



**Ford Unit 1H**  
**Harrison County West Virginia**  
 Northing: 14254490.84  
 Easting: 1764889.92  
**As Drilled**



To convert Magnetic North to Grid, Subtract 8.90°  
 To convert True North to Grid, Subtract 0.28°

Azimuths to Grid North  
 True North: -0.28°  
 Magnetic North: -8.90°

Magnetic Field  
 Strength: 52205.6snT  
 Dip Angle: 66.81°  
 Date: 7/2/2014  
 Model: BGGM2014

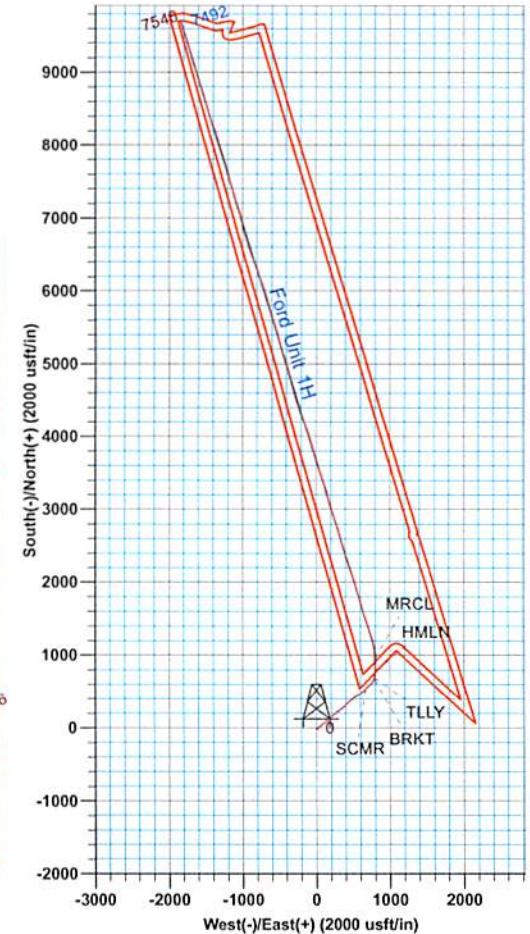
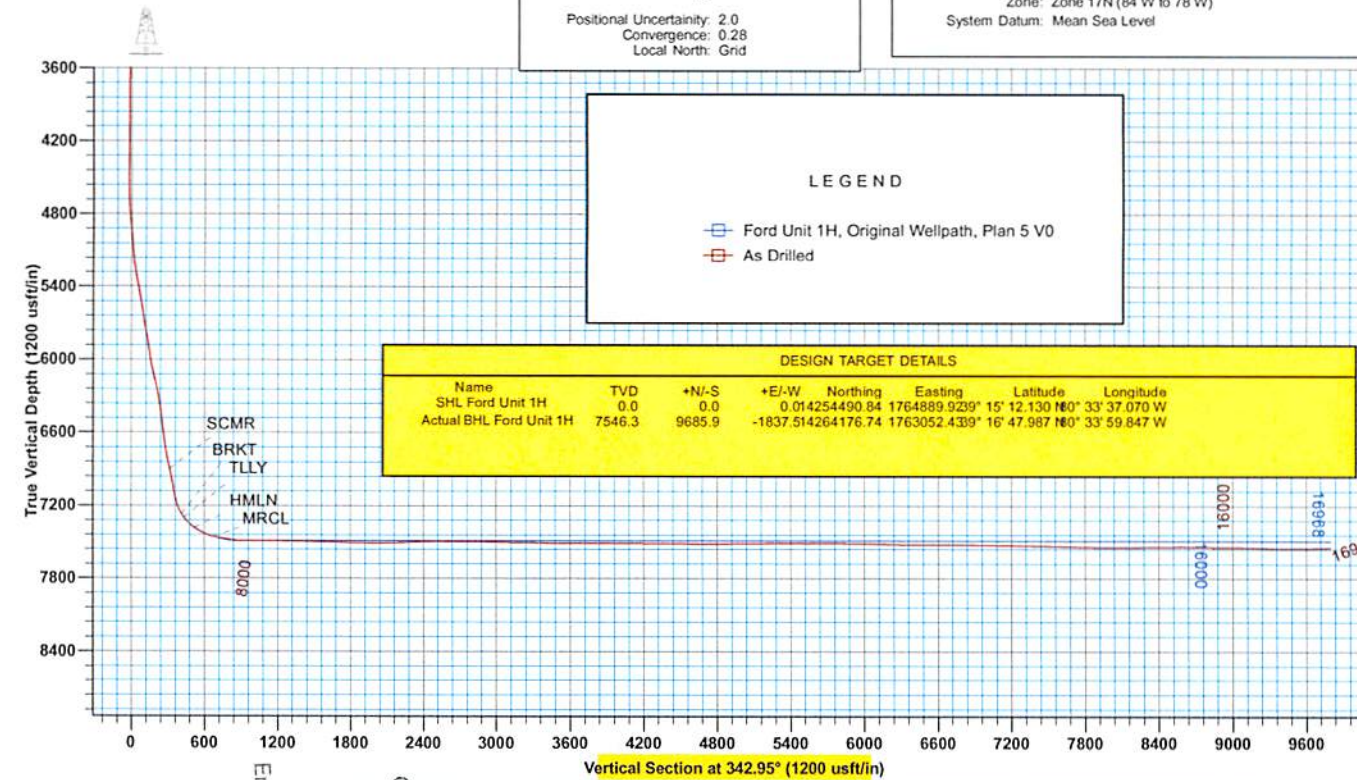
WELL DETAILS						
Ground Level: 1374.0						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	14254490.84	1764889.92	39° 15' 12.130 N	80° 33' 37.070 W	

Genie Lightfoot  
 14.03, August 27 2014  
 Scientific Drilling  
 421 South Eagle Lane  
 Oklahoma City, OK 73124

**SITE DETAILS:** Ruth/Norris/Nellie/Ford Pad  
 Site Center: Ruth Unit 2H  
 Site Centre Northing: 14254530.66  
 Easting: 1764845.07  
 Positional Uncertainty: 2.0  
 Convergence: 0.28  
 Local North: Grid

**PROJECT DETAILS:** Harrison County West Virginia  
 Geodetic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1927 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: Zone 17N (84 W to 78 W)  
 System Datum: Mean Sea Level

Patterson 340: GL 1374' + 24' RKB @ 1398.0usft  
 1374.0



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 Environmental Protection  
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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

<b>Project</b>	Harrison County West Virginia, Harrison County, USA		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Zone 17N (84 W to 78 W)		

<b>Site</b>	Ruth/Norris/Nellie/Ford Pad		
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<b>Site Position:</b>		<b>Northing:</b>	14,254,530.66 usft	<b>Latitude:</b>	39° 15' 12.526 N
<b>From:</b>	Map	<b>Easting:</b>	1,764,845.07 usft	<b>Longitude:</b>	80° 33' 37.638 W
<b>Position Uncertainty:</b>	2.0 usft	<b>Slot Radius:</b>	13-3/16"	<b>Grid Convergence:</b>	0.28 °

<b>Well</b>	Ford Unit 1H					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,254,490.84 usft	<b>Latitude:</b>	39° 15' 12.130 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	1,764,889.92 usft	<b>Longitude:</b>	80° 33' 37.070 W
<b>Position Uncertainty</b>		2.0 usft	<b>Wellhead Elevation:</b>	1,398.0 usft	<b>Ground Level:</b>	1,374.0 usft

<b>Wellbore</b>	Original Wellpath				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	7/2/2014	-8.62	66.81	52,206

<b>Design</b>	As Drilled				
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<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	342.95	

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<b>Survey Program</b>	Date 8/27/2014				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
95.7	7,174.9	Survey #6 Gyro to KOP (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
7,175.0	16,966.0	Survey #7 MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1	

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00
95.7	0.20	300.40	95.7	0.1	-0.1	0.1	0.21
120.7	0.05	154.57	120.7	0.1	-0.2	0.1	0.97
145.7	0.04	40.68	145.7	0.1	-0.2	0.1	0.30
170.7	0.09	27.36	170.7	0.1	-0.2	0.2	0.21
195.7	0.17	10.74	195.7	0.2	-0.1	0.2	0.35
220.7	0.19	338.26	220.7	0.2	-0.1	0.3	0.41
245.7	0.17	310.31	245.7	0.3	-0.2	0.4	0.36
270.7	0.10	217.02	270.7	0.3	-0.2	0.4	0.81
295.7	0.13	179.99	295.7	0.3	-0.2	0.3	0.31
320.7	0.13	157.85	320.7	0.2	-0.2	0.3	0.20

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EOW Completion Report

WV Department of  
Environmental Protection

<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
345.7	0.10	123.60	345.7	0.2	-0.2	0.2	0.29
370.7	0.06	57.84	370.7	0.2	-0.2	0.2	0.37
395.7	0.05	19.44	395.7	0.2	-0.2	0.2	0.15
420.7	0.03	136.96	420.7	0.2	-0.2	0.2	0.28
445.7	0.21	166.83	445.7	0.1	-0.1	0.2	0.74
470.7	0.31	163.16	470.7	0.0	-0.1	0.1	0.41
495.7	0.27	148.34	495.7	-0.1	-0.1	-0.1	0.34
520.7	0.28	134.67	520.7	-0.2	0.0	-0.2	0.26
545.7	0.28	123.61	545.7	-0.2	0.1	-0.3	0.22
570.7	0.25	123.13	570.7	-0.3	0.2	-0.4	0.12
595.7	0.13	130.57	595.7	-0.4	0.3	-0.4	0.49
620.7	0.22	177.71	620.7	-0.4	0.3	-0.5	0.65
645.7	0.23	171.23	645.7	-0.5	0.3	-0.6	0.11
670.7	0.32	169.77	670.7	-0.6	0.3	-0.7	0.36
695.7	0.37	149.49	695.7	-0.8	0.4	-0.9	0.52
720.7	0.34	142.36	720.7	-0.9	0.5	-1.0	0.21
745.7	0.40	139.24	745.7	-1.0	0.6	-1.2	0.25
770.7	0.26	127.50	770.7	-1.1	0.7	-1.3	0.62
795.7	0.14	133.14	795.7	-1.2	0.7	-1.4	0.49
820.7	0.11	170.14	820.7	-1.2	0.8	-1.4	0.34
845.7	0.13	164.31	845.7	-1.3	0.8	-1.5	0.09
870.7	0.17	186.97	870.7	-1.4	0.8	-1.5	0.28
895.7	0.23	199.28	895.7	-1.4	0.8	-1.6	0.29
920.7	0.25	180.03	920.7	-1.5	0.7	-1.7	0.33
945.7	0.31	183.57	945.7	-1.7	0.7	-1.8	0.25
970.7	0.28	164.03	970.7	-1.8	0.8	-1.9	0.42
995.7	0.20	130.30	995.7	-1.9	0.8	-2.0	0.64
1,020.7	0.09	108.88	1,020.7	-1.9	0.9	-2.1	0.48
1,045.7	0.08	105.80	1,045.7	-1.9	0.9	-2.1	0.04
1,070.7	0.02	236.99	1,070.7	-1.9	0.9	-2.1	0.38
1,095.7	0.08	274.73	1,095.7	-1.9	0.9	-2.1	0.26
1,120.7	0.10	224.46	1,120.7	-1.9	0.8	-2.1	0.31
1,145.7	0.15	230.29	1,145.7	-2.0	0.8	-2.1	0.21
1,170.7	0.21	171.98	1,170.7	-2.0	0.8	-2.2	0.73
1,195.7	0.07	138.98	1,195.7	-2.1	0.8	-2.2	0.62
1,220.7	0.05	196.16	1,220.7	-2.1	0.8	-2.3	0.24
1,245.7	0.03	115.94	1,245.7	-2.1	0.8	-2.3	0.22
1,270.7	0.05	23.17	1,270.7	-2.1	0.8	-2.3	0.24
1,295.7	0.08	302.54	1,295.7	-2.1	0.8	-2.3	0.35
1,320.7	0.17	274.29	1,320.7	-2.1	0.8	-2.2	0.43
1,345.7	0.08	232.82	1,345.7	-2.1	0.7	-2.2	0.49
1,370.7	0.17	238.70	1,370.7	-2.1	0.7	-2.2	0.36
1,395.7	0.15	217.58	1,395.7	-2.2	0.6	-2.3	0.25
1,420.7	0.22	185.01	1,420.7	-2.3	0.6	-2.3	0.49



SEP 29 2017



EOW Completion Report

WV Department of  
Environmental Protection



Scientific Drilling

<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	
1,445.7	0.09	191.34	1,445.7	-2.3	0.6	-2.4	0.52	
1,470.7	0.04	73.85	1,470.7	-2.3	0.6	-2.4	0.46	
1,495.7	0.09	308.90	1,495.7	-2.3	0.6	-2.4	0.47	
1,520.7	0.12	265.91	1,520.7	-2.3	0.5	-2.4	0.33	
1,545.7	0.16	242.12	1,545.7	-2.3	0.5	-2.4	0.28	
1,570.7	0.22	243.96	1,570.7	-2.4	0.4	-2.4	0.24	
1,595.7	0.36	224.99	1,595.7	-2.4	0.3	-2.4	0.67	
1,620.7	0.29	207.18	1,620.7	-2.6	0.2	-2.5	0.49	
1,645.7	0.26	199.80	1,645.7	-2.7	0.2	-2.6	0.19	
1,670.7	0.23	184.31	1,670.7	-2.8	0.2	-2.7	0.29	
1,695.7	0.15	159.18	1,695.7	-2.8	0.2	-2.8	0.45	
1,720.7	0.08	241.73	1,720.7	-2.9	0.2	-2.8	0.64	
1,745.7	0.17	229.94	1,745.7	-2.9	0.1	-2.8	0.37	
1,770.7	0.28	252.56	1,770.7	-3.0	0.0	-2.8	0.56	
1,795.7	0.31	238.81	1,795.7	-3.0	-0.1	-2.9	0.31	
1,820.7	0.34	235.71	1,820.7	-3.1	-0.2	-2.9	0.14	
1,845.7	0.23	213.46	1,845.7	-3.2	-0.3	-2.9	0.62	
1,870.7	0.37	214.29	1,870.7	-3.3	-0.4	-3.0	0.56	
1,895.7	0.44	207.89	1,895.7	-3.4	-0.5	-3.2	0.33	
1,920.7	0.39	207.49	1,920.7	-3.6	-0.5	-3.3	0.20	
1,945.7	0.30	191.18	1,945.7	-3.7	-0.6	-3.4	0.53	
1,970.7	0.28	187.98	1,970.7	-3.9	-0.6	-3.5	0.10	
1,995.7	0.15	214.33	1,995.7	-3.9	-0.6	-3.6	0.64	
2,020.7	0.22	222.07	2,020.7	-4.0	-0.7	-3.6	0.30	
2,045.7	0.28	209.75	2,045.7	-4.1	-0.8	-3.7	0.32	
2,070.7	0.28	211.54	2,070.7	-4.2	-0.8	-3.8	0.03	
2,095.7	0.36	211.59	2,095.7	-4.3	-0.9	-3.9	0.32	
2,120.7	0.40	202.54	2,120.7	-4.5	-1.0	-4.0	0.29	
2,145.7	0.38	190.51	2,145.7	-4.6	-1.0	-4.1	0.34	
2,170.7	0.37	181.22	2,170.7	-4.8	-1.0	-4.3	0.25	
2,195.7	0.46	160.67	2,195.7	-5.0	-1.0	-4.5	0.69	
2,220.7	0.27	176.59	2,220.7	-5.1	-1.0	-4.6	0.85	
2,245.7	0.30	148.30	2,245.7	-5.2	-0.9	-4.7	0.57	
2,270.7	0.20	146.22	2,270.7	-5.3	-0.9	-4.8	0.40	
2,295.7	0.25	149.93	2,295.7	-5.4	-0.8	-4.9	0.21	
2,320.7	0.25	148.60	2,320.7	-5.5	-0.8	-5.0	0.02	
2,345.7	0.20	150.39	2,345.7	-5.6	-0.7	-5.1	0.20	
2,370.7	0.18	163.03	2,370.7	-5.7	-0.7	-5.2	0.19	
2,395.7	0.21	180.73	2,395.7	-5.8	-0.7	-5.3	0.27	
2,420.7	0.32	193.19	2,420.7	-5.9	-0.7	-5.4	0.49	
2,445.7	0.16	188.26	2,445.7	-6.0	-0.7	-5.5	0.64	
2,470.7	0.27	165.37	2,470.7	-6.1	-0.7	-5.6	0.55	
2,495.7	0.40	168.64	2,495.7	-6.2	-0.7	-5.7	0.53	
2,520.7	0.48	169.30	2,520.7	-6.4	-0.6	-5.9	0.32	
2,545.7	0.36	149.99	2,545.7	-6.6	-0.6	-6.1	0.74	



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
2,570.7	0.42	147.82	2,570.7	-6.7	-0.5	-6.3	0.25	
2,595.7	0.34	142.99	2,595.7	-6.8	-0.4	-6.4	0.34	
2,620.7	0.29	159.55	2,620.7	-7.0	-0.3	-6.6	0.41	
2,645.7	0.36	174.90	2,645.7	-7.1	-0.3	-6.7	0.44	
2,670.7	0.43	178.03	2,670.7	-7.3	-0.3	-6.9	0.29	
2,695.7	0.39	159.04	2,695.7	-7.4	-0.2	-7.0	0.56	
2,720.7	0.54	164.33	2,720.7	-7.6	-0.2	-7.2	0.62	
2,745.7	0.56	156.19	2,745.7	-7.9	-0.1	-7.5	0.32	
2,770.7	0.56	156.89	2,770.7	-8.1	0.0	-7.7	0.03	
2,795.7	0.52	148.14	2,795.7	-8.3	0.1	-8.0	0.37	
2,820.7	0.49	140.99	2,820.7	-8.5	0.2	-8.2	0.28	
2,845.7	0.41	147.56	2,845.7	-8.6	0.3	-8.4	0.38	
2,870.7	0.36	165.00	2,870.7	-8.8	0.4	-8.5	0.51	
2,895.7	0.46	170.27	2,895.7	-9.0	0.5	-8.7	0.43	
2,920.7	0.53	162.28	2,920.7	-9.2	0.5	-8.9	0.39	
2,945.7	0.60	154.59	2,945.7	-9.4	0.6	-9.2	0.41	
2,970.7	0.60	142.95	2,970.7	-9.6	0.7	-9.4	0.49	
2,995.7	0.59	136.36	2,995.7	-9.8	0.9	-9.6	0.28	
3,020.7	0.48	128.48	3,020.7	-10.0	1.1	-9.9	0.53	
3,045.7	0.49	141.25	3,045.7	-10.1	1.2	-10.0	0.43	
3,070.7	0.44	151.97	3,070.7	-10.3	1.3	-10.2	0.40	
3,095.7	0.51	157.00	3,095.7	-10.5	1.4	-10.4	0.33	
3,120.7	0.50	154.61	3,120.7	-10.7	1.5	-10.7	0.09	
3,145.7	0.54	149.92	3,145.7	-10.9	1.6	-10.9	0.23	
3,170.7	0.62	143.32	3,170.7	-11.1	1.8	-11.1	0.42	
3,195.7	0.57	141.31	3,195.7	-11.3	1.9	-11.4	0.22	
3,220.7	0.58	128.86	3,220.7	-11.5	2.1	-11.6	0.50	
3,245.7	0.53	125.29	3,245.7	-11.6	2.3	-11.8	0.24	
3,270.7	0.44	127.92	3,270.7	-11.7	2.5	-11.9	0.37	
3,295.7	0.40	145.86	3,295.7	-11.9	2.6	-12.1	0.55	
3,320.7	0.36	151.78	3,320.7	-12.0	2.7	-12.3	0.22	
3,345.7	0.43	140.29	3,345.7	-12.2	2.8	-12.4	0.42	
3,370.7	0.43	149.75	3,370.7	-12.3	2.9	-12.6	0.28	
3,395.7	0.56	137.75	3,395.7	-12.5	3.0	-12.8	0.66	
3,420.7	0.53	135.62	3,420.7	-12.7	3.2	-13.0	0.14	
3,445.7	0.39	121.67	3,445.7	-12.8	3.3	-13.2	0.71	
3,470.7	0.35	140.36	3,470.7	-12.9	3.4	-13.3	0.51	
3,495.7	0.40	138.86	3,495.7	-13.0	3.5	-13.5	0.20	
3,520.7	0.40	142.28	3,520.7	-13.1	3.7	-13.6	0.10	
3,545.7	0.42	159.90	3,545.7	-13.3	3.7	-13.8	0.51	
3,570.7	0.45	147.58	3,570.7	-13.5	3.8	-14.0	0.39	
3,595.7	0.44	148.70	3,595.7	-13.6	3.9	-14.2	0.05	
3,620.7	0.39	144.32	3,620.7	-13.8	4.0	-14.4	0.24	
3,645.7	0.38	140.62	3,645.7	-13.9		-14.5	0.11	

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
3,670.7	0.37	142.29	3,670.7	-14.0	4.2	-14.7	0.06
3,695.7	0.41	137.50	3,695.7	-14.2	4.3	-14.8	0.21
3,720.7	0.40	137.63	3,720.7	-14.3	4.5	-15.0	0.04
3,745.7	0.37	126.86	3,745.6	-14.4	4.6	-15.1	0.31
3,770.7	0.42	119.46	3,770.6	-14.5	4.7	-15.3	0.29
3,795.7	0.41	113.92	3,795.6	-14.6	4.9	-15.4	0.17
3,820.7	0.42	119.98	3,820.6	-14.7	5.0	-15.5	0.18
3,845.7	0.49	117.19	3,845.6	-14.8	5.2	-15.7	0.29
3,870.7	0.34	125.15	3,870.6	-14.9	5.4	-15.8	0.64
3,895.7	0.35	123.95	3,895.6	-14.9	5.5	-15.9	0.05
3,920.7	0.28	143.81	3,920.6	-15.0	5.6	-16.0	0.51
3,945.7	0.31	141.93	3,945.6	-15.1	5.7	-16.1	0.13
3,970.7	0.42	138.73	3,970.6	-15.3	5.8	-16.3	0.45
3,995.7	0.37	150.40	3,995.6	-15.4	5.9	-16.5	0.38
4,020.7	0.62	140.54	4,020.6	-15.6	6.0	-16.7	1.05
4,045.7	0.63	133.34	4,045.6	-15.8	6.2	-16.9	0.32
4,070.7	0.63	126.86	4,070.6	-16.0	6.4	-17.1	0.28
4,095.7	0.55	113.33	4,095.6	-16.1	6.6	-17.3	0.64
4,120.7	0.50	124.14	4,120.6	-16.2	6.8	-17.5	0.44
4,145.7	0.41	127.54	4,145.6	-16.3	7.0	-17.6	0.38
4,170.7	0.51	120.95	4,170.6	-16.4	7.2	-17.8	0.45
4,195.7	0.57	131.25	4,195.6	-16.6	7.3	-18.0	0.46
4,220.7	0.65	125.52	4,220.6	-16.7	7.5	-18.2	0.40
4,245.7	0.72	120.45	4,245.6	-16.9	7.8	-18.4	0.37
4,270.7	0.70	118.39	4,270.6	-17.0	8.1	-18.7	0.13
4,295.7	0.63	115.05	4,295.6	-17.2	8.3	-18.9	0.32
4,320.7	0.58	117.42	4,320.6	-17.3	8.6	-19.0	0.22
4,345.7	0.60	124.26	4,345.6	-17.4	8.8	-19.2	0.29
4,370.7	0.70	123.86	4,370.6	-17.6	9.0	-19.4	0.40
4,395.7	0.70	113.55	4,395.6	-17.7	9.3	-19.7	0.50
4,420.7	0.60	110.90	4,420.6	-17.8	9.5	-19.8	0.42
4,445.7	0.45	126.66	4,445.6	-17.9	9.7	-20.0	0.83
4,470.7	0.39	132.21	4,470.6	-18.1	9.9	-20.2	0.29
4,495.7	0.82	125.57	4,495.6	-18.2	10.1	-20.4	1.74
4,520.7	0.88	124.71	4,520.6	-18.4	10.4	-20.7	0.25
4,545.7	0.66	114.62	4,545.6	-18.6	10.7	-20.9	1.03
4,570.7	0.74	108.63	4,570.6	-18.7	11.0	-21.1	0.43
4,595.7	0.89	105.84	4,595.6	-18.8	11.3	-21.3	0.62
4,620.7	1.16	75.61	4,620.6	-18.8	11.7	-21.4	2.38
4,645.7	1.93	57.11	4,645.6	-18.5	12.3	-21.3	3.63
4,670.7	3.16	47.10	4,670.6	-17.8	13.2	-20.9	5.21
4,695.7	4.50	42.35	4,695.5	-16.6	14.4	-20.1	5.50
4,720.7	5.80	39.73	4,720.4	-14.9	15.8	-18.9	5.28
4,745.7	6.87	38.32	4,745.3	-12.8	17.6	-17.4	4.32

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
4,770.7	7.69	37.27	4,770.1	-10.3	19.5	-15.5	3.32
4,795.7	8.13	36.76	4,794.8	-7.5	21.6	-13.5	1.78
4,820.7	8.57	37.04	4,819.6	-4.6	23.8	-11.4	1.77
4,845.7	9.21	37.18	4,844.3	-1.5	26.1	-9.1	2.56
4,870.7	9.64	37.48	4,868.9	1.7	28.6	-6.7	1.73
4,895.7	9.98	38.73	4,893.6	5.1	31.2	-4.3	1.60
4,920.7	10.36	44.25	4,918.2	8.4	34.1	-2.0	4.18
4,945.7	11.11	45.22	4,942.7	11.7	37.4	0.2	3.09
4,970.7	11.96	46.86	4,967.2	15.1	41.0	2.4	3.64
4,995.7	12.54	48.08	4,991.6	18.7	44.9	4.7	2.54
5,020.7	13.20	50.16	5,016.0	22.4	49.1	7.0	3.23
5,045.7	13.61	51.09	5,040.3	26.0	53.6	9.2	1.85
5,070.7	14.15	51.22	5,064.6	29.8	58.3	11.4	2.16
5,095.7	14.90	51.53	5,088.8	33.7	63.2	13.7	3.02
5,120.7	15.45	51.49	5,112.9	37.8	68.3	16.1	2.20
5,145.7	16.44	51.46	5,137.0	42.1	73.7	18.6	3.96
5,170.7	17.29	51.45	5,160.9	46.6	79.3	21.3	3.40
5,195.7	17.62	51.29	5,184.7	51.3	85.2	24.0	1.33
5,220.7	18.17	51.07	5,208.5	56.1	91.2	26.9	2.22
5,245.7	18.72	50.42	5,232.3	61.1	97.3	29.9	2.35
5,270.7	19.39	49.83	5,255.9	66.3	103.6	33.0	2.79
5,295.7	20.37	49.20	5,279.4	71.8	110.0	36.4	4.01
5,320.7	21.31	48.58	5,302.8	77.7	116.7	40.0	3.86
5,345.7	22.13	47.99	5,326.0	83.8	123.6	43.9	3.39
5,370.7	22.78	47.28	5,349.1	90.3	130.7	48.0	2.82
5,395.7	22.98	47.15	5,372.1	96.9	137.8	52.2	0.83
5,420.7	23.34	46.79	5,395.1	103.6	145.0	56.5	1.55
5,445.7	23.50	46.86	5,418.0	110.4	152.3	60.9	0.65
5,470.7	24.08	47.82	5,440.9	117.2	159.7	65.3	2.79
5,495.7	24.09	49.99	5,463.7	123.9	167.4	69.4	3.54
5,520.7	23.64	50.35	5,486.6	130.4	175.1	73.3	1.89
5,545.7	23.35	50.43	5,509.5	136.8	182.8	77.1	1.17
5,570.7	23.55	51.25	5,532.5	143.0	190.5	80.9	1.53
5,595.7	23.80	52.25	5,555.4	149.3	198.4	84.5	1.89
5,620.7	23.63	52.20	5,578.3	155.4	206.4	88.1	0.68
5,645.7	23.16	51.49	5,601.2	161.6	214.2	91.7	2.19
5,670.7	22.21	50.47	5,624.3	167.6	221.7	95.3	4.11
5,695.7	21.42	49.77	5,647.5	173.6	228.8	98.9	3.33
5,720.7	21.16	49.25	5,670.8	179.5	235.7	102.5	1.29
5,745.7	21.37	49.25	5,694.1	185.4	242.6	106.1	0.84
5,770.7	21.76	49.31	5,717.3	191.4	249.5	109.8	1.56
5,795.7	22.46	49.57	5,740.5	197.5	256.7	113.6	2.83
5,820.7	23.28	49.85	5,763.5	203.8	264.1	117.4	3.31
5,845.7	24.36	50.01	5,786.4	210.3	271.8	121.3	4.33

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WV Department of Environmental Protection





<b>Company:</b> Antero Resources	<b>Local Co-ordinate Reference:</b> Well Ford Unit 1H
<b>Project:</b> Harrison County West Virginia	<b>TVD Reference:</b> Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b> Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b> Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b> Ford Unit 1H	<b>North Reference:</b> Grid
<b>Wellbore:</b> Original Wellpath	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> As Drilled	<b>Database:</b> Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
5,870.7	24.91	49.98	5,809.1	217.0	279.8	125.4	2.20
5,895.7	24.79	50.12	5,831.8	223.7	287.9	129.5	0.53
5,920.7	24.93	51.40	5,854.5	230.4	296.0	133.5	2.22
5,945.7	25.18	52.32	5,877.1	236.9	304.3	137.3	1.85
5,970.7	25.07	53.07	5,899.8	243.3	312.8	140.9	1.35
5,995.7	24.87	55.51	5,922.4	249.5	321.3	144.3	4.20
6,020.7	24.70	56.11	5,945.1	255.4	330.0	147.4	1.21
6,045.7	24.61	54.47	5,967.8	261.3	338.6	150.6	2.76
6,070.7	25.07	52.86	5,990.5	267.6	347.0	154.0	3.27
6,095.7	25.37	51.52	6,013.1	274.1	355.4	157.8	2.58
6,120.7	25.44	49.35	6,035.7	280.9	363.7	161.9	3.73
6,145.7	25.10	46.27	6,058.3	288.1	371.6	166.5	5.43
6,170.7	24.85	43.61	6,081.0	295.6	379.1	171.4	4.60
6,195.7	25.51	42.21	6,103.6	303.3	386.3	176.7	3.56
6,220.7	26.04	41.80	6,126.1	311.4	393.6	182.3	2.24
6,245.7	26.13	42.20	6,148.6	319.6	400.9	188.0	0.79
6,270.7	26.23	42.57	6,171.0	327.7	408.4	193.6	0.77
6,295.7	25.91	43.52	6,193.5	335.8	415.9	199.1	2.10
6,320.7	25.83	44.52	6,216.0	343.6	423.5	204.3	1.77
6,345.7	25.58	45.91	6,238.5	351.2	431.2	209.4	2.61
6,370.7	25.27	47.91	6,261.1	358.6	439.0	214.1	3.65
6,395.7	24.60	49.40	6,283.8	365.5	446.9	218.4	3.67
6,420.7	23.70	51.25	6,306.6	372.1	454.8	222.4	4.70
6,445.7	23.14	53.02	6,329.5	378.2	462.6	225.9	3.60
6,470.7	22.77	54.18	6,352.5	384.0	470.5	229.1	2.34
6,495.7	22.42	54.01	6,375.6	389.6	478.2	232.2	1.42
6,520.7	22.17	53.29	6,398.7	395.2	485.9	235.4	1.48
6,545.7	22.25	51.88	6,421.9	401.0	493.4	238.7	2.16
6,570.7	22.72	50.79	6,445.0	406.9	500.8	242.2	2.51
6,595.7	23.04	50.82	6,468.0	413.1	508.4	245.9	1.28
6,620.7	22.99	52.39	6,491.0	419.1	516.0	249.4	2.46
6,645.7	23.01	53.96	6,514.0	425.0	523.9	252.7	2.46
6,670.7	23.23	55.46	6,537.0	430.7	531.9	255.8	2.51
6,695.7	23.59	56.81	6,560.0	436.2	540.1	258.7	2.58
6,720.7	24.15	58.52	6,582.8	441.6	548.7	261.3	3.56
6,745.7	24.67	59.19	6,605.6	447.0	557.5	263.8	2.36
6,770.7	25.37	59.46	6,628.3	452.3	566.6	266.3	2.84
6,795.7	26.13	59.08	6,650.8	457.9	575.9	268.9	3.11
6,820.7	27.19	58.39	6,673.1	463.7	585.5	271.7	4.42
6,845.7	27.23	58.01	6,695.3	469.7	595.2	274.6	0.71
6,870.7	27.32	56.55	6,717.6	475.9	604.9	277.7	2.70
6,895.7	26.98	54.92	6,739.8	482.4	614.3	281.0	3.27
6,920.7	26.80	52.73	6,762.1	489.0	623.4	284.7	4.03
6,945.7	27.21	50.19	6,784.4	496.1	632.3	288.9	4.90

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
6,970.7	25.89	47.82	6,806.7	503.4	640.7	293.4	6.77
6,995.7	26.38	45.67	6,829.2	511.0	648.8	298.3	4.26
7,020.7	25.44	42.84	6,851.7	518.8	656.4	303.5	6.21
7,045.7	25.30	40.41	6,874.3	526.8	663.5	309.1	4.20
7,070.7	25.04	40.45	6,896.9	534.9	670.4	314.8	1.04
7,075.0	25.09	40.78	6,900.8	536.3	671.6	315.8	3.50
<b>SCMR</b>							
7,095.7	25.34	42.38	6,919.5	542.9	677.4	320.4	3.50
7,120.7	24.13	44.63	6,942.2	550.5	684.6	325.5	6.13
7,145.7	23.26	45.59	6,965.1	557.6	691.7	330.2	3.81
7,170.7	22.77	47.18	6,988.1	564.3	698.8	334.6	3.17
7,174.9	22.69	47.48	6,992.0	565.4	700.0	335.3	3.32
7,226.0	22.69	50.95	7,039.1	578.3	714.9	343.2	2.62
7,256.0	22.45	50.85	7,066.8	585.5	723.9	347.5	0.81
7,286.0	22.93	47.25	7,094.5	593.1	732.6	352.2	4.90
7,316.0	23.99	42.87	7,122.0	601.5	741.0	357.8	6.80
7,346.0	25.73	39.29	7,149.3	611.1	749.3	364.5	7.67
7,376.0	27.62	37.32	7,176.1	621.6	757.7	372.2	6.95
7,406.0	29.84	34.84	7,202.4	633.3	766.1	380.8	8.40
7,436.0	32.12	28.89	7,228.1	646.4	774.3	391.0	12.72
7,466.0	34.21	21.52	7,253.2	661.2	781.2	403.1	15.13
7,487.0	36.56	16.84	7,270.3	672.7	785.2	412.9	17.07
<b>BRKT</b>							
7,496.0	37.62	15.00	7,277.5	677.9	786.7	417.5	17.07
7,522.0	40.87	10.74	7,297.7	694.0	790.3	431.7	16.22
<b>TLLY</b>							
7,526.0	41.38	10.14	7,300.7	696.6	790.8	434.1	16.22
7,556.0	44.19	7.14	7,322.7	716.7	793.8	452.4	11.57
7,586.0	46.34	4.39	7,343.8	737.9	796.0	472.1	9.68
7,616.0	49.93	1.90	7,363.8	760.2	797.2	493.0	13.47
7,646.0	54.84	0.39	7,382.1	783.9	797.6	515.6	16.84
7,647.0	54.95	0.36	7,382.7	784.8	797.7	516.4	11.79
<b>HMLN</b>							
7,676.0	58.29	359.45	7,398.7	809.0	797.6	539.6	11.79
7,706.0	61.82	358.54	7,413.6	835.0	797.1	564.5	12.06
7,736.0	65.40	358.25	7,427.0	861.8	796.4	590.4	11.96
7,766.0	69.34	358.22	7,438.5	889.5	795.5	617.1	13.13
7,796.0	73.62	358.43	7,448.0	917.9	794.7	644.6	14.28
7,826.0	75.84	358.62	7,455.9	946.9	794.0	672.4	7.43
<b>MRCL</b>							
7,856.0	76.80	359.29	7,463.0	976.0	793.4	700.5	3.87
7,886.0	78.30	0.15	7,469.5	1,005.3	793.3	728.5	5.73
7,916.0	80.11	358.26	7,475.1	1,034.8	792.9	756.8	8.64
7,946.0	80.93	354.92	7,480.1	1,064.3	791.1	785.5	11.32
7,976.0	81.37	352.05	7,484.7	1,093.7	787.0	814.7	9.57



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey

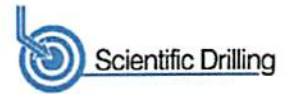
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
8,012.0	83.80	348.64	7,489.3	1,128.9	781.8	850.1	11.57
8,070.0	90.20	344.08	7,492.4	1,185.2	768.1	907.9	13.54
8,166.0	90.34	341.52	7,491.9	1,276.9	739.7	1,003.8	2.67
8,260.0	89.93	341.49	7,491.7	1,366.0	709.9	1,097.8	0.44
8,354.0	89.16	342.20	7,492.4	1,455.3	680.6	1,191.8	1.11
8,447.0	88.83	342.68	7,494.1	1,544.0	652.6	1,284.8	0.63
8,542.0	88.42	342.27	7,496.3	1,634.5	624.0	1,379.7	0.61
8,636.0	89.06	343.49	7,498.4	1,724.3	596.3	1,473.7	1.47
8,730.0	88.39	345.30	7,500.5	1,814.9	571.0	1,567.7	2.05
8,824.0	87.92	342.71	7,503.5	1,905.2	545.1	1,661.6	2.80
8,919.0	88.63	342.48	7,506.4	1,995.8	516.7	1,756.5	0.79
9,013.0	89.19	340.06	7,508.2	2,084.8	486.6	1,850.5	2.64
9,106.0	88.81	341.61	7,509.8	2,172.6	456.0	1,943.4	1.72
9,200.0	89.03	342.76	7,511.6	2,262.1	427.3	2,037.4	1.25
9,294.0	92.11	343.12	7,510.6	2,351.9	399.7	2,131.4	3.30
9,388.0	93.49	343.61	7,506.0	2,441.9	372.8	2,225.2	1.56
9,482.0	92.85	344.44	7,500.8	2,532.1	347.0	2,319.1	1.11
9,576.0	92.21	344.90	7,496.7	2,622.7	322.2	2,412.9	0.84
9,670.0	88.99	341.91	7,495.7	2,712.7	295.3	2,506.9	4.67
9,763.0	89.60	340.57	7,496.9	2,800.8	265.4	2,599.9	1.58
9,858.0	90.37	341.72	7,496.9	2,890.7	234.7	2,694.8	1.46
9,951.0	89.30	344.07	7,497.1	2,979.6	207.4	2,787.8	2.78
10,045.0	89.60	345.55	7,498.1	3,070.3	182.8	2,881.7	1.61
10,137.0	88.09	345.51	7,499.9	3,159.3	159.8	2,973.6	1.64
10,230.0	88.02	342.59	7,503.1	3,248.7	134.2	3,066.5	3.14
10,325.0	88.89	341.44	7,505.6	3,339.0	104.9	3,161.5	1.52
10,419.0	89.93	342.05	7,506.6	3,428.3	75.5	3,255.5	1.28
10,513.0	87.71	344.17	7,508.5	3,518.2	48.2	3,349.4	3.27
10,607.0	89.46	343.16	7,510.8	3,608.4	21.7	3,443.4	2.15
10,701.0	91.01	343.61	7,510.5	3,698.4	-5.1	3,537.4	1.72
10,795.0	89.46	342.56	7,510.1	3,788.4	-32.5	3,631.4	1.99
10,889.0	90.27	343.86	7,510.3	3,878.4	-59.6	3,725.4	1.63
10,982.0	89.73	343.36	7,510.3	3,967.6	-85.9	3,818.4	0.79
11,076.0	89.83	340.39	7,510.7	4,056.9	-115.1	3,912.3	3.16
11,171.0	90.23	340.22	7,510.6	4,146.3	-147.1	4,007.2	0.46
11,265.0	89.70	339.90	7,510.7	4,234.7	-179.2	4,101.1	0.66
11,358.0	89.50	342.15	7,511.3	4,322.6	-209.4	4,194.1	2.43
11,452.0	89.93	339.41	7,511.8	4,411.4	-240.4	4,288.0	2.95
11,546.0	89.29	343.65	7,512.4	4,500.5	-270.1	4,381.9	4.56
11,640.0	89.50	342.40	7,513.4	4,590.4	-297.6	4,475.9	1.35
11,734.0	89.46	345.48	7,514.3	4,680.7	-323.6	4,569.9	3.28
11,828.0	90.00	345.69	7,514.7	4,771.8	-347.0	4,663.8	0.62
11,922.0	89.93	344.70	7,514.8	4,862.7	-371.0	4,757.7	1.06
12,016.0	90.40	342.32	7,514.5	4,952.8	-397.7	4,851.7	2.58

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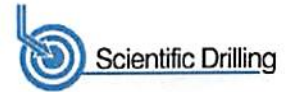
WV Department of  
Environmental Protection





<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
12,109.0	90.92	341.52	7,513.4	5,041.2	-426.5	4,944.7	1.03	
12,200.0	90.47	343.44	7,512.3	5,128.0	-453.9	5,035.7	2.17	
12,290.0	89.83	345.32	7,512.1	5,214.6	-478.2	5,125.6	2.21	
12,381.0	90.40	346.96	7,511.9	5,303.0	-500.0	5,216.5	1.91	
12,472.0	88.79	343.99	7,512.6	5,391.0	-522.8	5,307.4	3.71	
12,563.0	90.91	342.28	7,512.8	5,478.1	-549.2	5,398.4	2.99	
12,654.0	89.80	340.90	7,512.2	5,564.5	-577.9	5,489.4	1.95	
12,745.0	90.50	344.12	7,512.0	5,651.2	-605.3	5,580.3	3.62	
12,835.0	90.00	344.12	7,511.6	5,737.8	-629.9	5,670.3	0.56	
12,926.0	89.63	346.52	7,511.9	5,825.8	-653.0	5,761.2	2.67	
13,017.0	89.03	343.26	7,513.0	5,913.7	-676.7	5,852.2	3.64	
13,108.0	89.33	341.56	7,514.3	6,000.4	-704.2	5,943.1	1.90	
13,199.0	90.00	342.81	7,514.8	6,087.0	-732.0	6,034.1	1.56	
13,293.0	88.69	342.43	7,515.9	6,176.7	-760.1	6,128.1	1.45	
13,387.0	88.46	340.69	7,518.2	6,265.9	-789.8	6,222.1	1.87	
13,481.0	88.76	340.78	7,520.5	6,354.6	-820.8	6,316.0	0.33	
13,575.0	90.23	336.87	7,521.3	6,442.2	-854.8	6,409.7	4.44	
13,670.0	90.24	340.67	7,520.9	6,530.8	-889.2	6,504.4	4.00	
13,764.0	89.73	339.80	7,520.9	6,619.2	-920.9	6,598.3	1.07	
13,858.0	90.07	345.14	7,521.1	6,708.8	-949.2	6,692.3	5.69	
13,952.0	90.10	344.33	7,521.0	6,799.5	-974.0	6,786.2	0.86	
14,046.0	90.40	346.13	7,520.6	6,890.4	-998.0	6,880.2	1.94	
14,140.0	87.95	344.42	7,521.9	6,981.3	-1,021.8	6,974.1	3.18	
14,234.0	87.82	343.99	7,525.4	7,071.7	-1,047.4	7,068.0	0.48	
14,328.0	89.36	343.16	7,527.7	7,161.8	-1,074.0	7,161.9	1.86	
14,422.0	89.46	343.93	7,528.7	7,251.9	-1,100.6	7,255.9	0.83	
14,516.0	88.05	343.46	7,530.7	7,342.1	-1,127.0	7,349.9	1.58	
14,610.0	88.52	343.86	7,533.5	7,432.3	-1,153.4	7,443.8	0.66	
14,704.0	88.76	344.76	7,535.7	7,522.8	-1,178.8	7,537.8	0.99	
14,798.0	89.66	344.44	7,537.0	7,613.4	-1,203.8	7,631.7	1.02	
14,892.0	88.36	344.42	7,538.7	7,703.9	-1,229.0	7,725.7	1.38	
14,986.0	89.56	344.86	7,540.4	7,794.6	-1,253.9	7,819.6	1.36	
15,080.0	87.85	342.79	7,542.5	7,884.8	-1,280.1	7,913.6	2.86	
15,174.0	90.74	342.14	7,543.7	7,974.4	-1,308.4	8,007.6	3.15	
15,268.0	91.94	342.33	7,541.5	8,063.9	-1,337.1	8,101.5	1.29	
15,362.0	90.10	342.63	7,539.8	8,153.5	-1,365.4	8,195.5	1.98	
15,456.0	89.53	340.65	7,540.1	8,242.7	-1,395.0	8,289.5	2.19	
15,550.0	90.64	340.22	7,539.9	8,331.3	-1,426.5	8,383.4	1.27	
15,644.0	91.11	342.71	7,538.5	8,420.4	-1,456.3	8,477.3	2.70	
15,738.0	89.53	345.32	7,538.0	8,510.8	-1,482.2	8,571.3	3.25	
15,832.0	88.93	344.17	7,539.3	8,601.4	-1,506.9	8,665.3	1.38	
15,926.0	89.63	343.23	7,540.4	8,691.7	-1,533.3	8,759.2	1.25	
16,020.0	89.73	342.27	7,541.0	8,781.4	-1,561.2	8,853.2	1.03	
16,114.0	88.96	342.21	7,542.0	8,870.9	-1,589.9	8,947.2	0.82	
16,208.0	89.87	344.75	7,543.0	8,961.0	-1,616.6	9,041.2	2.87	



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Ford Unit 1H
<b>Project:</b>	Harrison County West Virginia	<b>TVD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Site:</b>	Ruth/Norris/Nellie/Ford Pad	<b>MD Reference:</b>	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
<b>Well:</b>	Ford Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
16,302.0	88.59	344.19	7,544.3	9,051.6	-1,641.8	9,135.2	1.49
16,397.0	88.08	341.63	7,547.0	9,142.4	-1,669.7	9,230.1	2.75
16,492.0	88.86	341.73	7,549.6	9,232.5	-1,699.5	9,325.1	0.83
16,586.0	89.33	342.72	7,551.0	9,322.0	-1,728.2	9,419.0	1.17
16,680.0	90.07	343.52	7,551.5	9,412.0	-1,755.5	9,513.0	1.16
16,774.0	91.17	343.72	7,550.5	9,502.1	-1,782.0	9,607.0	1.19
16,868.0	91.01	343.03	7,548.7	9,592.2	-1,808.9	9,701.0	0.75
16,909.0	91.58	343.10	7,547.8	9,631.4	-1,820.8	9,742.0	1.40
16,966.0	91.50	342.90	7,546.3	9,685.9	-1,837.5	9,799.0	0.38

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,075.0	6,900.8	536.3	671.6	SCMR
7,487.0	7,270.3	672.7	785.2	BRKT
7,522.0	7,297.7	694.0	790.3	TLLY
7,647.0	7,382.7	784.8	797.7	HMLN
7,826.0	7,455.9	946.9	794.0	MRCL

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

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