	-172.28	185.87	893.19	1658769.43	14278685.30	39°19'14.281"N	80°56'06.384"W	912.32	78.245	1.13	
4525.00	13.810	73.980	4405.26	-172.99	187.50	898.95	1658775.19	14278686.92	39°19'14.297"N	80°56'06.310"W	918.30	78.219	0.61	





**Actual Wellpath Report**  
Kerogen Unit 2H AWP Proj: 13890  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Richlie County, WV	Well	Kerogen Unit 2H
Field	Richlie	Wellbore	Kerogen Unit 2H AWB
Facility	Zinn Pad		

WELLPATH DATA (334 stations)														
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
4550.00	14.590	4429.50	-173.73	189.16	904.85	1658781.09	14278688.59	39°19'14.314"N	80°56'06.235"W	924.41	930.84	78.169	3.15	
4575.00	15.260	75.110	-174.56	190.85	911.06	1658787.30	14278690.28	39°19'14.330"N	80°56'06.156"W	930.84	937.44	78.145	2.76	
4600.00	15.420	74.590	-175.42	192.58	917.45	1658793.68	14278692.00	39°19'14.347"N	80°56'06.075"W	937.44	944.20	78.119	2.38	
4625.00	16.010	74.330	-176.26	194.40	923.97	1658800.20	14278693.82	39°19'14.365"N	80°56'05.992"W	944.20	951.19	78.090	2.09	
4650.00	16.530	74.130	-177.10	196.30	930.71	1658806.94	14278695.72	39°19'14.384"N	80°56'05.906"W	951.19	958.31	78.059	1.74	
4675.00	16.670	73.710	-177.91	198.28	937.58	1658813.80	14278697.70	39°19'14.404"N	80°56'05.819"W	958.31	965.47	78.026	1.44	
4700.00	16.730	73.390	-178.69	200.31	944.47	1658820.69	14278699.73	39°19'14.424"N	80°56'05.731"W	965.47	972.61	77.993	1.17	
4725.00	16.650	73.700	-179.46	202.34	951.33	1658827.55	14278701.76	39°19'14.444"N	80°56'05.644"W	972.61	979.63	77.970	0.88	
4750.00	16.080	76.070	-180.37	204.17	958.11	1658834.33	14278703.59	39°19'14.462"N	80°56'05.557"W	979.63	986.54	77.959	0.61	
4775.00	16.020	76.720	-181.46	205.80	964.83	1658841.04	14278705.22	39°19'14.478"N	80°56'05.472"W	986.54	993.39	77.949	0.34	
4800.00	15.810	76.200	-182.54	207.40	971.50	1658847.71	14278706.82	39°19'14.493"N	80°56'05.387"W	993.39	1000.18	77.942	0.07	
4825.00	15.710	77.790	-183.68	208.93	978.11	1658854.32	14278708.35	39°19'14.509"N	80°56'05.303"W	1000.18	1006.95	77.950	0.00	
4850.00	15.670	80.240	-185.05	210.22	984.76	1658860.97	14278709.64	39°19'14.521"N	80°56'05.218"W	1006.95	1013.71	77.966	0.00	
4875.00	15.670	80.540	-186.58	211.35	991.44	1658867.64	14278710.77	39°19'14.532"N	80°56'05.133"W	1013.71	1020.40	77.979	0.00	
4900.00	14.980	79.450	-188.04	212.52	998.03	1658874.23	14278711.93	39°19'14.544"N	80°56'05.049"W	1020.40	1026.92	77.998	0.00	
4925.00	14.900	82.440	-189.57	213.55	1004.47	1658880.67	14278712.96	39°19'14.554"N	80°56'04.967"W	1026.92	1033.34	78.030	0.00	
4950.00	14.960	83.780	-191.32	214.32	1010.87	1658887.06	14278713.73	39°19'14.562"N	80°56'04.886"W	1033.34	1039.77	78.065	0.00	
4975.00	15.020	83.580	-193.14	215.03	1017.29	1658893.48	14278714.44	39°19'14.569"N	80°56'04.804"W	1039.77	1046.20	78.096	0.00	
5000.00	14.890	82.840	-194.90	215.79	1023.70	1658899.89	14278715.21	39°19'14.576"N	80°56'04.723"W	1046.20	1052.62	78.127	0.00	
5025.00	15.020	83.190	-196.64	216.58	1030.10	1658906.29	14278715.99	39°19'14.584"N	80°56'04.641"W	1052.62	1059.14	78.158	0.00	
5050.00	15.330	83.340	-198.43	217.34	1036.60	1658912.79	14278716.76	39°19'14.591"N	80°56'04.558"W	1059.14	1065.83	78.187	0.00	
5075.00	15.820	82.050	-200.21	218.20	1043.26	1658919.44	14278717.61	39°19'14.600"N	80°56'04.474"W	1065.83	1072.66	78.210	0.00	
5100.00	15.920	81.460	-201.91	219.18	1050.03	1658926.20	14278718.59	39°19'14.609"N	80°56'04.388"W	1072.66	1079.61	78.231	0.00	
5125.00	16.410	81.480	-203.60	220.21	1056.91	1658933.08	14278719.62	39°19'14.619"N	80°56'04.300"W	1079.61	1086.71	78.250	0.00	
5150.00	16.670	80.860	-205.30	221.30	1063.94	1658940.11	14278720.72	39°19'14.630"N	80°56'04.211"W	1086.71	1093.92	78.264	0.00	
5175.00	16.880	79.980	-206.93	222.51	1071.06	1658947.23	14278721.92	39°19'14.642"N	80°56'04.120"W	1093.92	1101.20	78.277	0.00	
5200.00	16.970	80.330	-208.54	223.75	1078.23	1658954.39	14278723.16	39°19'14.654"N	80°56'04.029"W	1101.20	1108.48	78.296	0.00	
5225.00	16.930	82.150	-210.29	224.86	1085.43	1658961.59	14278724.27	39°19'14.665"N	80°56'03.937"W	1108.48	1115.67	78.324	0.00	
5250.00	16.640	83.140	-212.20	225.78	1092.59	1658968.75	14278725.19	39°19'14.674"N	80°56'03.846"W	1115.67	1122.75	78.353	0.00	
5275.00	16.370	82.510	-214.09	226.67	1099.64	1658975.79	14278726.08	39°19'14.683"N	80°56'03.756"W	1122.75			1.30	



**Actual Wellpath Report**  
Kerogen Unit 2H AWP Proj: 13890  
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**REFERENCE WELLPATH IDENTIFICATION**

Operator	ANTERO RESOURCES CORPORATION
Area	Richlie County, WV
Field	Richlie
Facility	Zinn Pad
Slot	Slot #04
	Kerogen Unit 2H
	Kerogen Unit 2H AWP

MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect (ft)	North	East	Grid East (ft)	Grid North (ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (ft/100ft)	Comments
5300.00	15.890	80.740	5150.69	-215.80	227.68	1106.51	1658982.66	14278727.09	39°19'14.69"N	80°56'03.66"W	1129.69	78.373	2.75	
5325.00	15.410	78.690	5174.76	-217.25	228.88	1113.14	1658989.29	14278728.29	39°19'14.705"N	80°56'03.584"W	1136.43	78.381	2.93	
5350.00	15.160	76.830	5198.88	-218.44	230.28	1119.58	1658995.73	14278729.69	39°19'14.718"N	80°56'03.503"W	1143.02	78.377	2.20	
5375.00	15.390	76.160	5222.99	-219.48	231.82	1125.99	1659002.13	14278731.22	39°19'14.734"N	80°56'03.421"W	1149.60	78.366	1.17	
5400.00	16.000	76.450	5247.06	-220.53	233.42	1132.56	1659008.70	14278732.83	39°19'14.749"N	80°56'03.337"W	1156.36	78.354	2.46	
5425.00	16.870	77.210	5271.04	-221.70	235.03	1139.44	1659015.59	14278734.44	39°19'14.765"N	80°56'03.250"W	1163.43	78.345	3.58	
5450.00	16.950	77.500	5294.96	-222.96	236.62	1146.54	1659022.68	14278736.03	39°19'14.781"N	80°56'03.159"W	1170.70	78.339	0.47	
5475.00	17.040	77.990	5318.87	-224.28	238.17	1153.68	1659029.82	14278737.82	39°19'14.796"N	80°56'03.069"W	1178.01	78.335	0.68	
5500.00	17.300	80.980	5342.75	-225.83	239.52	1160.93	1659037.07	14278738.92	39°19'14.810"N	80°56'02.976"W	1185.38	78.343	3.68	
5525.00	17.560	83.820	5366.61	-227.77	240.51	1168.35	1659044.48	14278739.91	39°19'14.819"N	80°56'02.882"W	1192.85	78.368	3.56	
5550.00	17.720	84.600	5390.43	-229.97	241.27	1175.89	1659052.02	14278740.67	39°19'14.827"N	80°56'02.786"W	1200.39	78.405	1.14	
5575.00	17.670	83.720	5414.25	-232.17	242.04	1183.45	1659059.57	14278741.45	39°19'14.834"N	80°56'02.690"W	1207.95	78.441	1.09	
5600.00	17.360	83.040	5438.09	-234.24	242.91	1190.92	1659067.05	14278742.31	39°19'14.843"N	80°56'02.595"W	1215.44	78.472	1.49	
5625.00	17.140	82.140	5461.97	-236.19	243.87	1198.27	1659074.39	14278743.27	39°19'14.852"N	80°56'02.501"W	1222.84	78.497	1.38	
5650.00	16.720	81.450	5485.88	-238.00	244.90	1205.48	1659081.60	14278744.31	39°19'14.862"N	80°56'02.409"W	1230.11	78.516	1.86	
5675.00	16.330	81.100	5509.58	-239.72	245.98	1212.51	1659088.62	14278745.38	39°19'14.873"N	80°56'02.320"W	1237.21	78.532	1.61	
5700.00	15.820	81.310	5533.87	-241.37	247.04	1219.35	1659095.46	14278746.44	39°19'14.883"N	80°56'02.233"W	1244.12	78.547	2.05	
5725.00	15.670	80.240	5557.93	-242.96	248.11	1226.05	1659102.16	14278747.51	39°19'14.894"N	80°56'02.148"W	1250.90	78.560	1.06	
5750.00	16.060	79.990	5606.04	-245.89	250.54	1239.47	1659115.57	14278749.94	39°19'14.918"N	80°56'01.977"W	1264.54	78.572	1.35	
5775.00	16.500	80.230	5620.44	-246.81	251.26	1243.61	1659119.71	14278750.66	39°19'14.925"N	80°56'01.924"W	1268.74	78.578	2.97	
5790.80	16.520	80.240	5621.20	-246.86	251.30	1243.83	1659119.93	14278750.70	39°19'14.925"N	80°56'01.921"W	1268.97	78.578	2.53	
5815.00	16.720	69.550	5766.12	-252.49	262.55	1285.41	1659161.49	14278761.94	39°19'15.036"N	80°56'01.892"W	1311.95	78.456	2.02	BHI AT Curve <8-1/2"> (5790.8)(5942-13865)
5840.00	15.300	69.140	5811.30	-252.94	267.12	1297.54	1659173.62	14278766.51	39°19'15.081"N	80°56'01.238"W	1324.75	78.367	3.03	
6037.00	15.530	55.000	5857.59	-251.76	273.06	1308.72	1659184.80	14278772.45	39°19'15.140"N	80°56'01.095"W	1336.91	78.215	7.83	
6083.00	17.930	40.900	5901.65	-247.29	281.95	1318.41	1659194.48	14278781.34	39°19'15.228"N	80°56'00.972"W	1348.22	77.929	10.21	
6131.00	19.430	28.990	5947.14	-239.03	294.52	1327.12	1659203.19	14278793.90	39°19'15.352"N	80°56'00.861"W	1359.41	77.487	8.52	
6181.00	20.380	23.680	5994.16	-227.86	309.77	1334.65	1659210.71	14278809.15	39°19'15.503"N	80°56'00.765"W	1370.13	76.933	4.08	
6226.00	21.580	25.140	6036.17	-216.88	324.44	1341.31	1659217.37	14278823.81	39°19'15.648"N	80°56'00.680"W	1379.99	76.402	2.91	
6272.00	24.480	25.160	6078.50	-204.80	340.73	1348.96	1659225.02	14278840.09	39°19'15.808"N	80°56'00.583"W	1391.33	75.824	6.30	



### Actual Wellpath Report

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Kerogen Unit 2H AWP Proj: 13890



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Kerogen Unit 2H
Field	Ritchie	Wellbore	Kerogen Unit 2H AWB
Facility	Zinn Pad		

WELLPATH DATA (334 stations) † = interpolated/extrapolated station														
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
6320.00	19.820	6121.69	-189.99	360.09	1356.92	1659232.98	14278859.45	39°19'16.00"N	80°56'00.48"W	1403.89	1403.89	75.138	7.62	
6365.00	12.170	6160.85	-172.64	381.39	1362.92	1659238.97	14278880.74	39°19'16.21"N	80°56'00.405"W	1415.28	1415.28	74.367	12.93	
6414.00	9.060	6201.38	-149.62	408.43	1367.94	1659243.99	14278907.76	39°19'16.477"N	80°56'00.341"W	1427.61	1427.61	73.376	10.52	
6460.00	8.710	6237.35	-125.18	436.75	1372.37	1659248.41	14278936.08	39°19'16.757"N	80°56'00.284"W	1440.19	1440.19	72.346	8.58	
6490.00†	9.008	6259.83	-108.06	456.59	1375.46	1659251.51	14278955.91	39°19'16.953"N	80°56'00.245"W	1449.26	1449.26	71.636	9.98	Middlesex: 6490 MD
6509.00	9.180	6273.19	-96.74	469.73	1377.56	1659253.61	14278969.05	39°19'17.083"N	80°56'00.218"W	1455.45	1455.45	71.171	9.98	
6553.00	9.530	6302.93	-69.25	501.71	1382.84	1659258.88	14279001.01	39°19'17.399"N	80°56'00.150"W	1471.04	1471.04	70.058	9.34	
6603.00	9.820	6333.32	-35.72	540.83	1389.51	1659265.55	14279040.11	39°19'17.786"N	80°56'00.065"W	1491.05	1491.05	68.733	12.19	
6650.00	6.800	6357.72	-1.89	580.37	1396.41	1659272.45	14279079.64	39°19'18.177"N	80°55'59.977"W	1512.21	1512.21	67.431	13.19	
6676.00†	6.490	6369.37	17.77	603.29	1400.29	1659278.33	14279102.54	39°19'18.403"N	80°55'59.927"W	1524.72	1524.72	66.692	12.49	Burkett: 6675 MD
6697.00	6.550	6377.82	34.14	622.27	1403.28	1659279.32	14279121.52	39°19'18.591"N	80°55'59.889"W	1535.07	1535.07	66.086	12.49	
6743.00	72.720	6393.45	71.49	665.13	1409.04	1659285.07	14279164.37	39°19'19.014"N	80°55'59.815"W	1558.14	1558.14	64.730	11.99	
6758.00†	73.235	6397.84	84.06	679.40	1410.56	1659286.60	14279178.62	39°19'19.155"N	80°55'59.796"W	1565.65	1565.65	64.282	7.52	Tully: 6758 MD
6792.00	74.420	6407.31	113.14	711.95	1413.07	1659289.10	14279211.16	39°19'19.477"N	80°55'59.764"W	1582.29	1582.29	63.260	7.52	
6838.00	76.270	6418.95	153.54	756.42	1414.73	1659290.76	14279255.61	39°19'19.917"N	80°55'59.742"W	1604.25	1604.25	61.868	6.10	
6843.00†	76.652	6420.12	158.00	761.28	1414.81	1659290.84	14279260.47	39°19'19.965"N	80°55'59.741"W	1608.62	1608.62	61.716	9.62	Marcellus: 6843 MD
6868.00	79.560	6428.84	197.00	803.37	1414.41	1659290.45	14279302.55	39°19'20.281"N	80°55'59.746"W	1626.65	1626.65	60.404	9.62	
6932.00	84.300	6435.14	240.30	848.77	1410.78	1659286.82	14279347.83	39°19'20.829"N	80°55'59.791"W	1646.42	1646.42	58.968	15.19	
6980.00	87.720	6438.49	286.99	895.91	1402.52	1659278.55	14279395.05	39°19'21.295"N	80°55'59.896"W	1664.24	1664.24	57.430	13.01	
7023.00	89.380	6439.68	329.55	937.48	1391.61	1659267.66	14279436.60	39°19'21.706"N	80°56'00.034"W	1677.93	1677.93	56.033	10.65	
7075.00	89.480	6440.09	381.40	986.79	1375.14	1659251.19	14279485.89	39°19'22.194"N	80°56'00.244"W	1692.56	1692.56	54.337	6.31	
7169.00	89.540	6440.90	475.35	1074.57	1341.54	1659217.60	14279573.64	39°19'23.062"N	80°56'00.670"W	1718.84	1718.84	51.305	1.79	
7263.00	89.510	6441.88	569.34	1161.07	1304.77	1659180.85	14279660.10	39°19'23.917"N	80°56'01.137"W	1746.57	1746.57	48.335	2.63	
7358.00	90.090	6442.01	664.30	1247.60	1265.57	1659141.66	14279746.60	39°19'24.772"N	80°56'01.635"W	1777.12	1777.12	45.410	0.66	
7452.00	90.740	6441.33	758.27	1333.62	1227.68	1659103.79	14279832.59	39°19'25.623"N	80°56'02.117"W	1812.66	1812.66	42.631	1.68	
7546.00	90.280	6440.49	852.23	1419.34	1189.12	1659065.24	14279918.27	39°19'26.470"N	80°56'02.607"W	1851.63	1851.63	39.956	2.54	
7641.00	90.250	6440.05	946.87	1503.62	1145.34	1659201.48	14280002.52	39°19'27.304"N	80°56'03.163"W	1890.15	1890.15	37.297	4.34	
7735.00	90.120	6439.75	1040.26	1585.73	1099.57	1658975.73	14280084.59	39°19'28.115"N	80°56'03.745"W	1929.66	1929.66	34.738	0.81	
7830.00	90.090	6439.57	1134.99	1670.46	1056.65	1658932.83	14280169.29	39°19'28.953"N	80°56'04.290"W	1976.60	1976.60	32.315	3.99	
7924.00	90.280	6439.27	1228.96	1756.47	1018.75	1658894.94	14280255.27	39°19'29.804"N	80°56'04.771"W	2030.53	2030.53	30.114	2.54	



**Actual Wellpath Report**  
Kerogen Unit 2H AWP Proj: 13890  
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**REFERENCE WELLPATH IDENTIFICATION**

Operator	ANTERO RESOURCES CORPORATION
Area	Ritchie County, WV
Field	Ritchie
Facility	Zinn Pad
Slot	Slot #04
Well	Kerogen Unit 2H
Wellbore	Kerogen Unit 2H AWP

**WELLPATH DATA (334 stations)**

MD (ft)	Inclination (ft)	Azimuth (ft)	TVD (ft)	Vert Sect	North (ft)	East (ft)	Grid East US M	Grid North US M	Latitude	Longitude	Closure Dist (ft)	Closure Dir (ft)	DLS (ft/100ft)	Comments
8019.00	337.770	6439.01	1323.96	1844.30	982.54	1658858.74	14280343.06	39°19'30.67"N	80°56'05.23"W	2089.69			0.46	
8113.00	339.250	6439.06	1417.94	1931.76	948.10	1658824.32	14280430.48	39°19'31.53"N	80°56'05.66"W	2151.88			1.58	
8208.00	338.170	6439.21	1512.91	2020.28	913.61	1658789.84	14280518.96	39°19'32.42"N	80°56'06.10"W	2217.25			1.14	
8302.00	336.780	6439.31	1606.91	2107.10	877.60	1658753.85	14280605.76	39°19'33.27"N	80°56'06.56"W	2282.56			1.48	
8397.00	335.290	6439.41	1701.88	2193.91	839.01	1658716.28	14280692.53	39°19'34.12"N	80°56'07.05"W	2348.87			1.57	
8491.00	337.400	6439.53	1795.86	2280.01	801.30	1658677.58	14280778.59	39°19'34.98"N	80°56'07.53"W	2416.72			2.24	
8586.00	340.100	6439.66	1890.82	2368.54	766.87	1658643.16	14280867.09	39°19'35.85"N	80°56'07.97"W	2489.59			2.84	
8680.00	339.880	6439.80	1984.73	2456.86	734.71	1658611.01	14280955.38	39°19'36.72"N	80°56'08.38"W	2564.37			0.23	
8775.00	335.500	6439.85	2079.70	2544.73	698.66	1658574.97	14281043.21	39°19'37.58"N	80°56'08.83"W	2638.90			4.61	
8869.00	333.020	6440.26	2173.56	2629.40	657.83	1658534.17	14281127.84	39°19'38.43"N	80°56'09.35"W	2710.44			2.70	
8964.00	334.190	6441.23	2268.34	2714.49	615.60	1658491.95	14281212.90	39°19'39.27"N	80°56'09.83"W	2783.42			1.24	
9058.00	336.080	6442.27	2362.26	2799.76	576.08	1658452.45	14281298.14	39°19'40.11"N	80°56'10.39"W	2858.42			2.01	
9153.00	337.550	6443.26	2457.25	2887.09	538.88	1658415.07	14281385.43	39°19'40.98"N	80°56'10.87"W	2936.91			1.56	
9247.00	337.030	6444.21	2551.25	2973.79	502.39	1658378.79	14281472.10	39°19'41.83"N	80°56'11.33"W	3016.93			0.56	
9342.00	338.060	6445.04	2646.24	3061.58	468.11	1658342.52	14281559.86	39°19'42.70"N	80°56'11.79"W	3098.86			1.11	
9436.00	338.290	6446.14	2740.18	3149.43	432.70	1658309.12	14281647.67	39°19'43.55"N	80°56'12.27"W	3179.02			2.47	
9530.00	341.440	6447.43	2833.99	3238.23	401.89	1658278.33	14281736.43	39°19'44.43"N	80°56'12.80"W	3263.07			1.32	
9625.00	340.910	6447.70	2928.78	3328.15	371.23	1658247.68	14281826.31	39°19'45.34"N	80°56'13.29"W	3348.79			0.88	
9719.00	340.090	6447.45	3022.72	3415.91	337.61	1658214.07	14281914.03	39°19'46.210"N	80°56'13.74"W	3432.55			3.99	
9814.00	335.800	6447.42	3117.71	3503.01	299.70	1658176.17	14282001.10	39°19'47.07"N	80°56'14.16"W	3516.81			1.44	
9908.00	338.770	6447.60	3211.70	3589.71	263.40	1658139.90	14282087.77	39°19'47.92"N	80°56'14.56"W	3599.36			3.16	
10002.00	336.730	6447.60	3305.69	3676.71	227.81	1658104.32	14282174.73	39°19'48.78"N	80°56'14.91"W	3683.76			2.19	
10097.00	334.130	6447.12	3400.63	3763.10	188.31	1658064.84	14282261.09	39°19'49.64"N	80°56'15.32"W	3767.81			2.75	
10191.00	330.200	6446.46	3494.22	3848.20	144.43	1658020.97	14282344.16	39°19'50.44"N	80°56'15.79"W	3848.91			4.18	
10286.00	332.990	6446.00	3588.73	3929.76	99.24	1657975.81	14282427.68	39°19'51.290"N	80°56'16.45"W	3931.01			2.94	
10380.00	334.850	6445.60	3682.56	4014.18	57.92	1657934.50	14282512.07	39°19'52.125"N	80°56'16.97"W	4014.60			1.98	
10475.00	336.550	6445.14	3777.51	4100.76	18.83	1657895.42	14282598.61	39°19'52.981"N	80°56'17.47"W	4100.80			1.79	
10569.00	344.480	6444.83	3871.30	4189.30	-12.50	1657864.11	14282687.12	39°19'53.856"N	80°56'17.873"W	4189.32			8.44	
10664.00	343.080	6444.22	3965.69	4280.52	-39.03	1657837.58	14282778.30	39°19'54.758"N	80°56'18.210"W	4280.70			1.56	
10758.00	340.600	6443.43	4059.40	4369.83	-68.33	1657808.30	14282867.57	39°19'55.641"N	80°56'18.582"W	4370.36			2.65	



**Actual Wellpath Report**  
Kerogen Unit 2H AWP Proj: 13890  
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Operator	ANTERO RESOURCES CORPORATION
Area	Richlie County, WV
Field	Richlie
Facility	Zinn Pad
Well	Kerogen Unit 2H
Slot	Slot #04

**WELLPATH DATA (334 stations)**

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Comments
10853.00	90.740	338.120	6442.54	4154.33	4458.72	-101.81	1657774.83	14282956.43	39°19'56.51"N	80°56'19.00"W	4459.88	358.692	2.64	
10947.00	90.180	335.050	6441.78	4248.30	4544.96	-139.16	1657737.60	14283042.64	39°19'57.37"N	80°56'19.48"W	4547.09	358.246	3.32	
11041.00	90.220	338.300	6441.45	4342.28	4631.27	-176.37	1657700.30	14283128.91	39°19'58.22"N	80°56'19.95"W	4634.63	357.819	3.46	
11136.00	90.220	339.920	6441.09	4437.24	4720.02	-210.25	1657666.44	14283217.62	39°19'59.10"N	80°56'20.38"W	4724.70	357.450	1.71	
11230.00	90.400	335.230	6440.58	4531.21	4806.89	-246.09	1657630.60	14283304.46	39°19'59.96"N	80°56'20.84"W	4813.18	357.069	4.99	
11324.00	90.220	333.740	6440.07	4625.09	4891.72	-286.58	1657590.13	14283389.25	39°20'00.80"N	80°56'21.35"W	4900.10	356.647	1.60	
11419.00	90.180	336.190	6439.74	4719.99	4977.78	-326.78	1657549.95	14283475.28	39°20'01.65"N	80°56'21.86"W	4988.50	356.244	2.58	
11513.00	89.880	342.000	6439.74	4813.99	5064.49	-363.05	1657513.68	14283561.96	39°20'02.50"N	80°56'22.32"W	5077.49	355.900	2.38	
11608.00	89.750	338.750	6440.10	4908.86	5153.86	-395.24	1657481.52	14283651.29	39°20'03.39"N	80°56'22.73"W	5168.99	355.615	3.79	
11702.00	90.250	339.580	6440.10	5002.68	5242.62	-426.16	1657450.61	14283740.01	39°20'04.26"N	80°56'23.12"W	5259.91	355.353	2.63	
11797.00	89.880	336.750	6439.99	5097.66	5330.80	-461.49	1657415.29	14283828.15	39°20'05.14"N	80°56'23.57"W	5350.73	355.052	3.00	
11891.00	89.970	336.300	6440.11	5191.65	5417.02	-498.94	1657377.86	14283914.34	39°20'05.99"N	80°56'24.05"W	5439.94	354.738	0.49	
11986.00	89.910	334.290	6440.21	5286.58	5503.32	-538.64	1657338.18	14284000.61	39°20'06.84"N	80°56'24.55"W	5529.61	354.410	2.12	
12080.00	90.000	335.290	6440.28	5380.49	5588.36	-578.68	1657298.16	14284085.62	39°20'07.68"N	80°56'25.06"W	5618.24	354.088	1.07	
12174.00	90.090	341.210	6440.21	5474.43	5675.63	-613.49	1657263.35	14284172.85	39°20'08.53"N	80°56'25.50"W	5708.69	353.831	6.30	
12269.00	90.060	341.190	6440.09	5569.22	5765.56	-644.11	1657232.75	14284262.75	39°20'09.43"N	80°56'25.89"W	5801.43	353.626	0.04	
12363.00	90.090	337.320	6439.66	5663.15	5853.45	-677.40	1657199.47	14284350.60	39°20'10.30"N	80°56'26.32"W	5892.52	353.399	4.12	
12458.00	90.060	334.370	6439.84	5758.11	5940.12	-716.27	1657160.62	14284437.24	39°20'11.16"N	80°56'26.81"W	5983.15	353.124	3.11	
12550.00	90.340	334.730	6439.52	5850.00	6023.20	-755.80	1657121.10	14284520.28	39°20'11.98"N	80°56'27.31"W	6070.43	352.848	0.50	
12647.00	90.310	332.870	6438.97	5946.80	6110.22	-798.63	1657078.29	14284607.27	39°20'12.84"N	80°56'27.86"W	6162.19	352.563	1.92	
12741.00	90.250	332.870	6438.51	6040.51	6193.88	-841.49	1657035.45	14284690.89	39°20'13.67"N	80°56'28.40"W	6250.78	352.263	0.06	
12836.00	90.060	337.030	6438.25	6135.41	6279.93	-881.71	1656995.25	14284776.90	39°20'14.52"N	80°56'28.91"W	6341.52	352.008	4.38	
12930.00	90.180	340.030	6438.05	6229.38	6367.39	-916.11	1656960.86	14284864.34	39°20'15.38"N	80°56'29.35"W	6432.96	351.813	3.19	
13025.00	90.180	338.700	6437.75	6324.32	6456.30	-949.59	1656927.40	14284953.20	39°20'16.26"N	80°56'29.78"W	6525.75	351.633	1.40	
13119.00	90.220	337.920	6437.43	6418.30	6543.64	-984.33	1656892.67	14285040.51	39°20'17.13"N	80°56'30.22"W	6617.26	351.445	0.83	
13213.00	90.250	337.280	6437.04	6512.30	6630.54	-1020.15	1656856.86	14285127.38	39°20'17.99"N	80°56'30.67"W	6708.56	351.253	0.68	
13308.00	90.250	339.120	6436.63	6607.29	6718.75	-1055.42	1656821.60	14285215.55	39°20'18.86"N	80°56'31.12"W	6801.14	351.073	1.94	
13402.00	90.280	342.640	6436.19	6701.09	6807.55	-1086.21	1656790.83	14285304.31	39°20'19.74"N	80°56'31.51"W	6893.66	350.934	3.74	
13497.00	90.460	340.460	6435.58	6795.83	6897.66	-1116.27	1656760.78	14285394.39	39°20'20.63"N	80°56'31.89"W	6987.40	350.807	2.30	
13591.00	90.180	336.740	6435.05	6889.80	6984.85	-1151.32	1656725.74	14285481.54	39°20'21.49"N	80°56'32.34"W	7079.10	350.640	5.03	



## Actual Wellpath Report

Kerogen Unit 2H AWP Proj: 13890'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Kerogen Unit 2H
Field	Ritchie	Wellbore	Kerogen Unit 2H AWB
Facility	Zinn Pad		

WELLPATH DATA (334 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]	Comments
13686.00	90.280	336.310	6434.67	6984.77	7071.65	-1189.92	1656687.15	14285568.31	39°20'22.352"N	80°56'32.834"W	7171.06	350.448	0.61	
13780.00	90.310	334.200	6434.19	7078.70	7157.01	-1229.27	1656647.83	14285653.64	39°20'23.196"N	80°56'33.334"W	7261.81	350.254	2.24	
13865.00	90.310	342.140	6433.73	7163.62	7235.85	-1260.85	1656616.26	14285732.45	39°20'23.975"N	80°56'33.735"W	7344.88	350.115	9.34	
13890.00	90.310	342.140	6433.59	7188.53	7259.65	-1268.52	1656608.59	14285756.23	39°20'24.210"N	80°56'33.832"W	7369.64	350.088	0.00	Projected MD @ TD: 13890'

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Kerogen Unit 2H POE Rev-1	6423.00	749.13	1401.60	1659277.64	14279248.33	39°19'19.845"N	80°55'59.909"W	point
Kerogen Unit 2H Landing Pt. - Plat	6426.00	985.96	1352.27	1659228.33	14279485.06	39°19'22.186"N	80°56'00.535"W	point
Kerogen Unit 2H BHL Rev-1	6447.00	7265.68	-1267.55	1656609.56	14285762.26	39°20'24.270"N	80°56'33.820"W	point
Kerogen Unit 2H Landing Pt. Rev-1	6447.00	985.96	1352.27	1659228.33	14279485.06	39°19'22.186"N	80°56'00.535"W	point

WELLPATH COMPOSITION - Ref Wellbore: Kerogen Unit 2H AWB    Ref Wellpath: Kerogen Unit 2H AWP Proj: 13890'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	5790.80	SDI Keeper v1.04	01 SDI Std. Keeper Gyro (100'-5790.8')	Kerogen Unit 2H AWB
5790.80	13865.00	BHI AutoTrak Curve (Short)	02 BHI AT Curve <8-1/2"> (5790.8')(5942'-13865')	Kerogen Unit 2H AWB
13865.00	13890.00	Blind Drilling (std)	Projection to bit	Kerogen Unit 2H AWB



## Actual Wellpath Report

Kerogen Unit 2H AWP Proj: 13890'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #04
Area	Ritchie County, WV	Well	Kerogen Unit 2H
Field	Ritchie	Wellbore	Kerogen Unit 2H AWB
Facility	Zinn Pad		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
100.00	0.100	309.790	100.00	SDI Std. Keeper Gyro (100'-5790.8')	
5942.00	16.720	69.550	5766.12	BHI AT Curve <8-1/2"> (5790.8')(5942'-13865')	
6490.00	43.518	9.008	6259.63	Middlesex: 6490' MD	
6676.00	64.979	9.246	6369.37	Burkett: 6676' MD	
6758.00	73.235	5.590	6397.84	Tully: 6758' MD	
6843.00	76.652	0.749	6420.12	Marcellus: 6843' MD	
13890.00	90.310	342.140	6433.59	Projected MD @ TD: 13890'	

COMMENTS
<p><b>Wellpath general comments</b>            API: 47-085-10281-0000            BHI Job #: 7981917            Rig: Patterson 343            Duration: 05.31.2016-06.02.2016            SDI Std. Keeper Gyro (100'-5790.8')            BHI AT Curve &lt;8-1/2"&gt; (5790.8')(5942'-13865')            Middlesex: 6490' MD            Burkett: 6676' MD            Tully: 6758' MD            Marcellus: 6843' MD            Projected MD @ TD: 13890'</p>