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JUN 26 2015

WV GEOLOGICAL SURVEY
MORGANTHAU, WV



Antero Resources
Courtney Unit 1H
Harrison County West Virginia
Northing: 14231180.55
Easting: 1778702.44
As Drilled

WELL DETAILS: Courtney Unit 1H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	14231180.55	1778702.44	39° 11' 20.951 N	80° 30' 43.018 W	

PROJECT DETAILS: Harrison County West Virginia

Geoids: System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 83 (NAD83 CONUS)
 Ellipsoid: Clarke 1866
 Zone: Zone 17N (84 W to 78 W)
 System Datum: Mean Sea Level

REFERENCE INFORMATION

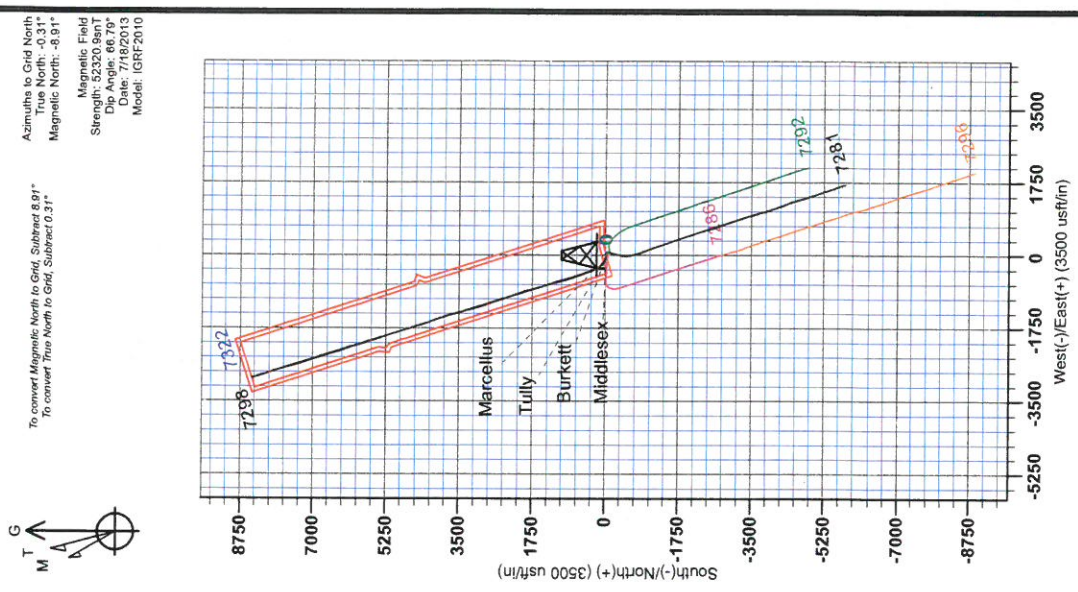
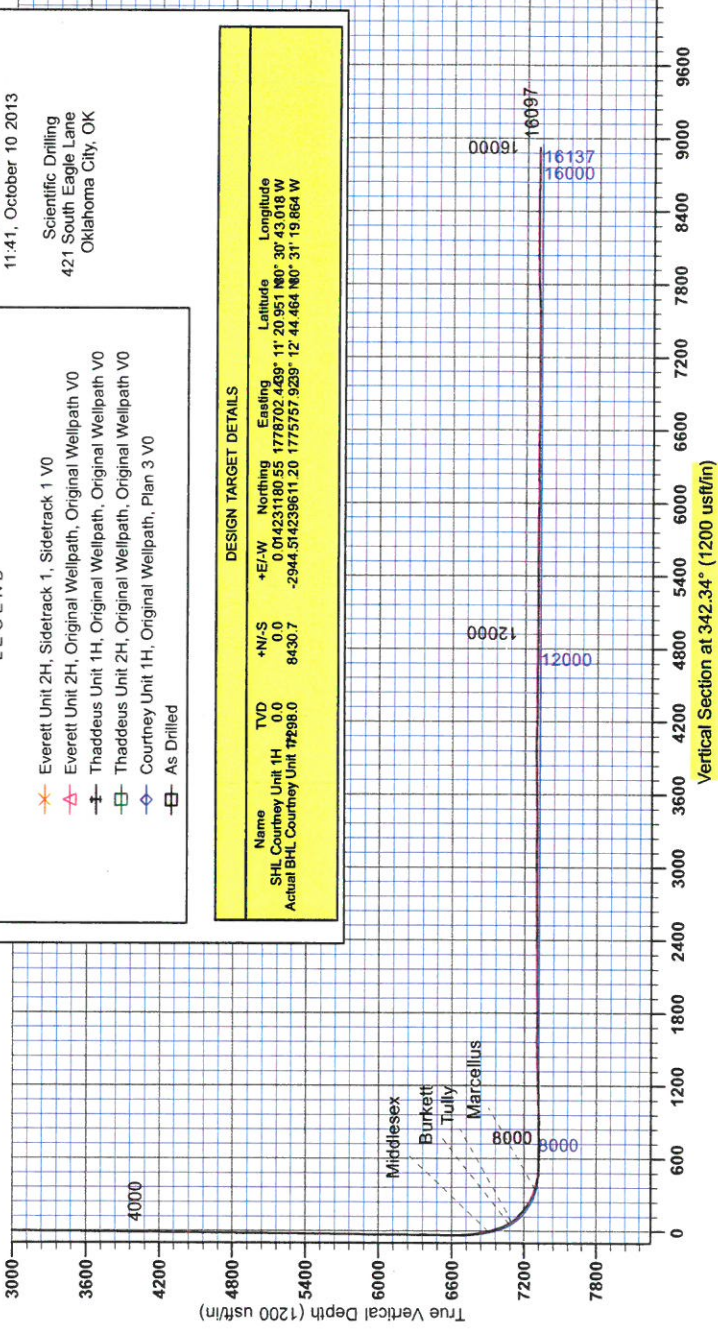
Coordinate (NED) Reference: Well Courtyard Unit 1H, Grid North
 Vertical (TVD) Reference: Courtyard Unit 1H, 1336' South (Original Well Elev)
 Measured Depth Reference: Courtyard Unit 1H, 1336' South (Original Well Elev)
 Calculation Method: Minimum Curvature

LEGEND

- ✖ Everett Unit 2H, Sidetrack 1, Sidetrack 1 V0
- △ Everett Unit 2H, Original Wellpath, Original Wellpath V0
- ⊕ Thaddeus Unit 1H, Original Wellpath, Original Wellpath V0
- ⊖ Thaddeus Unit 2H, Original Wellpath, Original Wellpath V0
- ◇ Courtney Unit 1H, Original Wellpath, Plan 3 V0
- As Drilled

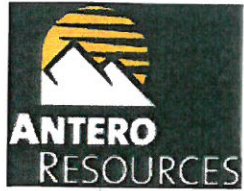
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL Courtney Unit 1H	0.0	0.0	0.0	014231180.55	1778702.44	39° 11' 20.951 N	80° 30' 43.018 W
Actual BHL Courtney Unit 1H	17899.0	8430.7	-2944.514	239611.20	1775757.923	12° 44.464 N	80° 31' 19.864 W



Azimuths to Grid North
 True North: -0.31°
 Magnetic North: -8.91°
 Strength: 52320.807
 Magnetic Field
 Dip Angle: 66.79°
 Date: 7/18/2013
 Model: IGRF2010

To convert Magnetic North to Grid, Subtract 8.91°
 To convert True North to Grid, Subtract 0.31°



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Antero Resources

**Harrison County West Virginia
Myer/Thaddeus/Everett/Courtney Pad
Courtney Unit 1H
Original Wellpath**

Design: As Drilled

EOW Completion Report

10 October, 2013



JUN 26 2015



WV GEOLOGICAL SURVEY
MORGANTOWN, WV

EOW Completion Report



Company: Antero Resources	Local Co-ordinate Reference: Well Courtney Unit 1H
Project: Harrison County West Virginia	TVD Reference: Courtney Unit 1H GL 1358'+28'RKB @ 1386.0usft
Site: Myer/Thaddeus/Everett/Courtney Pad	MD Reference: Courtney Unit 1H GL 1358'+28'RKB @ 1386.0usft
Well: Courtney Unit 1H	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 Fee	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 17N (84 W to 78 W)		

Site Myer/Thaddeus/Everett/Courtney Pad, SHL of Thaddeus Unit 2H			
Site Position:	Northing:	Latitude:	
From: Map	14,231,176.62 usft	39° 11' 20.911 N	
Position Uncertainty: 0.0 usft	Easting: 1,778,722.04 usft	Longitude: 80° 30' 42.769 W	
	Slot Radius: 13-3/16"	Grid Convergence: 0.31 °	

Well Courtney Unit 1H, Marcellus			
Well Position	+N/-S	Northing:	Latitude:
	0.0 usft	14,231,180.55 usft	39° 11' 20.951 N
	+E/-W 0.0 usft	Easting: 1,778,702.44 usft	Longitude: 80° 30' 43.018 W
Position Uncertainty 2.0 usft		Wellhead Elevation: 1,386.0 usft	Ground Level: 1,358.0 usft

Wellbore Original Wellpath					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/18/2013	-8.60	66.79	52,321

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	342.34	

Survey Program		Date 10/10/2013			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	6,604.2	Survey #2 Def Gyro to KOP (Original Well	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
6,633.0	16,097.0	Survey #3 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	0.65	187.35	100.0	-0.6	-0.1	-0.5	0.65
200.0	0.83	247.41	200.0	-1.4	-0.8	-1.1	0.76
300.0	1.18	283.78	300.0	-1.4	-2.5	-0.6	0.71
400.0	1.16	285.63	400.0	-0.9	-4.5	0.5	0.04
500.0	0.77	278.85	499.9	-0.5	-6.1	1.3	0.41
600.0	0.53	294.06	599.9	-0.3	-7.2	1.9	0.29
700.0	0.40	272.68	699.9	0.0	-8.0	2.4	0.21
800.0	0.35	282.75	799.9	0.0	-8.6	2.6	0.08
900.0	0.11	286.45	899.9	0.1	-9.0	2.9	0.24
1,000.0	0.08	322.59	999.9	0.2	-9.1	3.0	0.07

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EOW Completion Report

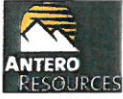


Company:	Antero Resources	Local Co-ordinate Reference:	Well Courtney Unit 1H
Project:	Harrison County West Virginia	TVD Reference:	Courtney Unit 1H GL 1358'+28'RKB @ 1386.0usft
Site:	Myer/Thaddeus/Everett/Courtney Pad	MD Reference:	Courtney Unit 1H GL 1358'+28'RKB @ 1386.0usft
Well:	Courtney Unit 1H	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)
1,100.0	0.08	82.82	1,099.9	0.3	-9.1	3.0	0.14
1,200.0	0.07	273.20	1,199.9	0.3	-9.1	3.0	0.15
1,300.0	0.02	54.90	1,299.9	0.3	-9.1	3.1	0.09
1,400.0	0.06	215.62	1,399.9	0.3	-9.2	3.0	0.08
1,500.0	0.05	5.57	1,499.9	0.3	-9.2	3.0	0.11
1,600.0	0.21	175.48	1,599.9	0.1	-9.2	2.9	0.26
1,700.0	0.03	276.18	1,699.9	0.0	-9.2	2.7	0.22
1,800.0	0.20	128.27	1,799.9	-0.2	-9.1	2.6	0.23
1,900.0	0.02	314.91	1,899.9	-0.2	-8.9	2.5	0.22
2,000.0	0.10	111.47	1,999.9	-0.3	-8.9	2.4	0.12
2,100.0	0.17	67.90	2,099.9	-0.2	-8.6	2.4	0.12
2,200.0	0.12	106.68	2,199.9	-0.2	-8.4	2.3	0.11
2,300.0	0.09	97.60	2,299.9	-0.3	-8.2	2.3	0.03
2,400.0	0.27	98.50	2,399.9	-0.3	-7.9	2.1	0.18
2,500.0	0.18	134.02	2,499.9	-0.4	-7.6	1.9	0.16
2,600.0	0.26	140.35	2,599.9	-0.7	-7.3	1.5	0.08
2,700.0	0.36	112.23	2,699.9	-1.0	-6.9	1.1	0.18
2,800.0	0.56	112.49	2,799.9	-1.3	-6.1	0.6	0.20
2,900.0	0.77	126.38	2,899.9	-1.9	-5.1	-0.3	0.26
3,000.0	0.77	124.19	2,999.9	-2.7	-4.1	-1.3	0.03
3,100.0	0.78	129.91	3,099.9	-3.5	-3.0	-2.4	0.08
3,200.0	0.74	130.12	3,199.9	-4.4	-2.0	-3.6	0.04
3,300.0	0.79	126.63	3,299.9	-5.2	-0.9	-4.7	0.07
3,400.0	0.55	118.92	3,399.9	-5.8	0.1	-5.6	0.26
3,500.0	0.55	134.11	3,499.9	-6.4	0.8	-6.3	0.15
3,600.0	0.78	158.66	3,599.9	-7.4	1.4	-7.4	0.36
3,700.0	0.50	148.73	3,699.9	-8.4	1.9	-8.6	0.30
3,800.0	0.47	160.45	3,799.8	-9.1	2.3	-9.4	0.10
3,900.0	0.30	151.46	3,899.8	-9.7	2.5	-10.1	0.18
4,000.0	0.32	157.67	3,999.8	-10.2	2.8	-10.6	0.04
4,100.0	0.76	174.57	4,099.8	-11.2	2.9	-11.5	0.46
4,200.0	0.44	168.16	4,199.8	-12.2	3.1	-12.5	0.33
4,300.0	0.44	190.61	4,299.8	-12.9	3.1	-13.3	0.17
4,400.0	0.51	190.04	4,399.8	-13.8	2.9	-14.0	0.07
4,500.0	0.45	191.30	4,499.8	-14.6	2.8	-14.7	0.06
4,600.0	0.43	191.36	4,599.8	-15.3	2.6	-15.4	0.02
4,700.0	0.46	175.99	4,699.8	-16.1	2.6	-16.1	0.12
4,800.0	0.52	168.88	4,799.8	-16.9	2.7	-17.0	0.09
4,900.0	0.68	169.01	4,899.8	-18.0	2.9	-18.0	0.16
5,000.0	0.78	169.88	4,999.8	-19.2	3.1	-19.3	0.10
5,100.0	0.72	161.02	5,099.8	-20.5	3.4	-20.6	0.13
5,200.0	0.54	162.82	5,199.8	-21.5	3.8	-21.7	0.18
5,300.0	0.52	168.39	5,299.8	-22.4	4.0	-22.6	0.06
5,400.0	0.74	163.86	5,399.8	-23.5	4.3	-23.7	0.23

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EOW Completion Report



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Site:	Myer/Thaddeus/Everett/Courtney Pad	MD Reference:	Courtney Unit 1H GL 1358'+28'RKB @ 1386.0usft
Well:	Courtney Unit 1H	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)
5,500.0	0.52	154.40	5,499.8	-24.5	4.7	-24.8	0.24
5,600.0	0.60	147.70	5,599.8	-25.4	5.1	-25.7	0.10
5,700.0	0.80	153.20	5,699.8	-26.4	5.7	-26.9	0.21
5,800.0	0.49	128.40	5,799.8	-27.3	6.4	-28.0	0.41
5,900.0	0.57	147.79	5,899.7	-28.0	7.0	-28.8	0.20
6,000.0	0.39	141.02	5,999.7	-28.7	7.5	-29.6	0.19
6,100.0	0.46	152.29	6,099.7	-29.3	7.9	-30.3	0.11
6,200.0	0.57	143.48	6,199.7	-30.1	8.3	-31.2	0.14
6,300.0	0.76	105.09	6,299.7	-30.7	9.3	-32.0	0.47
6,400.0	1.14	84.40	6,399.7	-30.7	10.9	-32.6	0.51
6,500.0	1.51	78.36	6,499.7	-30.4	13.2	-32.9	0.39
6,604.2	1.95	78.06	6,603.9	-29.7	16.3	-33.3	0.42
6,633.0	2.11	81.92	6,632.6	-29.5	17.3	-33.4	0.73
6,665.0	1.85	43.91	6,664.6	-29.1	18.2	-33.2	4.10
6,697.0	1.43	20.96	6,696.6	-28.3	18.7	-32.7	2.41
6,729.0	2.79	316.13	6,728.6	-27.4	18.3	-31.7	7.93
6,761.0	6.76	302.14	6,760.5	-25.8	16.2	-29.5	12.84
6,793.0	10.99	301.34	6,792.1	-23.3	12.0	-25.8	13.22
6,826.0	14.86	300.91	6,824.2	-19.4	5.7	-20.2	11.73
6,858.0	17.50	292.64	6,855.0	-15.5	-2.3	-14.1	10.93
6,890.0	19.96	289.04	6,885.3	-11.8	-11.9	-7.7	8.49
6,908.0	21.49	287.52	6,902.1	-9.9	-18.0	-3.9	8.98
Middlesex							
6,922.0	22.68	286.48	6,915.1	-8.3	-23.0	-1.0	8.98
6,954.0	26.17	286.00	6,944.2	-4.6	-35.7	6.4	10.92
6,986.0	29.78	286.17	6,972.5	-0.5	-50.1	14.8	11.28
7,018.0	32.83	286.55	6,999.8	4.2	-66.1	24.1	9.55
7,050.0	35.17	289.83	7,026.3	9.8	-83.0	34.6	9.29
7,082.0	37.77	291.79	7,052.1	16.6	-100.8	46.4	8.90
7,109.0	39.65	295.16	7,073.1	23.3	-116.3	57.5	10.45
Burkett							
7,115.0	40.08	295.87	7,077.7	25.0	-119.8	60.1	10.45
7,142.0	42.69	298.81	7,098.0	33.2	-135.6	72.8	12.04
Tully							
7,147.0	43.18	299.32	7,101.7	34.8	-138.6	75.2	12.04
7,178.0	46.78	302.40	7,123.6	46.1	-157.4	91.7	13.57
7,210.0	49.41	306.01	7,145.0	59.5	-177.1	110.4	11.75
7,242.0	51.18	308.90	7,165.4	74.5	-196.6	130.6	8.88
7,274.0	52.67	313.03	7,185.1	91.0	-215.6	152.1	11.17
7,307.0	53.99	316.63	7,204.9	109.6	-234.4	175.6	9.62
7,339.0	56.72	320.48	7,223.0	129.4	-251.8	199.7	13.07
7,371.0	60.06	323.45	7,239.8	150.8	-268.5	225.2	13.09
7,403.0	63.31	326.05	7,255.0	173.8	-284.8	252.0	12.42
7,435.0	66.70	328.45	7,268.5	198.2	-300.5	280.0	12.59
7,467.0	69.87	329.98	7,280.4	223.8	-315.7	309.0	10.86

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7,499.0	71.46	332.31	7,291.0	250.2	-330.3	338.6	8.48
7,505.0	71.82	332.65	7,292.8	255.3	-332.9	344.2	8.01
Marcellus							
7,531.0	73.38	334.09	7,300.6	277.4	-344.0	368.7	8.01
7,563.0	76.73	335.09	7,308.9	305.4	-357.3	399.4	10.90
7,596.0	78.89	336.79	7,315.8	334.8	-370.4	431.4	8.26
7,621.0	82.76	338.32	7,319.8	357.6	-379.8	456.0	16.62
7,685.0	88.20	339.31	7,324.9	417.1	-402.9	519.7	8.64
7,781.0	89.96	339.40	7,326.4	506.9	-436.7	615.5	1.84
7,877.0	89.60	338.08	7,326.8	596.4	-471.5	711.3	1.43
7,973.0	91.28	339.93	7,326.0	686.0	-505.9	807.1	2.60
8,070.0	91.63	342.21	7,323.6	777.7	-537.4	904.1	2.38
8,166.0	91.54	341.33	7,320.9	868.9	-567.4	1,000.0	0.92
8,263.0	90.84	345.03	7,318.9	961.7	-595.5	1,097.0	3.88
8,359.0	91.63	345.99	7,316.8	1,054.6	-619.5	1,192.8	1.29
8,456.0	90.04	346.70	7,315.4	1,148.8	-642.4	1,289.6	1.80
8,551.0	93.39	346.34	7,312.6	1,241.2	-664.5	1,384.3	3.55
8,647.0	91.80	342.04	7,308.2	1,333.4	-690.6	1,480.1	4.77
8,744.0	89.60	341.60	7,307.0	1,425.6	-720.9	1,577.1	2.31
8,840.0	89.25	340.28	7,308.0	1,516.3	-752.2	1,673.0	1.42
8,936.0	90.57	343.80	7,308.2	1,607.6	-781.8	1,769.0	3.92
9,032.0	90.48	345.55	7,307.3	1,700.2	-807.2	1,864.9	1.83
9,129.0	91.01	346.43	7,306.0	1,794.3	-830.7	1,961.7	1.06
9,225.0	88.81	342.92	7,306.2	1,886.8	-856.0	2,057.6	4.31
9,322.0	90.66	343.27	7,306.6	1,979.6	-884.2	2,154.6	1.94
9,418.0	91.19	340.19	7,305.1	2,070.8	-914.3	2,250.6	3.26
9,514.0	90.84	340.54	7,303.4	2,161.2	-946.6	2,346.5	0.52
9,611.0	89.52	338.52	7,303.1	2,252.1	-980.5	2,443.4	2.49
9,707.0	90.92	341.16	7,302.7	2,342.2	-1,013.6	2,539.3	3.11
9,804.0	90.75	340.72	7,301.3	2,433.8	-1,045.3	2,636.2	0.49
9,900.0	90.57	342.65	7,300.2	2,525.0	-1,075.4	2,732.2	2.02
9,991.0	89.60	341.42	7,300.0	2,611.5	-1,103.5	2,823.2	1.72
10,082.0	90.92	342.74	7,299.6	2,698.1	-1,131.5	2,914.2	2.05
10,173.0	89.96	341.77	7,298.9	2,784.8	-1,159.2	3,005.2	1.50
10,264.0	89.43	340.54	7,299.4	2,870.9	-1,188.6	3,096.2	1.47
10,355.0	90.48	341.42	7,299.5	2,956.9	-1,218.3	3,187.2	1.51
10,447.0	89.34	341.95	7,299.6	3,044.3	-1,247.2	3,279.1	1.37
10,538.0	89.08	342.83	7,300.9	3,131.0	-1,274.7	3,370.1	1.01
10,630.0	91.19	345.46	7,300.7	3,219.5	-1,299.8	3,462.1	3.66
10,721.0	91.10	344.94	7,298.8	3,307.4	-1,323.1	3,552.9	0.58
10,812.0	90.13	343.36	7,297.9	3,395.0	-1,347.9	3,643.9	2.04
10,903.0	91.10	347.93	7,296.9	3,483.1	-1,370.5	3,734.7	5.13
10,994.0	89.60	342.92	7,296.3	3,571.1	-1,393.4	3,825.5	5.75
11,091.0	92.59	346.78	7,294.5	3,664.7	-1,418.7	3,922.4	5.03

JUN 26 2015



WV GEOLOGICAL SURVEY
MORGANTOWN, WV

EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Courtney Unit 1H
Project:	Harrison County West Virginia	TVD Reference:	Courtney Unit 1H GL 1358'+28'RKB @ 1386.0usft
Site:	Myer/Thaddeus/Everett/Courtney Pad	MD Reference:	Courtney Unit 1H GL 1358'+28'RKB @ 1386.0usft
Well:	Courtney Unit 1H	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)
11,186.0	87.85	340.28	7,294.1	3,755.7	-1,445.6	4,017.3	8.47
11,283.0	88.55	341.51	7,297.2	3,847.4	-1,477.4	4,114.2	1.46
11,379.0	89.90	342.87	7,298.5	3,938.7	-1,506.7	4,210.2	2.00
11,475.0	89.96	339.49	7,298.6	4,029.6	-1,537.7	4,306.2	3.52
11,572.0	90.40	340.28	7,298.3	4,120.7	-1,571.0	4,403.1	0.93
11,668.0	89.78	340.81	7,298.1	4,211.2	-1,603.0	4,499.0	0.85
11,765.0	89.43	339.66	7,298.8	4,302.5	-1,635.8	4,596.0	1.24
11,861.0	89.43	342.56	7,299.7	4,393.3	-1,666.9	4,691.9	3.02
11,957.0	89.16	343.18	7,300.9	4,485.0	-1,695.2	4,787.9	0.70
12,052.0	89.25	342.30	7,302.2	4,575.7	-1,723.4	4,882.9	0.93
12,148.0	90.31	342.65	7,302.6	4,667.3	-1,752.3	4,978.9	1.16
12,244.0	89.96	342.83	7,302.4	4,759.0	-1,780.7	5,074.9	0.41
12,341.0	89.60	343.00	7,302.8	4,851.7	-1,809.2	5,171.9	0.41
12,437.0	90.57	342.56	7,302.6	4,943.4	-1,837.7	5,267.9	1.11
12,533.0	89.87	342.92	7,302.3	5,035.0	-1,866.1	5,363.9	0.82
12,630.0	90.75	342.74	7,301.7	5,127.7	-1,894.8	5,460.9	0.93
12,726.0	89.69	342.21	7,301.4	5,219.3	-1,923.7	5,556.9	1.23
12,823.0	90.40	341.77	7,301.3	5,311.5	-1,953.7	5,653.9	0.86
12,919.0	89.96	342.04	7,301.0	5,402.8	-1,983.5	5,749.9	0.54
13,016.0	88.72	339.66	7,302.1	5,494.4	-2,015.3	5,846.8	2.77
13,111.0	88.02	340.54	7,304.8	5,583.7	-2,047.6	5,941.7	1.18
13,206.0	89.52	341.33	7,306.8	5,673.4	-2,078.7	6,036.7	1.78
13,302.0	91.80	344.85	7,305.7	5,765.3	-2,106.6	6,132.6	4.37
13,398.0	90.04	342.04	7,304.2	5,857.2	-2,133.9	6,228.6	3.45
13,495.0	89.69	343.27	7,304.4	5,949.8	-2,162.8	6,325.6	1.32
13,590.0	89.43	342.65	7,305.2	6,040.7	-2,190.7	6,420.6	0.71
13,687.0	90.48	342.21	7,305.2	6,133.1	-2,220.0	6,517.6	1.17
13,782.0	88.37	339.93	7,306.2	6,223.0	-2,250.8	6,612.5	3.27
13,879.0	90.13	341.07	7,307.4	6,314.4	-2,283.1	6,709.5	2.16
13,975.0	90.31	344.15	7,307.1	6,406.0	-2,311.8	6,805.4	3.21
14,072.0	90.13	343.36	7,306.7	6,499.1	-2,339.0	6,902.4	0.84
14,168.0	89.87	342.83	7,306.7	6,591.0	-2,366.9	6,998.4	0.61
14,264.0	89.25	342.04	7,307.4	6,682.5	-2,395.8	7,094.4	1.05
14,360.0	90.75	342.48	7,307.4	6,773.9	-2,425.1	7,190.4	1.63
14,456.0	89.34	340.72	7,307.4	6,865.0	-2,455.4	7,286.4	2.35
14,552.0	90.66	341.95	7,307.4	6,956.0	-2,486.1	7,382.4	1.88
14,647.0	90.13	341.60	7,306.7	7,046.2	-2,515.8	7,477.4	0.67
14,743.0	89.96	342.13	7,306.6	7,137.4	-2,545.7	7,573.4	0.58
14,839.0	91.89	342.21	7,305.1	7,228.8	-2,575.1	7,669.3	2.01
14,936.0	92.42	344.41	7,301.4	7,321.6	-2,602.9	7,766.2	2.33
15,032.0	92.42	344.67	7,297.4	7,414.1	-2,628.5	7,862.1	0.27
15,129.0	90.92	344.85	7,294.6	7,507.6	-2,654.0	7,959.0	1.56
15,225.0	90.48	343.88	7,293.4	7,600.1	-2,679.9	8,054.9	1.11
15,321.0	90.84	343.36	7,292.3	7,692.2	-2,706.9	8,150.9	0.66
15,418.0	90.13	344.06	7,291.5	7,785.3	-2,734.1	8,247.8	1.03



EOW Completion Report



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Site:	Myer/Thaddeus/Everett/Courtney Pad	MD Reference:	Courtney Unit 1H GL 1358'+28'RKB @ 1386.0usft
Well:	Courtney Unit 1H	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)
15,513.0	89.16	342.65	7,292.1	7,876.3	-2,761.3	8,342.8	1.80
15,610.0	89.34	341.77	7,293.3	7,968.6	-2,791.0	8,439.8	0.93
15,706.0	89.52	342.21	7,294.3	8,059.9	-2,820.7	8,535.8	0.50
15,803.0	89.69	339.14	7,294.9	8,151.5	-2,852.8	8,632.7	3.17
15,899.0	90.04	341.77	7,295.2	8,241.9	-2,884.9	8,728.7	2.76
15,995.0	90.04	342.30	7,295.1	8,333.2	-2,914.5	8,824.7	0.55
16,050.0	87.79	343.07	7,296.1	8,385.7	-2,930.8	8,879.7	4.32
16,097.0	87.79	343.07	7,298.0	8,430.7	-2,944.5	8,926.6	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,908.0	6,902.1	-9.9	-18.0	Middlesex
7,109.0	7,073.1	23.3	-116.3	Burkett
7,142.0	7,098.0	33.2	-135.6	Tully
7,505.0	7,292.8	255.3	-332.9	Marcellus

Checked By: _____ Approved By: _____ Date: _____

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