



Ford Unit 2H
Harrison County West Virginia
Northing: 14254497.48
Easting: 1764882.44
As Drilled



To convert Magnetic North to Grid, Subtract 8.89°
 To convert True North to Grid, Subtract 0.28°

Azimuths to Grid North
 True North: -0.28°
 Magnetic North: -8.89°

Magnetic Field
 Strength: 52234.2snT
 Dip Angle: 66.83°
 Date: 4/11/2014
 Model: BGGM2014

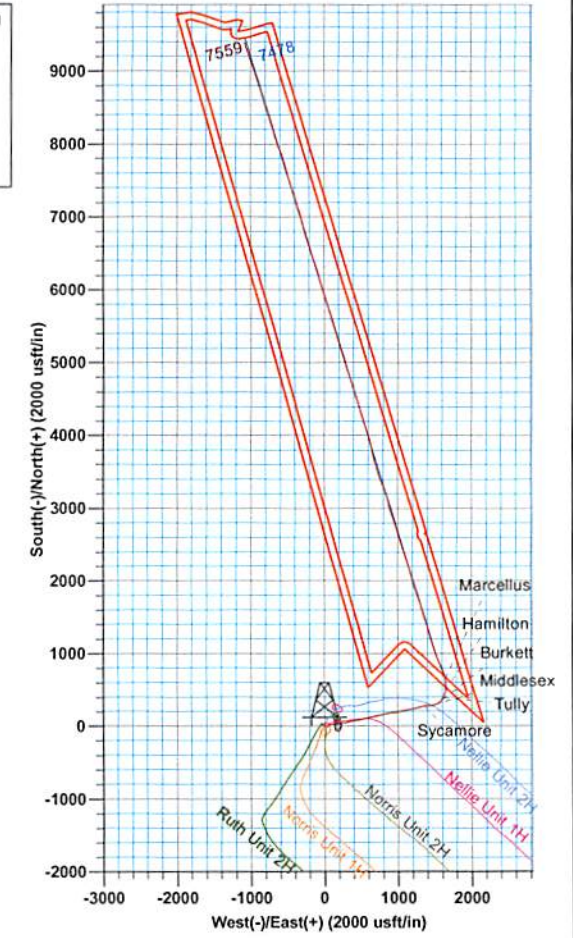
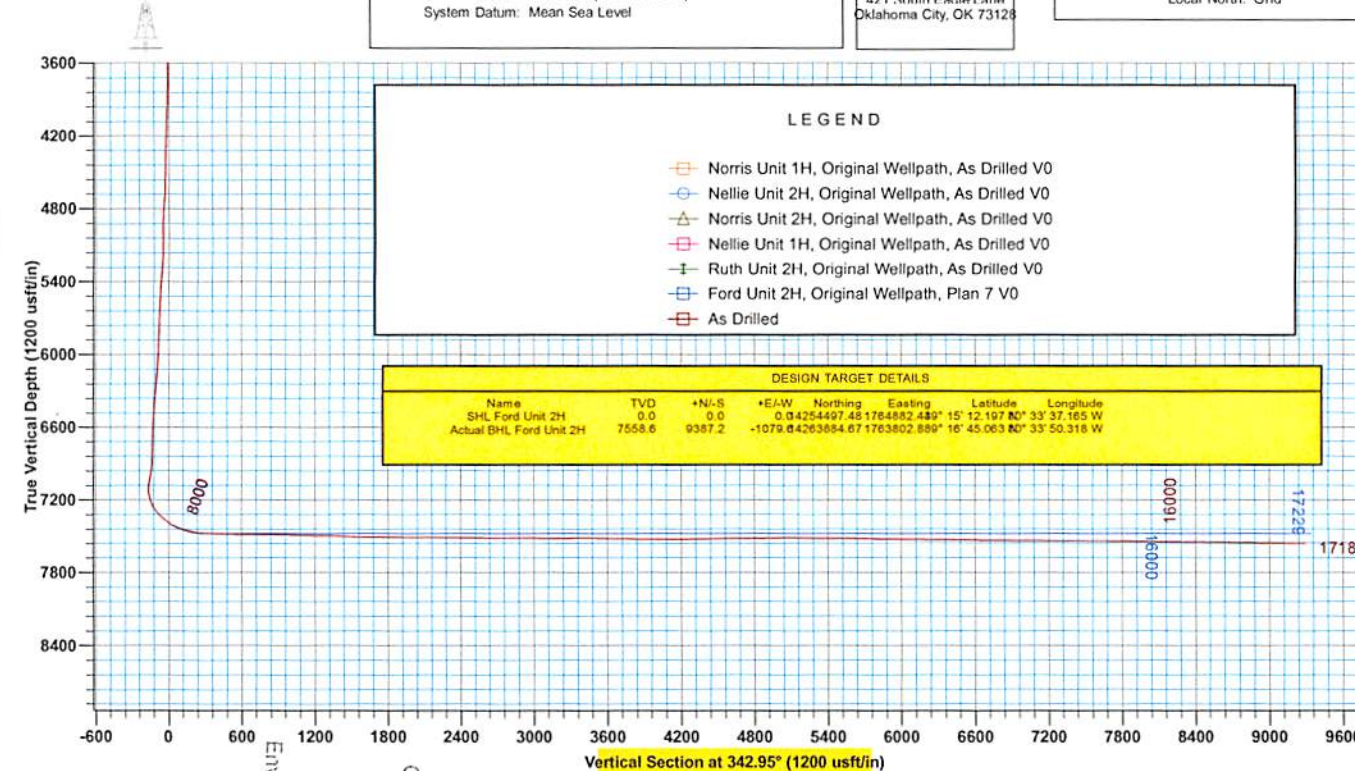
WELL DETAILS Ford Unit 2H						
Ground Level: 1374.0						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	14254497.48	1764882.44	39° 15' 12.197 N	80° 33' 37.165 W	

SITE DETAILS: Ruth/Norris/Nellie/Ford Pad	
Site Center: Ruth Unit 2H	
Site Centre Northing:	14254530.66
Site Centre 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	

Genie Lightfoot	
13.56, July 29 2014	
Scientific Drilling	
421 South Eagle Lane	
Oklahoma City, OK 73128	

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



RECEIVED
 Office of Oil and Gas
 SEP 29 2017
 WV Department of
 Environmental Protection



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ford Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site:	Ruth/Norris/Nellie/Ford Pad	MD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well:	Ford Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

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

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

Well	Ford Unit 2H, Marcellus					
Well Position	+N/-S	0.0 usft	Northing:	14,254,497.48 usft	Latitude:	39° 15' 12.197 N
	+E/-W	0.0 usft	Easting:	1,764,882.44 usft	Longitude:	80° 33' 37.165 W
Position Uncertainty	2.0 usft	Wellhead Elevation:	1,398.0 usft	Ground Level:	1,374.0 usft	

Wellbore	Original Wellpath
-----------------	-------------------

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	4/11/2014	-8.62	66.83	52,234

Design	As Drilled
---------------	------------

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

RECEIVED
Office of Oil and Gas
SEP 29 2017
WV Department of
Environmental Protection

Survey Program	Date	7/31/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	1,110.1	Survey #2 Def Gyro (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
1,110.8	2,548.2	Survey #4 Def Gyro to Int (Original Wellpa	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
2,573.2	3,490.4	Survey #6 Def Gyro to KOP (Original Well	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
3,500.1	7,070.3	Survey #8 EOTang to Curve KOP (Origina	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
7,192.0	17,184.0	Survey #9 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
100.0	0.04	61.40	100.0	0.0	0.0	0.0	0.04
200.0	0.05	22.79	200.0	0.1	0.1	0.0	0.03
300.0	0.11	56.05	300.0	0.2	0.2	0.1	0.07
400.0	0.05	172.63	400.0	0.2	0.3	0.1	0.14
500.0	0.08	130.08	500.0	0.1	0.3	0.0	0.05
600.0	0.05	198.23	600.0	0.0	0.4	-0.1	0.08
700.0	0.10	135.94	700.0	-0.1	0.4	-0.2	0.09



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ford Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site:	Ruth/Norris/Nellie/Ford Pad	MD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well:	Ford Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
800.0	0.13	151.38	800.0	-0.3	0.5	-0.4	0.04
900.0	0.13	199.68	900.0	-0.5	0.5	-0.6	0.11
1,000.0	0.06	272.20	1,000.0	-0.6	0.4	-0.7	0.13
1,100.0	0.04	201.74	1,100.0	-0.6	0.4	-0.7	0.06
1,110.1	0.05	216.89	1,110.1	-0.6	0.4	-0.7	0.15
1,110.8	0.05	216.89	1,110.8	-0.6	0.4	-0.7	0.00
1,135.8	0.05	167.18	1,135.8	-0.6	0.4	-0.7	0.17
1,160.8	0.07	233.26	1,160.8	-0.7	0.4	-0.7	0.27
1,185.8	0.09	219.37	1,185.8	-0.7	0.3	-0.7	0.11
1,210.8	0.06	200.44	1,210.8	-0.7	0.3	-0.8	0.15
1,235.8	0.32	77.84	1,235.8	-0.7	0.4	-0.8	1.42
1,260.8	1.08	68.35	1,260.8	-0.6	0.7	-0.8	3.06
1,285.8	1.91	66.75	1,285.8	-0.3	1.3	-0.7	3.32
1,310.8	2.50	67.96	1,310.8	0.0	2.2	-0.6	2.37
1,335.8	2.85	69.29	1,335.7	0.4	3.2	-0.5	1.42
1,360.8	2.96	70.44	1,360.7	0.9	4.4	-0.5	0.50
1,385.8	3.02	69.90	1,385.7	1.3	5.7	-0.4	0.27
1,410.8	3.06	69.61	1,410.6	1.8	6.9	-0.3	0.17
1,435.8	3.13	70.91	1,435.6	2.2	8.2	-0.3	0.40
1,460.8	3.21	71.75	1,460.6	2.7	9.5	-0.2	0.37
1,485.8	3.26	74.05	1,485.5	3.1	10.8	-0.2	0.56
1,510.8	3.38	78.21	1,510.5	3.4	12.2	-0.3	1.08
1,535.8	3.38	80.29	1,535.4	3.7	13.7	-0.5	0.49
1,560.8	3.27	80.62	1,560.4	4.0	15.1	-0.7	0.45
1,585.8	3.21	81.64	1,585.4	4.2	16.5	-0.9	0.33
1,610.8	2.94	81.99	1,610.3	4.4	17.8	-1.1	1.08
1,635.8	2.63	82.27	1,635.3	4.5	19.0	-1.3	1.24
1,660.8	2.49	82.65	1,660.3	4.7	20.2	-1.4	0.56
1,685.8	2.22	83.80	1,685.2	4.8	21.2	-1.6	1.10
1,710.8	2.00	84.49	1,710.2	4.9	22.1	-1.8	0.89
1,735.8	1.82	84.38	1,735.2	5.0	22.9	-2.0	0.72
1,760.8	1.61	86.24	1,760.2	5.0	23.7	-2.1	0.87
1,785.8	1.51	87.45	1,785.2	5.1	24.3	-2.3	0.42
1,810.8	1.33	87.19	1,810.2	5.1	25.0	-2.4	0.72
1,835.8	1.17	89.07	1,835.2	5.1	25.5	-2.6	0.66
1,860.8	1.05	89.39	1,860.2	5.1	26.0	-2.7	0.48
1,885.8	0.93	88.94	1,885.2	5.1	26.4	-2.8	0.48
1,910.8	0.77	92.00	1,910.2	5.1	26.8	-2.9	0.67
1,935.8	0.71	92.16	1,935.2	5.1	27.1	-3.1	0.24
1,960.8	0.58	93.05	1,960.2	5.1	27.4	-3.1	0.52
1,985.8	0.50	95.59	1,985.2	5.1	27.6	-3.2	0.33
2,010.8	0.48	96.15	2,010.2	5.1	27.8	-3.3	0.08
2,035.8	0.41	105.42	2,035.2	5.0	28.0	-3.4	0.40
2,060.8	0.44	111.18	2,060.2	5.0	28.2	-3.5	0.21

RECEIVED
Office of Oil and Gas

SEP 29 2017



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ford Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site:	Ruth/Norris/Nellie/Ford Pad	MD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well:	Ford Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
2,085.8	0.46	105.96	2,085.2	4.9	28.4	-3.6	0.18
2,110.8	0.49	105.15	2,110.2	4.9	28.6	-3.7	0.12
2,135.8	0.47	106.71	2,135.2	4.8	28.8	-3.9	0.10
2,160.8	0.42	105.66	2,160.2	4.7	29.0	-4.0	0.20
2,185.8	0.37	110.90	2,185.2	4.7	29.1	-4.1	0.25
2,210.8	0.32	113.69	2,210.2	4.6	29.3	-4.2	0.21
2,235.8	0.31	108.38	2,235.2	4.6	29.4	-4.2	0.12
2,260.8	0.27	106.47	2,260.2	4.5	29.5	-4.3	0.16
2,285.8	0.23	112.63	2,285.2	4.5	29.6	-4.4	0.19
2,310.8	0.18	119.79	2,310.2	4.5	29.7	-4.4	0.22
2,335.8	0.22	115.03	2,335.2	4.4	29.8	-4.5	0.17
2,360.8	0.20	124.41	2,360.2	4.4	29.9	-4.6	0.16
2,385.8	0.12	139.17	2,385.2	4.3	29.9	-4.6	0.36
2,410.8	0.11	142.83	2,410.2	4.3	30.0	-4.7	0.05
2,435.8	0.13	156.15	2,435.2	4.3	30.0	-4.7	0.14
2,460.8	0.19	150.98	2,460.2	4.2	30.0	-4.8	0.25
2,485.8	0.24	137.73	2,485.2	4.1	30.1	-4.9	0.28
2,510.8	0.28	130.37	2,510.2	4.0	30.2	-5.0	0.21
2,535.8	0.28	118.83	2,535.2	4.0	30.3	-5.1	0.23
2,548.2	0.29	111.55	2,547.6	4.0	30.3	-5.1	0.30
2,573.2	0.27	125.29	2,572.6	3.9	30.4	-5.2	0.28
2,598.2	0.23	122.73	2,597.6	3.8	30.5	-5.3	0.17
2,623.2	0.30	123.07	2,622.6	3.8	30.6	-5.4	0.28
2,648.2	0.30	125.73	2,647.6	3.7	30.7	-5.5	0.06
2,673.2	0.27	113.72	2,672.6	3.6	30.8	-5.6	0.27
2,698.2	0.31	116.66	2,697.6	3.6	30.9	-5.6	0.17
2,723.2	0.32	118.88	2,722.6	3.5	31.1	-5.7	0.06
2,748.2	0.35	100.25	2,747.6	3.5	31.2	-5.8	0.45
2,773.2	0.30	113.64	2,772.6	3.4	31.3	-5.9	0.36
2,798.2	0.30	110.25	2,797.6	3.4	31.5	-6.0	0.07
2,823.2	0.37	115.16	2,822.6	3.3	31.6	-6.1	0.30
2,848.2	0.37	116.90	2,847.6	3.3	31.7	-6.2	0.04
2,873.2	0.48	128.65	2,872.6	3.1	31.9	-6.3	0.56
2,898.2	0.58	130.29	2,897.6	3.0	32.1	-6.5	0.40
2,923.2	0.67	119.92	2,922.5	2.8	32.3	-6.7	0.58
2,948.2	0.64	114.18	2,947.5	2.7	32.5	-6.9	0.29
2,973.2	0.51	124.05	2,972.5	2.6	32.8	-7.1	0.65
2,998.2	0.50	113.93	2,997.5	2.5	33.0	-7.3	0.36
3,023.2	0.39	119.20	3,022.5	2.4	33.1	-7.4	0.47
3,048.2	0.37	123.15	3,047.5	2.3	33.3	-7.5	0.13
3,073.2	0.43	125.61	3,072.5	2.2	33.4	-7.7	0.25
3,098.2	0.38	152.69	3,097.5	2.1	33.5	-7.8	0.78
3,123.2	0.42	126.50	3,122.5	2.0	33.6	-8.0	0.74
3,148.2	0.44	135.51	3,147.5	1.8	33.8	-8.1	0.28

RECEIVED
Office of Oil and Gas

SEP 29 2017

WV Department of
Environmental Protection



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ford Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site:	Ruth/Norris/Nellie/Ford Pad	MD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well:	Ford Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
3,173.2	0.44	141.90	3,172.5	1.7	33.9	-8.3	0.20
3,198.2	0.44	139.10	3,197.5	1.5	34.0	-8.5	0.09
3,223.2	0.48	142.69	3,222.5	1.4	34.2	-8.7	0.20
3,248.2	0.46	137.93	3,247.5	1.2	34.3	-8.9	0.18
3,273.2	0.37	132.40	3,272.5	1.1	34.4	-9.0	0.39
3,298.2	0.35	127.62	3,297.5	1.0	34.5	-9.2	0.14
3,323.2	0.39	121.60	3,322.5	0.9	34.7	-9.3	0.22
3,348.2	0.33	119.56	3,347.5	0.8	34.8	-9.4	0.25
3,373.2	0.38	117.14	3,372.5	0.8	34.9	-9.5	0.21
3,398.2	0.44	168.79	3,397.5	0.6	35.0	-9.7	1.45
3,423.2	0.35	138.30	3,422.5	0.5	35.1	-9.8	0.90
3,448.2	0.33	120.70	3,447.5	0.4	35.2	-10.0	0.42
3,473.2	0.29	126.64	3,472.5	0.3	35.3	-10.1	0.21
3,490.4	0.40	123.11	3,489.7	0.3	35.4	-10.1	0.65
3,500.1	0.45	117.70	3,499.4	0.2	35.5	-10.2	0.66
3,525.2	0.37	121.27	3,524.5	0.1	35.6	-10.3	0.33
3,550.8	0.42	117.73	3,550.1	0.0	35.8	-10.5	0.22
3,575.0	0.46	107.12	3,574.3	0.0	36.0	-10.6	0.37
3,600.2	0.63	93.61	3,599.5	-0.1	36.2	-10.7	0.84
3,625.6	1.29	92.91	3,625.0	-0.1	36.6	-10.8	2.59
3,651.4	1.91	81.52	3,650.7	0.0	37.3	-11.0	2.70
3,675.1	2.38	73.91	3,674.4	0.2	38.2	-11.1	2.31
3,700.6	2.74	72.88	3,699.9	0.5	39.3	-11.1	1.42
3,726.3	3.23	74.66	3,725.6	0.9	40.6	-11.1	1.94
3,750.7	4.09	71.85	3,749.8	1.3	42.1	-11.1	3.61
3,775.4	4.17	71.15	3,774.6	1.9	43.7	-11.0	0.38
3,800.4	4.62	70.02	3,799.5	2.5	45.6	-11.0	1.83
3,826.6	5.05	69.75	3,825.6	3.3	47.6	-10.8	1.64
3,851.1	5.53	73.07	3,849.9	4.0	49.8	-10.8	2.33
3,876.0	6.27	76.17	3,874.7	4.7	52.2	-10.9	3.23
3,901.5	6.65	76.34	3,900.1	5.3	55.0	-11.0	1.49
3,926.2	7.40	79.27	3,924.6	6.0	58.0	-11.3	3.37
3,950.9	8.13	81.24	3,949.0	6.5	61.3	-11.7	3.14
3,976.1	8.83	82.43	3,974.0	7.1	64.9	-12.3	2.86
4,001.1	9.67	83.67	3,998.6	7.5	68.9	-13.0	3.46
4,025.3	10.12	83.35	4,022.5	8.0	73.1	-13.8	1.87
4,051.0	10.76	83.68	4,047.8	8.5	77.7	-14.6	2.50
4,075.7	11.25	84.12	4,072.0	9.0	82.4	-15.5	2.01
4,101.0	11.59	84.44	4,096.8	9.5	87.4	-16.5	1.37
4,125.9	11.81	84.66	4,121.2	10.0	92.4	-17.5	0.90
4,151.0	12.24	83.59	4,145.8	10.6	97.6	-18.5	1.93
4,175.5	12.43	83.72	4,169.7	11.1	102.8	-19.5	0.78
4,200.3	12.81	82.36	4,193.9	11.8	108.2	-20.4	1.94
4,226.0	13.11	80.60	4,218.9	12.6	113.9	-21.3	1.93

RECEIVED
Office of Oil and Gas



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ford Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site:	Ruth/Norris/Nellie/Ford Pad	MD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well:	Ford Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
4,250.1	13.73	77.60	4,242.4	13.7	119.4	-21.9	3.86	
4,275.4	14.38	76.47	4,266.9	15.1	125.3	-22.3	2.80	
4,300.6	14.63	76.54	4,291.3	16.6	131.5	-22.7	0.99	
4,325.3	15.04	77.86	4,315.1	18.0	137.6	-23.2	2.15	
4,351.0	15.36	79.64	4,340.0	19.3	144.3	-23.9	2.20	
4,375.4	15.47	80.11	4,363.5	20.4	150.7	-24.7	0.68	
4,400.1	15.53	80.15	4,387.3	21.5	157.1	-25.5	0.25	
4,425.7	15.70	79.68	4,411.9	22.7	163.9	-26.3	0.83	
4,450.1	15.80	79.55	4,435.4	23.9	170.4	-27.1	0.43	
4,475.3	15.86	79.28	4,459.7	25.2	177.2	-27.9	0.38	
4,500.9	15.87	78.32	4,484.3	26.6	184.1	-28.6	1.03	
4,525.7	15.70	75.90	4,508.2	28.1	190.6	-29.1	2.74	
4,550.6	15.64	73.94	4,532.1	29.8	197.1	-29.3	2.14	
4,575.0	15.56	73.47	4,555.7	31.7	203.4	-29.4	0.61	
4,600.4	15.61	73.58	4,580.1	33.6	210.0	-29.4	0.23	
4,625.6	15.65	73.97	4,604.4	35.5	216.5	-29.5	0.45	
4,650.2	15.65	76.43	4,628.1	37.2	222.9	-29.8	2.70	
4,675.6	15.57	79.41	4,652.5	38.6	229.6	-30.4	3.18	
4,700.2	15.44	83.19	4,676.2	39.6	236.1	-31.3	4.14	
4,726.0	15.36	87.55	4,701.1	40.2	242.9	-32.8	4.49	
4,750.6	15.16	91.77	4,724.9	40.2	249.4	-34.7	4.58	
4,775.4	15.33	92.31	4,748.8	40.0	255.9	-36.8	0.89	
4,800.1	15.36	90.33	4,772.6	39.8	262.4	-38.9	2.12	
4,825.0	15.41	86.89	4,796.6	40.0	269.0	-40.7	3.67	
4,850.2	15.60	84.51	4,820.9	40.5	275.8	-42.1	2.63	
4,875.4	15.71	82.26	4,845.1	41.3	282.5	-43.4	2.46	
4,900.5	16.12	80.36	4,869.3	42.3	289.3	-44.4	2.64	
4,925.5	16.64	78.32	4,893.3	43.6	296.2	-45.2	3.10	
4,950.7	17.13	76.58	4,917.4	45.2	303.4	-45.7	2.80	
4,975.1	17.64	74.96	4,940.7	47.0	310.4	-46.1	2.88	
5,000.4	18.24	72.54	4,964.8	49.2	317.9	-46.2	3.78	
5,025.5	18.95	70.77	4,988.5	51.7	325.5	-46.0	3.62	
5,050.8	19.22	70.09	5,012.4	54.5	333.3	-45.6	1.38	
5,076.1	19.50	71.17	5,036.3	57.3	341.2	-45.3	1.80	
5,100.1	19.56	72.24	5,059.0	59.8	348.9	-45.1	1.51	
5,125.4	19.95	74.68	5,082.7	62.2	357.0	-45.2	3.61	
5,151.0	20.17	75.17	5,106.8	64.5	365.5	-45.5	1.08	
5,175.5	20.41	76.16	5,129.8	66.6	373.7	-45.9	1.71	
5,200.8	20.72	76.35	5,153.4	68.7	382.4	-46.4	1.25	
5,225.8	21.20	76.60	5,176.8	70.8	391.1	-47.0	1.95	
5,250.3	21.96	77.48	5,199.6	72.8	399.9	-47.6	3.37	
5,275.3	22.80	79.15	5,222.7	74.7	409.2	-48.5	4.22	
5,301.0	23.68	80.50	5,246.3	76.5	419.2	-49.7	4.00	
5,326.1	24.93	81.35	5,269.2	78.2	429.1	-51.2	5.17	
5,351.2	26.21	81.59	5,291.9	79.8	440.1	-52.8	5.11	

RECEIVED
Office of Oil and
SEP 29 2017



EOW Completion Report



Company: Antero Resources	Local Co-ordinate Reference: Well Ford Unit 2H
Project: Harrison County West Virginia	TVD Reference: Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site: Ruth/Norris/Nellie/Ford Pad	MD Reference: Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well: Ford Unit 2H	North Reference: Grid
Wellbore: Original Wellpath	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Oklahoma District

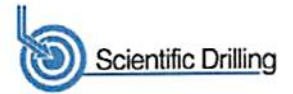
Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
5,375.6	27.87	80.89	5,313.6	81.5	451.0	-54.4	6.93
5,400.4	29.57	80.64	5,335.3	83.4	462.8	-56.0	6.87
5,425.7	30.79	80.29	5,357.2	85.5	475.3	-57.6	4.88
5,450.8	31.44	79.50	5,378.7	87.8	488.1	-59.2	3.06
5,475.2	31.05	79.32	5,399.5	90.1	500.6	-60.6	1.64
5,501.2	30.33	79.02	5,421.9	92.6	513.6	-62.1	2.83
5,525.8	30.10	77.82	5,443.1	95.1	525.7	-63.3	2.63
5,550.4	30.09	77.01	5,464.4	97.7	537.7	-64.2	1.65
5,576.0	29.76	76.46	5,486.7	100.7	550.2	-65.1	1.67
5,600.7	29.34	76.43	5,508.1	103.5	562.0	-65.8	1.71
5,625.4	29.30	76.54	5,529.6	106.4	573.8	-66.5	0.27
5,651.1	28.74	76.54	5,552.1	109.3	585.9	-67.3	2.17
5,675.9	27.98	76.60	5,573.9	112.0	597.3	-68.1	3.07
5,700.5	27.59	76.68	5,595.7	114.6	608.5	-68.8	1.59
5,726.3	27.76	76.66	5,618.6	117.4	620.2	-69.6	0.66
5,750.6	28.50	76.77	5,640.0	120.0	631.3	-70.3	3.05
5,775.7	28.92	76.79	5,662.0	122.8	643.1	-71.1	1.68
5,800.5	29.04	76.87	5,683.7	125.5	654.8	-72.0	0.51
5,825.4	29.44	76.70	5,705.4	128.3	666.6	-72.8	1.64
5,850.4	30.42	77.22	5,727.1	131.1	678.8	-73.6	4.05
5,875.8	30.71	77.19	5,749.0	134.0	691.4	-74.6	1.14
5,900.8	30.30	76.53	5,770.5	136.9	703.7	-75.5	2.12
5,926.1	30.07	76.30	5,792.4	139.9	716.1	-76.2	1.02
5,951.0	30.20	76.37	5,813.9	142.8	728.2	-77.0	0.54
5,975.6	30.01	76.55	5,835.2	145.7	740.2	-77.7	0.85
6,000.4	30.04	76.84	5,856.7	148.6	752.3	-78.5	0.60
6,025.7	30.44	77.16	5,878.5	151.4	764.7	-79.4	1.70
6,050.4	30.39	77.40	5,899.8	154.2	776.9	-80.4	0.53
6,075.4	29.45	77.59	5,921.4	156.9	789.1	-81.4	3.79
6,100.6	28.57	77.28	5,943.5	159.5	801.0	-82.3	3.54
6,125.4	28.80	77.79	5,965.3	162.1	812.6	-83.3	1.35
6,150.1	28.58	79.04	5,986.9	164.5	824.2	-84.4	2.59
6,176.1	28.15	80.03	6,009.8	166.7	836.4	-85.8	2.45
6,200.6	27.91	80.26	6,031.4	168.7	847.7	-87.3	1.07
6,225.2	27.64	79.15	6,053.2	170.8	859.0	-88.6	2.37
6,250.7	27.16	78.68	6,075.9	173.0	870.5	-89.8	2.07
6,275.9	26.85	79.85	6,098.3	175.1	881.8	-91.1	2.44
6,300.1	27.19	80.27	6,119.8	177.0	892.6	-92.5	1.62
6,326.0	27.66	81.21	6,142.9	179.0	904.4	-94.1	2.46
6,350.9	28.15	82.14	6,164.9	180.6	915.9	-95.8	2.63
6,375.2	28.46	82.71	6,186.2	182.2	927.3	-97.7	1.70
6,400.2	28.99	82.64	6,208.2	183.7	939.2	-99.8	2.12
6,425.4	29.24	82.23	6,230.2	185.3	951.4	-101.8	1.27
6,450.7	29.67	81.42	6,252.2	187.1	963.7	-103.7	2.32

RECEIVED
 Office of Oil and Gas
 SEP 29 2017



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ford Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site:	Ruth/Norris/Nellie/Ford Pad	MD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well:	Ford Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
6,475.9	30.19	80.83	6,274.1	189.0	976.1	-105.5	2.37
6,501.8	30.67	80.75	6,296.4	191.1	989.1	-107.3	1.86
6,526.0	31.69	80.54	6,317.1	193.2	1,001.4	-109.0	4.24
6,550.1	32.60	80.48	6,337.5	195.3	1,014.1	-110.7	3.77
6,575.8	33.91	80.26	6,359.0	197.6	1,028.0	-112.5	5.13
6,600.4	34.51	79.98	6,379.3	200.0	1,041.6	-114.2	2.52
6,625.6	34.18	79.52	6,400.2	202.5	1,055.6	-115.9	1.66
6,650.8	33.48	78.80	6,421.1	205.2	1,069.4	-117.4	3.20
6,675.0	33.95	78.41	6,441.3	207.8	1,082.6	-118.7	2.14
6,700.7	34.50	77.72	6,462.5	210.8	1,096.7	-120.0	2.62
6,726.1	33.69	77.54	6,483.5	213.9	1,110.6	-121.2	3.22
6,750.4	33.07	77.46	6,503.8	216.8	1,123.6	-122.2	2.56
6,775.9	32.84	77.02	6,525.1	219.8	1,137.2	-123.3	1.30
6,801.0	32.98	76.62	6,546.2	222.9	1,150.4	-124.2	1.03
6,825.9	32.93	76.46	6,567.2	226.1	1,163.7	-125.0	0.40
6,851.2	32.45	76.42	6,588.4	229.3	1,176.9	-125.9	1.90
6,875.4	31.65	77.33	6,609.0	232.2	1,189.4	-126.7	3.85
6,900.5	31.39	78.39	6,630.4	235.0	1,202.3	-127.9	2.44
6,926.1	31.91	79.03	6,652.2	237.6	1,215.4	-129.2	2.42
6,950.8	32.35	78.94	6,673.1	240.1	1,228.3	-130.6	1.79
6,975.7	32.95	78.21	6,694.0	242.8	1,241.5	-131.9	2.89
7,000.6	32.54	77.47	6,715.0	245.6	1,254.7	-133.1	2.30
7,025.7	32.11	76.54	6,736.2	248.6	1,267.8	-134.0	2.62
7,050.6	32.63	75.47	6,757.2	251.9	1,280.7	-134.7	3.11
7,070.3	33.07	74.90	6,773.7	254.6	1,291.0	-135.1	2.74
7,192.0	26.82	74.17	6,879.2	270.7	1,349.5	-136.9	5.14
7,208.0	26.68	75.43	6,893.4	272.6	1,356.5	-137.1	3.65
Sycamore							
7,222.0	26.56	76.54	6,906.0	274.1	1,362.6	-137.4	3.65
7,252.0	28.23	81.55	6,932.6	276.7	1,376.1	-138.9	9.48
7,282.0	29.53	86.93	6,958.9	278.2	1,390.5	-141.7	9.68
7,312.0	31.90	89.81	6,984.7	278.6	1,405.8	-145.8	9.30
7,342.0	34.32	89.87	7,009.8	278.6	1,422.2	-150.6	8.07
7,372.0	37.11	88.50	7,034.1	278.9	1,439.7	-155.5	9.67
7,402.0	39.22	85.24	7,057.7	279.9	1,458.2	-159.9	9.72
7,432.0	40.27	79.97	7,080.8	282.4	1,477.2	-163.1	11.76
7,462.0	40.80	74.52	7,103.6	286.7	1,496.2	-164.6	11.94
7,474.0	40.56	72.38	7,112.7	288.9	1,503.7	-164.7	11.78
Middlesex							
7,492.0	40.28	69.14	7,126.4	292.8	1,514.7	-164.2	11.78
7,522.0	39.20	61.81	7,149.5	300.7	1,532.2	-161.7	16.02
7,552.0	38.32	55.74	7,172.9	310.4	1,548.2	-157.2	13.00
7,582.0	38.94	49.81	7,196.3	321.8	1,563.1	-150.7	12.51
7,612.0	40.10	44.11	7,219.5	334.8	1,577.0	-142.3	12.69



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ford Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site:	Ruth/Norris/Nellie/Ford Pad	MD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well:	Ford Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
7,642.0	41.21	38.37	7,242.3	349.5	1,589.9	-132.1	13.00	
7,672.0	42.92	33.18	7,264.5	365.8	1,601.6	-119.9	12.91	
Burkett								
7,702.0	44.74	28.11	7,286.2	383.7	1,612.2	-105.9	13.18	
7,709.0	45.25	27.04	7,291.1	388.0	1,614.5	-102.4	13.06	
Tully								
7,732.0	47.00	23.65	7,307.1	403.0	1,621.6	-90.1	13.06	
7,762.0	49.61	19.65	7,327.0	423.8	1,629.8	-72.7	13.22	
7,792.0	51.83	16.63	7,346.0	445.9	1,637.0	-53.7	10.74	
7,822.0	53.96	10.96	7,364.1	469.1	1,642.7	-33.2	16.66	
7,845.0	56.62	8.74	7,377.2	487.7	1,646.0	-16.3	14.03	
Hamilton								
7,852.0	57.44	8.09	7,381.0	493.6	1,646.8	-11.0	14.03	
7,882.0	61.11	5.31	7,396.4	519.2	1,649.8	12.6	14.60	
7,912.0	64.65	2.41	7,410.1	545.8	1,651.6	37.6	14.60	
7,942.0	67.68	359.60	7,422.2	573.2	1,652.1	63.6	13.24	
7,972.0	70.05	356.12	7,433.0	601.2	1,651.0	90.7	13.40	
8,002.0	71.98	352.32	7,442.8	629.4	1,648.2	118.5	13.60	
8,027.0	73.64	349.45	7,450.1	653.0	1,644.4	142.1	12.83	
Marcellus								
8,032.0	73.98	348.88	7,451.5	657.7	1,643.5	146.9	12.83	
8,062.0	77.17	345.83	7,459.0	686.0	1,637.1	175.9	14.49	
8,092.0	80.20	342.68	7,464.9	714.3	1,629.1	205.3	14.42	
8,115.0	82.70	340.58	7,468.3	735.9	1,622.0	228.0	14.13	
8,167.0	86.23	335.63	7,473.3	783.9	1,602.7	279.6	11.65	
8,240.0	89.10	335.45	7,476.3	850.3	1,572.5	351.9	3.94	
8,355.0	88.39	339.11	7,478.8	956.3	1,528.1	466.3	3.24	
8,448.0	88.86	343.02	7,481.1	1,044.3	1,497.9	559.2	4.23	
8,543.0	89.16	343.36	7,482.7	1,135.2	1,470.4	654.2	0.48	
8,637.0	89.26	342.83	7,484.0	1,225.1	1,443.1	748.2	0.57	
8,731.0	89.63	343.00	7,484.9	1,315.0	1,415.5	842.1	0.43	
8,825.0	89.43	342.81	7,485.7	1,404.8	1,387.8	936.1	0.29	
8,920.0	88.62	343.29	7,487.3	1,495.7	1,360.2	1,031.1	0.99	
9,014.0	88.56	343.25	7,489.6	1,585.7	1,333.1	1,125.1	0.08	
9,108.0	88.42	342.26	7,492.1	1,675.4	1,305.2	1,219.1	1.06	
9,202.0	88.09	340.83	7,495.0	1,764.5	1,275.5	1,313.0	1.56	
9,296.0	88.46	343.76	7,497.8	1,854.0	1,246.9	1,406.9	3.14	
9,389.0	87.65	342.53	7,500.9	1,943.0	1,220.0	1,499.9	1.58	
9,483.0	89.66	343.58	7,503.1	2,032.9	1,192.6	1,593.8	2.41	
9,577.0	90.03	344.45	7,503.4	2,123.2	1,166.7	1,687.8	1.01	
9,670.0	90.20	344.10	7,503.2	2,212.7	1,141.5	1,780.8	0.42	
9,764.0	89.40	340.89	7,503.5	2,302.4	1,113.2	1,874.8	3.52	
9,859.0	88.96	340.90	7,504.9	2,392.1	1,082.1	1,969.7	0.46	
9,953.0	89.29	342.75	7,506.3	2,481.4	1,052.8	2,063.7	2.00	
10,046.0	89.70	344.48	7,507.2	2,570.7	1,026.6	2,156.7	1.91	

REC'D
Office of Oil and Gas

SEP 29 2017



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ford Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site:	Ruth/Norris/Nellie/Ford Pad	MD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well:	Ford Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
10,139.0	89.56	343.03	7,507.8	2,659.9	1,000.6	2,249.6	1.57	
10,231.0	89.70	340.78	7,508.4	2,747.4	972.0	2,341.6	2.45	
10,326.0	88.99	341.59	7,509.4	2,837.3	941.4	2,436.6	1.13	
10,420.0	89.63	343.55	7,510.6	2,927.0	913.2	2,530.6	2.19	
10,514.0	90.00	344.82	7,510.9	3,017.4	887.6	2,624.5	1.41	
10,608.0	90.70	345.78	7,510.3	3,108.3	863.8	2,718.5	1.26	
10,702.0	89.63	342.11	7,510.0	3,198.6	837.8	2,812.4	4.07	
10,796.0	90.03	339.00	7,510.3	3,287.3	806.5	2,906.3	3.34	
10,890.0	88.72	338.12	7,511.3	3,374.8	772.1	3,000.0	1.68	
10,984.0	88.66	341.48	7,513.5	3,462.9	739.7	3,093.9	3.57	
11,077.0	90.03	344.39	7,514.5	3,551.8	712.4	3,186.8	3.46	
11,172.0	91.01	344.94	7,513.7	3,643.4	687.3	3,281.8	1.18	
11,266.0	90.20	347.58	7,512.7	3,734.7	664.9	3,375.6	2.94	
11,360.0	89.53	346.80	7,512.9	3,826.4	644.1	3,469.4	1.09	
11,456.0	88.52	345.14	7,514.5	3,919.5	620.8	3,565.2	2.02	
11,547.0	88.83	342.92	7,516.7	4,007.0	595.8	3,656.2	2.46	
11,641.0	88.83	342.33	7,518.6	4,096.7	567.7	3,750.1	0.63	
11,735.0	88.62	343.47	7,520.7	4,186.5	540.1	3,844.1	1.23	
11,829.0	90.07	343.00	7,521.7	4,276.5	513.0	3,938.1	1.62	
11,923.0	90.10	341.97	7,521.6	4,366.1	484.7	4,032.1	1.10	
12,017.0	90.20	342.49	7,521.4	4,455.6	456.0	4,126.1	0.56	
12,111.0	90.67	343.09	7,520.6	4,545.4	428.2	4,220.1	0.81	
12,204.0	90.44	340.72	7,519.7	4,633.8	399.3	4,313.1	2.56	
12,295.0	91.01	341.11	7,518.6	4,719.8	369.6	4,404.0	0.76	
12,385.0	91.31	343.36	7,516.8	4,805.5	342.1	4,494.0	2.52	
12,477.0	90.20	345.02	7,515.5	4,894.0	317.1	4,585.9	2.17	
12,568.0	89.93	343.14	7,515.4	4,981.5	292.1	4,676.9	2.09	
12,659.0	90.57	341.27	7,515.0	5,068.1	264.3	4,767.9	2.17	
12,749.0	91.24	344.59	7,513.6	5,154.2	237.9	4,857.9	3.76	
12,840.0	90.64	343.36	7,512.1	5,241.6	212.8	4,948.8	1.50	
12,931.0	90.60	343.32	7,511.1	5,328.8	186.7	5,039.8	0.06	
13,021.0	90.13	342.69	7,510.6	5,414.8	160.4	5,129.8	0.87	
13,112.0	88.69	341.62	7,511.5	5,501.5	132.5	5,220.8	1.97	
13,204.0	88.62	341.90	7,513.7	5,588.8	103.7	5,312.8	0.31	
13,294.0	90.91	343.35	7,514.0	5,674.7	76.8	5,402.8	3.01	
13,389.0	89.56	344.01	7,513.7	5,765.9	50.1	5,497.8	1.58	
13,483.0	88.83	343.17	7,515.0	5,856.0	23.6	5,591.7	1.18	
13,577.0	89.20	344.01	7,516.6	5,946.2	-3.0	5,685.7	0.98	
13,671.0	89.50	344.31	7,517.7	6,036.6	-28.6	5,779.7	0.45	
13,765.0	89.36	345.15	7,518.6	6,127.3	-53.4	5,873.6	0.91	
13,859.0	89.50	344.09	7,519.5	6,217.9	-78.3	5,967.6	1.14	
13,953.0	88.93	341.45	7,520.8	6,307.7	-106.2	6,061.6	2.87	
14,049.0	88.69	340.71	7,522.8	6,398.5	-137.3	6,157.5	0.81	
14,142.0	89.03	342.06	7,524.7	6,486.6	-167.0	6,250.4	1.50	

RECEIVED
Office of Oil and Gas



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ford Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Site:	Ruth/Norris/Nellie/Ford Pad	MD Reference:	Patterson 340: GL 1374' + 24' RKB @ 1398.0usft
Well:	Ford Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
14,236.0	89.36	341.15	7,526.0	6,575.8	-196.6	6,344.4	1.03
14,329.0	89.03	341.40	7,527.3	6,663.8	-226.5	6,437.4	0.45
14,423.0	89.63	343.98	7,528.4	6,753.6	-254.4	6,531.3	2.82
14,517.0	89.97	345.77	7,528.7	6,844.3	-279.0	6,625.3	1.94
14,611.0	89.33	344.65	7,529.3	6,935.2	-303.0	6,719.2	1.37
14,705.0	89.83	344.41	7,530.0	7,025.8	-328.0	6,813.2	0.59
14,799.0	88.93	341.88	7,531.0	7,115.7	-355.3	6,907.2	2.86
14,894.0	89.40	342.89	7,532.4	7,206.3	-384.0	7,002.1	1.17
14,988.0	90.27	343.51	7,532.6	7,296.3	-411.2	7,096.1	1.14
15,081.0	89.10	342.31	7,533.2	7,385.1	-438.5	7,189.1	1.80
15,176.0	88.56	342.57	7,535.1	7,475.7	-467.2	7,284.1	0.63
15,269.0	89.63	343.90	7,536.6	7,564.7	-494.0	7,377.1	1.84
15,363.0	90.07	344.30	7,536.8	7,655.1	-519.7	7,471.1	0.63
15,457.0	89.19	342.68	7,537.4	7,745.2	-546.5	7,565.1	1.96
15,551.0	88.63	340.99	7,539.2	7,834.5	-575.8	7,659.0	1.89
15,645.0	88.93	339.93	7,541.2	7,923.1	-607.2	7,752.9	1.17
15,738.0	89.63	341.73	7,542.4	8,010.9	-637.7	7,845.8	2.08
15,833.0	90.03	341.84	7,542.7	8,101.2	-667.4	7,940.8	0.44
15,927.0	89.06	343.19	7,543.4	8,190.8	-695.7	8,034.8	1.77
16,020.0	89.87	342.24	7,544.3	8,279.6	-723.3	8,127.8	1.34
16,115.0	88.56	342.63	7,545.6	8,370.2	-752.0	8,222.8	1.44
16,209.0	88.79	343.67	7,547.8	8,460.1	-779.2	8,316.8	1.13
16,303.0	88.83	342.49	7,549.7	8,550.0	-806.5	8,410.7	1.26
16,397.0	89.76	343.39	7,550.9	8,639.9	-834.1	8,504.7	1.38
16,491.0	89.66	341.97	7,551.3	8,729.6	-862.1	8,598.7	1.51
16,585.0	89.16	343.63	7,552.3	8,819.4	-889.9	8,692.7	1.84
16,679.0	89.36	342.55	7,553.5	8,909.3	-917.2	8,786.7	1.17
16,773.0	89.09	339.95	7,554.8	8,998.3	-947.5	8,880.6	2.78
16,867.0	89.93	339.45	7,555.6	9,086.5	-980.1	8,974.5	1.04
16,961.0	88.86	339.15	7,556.6	9,174.4	-1,013.3	9,068.3	1.18
17,056.0	89.46	342.19	7,558.0	9,264.0	-1,044.7	9,163.2	3.26
17,126.0	89.83	344.96	7,558.4	9,331.2	-1,064.5	9,233.2	3.99
17,184.0	89.83	344.96	7,558.6	9,387.2	-1,079.6	9,291.2	0.00

RECEIVED
Office of Oil and Gas

SEP 29 2017

WV Department of
Environmental Protection

Bioclear 2000	U.S. Well Services, LLC	Anti-Bacterial Agent					
			2,2-dibromo-3-nitripropionamide	10222-01-2	20.00000	0.00406	
			Deionized Water	7732-18-5	28.00000	0.00232	
SI-1200s	U.S. Well Services, LLC	Scale Inhibitor					
			Alkyl Phosphonic Acid	Proprietary	5.00000	0.00064	
			Ammonia	7664-41-7	0.50000	0.00010	
AP One	U.S. Well Services, LLC	Gel Breakers					
			Ammonium Persulfate	7727-54-0	100.00000	0.00070	
AI-303	U.S. Well Services, LLC	Acid Corrosion Inhibitors					
			Ethylene glycol	107-21-1	40.00000	0.00004	
			Cinnamaldehyde	104-55-2	20.00000	0.00002	
			Formic acid	64-18-6	20.00000	0.00002	
			Butyl cellosolve	111-76-2	20.00000	0.00001	
			Polyether	60828-78-6	10.00000	0.00001	
			Acetophenone, thiourea, formaldehyde polymer	68527-49-1	5.00000	0.00000	

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

RECEIVED
 Office of Oil and Gas
 SEP 29 2017
 WV Department of
 Environmental Protection