

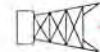


ANTERO RESOURCES CORPORATION

Location: Doddridge Co., WV
Field: Doddridge
Facility: Alvadore Pad

Slot: Slot #06
Well: Doak Unit 1H
Wellbore: Doak Unit 1H PWB

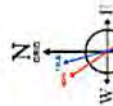
Plot reference wellpath is Doak Unit 1H PWP Rev-A-0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to Patterson 342 (RKB)	** Wellpath was transformed from a different geoidetic datum
Measured depths are referenced to Patterson 342 (RKB)	North Reference: Grid north
Patterson 342 (RKB) to Mean Sea Level: 1082 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot #06): -1057 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: harrisk on 2016-08-02
	Database: WA_MPL_EASTERNUS_Datb



Gyrodatta MS Gyro <8-3/4">(100° - 5587') : 0.36° Inc, 100.00ft MD, 100.00ft TVD, -0.23ft VS

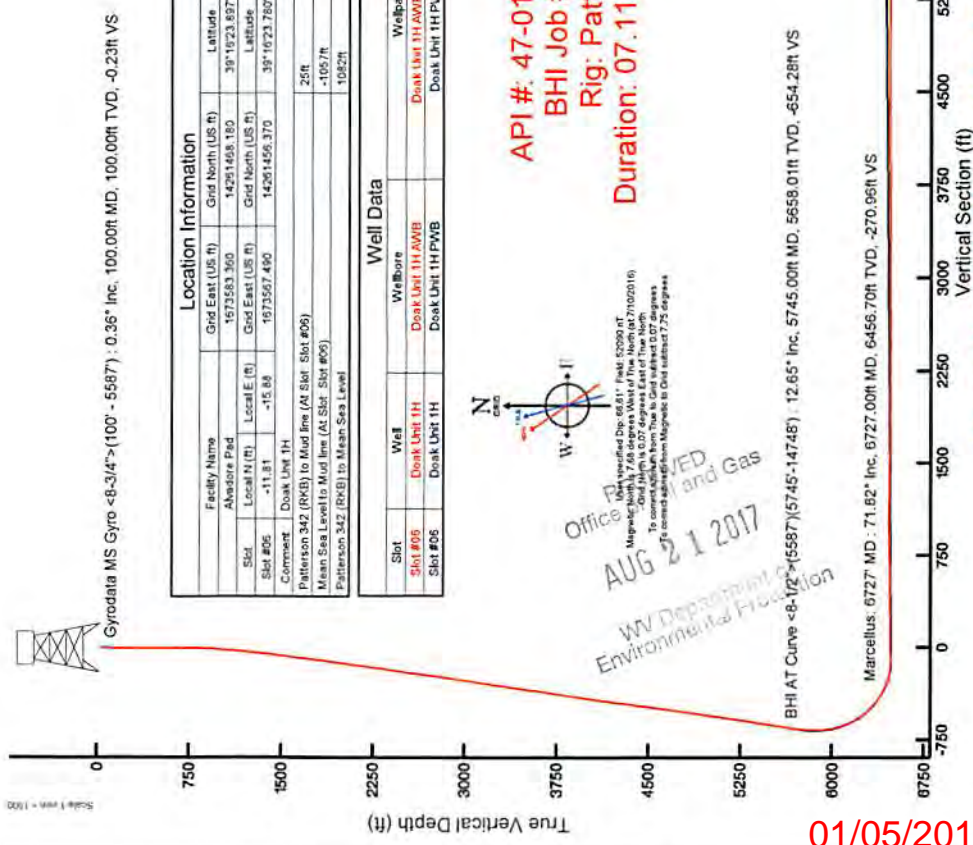
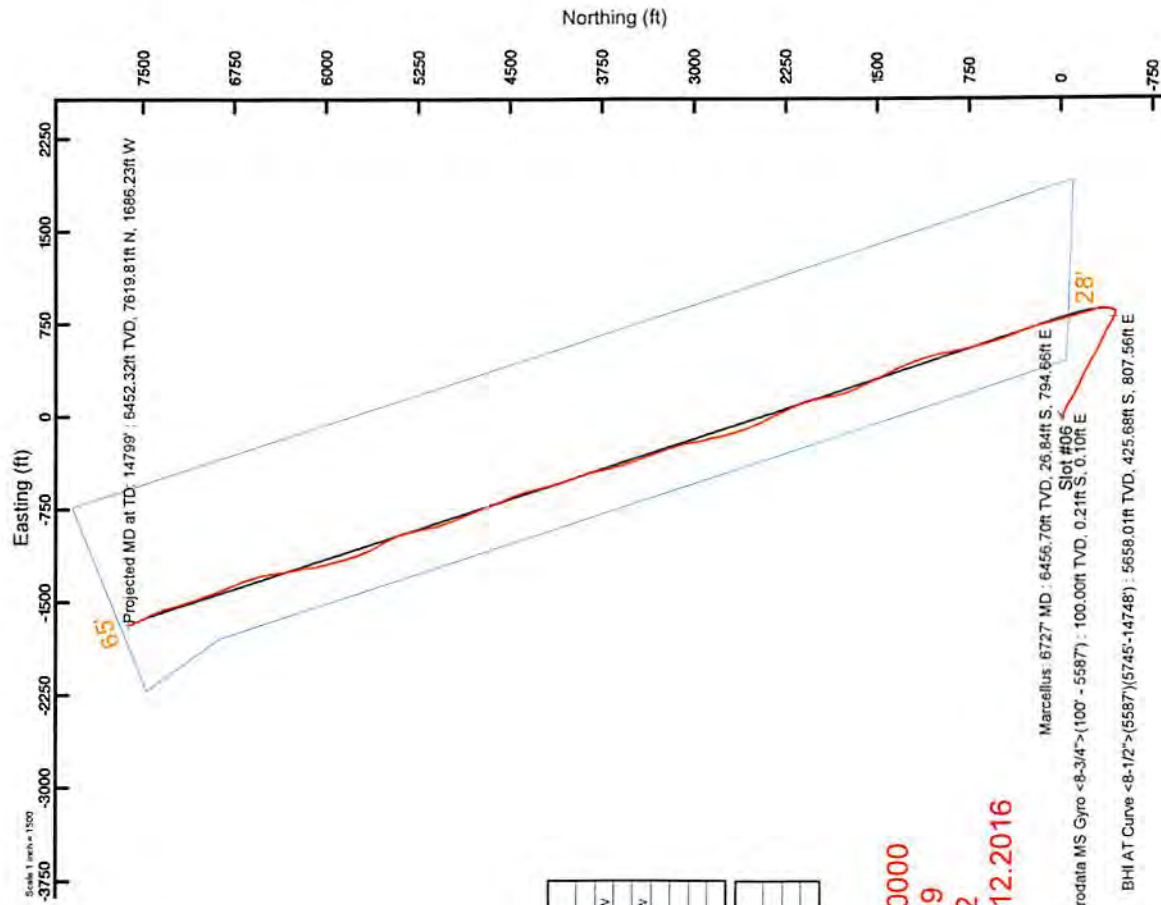
Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
Alvadore Pad	1573583.360	14291484.180	80°52'58.028"W
Slot	Local N (ft)	Grid East (US ft)	Longitude
Slot #06	-11.81	1573587.490	80°52'58.300"W
Doak Unit 1H		14291456.370	80°52'58.300"W
Comment: Doak Unit 1H			
Patterson 342 (RKB) to Mud line (At Slot #06)			
Mean Sea Level to Mud line (At Slot #06)			
Patterson 342 (RKB) to Mean Sea Level			
26ft			
-1057ft			
1082ft			

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #06	Doak Unit 1H	Doak Unit 1H AWB	Doak Unit 1H AWIP Proj, 14799-
Slot #06	Doak Unit 1H	Doak Unit 1H PWB	Doak Unit 1H PWP Rev-A-0



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AUG 21 2017
WV Department of Environmental Protection

API #: 47-017-06766-0000
BHI Job #: 8047109
Rig: Patterson 342
Duration: 07.11.2016-07.12.2016



01/05/2018



Actual Wellpath Report

Doak Unit 1H AWP Proj: 14799



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Doak Unit 1H
Field	Doddridge	Wellbore	Doak Unit 1H AWP
Facility	Alvadore Pad		

WELLPATH DATA (173 stations) † = interpolated/extrapolated station															
MD	Inclinon	Azimuth	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Closure	Dir	DLS	Bull	Turn	Comments
[m]	[°]	[°]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[°]	[°/100ft]	[°/100ft]	[°]	
0.00	154.370	0.00	0.00	0.00	0.00	1673567.49	14261456.37	39°16'23.780"N	80°52'58.300"W	0.00	0.00	0.00	0.00	0.00	
25.00	154.370	25.00	0.00	0.00	0.00	1673567.49	14261456.37	39°16'23.780"N	80°52'58.300"W	0.00	0.00	0.00	0.00	0.00	
100.00	154.370	100.00	-0.23	-0.21	0.10	1673567.59	14261456.16	39°16'23.778"N	80°52'58.299"W	0.24	154.370	0.48	0.48	0.18	69.07
200.00	223.440	200.00	-0.62	-0.61	0.13	1673567.62	14261456.76	39°16'23.774"N	80°52'58.298"W	0.62	167.982	0.34	0.34	-0.18	
300.00	262.040	300.00	-0.65	-0.76	-0.25	1673567.24	14261456.61	39°16'23.772"N	80°52'58.303"W	0.80	197.917	0.20	0.20	0.13	38.60
400.00	270.820	400.00	-0.52	-0.80	-0.77	1673566.72	14261455.58	39°16'23.772"N	80°52'58.310"W	1.10	223.973	0.05	-0.02	8.78	
500.00	261.900	499.99	-0.39	-0.83	-1.29	1673566.20	14261455.54	39°16'23.772"N	80°52'58.316"W	1.53	237.214	0.05	0.02	-8.92	
600.00	126.170	599.99	-0.75	-1.16	-1.15	1673566.34	14261455.21	39°16'23.769"N	80°52'58.315"W	1.64	224.826	0.82	0.26	-135.73	
700.00	121.590	699.99	-1.70	-1.83	-0.14	1673567.35	14261454.54	39°16'23.762"N	80°52'58.302"W	1.84	184.232	0.27	0.26	-4.58	
800.00	112.340	799.94	-3.62	-3.02	2.43	1673569.92	14261453.35	39°16'23.750"N	80°52'58.269"W	3.88	141.096	1.61	1.59	-9.25	
900.00	112.290	899.77	-7.41	-5.24	7.66	1673575.34	14261451.13	39°16'23.728"N	80°52'58.200"W	9.44	123.707	1.88	1.88	-0.05	
1000.00	116.650	999.35	-13.57	-9.05	16.08	1673583.57	14261447.32	39°16'23.690"N	80°52'58.096"W	18.45	119.368	1.85	1.81	4.36	
1100.00	114.240	1098.64	-21.73	-14.13	26.83	1673594.31	14261442.24	39°16'23.640"N	80°52'57.959"W	30.33	117.782	1.47	1.44	-2.41	
1200.00	112.190	1197.67	-30.86	-19.59	39.58	1673607.06	14261436.79	39°16'23.586"N	80°52'57.797"W	44.17	116.332	0.90	0.85	-2.05	
1300.00	113.300	1296.48	-40.89	-25.54	53.75	1673621.22	14261430.84	39°16'23.527"N	80°52'57.617"W	59.51	115.413	0.90	0.86	1.11	
1400.00	113.590	1395.15	-51.67	-32.02	68.69	1673636.15	14261424.37	39°16'23.463"N	80°52'57.427"W	75.78	114.991	0.19	0.18	0.29	
1500.00	116.740	1592.12	-75.63	-47.07	99.92	1673667.37	14261409.31	39°16'23.313"N	80°52'57.030"W	110.45	115.227	0.34	0.33	0.50	
1600.00	120.100	1690.69	-87.78	-55.04	114.71	1673682.15	14261401.35	39°16'23.235"N	80°52'56.842"W	127.23	115.632	1.52	-1.41	3.56	
1700.00	123.730	1789.50	-99.55	-63.18	127.79	1673695.23	14261393.22	39°16'23.154"N	80°52'56.676"W	142.55	116.307	0.60	-0.21	3.53	
1800.00	123.490	1888.22	-112.06	-72.01	141.07	1673708.51	14261384.39	39°16'23.067"N	80°52'56.507"W	158.39	117.040	0.84	0.84	-0.24	
1900.00	122.870	1986.69	-125.63	-81.54	155.66	1673723.09	14261374.86	39°16'22.972"N	80°52'56.322"W	175.72	117.647	0.88	0.87	-0.62	
2000.00	122.940	2085.06	-139.56	-91.29	170.74	1673738.16	14261365.11	39°16'22.875"N	80°52'56.131"W	193.61	118.134	0.25	-0.25	0.07	
2100.00	122.940	2085.06	-139.56	-91.29	170.74	1673738.16	14261365.11	39°16'22.875"N	80°52'56.131"W	193.61	118.134	0.25	-0.25	0.07	
2200.00	120.740	2183.55	-152.81	-100.45	185.46	1673752.88	14261355.86	39°16'22.785"N	80°52'55.843"W	210.91	118.440	0.61	-0.47	-2.20	
2300.00	115.390	2281.90	-165.76	-108.88	201.39	1673768.80	14261347.53	39°16'22.701"N	80°52'55.741"W	228.94	118.398	1.61	1.29	-5.35	
2400.00	115.550	2379.73	-180.02	-117.80	220.11	1673787.51	14261338.62	39°16'22.613"N	80°52'55.503"W	249.65	118.155	1.86	1.86	0.16	
2500.00	117.680	2477.32	-195.32	-127.56	239.60	1673806.99	14261328.87	39°16'22.516"N	80°52'55.255"W	271.44	118.029	0.77	-0.62	2.13	
2600.00	114.880	2575.10	-209.96	-136.84	258.40	1673825.78	14261319.58	39°16'22.424"N	80°52'55.017"W	292.39	117.905	0.69	-0.35	-2.82	
2700.00	112.540	2673.10	-223.20	-144.85	276.60	1673843.98	14261311.58	39°16'22.345"N	80°52'54.785"W	312.23	117.640	1.02	-0.91	-2.32	
2800.00	116.240	2771.33	-235.81	-152.57	293.66	1673861.03	14261303.86	39°16'22.268"N	80°52'54.569"W	330.92	117.454	0.83	-0.45	3.70	

† = interpolated/extrapolated station

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Actual Wellpath Report

Doak Unit 1H AWP Proj: 14799'
Page 3 of 9



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #06
Area	Doddridge Co., WV		Well	Doak Unit 1H
Field	Doddridge		Wellbore	Doak Unit 1H AWB
Facility	Alvadore Pad			

WELLPATH DATA (173 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	
2900.00	11.490	117.960	2869.48	-249.36	-161.29	310.68	1673878.05	14261295.14	39°16'22.182"N	80°52'54.352"W	350.05	117.437	0.98	0.92	1.72		
3000.00	12.380	116.170	2967.32	-263.99	-170.69	329.10	1673896.46	14261285.75	39°16'22.089"N	80°52'54.118"W	370.73	117.414	0.96	0.89	-1.79		
3100.00	12.500	113.860	3064.97	-278.68	-179.80	348.62	1673915.97	14261276.65	39°16'21.998"N	80°52'53.870"W	392.25	117.282	0.51	0.12	-2.31		
3200.00	11.280	116.990	3162.83	-292.81	-188.61	367.23	1673934.57	14261267.83	39°16'21.911"N	80°52'53.634"W	412.83	117.186	1.38	-1.22	3.13		
3300.00	11.010	121.540	3260.94	-306.99	-198.05	384.08	1673951.42	14261258.40	39°16'21.818"N	80°52'53.419"W	432.14	117.277	0.92	-0.27	4.55		
3400.00	11.350	121.690	3359.04	-321.76	-208.21	400.59	1673967.92	14261248.24	39°16'21.717"N	80°52'53.210"W	451.47	117.463	0.34	0.34	0.15		
3500.00	11.210	119.550	3457.11	-336.43	-218.17	417.42	1673984.75	14261238.28	39°16'21.618"N	80°52'52.996"W	471.00	117.595	0.44	-0.14	-2.14		
3600.00	11.360	114.030	3555.18	-350.19	-226.98	434.88	1674002.19	14261229.48	39°16'21.531"N	80°52'52.774"W	490.55	117.562	1.09	0.15	-5.52		
3700.00	11.520	117.380	3653.20	-363.89	-235.58	452.74	1674020.05	14261220.88	39°16'21.446"N	80°52'52.547"W	510.36	117.490	0.68	0.16	3.35		
3800.00	11.840	122.770	3751.13	-378.95	-245.73	470.23	1674037.53	14261210.74	39°16'21.345"N	80°52'52.325"W	530.57	117.590	1.14	0.32	5.39		
3900.00	11.230	122.140	3849.11	-394.36	-256.46	487.10	1674054.40	14261200.01	39°16'21.239"N	80°52'52.111"W	550.49	117.767	0.62	-0.61	-0.63		
4000.00	10.610	121.800	3947.30	-408.87	-266.49	503.17	1674070.46	14261189.98	39°16'21.140"N	80°52'51.906"W	569.39	117.907	0.62	-0.62	-0.34		
4100.00	10.670	118.950	4045.58	-422.66	-275.82	519.10	1674086.38	14261180.66	39°16'21.047"N	80°52'51.704"W	587.83	117.984	0.53	0.06	-2.85		
4200.00	10.600	117.670	4143.86	-436.01	-284.58	535.34	1674102.62	14261171.91	39°16'20.960"N	80°52'51.498"W	605.28	117.994	0.25	-0.07	-1.28		
4300.00	11.200	116.740	4242.06	-449.42	-293.22	552.16	1674119.43	14261163.27	39°16'20.875"N	80°52'51.284"W	625.19	117.970	0.63	0.60	-0.93		
4400.00	11.090	116.500	4340.17	-462.99	-301.88	569.44	1674136.70	14261154.61	39°16'20.789"N	80°52'51.064"W	644.51	117.929	0.12	-0.11	-0.24		
4500.00	11.870	117.250	4438.17	-477.04	-310.88	587.19	1674154.45	14261145.62	39°16'20.700"N	80°52'50.839"W	664.41	117.898	0.79	0.78	0.75		
4600.00	10.560	110.810	4536.26	-490.08	-318.84	604.90	1674172.15	14261137.65	39°16'20.621"N	80°52'50.614"W	683.79	117.794	1.81	-1.31	-6.44		
4700.00	11.180	112.730	4634.47	-502.15	-325.85	622.41	1674189.65	14261130.65	39°16'20.551"N	80°52'50.391"W	702.55	117.633	0.72	0.62	1.92		
4800.00	10.990	119.380	4732.61	-515.49	-334.27	639.66	1674206.89	14261122.24	39°16'20.468"N	80°52'50.172"W	721.73	117.590	1.29	-0.19	6.65		
4900.00	11.180	118.810	4830.74	-529.57	-343.62	656.46	1674223.69	14261112.89	39°16'20.375"N	80°52'49.959"W	740.95	117.629	0.22	0.19	-0.57		
5000.00	12.070	114.330	4928.69	-543.67	-352.60	674.48	1674241.70	14261103.91	39°16'20.286"N	80°52'49.730"W	761.09	117.599	1.27	0.89	-4.48		
5100.00	11.430	117.590	5026.60	-557.79	-361.49	692.79	1674260.00	14261095.02	39°16'20.198"N	80°52'49.497"W	781.43	117.555	0.92	-0.64	3.26		
5200.00	10.950	116.940	5124.69	-571.57	-370.39	710.04	1674277.25	14261086.13	39°16'20.110"N	80°52'49.278"W	800.84	117.548	0.50	-0.48	-0.65		
5300.00	12.010	119.520	5222.69	-585.95	-379.81	727.56	1674294.78	14261076.71	39°16'20.017"N	80°52'49.055"W	820.73	117.566	1.18	1.06	2.58		
5400.00	11.890	121.790	5320.53	-601.49	-390.37	745.37	1674312.56	14261066.16	39°16'19.912"N	80°52'48.829"W	841.41	117.642	0.49	-0.12	2.27		
5500.00	11.040	120.460	5418.53	-616.52	-400.65	762.38	1674329.57	14261055.88	39°16'19.810"N	80°52'48.613"W	861.25	117.723	0.89	-0.85	-1.33		
5587.00	12.270	119.760	5503.73	-629.60	-409.46	777.59	1674344.77	14261047.07	39°16'19.723"N	80°52'48.419"W	878.81	117.770	1.42	1.41	-0.80		
5745.00	12.650	117.100	5658.01	-654.28	-425.68	807.56	1674374.73	14261030.86	39°16'19.562"N	80°52'48.039"W	912.88	117.794	0.44	0.24	-1.68	BHI AT Curve <8-1/2">(5587)(5745-14748)	
5783.00	12.060	115.400	5695.13	-659.96	-429.27	814.85	1674382.02	14261027.27	39°16'19.527"N	80°52'47.946"W	921.01	117.781	1.82	-1.55	-4.47		

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Actual Wellpath Report
Doak Unit 1H AWP Proj: 14799

Page 4 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Doak Unit 1H
Field	Doddridge	Wellbore	Doak Unit 1H AWB
Facility	Alvadore Pad		

WELLPATH DATA (173 stations) † = interpolated/extrapolated station

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate	Comments
5830.00	11.300	107.340	574.116	-665.99	-432.75	823.69	1674390.84	14261023.79	39°16'19.492"N	80°52'47.834"W	930.45	117.717	3.83	-1.62	-17.15	
5878.00	10.910	94.120	5788.27	-670.42	-434.48	832.71	1674399.86	14261022.06	39°16'19.475"N	80°52'47.719"W	939.24	117.554	5.35	-0.81	-27.54	
5925.00	10.610	80.220	5834.45	-672.71	-434.07	841.41	1674408.56	14261022.48	39°16'19.479"N	80°52'47.608"W	946.77	117.288	5.54	-0.64	-29.57	
5972.00	10.610	67.040	5880.66	-672.96	-431.64	849.66	1674416.81	14261024.90	39°16'19.503"N	80°52'47.503"W	953.01	116.931	5.15	0.00	-28.04	
6019.00	12.050	49.600	5926.75	-670.71	-426.77	857.38	1674424.53	14261029.77	39°16'19.551"N	80°52'47.405"W	957.72	116.462	7.87	3.06	-37.11	
6066.00	13.940	35.090	5972.56	-665.44	-418.96	864.37	1674431.52	14261037.58	39°16'19.628"N	80°52'47.316"W	960.56	115.859	7.99	4.02	-30.87	
6116.00	16.810	18.690	6020.79	-656.02	-407.17	870.16	1674437.30	14261049.36	39°16'19.744"N	80°52'47.242"W	960.71	115.076	10.37	5.74	-32.80	
6160.00	19.990	12.990	6062.54	-644.46	-393.81	873.89	1674441.03	14261062.71	39°16'19.876"N	80°52'47.150"W	958.52	114.259	8.30	7.23	-72.95	
6209.00	23.280	9.500	6108.08	-628.69	-376.10	877.37	1674444.51	14261080.42	39°16'20.051"N	80°52'47.187"W	954.58	113.203	7.21	6.71	-77.12	
6257.00	26.640	3.990	6151.60	-610.28	-356.00	879.68	1674446.82	14261100.51	39°16'20.250"N	80°52'47.120"W	948.99	112.033	8.51	7.06	-11.48	
6302.00	29.920	6191.24	6191.24	-590.03	-334.72	879.61	1674446.74	14261121.78	39°16'20.460"N	80°52'47.121"W	941.14	110.834	11.10	7.29	-17.71	
6349.00	34.160	348.200	6231.08	-565.51	-310.09	876.09	1674443.23	14261146.40	39°16'20.704"N	80°52'47.165"W	929.35	109.491	12.61	9.02	-16.64	
6394.00	38.520	343.240	6267.33	-538.94	-284.21	869.75	1674436.89	14261172.27	39°16'20.960"N	80°52'47.245"W	915.01	108.096	10.86	9.69	-8.31	
6443.00	42.690	343.360	6304.52	-507.07	-253.55	860.99	1674428.14	14261202.92	39°16'21.263"N	80°52'47.356"W	897.55	106.409	8.57	8.51	-1.52	
6491.00	47.850	343.180	6338.29	-473.00	-220.88	851.26	1674418.41	14261235.58	39°16'21.586"N	80°52'47.479"W	879.45	104.546	10.78	10.75	-1.04	
6538.00	52.520	343.240	6368.38	-436.91	-186.33	840.84	1674407.99	14261270.12	39°16'21.927"N	80°52'47.611"W	861.24	102.495	9.94	9.94	0.13	
6584.00	56.660	343.351	6400.97	-390.19	-141.57	827.37	1674394.53	14261314.85	39°16'22.282"N	80°52'47.748"W	843.55	100.273	9.00	9.00	0.02	
6632.00	62.070	343.670	6419.48	-358.17	-110.86	818.28	1674385.44	14261345.56	39°16'22.370"N	80°52'47.782"W	839.40	99.710	11.30	11.27	0.86	
6655.00†	64.393	343.980	6429.83	-337.64	-91.14	812.56	1674379.73	14261365.27	39°16'22.669"N	80°52'47.969"W	817.66	96.400	10.17	10.10	1.35	Tully: 6655' MD
6682.00†	70.145	344.676	6451.48	-286.07	-41.43	798.63	1674365.80	14261414.95	39°16'23.360"N	80°52'48.146"W	799.70	92.970	10.49	10.43	1.29	Hamilton: 6711' MD
6726.00	71.710	344.850	6456.39	-271.91	-27.76	794.90	1674362.07	14261428.62	39°16'23.495"N	80°52'48.193"W	795.39	92.000	10.49	10.43	1.16	
6773.00†	76.900	345.350	6469.10	-226.74	15.96	783.28	1674350.45	14261472.32	39°16'23.928"N	80°52'48.240"W	783.44	88.833	11.09	11.04	1.06	Marcellus: 6727' MD
6821.00	83.680	346.130	6477.19	-179.56	61.78	771.63	1674338.81	14261518.13	39°16'24.381"N	80°52'48.487"W	774.10	85.422	14.22	14.12	1.62	
6868.00	88.220	346.000	6480.51	-132.80	107.27	760.34	1674327.53	14261563.60	39°16'24.830"N	80°52'48.630"W	767.87	81.969	9.66	9.66	-0.28	
6915.00	90.920	345.770	6480.86	-85.92	152.85	748.88	1674316.07	14261609.16	39°16'25.281"N	80°52'48.775"W	764.32	78.464	5.77	5.74	-0.49	
7009.00	91.230	342.750	6479.09	7.98	243.30	723.39	1674290.59	14261699.57	39°16'26.175"N	80°52'49.098"W	763.21	71.411	3.23	0.33	-3.21	

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Actual Wellpath Report

Doak Unit 1H AWP Proj: 14799'
Page 5 of 9



REFERENCE WELLPATH IDENTIFICATION				
Operator	ANTERO RESOURCES CORPORATION		Slot	Slot #06
Area	Doddridge Co., WV		Well	Doak Unit 1H
Field	Doddridge		Wellbore	Doak Unit 1H AWB
Facility	Alvadore Pad			

WELLPATH DATA (173 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
7103.00	90.800	339.640	6477.43	101.95	332.26	693.10	1674260.31	14261788.49	39°16'27.055"N	80°52'49.481"W	768.62	64.388	3.34	-0.46	-3.31	
7198.00	90.680	338.340	6476.20	196.81	420.93	659.04	1674226.27	14261877.13	39°16'27.932"N	80°52'49.913"W	782.00	57.434	1.37	-0.13	-1.37	
7292.00	90.740	341.090	6475.04	290.71	509.09	626.46	1674193.70	14261965.25	39°16'28.804"N	80°52'50.326"W	807.23	50.901	2.93	0.06	2.93	
7387.00	91.020	345.060	6473.58	385.67	599.94	598.81	1674166.06	14262056.07	39°16'29.702"N	80°52'50.676"W	847.65	44.946	4.19	0.29	4.18	
7481.00	90.890	348.280	6472.01	479.33	691.38	577.14	1674144.40	14262147.48	39°16'30.606"N	80°52'50.950"W	900.62	39.854	3.43	-0.14	3.43	
7576.00	90.310	345.360	6471.02	573.98	783.87	555.49	1674122.75	14262239.92	39°16'31.520"N	80°52'51.224"W	960.74	35.323	3.13	-0.61	-3.07	
7670.00	90.340	348.680	6470.48	667.61	875.45	534.38	1674101.65	14262331.47	39°16'32.426"N	80°52'51.490"W	1025.66	31.400	3.53	0.03	3.53	
7764.00	91.420	349.570	6469.04	760.87	967.75	516.64	1674083.93	14262423.73	39°16'33.338"N	80°52'51.714"W	1097.02	28.096	1.49	1.15	0.95	
7859.00	91.660	344.550	6466.48	855.44	1060.27	495.39	1674062.68	14262516.22	39°16'34.253"N	80°52'51.983"W	1170.29	25.043	5.29	0.25	-5.28	
7953.00	90.090	341.180	6465.05	949.40	1150.07	467.70	1674035.00	14262605.98	39°16'35.141"N	80°52'52.334"W	1241.54	22.130	3.95	-1.67	-3.59	
8047.00	89.880	339.120	6465.07	1043.34	1238.48	435.78	1674003.10	14262694.36	39°16'36.015"N	80°52'52.738"W	1312.92	19.385	2.20	-0.22	-2.19	
8142.00	90.000	336.090	6465.17	1138.05	1326.31	399.59	1673966.92	14262782.15	39°16'36.884"N	80°52'53.197"W	1385.20	16.767	3.19	0.13	-3.19	
8236.00	89.480	334.130	6465.60	1231.37	1411.57	360.03	1673927.38	14262867.38	39°16'37.727"N	80°52'53.699"W	1456.76	14.309	2.16	-0.55	-2.09	
8330.00	89.350	334.360	6466.56	1324.50	1496.23	319.19	1673886.55	14262952.00	39°16'38.564"N	80°52'54.216"W	1529.90	12.042	0.28	-0.14	0.24	
8425.00	89.570	333.550	6467.45	1418.56	1581.58	277.48	1673844.86	14263037.32	39°16'39.408"N	80°52'54.745"W	1605.74	9.951	0.88	0.23	-0.85	
8519.00	88.340	335.040	6469.17	1511.69	1666.26	236.72	1673804.11	14263121.96	39°16'40.246"N	80°52'55.262"W	1682.99	8.086	2.06	-1.31	1.59	
8613.00	87.910	341.310	6472.25	1605.38	1753.43	201.81	1673769.21	14263209.10	39°16'41.108"N	80°52'55.705"W	1765.00	6.565	6.68	-0.46	6.67	
8708.00	91.050	347.740	6473.11	1700.22	1844.92	176.48	1673743.90	14263300.55	39°16'42.012"N	80°52'56.025"W	1853.34	5.464	7.53	3.31	6.77	
8802.00	90.310	350.590	6471.99	1793.47	1937.23	158.81	1673726.24	14263392.82	39°16'42.925"N	80°52'56.249"W	1943.73	4.686	3.13	-0.79	3.03	
8897.00	89.970	349.590	6471.76	1887.53	2030.81	142.46	1673709.89	14263486.37	39°16'43.850"N	80°52'56.455"W	2035.80	4.013	1.11	-0.36	-1.05	
8991.00	90.090	338.310	6471.71	1981.32	2121.00	116.51	1673683.96	14263576.52	39°16'44.742"N	80°52'56.783"W	2124.20	3.144	12.00	0.13	-12.00	
9086.00	90.090	334.730	6471.56	2075.87	2208.12	78.67	1673646.13	14263663.61	39°16'45.603"N	80°52'57.263"W	2209.52	2.040	3.77	0.00	-3.77	
9180.00	90.120	336.500	6471.39	2169.28	2293.73	39.86	1673607.33	14263749.18	39°16'46.450"N	80°52'57.755"W	2294.08	0.996	1.88	0.03	1.88	
9275.00	90.150	332.800	6471.17	2263.48	2379.57	-0.81	1673566.68	14263834.99	39°16'47.299"N	80°52'58.271"W	2379.57	359.981	3.89	0.03	-3.89	
9369.00	90.180	333.440	6470.90	2356.35	2463.41	-43.31	1673524.20	14263918.80	39°16'48.128"N	80°52'58.810"W	2463.79	358.993	0.68	0.03	0.68	
9464.00	89.970	339.020	6470.77	2450.83	2550.32	-81.58	1673485.94	14264005.67	39°16'48.988"N	80°52'59.295"W	2551.62	358.168	5.88	-0.22	5.87	
9558.00	89.510	342.740	6471.20	2544.80	2639.12	-112.36	1673455.17	14264094.43	39°16'49.866"N	80°52'59.685"W	2641.51	357.562	3.99	-0.49	3.96	
9652.00	89.540	345.400	6471.98	2638.72	2729.50	-138.16	1673429.38	14264184.77	39°16'50.759"N	80°53'00.012"W	2732.99	357.102	2.83	0.03	2.83	
9747.00	89.570	347.570	6472.72	2733.43	2821.86	-160.36	1673407.19	14264277.10	39°16'51.673"N	80°53'00.293"W	2826.41	356.747	2.28	0.03	2.28	
9841.00	89.880	346.340	6473.17	2827.07	2913.43	-181.58	1673385.99	14264368.63	39°16'52.578"N	80°53'00.561"W	2919.08	356.434	1.35	0.33	-1.31	

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Actual Wellpath Report

Doak Unit 1H AWP Proj: 14799'
Page 6 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Doak Unit 1H
Field	Doddridge	Wellbore	Doak Unit 1H AWB
Facility	Alvadore Pad		

WELLPATH DATA (173 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
9935.00	90.460	350.220	6472.89	2920.49	3005.45	-200.67	1673366.90	14264460.62	39°16'53.488"N	80°53'00.802"W	3012.14	356.180	4.17	0.62	4.13	
10030.00	90.770	347.170	6471.87	3014.83	3098.59	-219.29	1673348.29	14264553.72	39°16'54.408"N	80°53'01.038"W	3106.34	355.952	3.23	0.33	-3.21	
10124.00	90.310	339.750	6470.98	3108.73	3188.63	-246.03	1673321.56	14264643.73	39°16'55.299"N	80°53'01.376"W	3198.11	355.588	7.91	-0.49	-7.89	
10218.00	89.750	341.110	6470.93	3202.69	3277.20	-277.51	1673290.09	14264732.26	39°16'56.175"N	80°53'01.775"W	3288.93	355.160	1.56	-0.60	1.45	
10313.00	89.850	339.270	6471.26	3297.64	3366.57	-309.71	1673257.91	14264821.60	39°16'57.058"N	80°53'02.183"W	3380.79	354.744	1.94	0.11	-1.94	
10407.00	89.780	340.510	6471.57	3391.57	3454.84	-342.03	1673225.60	14264909.83	39°16'57.931"N	80°53'02.593"W	3471.73	354.346	1.32	-0.07	1.32	
10502.00	89.750	342.140	6471.96	3486.56	3544.84	-372.44	1673195.20	14264999.79	39°16'58.821"N	80°53'02.978"W	3564.35	354.002	1.72	-0.03	1.72	
10596.00	89.600	344.040	6472.49	3580.54	3634.77	-399.78	1673167.87	14265089.68	39°16'59.710"N	80°53'03.324"W	3656.69	353.723	2.03	-0.16	2.02	
10691.00	89.850	348.700	6472.95	3675.24	3727.06	-422.16	1673145.50	14265181.94	39°17'00.623"N	80°53'03.607"W	3750.90	353.538	4.91	0.26	4.91	
10785.00	90.370	346.710	6472.77	3768.77	3818.90	-442.18	1673125.49	14265273.74	39°17'01.531"N	80°53'03.861"W	3844.42	353.395	2.19	0.55	-2.12	
10879.00	91.540	343.000	6471.20	3862.62	3909.61	-466.73	1673100.95	14265364.41	39°17'02.427"N	80°53'04.171"W	3937.37	353.192	4.14	1.24	-3.95	
10973.00	90.090	340.110	6469.86	3956.59	3998.76	-496.46	1673071.22	14265453.53	39°17'03.309"N	80°53'04.548"W	4029.46	352.923	3.44	-1.54	-3.07	
11068.00	89.940	342.870	6469.84	4051.58	4088.84	-526.62	1673041.08	14265543.57	39°17'04.200"N	80°53'04.930"W	4122.61	352.661	2.91	-0.16	2.91	
11162.00	90.150	345.900	6469.76	4145.49	4179.36	-551.92	1673015.79	14265634.05	39°17'05.095"N	80°53'05.250"W	4215.64	352.477	3.23	0.22	3.22	
11256.00	90.400	346.960	6469.31	4239.21	4270.73	-573.98	1672993.74	14265725.39	39°17'05.998"N	80°53'05.529"W	4309.13	352.345	1.16	0.27	1.13	
11351.00	90.490	343.250	6468.57	4334.05	4362.52	-598.39	1672969.34	14265817.14	39°17'06.906"N	80°53'05.838"W	4403.37	352.190	3.91	0.09	-3.91	
11445.00	90.120	339.000	6468.07	4428.02	4451.44	-628.79	1672938.95	14265906.03	39°17'07.785"N	80°53'06.224"W	4495.63	351.960	4.54	-0.39	-4.52	
11540.00	89.940	336.600	6468.02	4522.75	4539.39	-664.68	1672903.07	14265993.94	39°17'08.655"N	80°53'06.679"W	4587.80	351.670	2.53	-0.19	-2.53	
11634.00	89.910	339.000	6468.15	4616.49	4626.42	-700.20	1672867.57	14266080.93	39°17'09.515"N	80°53'07.129"W	4679.10	351.394	2.55	-0.03	2.55	
11728.00	89.970	339.630	6468.24	4710.39	4714.36	-733.40	1672834.38	14266168.84	39°17'10.385"N	80°53'07.550"W	4771.06	351.158	0.67	0.06	0.67	
11823.00	90.090	339.300	6468.19	4805.29	4803.32	-766.73	1672801.07	14266257.77	39°17'11.264"N	80°53'07.972"W	4864.13	350.931	0.37	0.13	-0.35	
11917.00	89.970	336.230	6468.14	4899.02	4890.32	-802.29	1672765.52	14266344.73	39°17'12.125"N	80°53'08.423"W	4955.69	350.683	3.27	-0.13	-3.27	
12011.00	89.780	339.150	6468.35	4992.75	4977.27	-837.97	1672729.85	14266431.65	39°17'12.985"N	80°53'08.875"W	5047.32	350.443	3.11	-0.20	3.11	
12106.00	89.940	342.870	6468.58	5087.71	5067.09	-868.88	1672698.96	14266521.43	39°17'13.873"N	80°53'09.267"W	5141.04	350.270	3.92	0.17	3.92	
12200.00	89.910	348.110	6468.71	5181.51	5158.06	-892.42	1672675.42	14266612.36	39°17'14.772"N	80°53'09.565"W	5234.69	350.184	5.57	-0.03	5.57	
12295.00	89.970	347.040	6468.80	5276.06	5250.83	-912.86	1672654.99	14266705.10	39°17'15.689"N	80°53'09.823"W	5329.59	350.138	1.13	0.06	-1.13	
12389.00	90.180	346.730	6468.68	5369.72	5342.38	-934.19	1672633.67	14266796.61	39°17'16.594"N	80°53'10.093"W	5423.44	350.081	0.40	0.22	-0.33	
12484.00	90.340	338.140	6468.25	5464.63	5432.86	-962.83	1672605.04	14266887.06	39°17'17.489"N	80°53'10.456"W	5517.52	349.950	9.04	0.17	-9.04	
12578.00	90.310	329.630	6467.72	5557.60	5517.19	-1004.17	1672563.72	14266971.35	39°17'18.323"N	80°53'10.981"W	5607.83	349.685	9.05	-0.03	-9.05	
12672.00	90.310	331.870	6467.21	5649.78	5599.20	-1050.10	1672517.81	14267053.32	39°17'19.134"N	80°53'11.563"W	5696.82	349.378	2.38	0.00	2.38	

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Actual Wellpath Report
 Doak Unit 1H AWP Proj: 14799
 Page 7 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddrige Co., WV	Well	Doak Unit 1H
Field	Doddrige	Wellbore	Doak Unit 1H AWB
Facility	Alvadore Pad		

WELLPATH DATA (173 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Buidl Rate	Turn Rate	Comments
12767.00	338.00	338.030	6466.69	5744.01	5685.22	-1090.30	1672477.62	14267139.31	39°17'19.985"N	80°53'12.073"W	5788.82	349.144	6.48	0.00	6.48	
12861.00	340.360	6466.01	5837.89	5773.08	-1123.08	1672444.25	14267227.14	39°17'20.854"N	80°53'12.486"W	5681.42	348.986	2.49	0.22	2.48		
12956.00	345.130	6465.58	5932.85	5863.78	-1151.86	1672416.09	14267317.80	39°17'21.750"N	80°53'12.853"W	5975.84	348.887	5.05	-0.55	5.02		
13050.00	343.190	6465.35	6026.78	5954.20	-1177.51	1672390.45	14267408.19	39°17'22.645"N	80°53'13.178"W	6089.52	348.813	2.09	0.30	-2.06		
13144.00	347.650	6464.41	6120.59	6045.15	-1201.17	1672366.80	14267499.10	39°17'23.544"N	80°53'13.478"W	6163.33	348.762	4.78	0.62	4.74		
13238.00	351.040	6462.72	6213.79	6137.50	-1218.55	1672349.43	14267591.41	39°17'24.457"N	80°53'13.697"W	6257.30	348.770	3.62	0.36	3.61		
13332.00	350.090	6461.18	6306.73	6230.21	-1233.95	1672334.09	14267684.09	39°17'25.373"N	80°53'13.892"W	6351.24	348.797	1.15	-0.55	-1.01		
13427.00	350.500	6460.24	6400.73	6323.85	-1249.97	1672318.02	14267777.69	39°17'26.299"N	80°53'14.094"W	6446.20	348.819	0.49	-0.23	0.43		
13521.00	351.880	6459.68	6493.53	6416.74	-1264.36	1672303.63	14267870.54	39°17'27.217"N	80°53'14.275"W	6540.12	348.853	1.49	-0.26	1.47		
13615.00	347.930	6459.38	6586.62	6509.26	-1280.84	1672287.17	14267963.02	39°17'28.132"N	80°53'14.483"W	6634.08	348.888	4.20	-0.07	-4.20		
13710.00	343.510	6459.04	6681.39	6601.30	-1304.26	1672263.75	14268055.03	39°17'29.042"N	80°53'14.780"W	6728.92	348.824	4.65	0.11	-4.65		
13804.00	339.760	6458.72	6775.37	6690.47	-1333.95	1672234.07	14268144.16	39°17'29.924"N	80°53'15.156"W	6822.16	348.724	4.10	-0.11	-4.10		
13898.00	336.630	6458.52	6869.15	6777.71	-1368.94	1672199.10	14268231.36	39°17'30.786"N	80°53'15.600"W	6914.57	348.581	3.22	-0.06	-3.22		
13993.00	338.720	6458.39	6963.87	6865.58	-1405.02	1672163.03	14268319.20	39°17'31.655"N	80°53'16.057"W	7007.87	348.434	2.20	-0.03	2.20		
14087.00	340.700	6458.20	7057.79	6953.74	-1437.62	1672130.45	14268407.33	39°17'32.527"N	80°53'16.471"W	7100.80	348.319	2.11	0.13	2.11		
14181.00	339.760	6457.87	7151.74	7042.20	-1469.41	1672098.67	14268495.75	39°17'33.402"N	80°53'16.874"W	7193.87	348.174	1.00	0.04	-1.00		
14276.00	340.990	6457.50	7246.70	7131.68	-1501.32	1672066.77	14268585.19	39°17'34.286"N	80°53'17.278"W	7287.99	348.112	1.29	0.00	1.29		
14370.00	342.840	6456.82	7340.68	7221.42	-1529.24	1672038.86	14268674.90	39°17'35.174"N	80°53'17.632"W	7381.56	348.043	3.69	0.43	3.67		
14465.00	342.840	6455.66	7435.63	7312.56	-1556.00	1672012.11	14268766.00	39°17'36.075"N	80°53'17.971"W	7476.28	347.988	1.69	0.16	-1.68		
14559.00	337.150	6454.50	7529.52	7400.85	-1588.14	1671979.98	14268854.25	39°17'36.948"N	80°53'18.378"W	7569.33	347.889	6.05	-0.13	-6.05		
14653.00	333.490	6453.54	7622.86	7486.24	-1627.38	1671940.76	14268939.61	39°17'37.792"N	80°53'18.876"W	7661.08	347.736	3.90	-0.14	-3.89		
14748.00	337.540	6452.72	7717.23	7572.68	-1666.75	1671901.41	14269026.01	39°17'38.647"N	80°53'19.375"W	7753.93	347.587	4.26	-0.06	4.26		
14799.00	337.540	6452.32	7768.07	7619.81	-1686.23	1671881.94	14269073.13	39°17'39.113"N	80°53'19.822"W	7804.16	347.522	0.00	0.00	0.00		Projected MD at TD: 14799'

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Actual Wellpath Report

Doak Unit 1H AWP Proj: 14799'
Page 8 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Slot	Slot #06
Area	Doddridge Co., WV	Well	Doak Unit 1H
Field	Doddridge	Wellbore	Doak Unit 1H 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 1H BHL - Plat	6415.54	7483.99	-1627.71	1671940.43	14268937.36	39°17'37.770"N	80°53'18.880"W	point
Doak Unit 1H BHL Rev-1	6417.54	7483.99	-1627.71	1671940.43	14268937.36	39°17'37.770"N	80°53'18.880"W	point
Doak Unit 1H POE - Plat	6462.00	-5.52	804.12	1674371.28	14261450.85	39°16'23.715"N	80°52'48.075"W	point
Doak Unit 1H POE Rev-1	6464.00	-5.52	804.12	1674371.28	14261450.85	39°16'23.715"N	80°52'48.075"W	point
Doak Unit 1H LP Rev-1	6485.00	131.70	759.56	1674326.75	14261588.02	39°16'25.072"N	80°52'48.640"W	point

WELLPATH COMPOSITION - Ref Wellbore: Doak Unit 1H AWB Ref Wellpath: Doak Unit 1H AWP Proj: 14799'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	5587.00	Gyrodatta standard - Drop gyro or Multi-shot	01 Gyrodatta MS Gyro <8-3/4">(100' - 5587')	Doak Unit 1H AWB
5587.00	14748.00	BHI AutoTrak Curve (Short)	02 BHI AT Curve <8-1/2">(5587')(5745'-14748')	Doak Unit 1H AWB
14748.00	14799.00	Blind Drilling (std)	Projection to bit	Doak Unit 1H AWB

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