

RECEIVED

JUL 20 2015

WV GEOLOGICAL SURVEY
MORGANTOWN, WV



Washington Unit 1H
Doddridge County WV
Northing: 14247229.61
Easting: 1685703.32
As Drilled



WELL DETAILS Washington Unit 1H
Ground Level: 1053.0
Northing: 14247229.61
Easting: 1685703.32
Longitude: 50° 24' 24.44 W
Latitude: 39° 14' 2.926 N

Genis Lightfoot
15:30, September 11 2014
Scientific Drilling
421 South Eagle Lane
Oklahoma City, OK 73128

Azimuths to Grid North
True North: -0.10°
Magnetic North: -8.51°
Magnetic Field
Strength: 52307.5nT
Dip Angle: 66.80°
Date: 3/5/2014
Model: IGRF2010

To convert Magnetic North to Grid, Subtract 8.51°
To convert True North to Grid, Subtract 0.10°

Patt 325 Washington 1H 1053 GL + 24 KB @ 1077.0usft
Gr: 1053.0

LEGEND

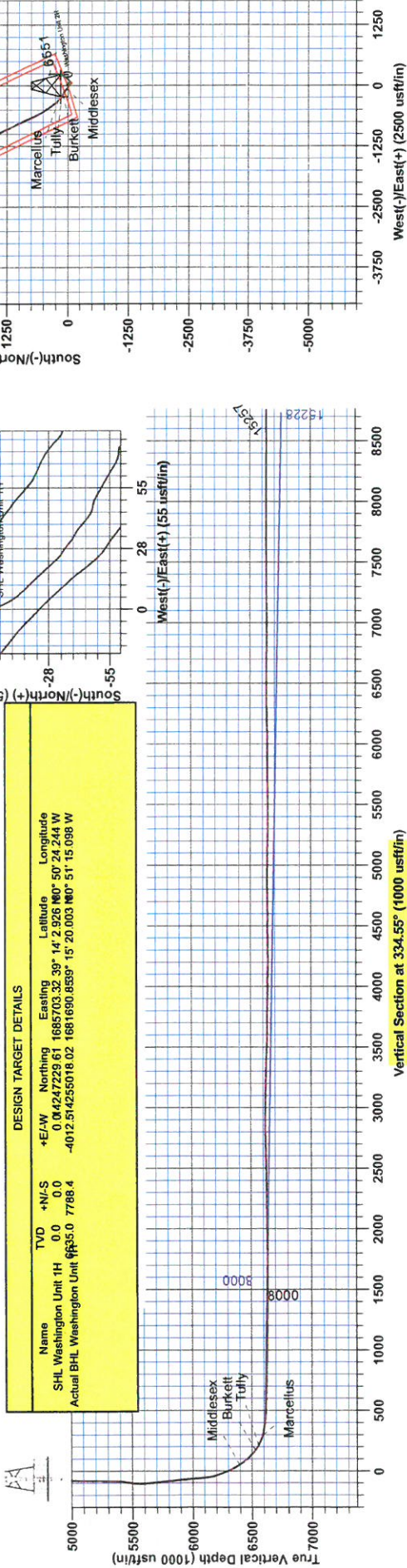
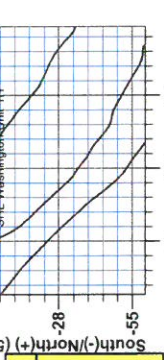
- Washington Unit 2H, Original Wellpath, As Drilled V0
- Washington Unit 1H, Original Wellpath, Plan 7 V0
- As Drilled

PROJECT DETAILS:Doddridge County WV

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

DESIGN TARGET DETAILS

Name	TVD	+N/S	+E/W	Northing	Easting	Latitude	Longitude
SHL Washington Unit 1H	0.0	0.0	0.0	14247229.61	1685703.32	39° 14' 2.926 N	50° 24' 24.44 W
Actual BHL Washington Unit	6635.0	7788.4	-4012.914255018.02	1681690.8599°	15° 20.003 N	51° 15.098 W	





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MORGANTOWN, WV

Antero Resources

Doddridge County WV
Fritz Pad: Hayden/Washington/Sheep/Hileman
Washington Unit 1H
Original Wellpath

Design: As Drilled

EOW Completion Report

11 September, 2014



JUL 20 2015



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Washington Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 325 Washington 1H 1053 GL + 24 KB @ 107
Site:	Fritz Pad: Hayden/Washington/Sheep/Hileman	MD Reference:	Patt 325 Washington 1H 1053 GL + 24 KB @ 107
Well:	Washington Unit 1H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Project	Doddridge County WV, McClellan District		
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	Fritz Pad: Hayden/Washington/Sheep/Hileman				
Site Position:		Northing:	14,247,222.50 usft	Latitude:	39° 14' 2.856 N
From:	Map	Easting:	1,685,696.44 usft	Longitude:	80° 50' 24.332 W
Position Uncertainty:	2.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.10 °

Well	Washington Unit 1H, Marcellus					
Well Position	+N/-S	0.0 usft	Northing:	14,247,229.61 usft	Latitude:	39° 14' 2.926 N
	+E/-W	0.0 usft	Easting:	1,685,703.32 usft	Longitude:	80° 50' 24.244 W
Position Uncertainty		2.0 usft	Wellhead Elevation:	1,077.0 usft	Ground Level:	1,053.0 usft

Wellbore	Original Wellpath
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/5/2014	-8.41	66.80	52,308

Design	As Drilled
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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	334.55

Survey Program	Date	9/11/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
113.0	5,288.0	Survey #5 Final Gyro to KOP (Original Wellbore)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
5,296.0	15,257.0	Survey #6 MWD (Original Wellpath)	MWD SDI	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
113.0	0.40	210.14	113.0	-0.3	-0.2	-0.2	0.35
213.0	0.36	157.27	213.0	-0.9	-0.3	-0.7	0.34
313.0	0.71	173.50	313.0	-1.8	-0.1	-1.6	0.38
413.0	0.61	161.01	413.0	-3.0	0.2	-2.7	0.17
513.0	0.86	148.53	513.0	-4.1	0.7	-4.0	0.30
613.0	1.02	157.22	613.0	-5.6	1.5	-5.7	0.21
713.0	1.03	152.47	712.9	-7.2	2.2	-7.4	0.09
813.0	1.09	149.00	812.9	-8.8	3.1	-9.3	0.09
913.0	1.07	152.79	912.9	-10.4	4.1	-11.2	0.07
1,013.0	0.96	147.85	1,012.9	-12.0	4.9	-12.9	0.14



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North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
1,113.0	0.98	133.34	1,112.9	-13.3	6.0	-14.6	0.25
1,213.0	1.13	140.70	1,212.9	-14.6	7.3	-16.3	0.20
1,313.0	1.02	141.66	1,312.8	-16.1	8.4	-18.1	0.11
1,413.0	1.06	134.98	1,412.8	-17.4	9.6	-19.9	0.13
1,513.0	1.21	128.31	1,512.8	-18.7	11.1	-21.7	0.20
1,613.0	1.32	138.38	1,612.8	-20.3	12.7	-23.8	0.25
1,713.0	1.21	134.68	1,712.8	-21.9	14.2	-25.9	0.14
1,813.0	1.55	136.68	1,812.7	-23.6	15.9	-28.1	0.34
1,913.0	1.23	143.05	1,912.7	-25.4	17.5	-30.5	0.35
2,013.0	1.01	136.25	2,012.7	-26.9	18.7	-32.4	0.26
2,113.0	1.09	131.20	2,112.7	-28.2	20.1	-34.1	0.12
2,213.0	0.88	142.71	2,212.7	-29.4	21.2	-35.7	0.29
2,313.0	0.99	132.13	2,312.6	-30.6	22.3	-37.2	0.20
2,413.0	1.01	142.03	2,412.6	-31.9	23.5	-38.9	0.17
2,513.0	0.82	114.45	2,512.6	-32.9	24.7	-40.3	0.47
2,613.0	0.90	123.21	2,612.6	-33.6	26.0	-41.5	0.15
2,713.0	0.93	128.23	2,712.6	-34.5	27.3	-42.9	0.09
2,813.0	0.97	126.95	2,812.6	-35.6	28.6	-44.4	0.05
2,913.0	1.02	131.74	2,912.6	-36.7	30.0	-46.0	0.10
3,013.0	0.88	124.11	3,012.5	-37.7	31.3	-47.5	0.19
3,113.0	0.90	123.41	3,112.5	-38.5	32.6	-48.8	0.02
3,213.0	1.04	119.19	3,212.5	-39.4	34.0	-50.2	0.16
3,313.0	0.98	125.08	3,312.5	-40.3	35.5	-51.7	0.12
3,413.0	0.99	130.95	3,412.5	-41.4	36.9	-53.2	0.10
3,513.0	0.88	125.87	3,512.5	-42.4	38.1	-54.7	0.14
3,613.0	0.89	128.81	3,612.5	-43.4	39.4	-56.1	0.05
3,713.0	0.96	129.77	3,712.5	-44.4	40.6	-57.5	0.07
3,813.0	0.96	125.86	3,812.4	-45.4	41.9	-59.0	0.07
3,913.0	0.89	130.26	3,912.4	-46.4	43.2	-60.5	0.10
4,013.0	0.76	98.30	4,012.4	-47.0	44.5	-61.5	0.47
4,113.0	1.00	103.77	4,112.4	-47.3	46.0	-62.5	0.25
4,213.0	1.07	102.12	4,212.4	-47.7	47.7	-63.6	0.08
4,313.0	1.05	109.06	4,312.4	-48.2	49.5	-64.8	0.13
4,413.0	1.41	121.38	4,412.3	-49.1	51.4	-66.5	0.44
4,513.0	1.57	116.98	4,512.3	-50.4	53.7	-68.6	0.20
4,613.0	1.70	119.44	4,612.3	-51.8	56.2	-70.9	0.15
4,713.0	2.15	119.74	4,712.2	-53.4	59.1	-73.6	0.45
4,813.0	1.99	119.70	4,812.2	-55.2	62.3	-76.6	0.16
4,913.0	1.31	126.09	4,912.1	-56.7	64.7	-79.0	0.70
5,013.0	1.19	116.06	5,012.1	-57.9	66.5	-80.8	0.25
5,113.0	1.16	106.32	5,112.1	-58.6	68.5	-82.3	0.20
5,213.0	1.18	96.80	5,212.0	-59.0	70.4	-83.6	0.20
5,288.0	1.06	92.35	5,287.0	-59.1	71.9	-84.3	0.20
5,296.0	1.31	96.60	5,295.0	-59.1	72.1	-84.4	3.31



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Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
5,327.0	1.10	100.87	5,326.0	-59.2	72.7	-84.7	0.74
5,359.0	1.28	104.25	5,358.0	-59.4	73.4	-85.2	0.60
5,390.0	2.56	162.27	5,389.0	-60.1	73.9	-86.1	7.01
5,422.0	7.19	182.77	5,420.9	-62.8	74.0	-88.5	15.23
5,453.0	11.82	187.43	5,451.4	-67.9	73.5	-92.9	15.13
5,484.0	13.92	190.70	5,481.7	-74.7	72.4	-98.6	7.17
5,516.0	11.50	209.81	5,512.9	-81.3	70.1	-103.5	15.06
5,547.0	8.90	230.83	5,543.4	-85.5	66.7	-105.9	14.51
5,578.0	7.03	256.35	5,574.1	-87.4	63.0	-106.0	12.75
5,609.0	6.37	288.26	5,604.9	-87.3	59.5	-104.5	12.03
5,641.0	6.39	306.00	5,636.7	-85.7	56.4	-101.7	6.14
5,672.0	5.98	324.19	5,667.5	-83.4	54.1	-98.6	6.43
5,704.0	6.05	327.59	5,699.4	-80.6	52.2	-95.2	1.13
5,735.0	6.01	326.32	5,730.2	-77.9	50.4	-92.0	0.45
5,766.0	6.10	324.43	5,761.0	-75.2	48.6	-88.8	0.71
5,798.0	5.62	325.48	5,792.9	-72.5	46.7	-85.6	1.54
5,829.0	5.19	329.13	5,823.7	-70.1	45.1	-82.7	1.78
5,860.0	5.20	328.66	5,854.6	-67.7	43.7	-79.9	0.14
5,892.0	6.12	324.18	5,886.4	-65.1	41.9	-76.8	3.19
5,923.0	6.54	315.27	5,917.2	-62.5	39.7	-73.5	3.44
5,955.0	6.08	312.02	5,949.1	-60.0	37.2	-70.2	1.82
5,986.0	5.71	307.60	5,979.9	-58.0	34.7	-67.3	1.89
6,018.0	5.18	305.08	6,011.7	-56.2	32.3	-64.6	1.82
6,049.0	4.05	305.19	6,042.6	-54.8	30.2	-62.4	3.65
6,080.0	4.70	300.96	6,073.6	-53.5	28.2	-60.4	2.34
6,112.0	6.62	309.01	6,105.4	-51.6	25.7	-57.7	6.48
6,143.0	10.16	317.77	6,136.1	-48.5	22.5	-53.4	12.11
6,173.0	13.60	322.60	6,165.4	-43.7	18.5	-47.5	11.93
6,204.0	16.47	320.16	6,195.3	-37.5	13.5	-39.6	9.48
6,235.0	19.66	316.16	6,224.8	-30.3	7.1	-30.4	11.04
6,267.0	22.71	315.10	6,254.7	-22.1	-1.0	-19.5	9.61
6,298.0	24.97	310.66	6,283.0	-13.6	-10.2	-7.9	9.30
6,329.0	27.37	306.37	6,310.8	-5.1	-20.9	4.4	9.85
6,361.0	29.51	304.50	6,339.0	3.8	-33.3	17.7	7.24
6,392.0	32.74	305.01	6,365.5	12.9	-46.5	31.6	10.45
6,423.0	35.58	305.74	6,391.2	23.0	-60.7	46.8	9.26
6,428.0	36.02	305.79	6,395.2	24.7	-63.1	49.4	8.77
Middlesex							
6,455.0	38.38	306.04	6,416.7	34.3	-76.3	63.7	8.77
6,486.0	41.81	306.03	6,440.4	46.0	-92.4	81.2	11.06
6,518.0	44.92	305.44	6,463.7	58.8	-110.2	100.5	9.80
6,549.0	48.21	304.48	6,485.0	71.7	-128.7	120.1	10.85
6,580.0	51.77	304.64	6,504.9	85.2	-148.2	140.6	11.49
6,612.0	55.24	304.59	6,524.0	99.8	-169.4	162.9	10.84

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EOW Completion Report



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Well: Washington Unit 1H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Washington Unit 1H
TVD Reference: Patt 325 Washington 1H 1053 GL + 24 KB @ 107
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Survey

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6,621.0	56.57	304.80	6,529.0	104.0	-175.5	169.4	14.86
Burkett							
6,643.0	59.81	305.28	6,540.6	114.8	-190.8	185.6	14.86
6,672.0	63.68	306.14	6,554.3	129.7	-211.6	208.0	13.60
Tully							
6,675.0	64.08	306.23	6,555.6	131.3	-213.8	210.4	13.60
6,706.0	67.41	306.68	6,568.4	148.1	-236.5	235.3	10.82
6,737.0	71.15	308.68	6,579.3	165.8	-259.4	261.2	13.49
6,769.0	75.00	310.62	6,588.7	185.3	-283.0	288.9	13.36
6,777.0	75.92	311.16	6,590.7	190.4	-288.8	296.0	13.17
Marcellus							
6,799.0	78.44	312.62	6,595.5	204.7	-304.8	315.8	13.17
6,830.0	81.34	314.85	6,601.0	225.8	-326.9	344.4	11.73
6,861.0	82.66	316.84	6,605.3	247.8	-348.2	373.4	7.65
6,893.0	83.10	319.57	6,609.3	271.5	-369.4	403.9	8.58
6,924.0	83.80	321.15	6,612.8	295.2	-389.0	433.8	5.54
6,956.0	85.12	322.73	6,615.9	320.3	-408.7	464.8	6.42
7,050.0	89.08	326.16	6,620.6	396.7	-463.2	557.2	5.57
7,144.0	88.11	325.72	6,623.0	474.5	-515.9	650.1	1.13
7,238.0	88.20	329.06	6,626.0	553.6	-566.5	743.3	3.55
7,333.0	88.81	333.10	6,628.5	636.7	-612.4	838.1	4.30
7,427.0	88.02	333.28	6,631.1	720.6	-654.8	932.1	0.86
7,521.0	88.55	333.54	6,633.9	804.6	-696.8	1,026.0	0.63
7,615.0	91.10	335.12	6,634.2	889.3	-737.6	1,120.0	3.19
7,709.0	89.52	335.91	6,633.7	974.9	-776.5	1,214.0	1.88
7,803.0	89.34	335.91	6,634.6	1,060.7	-814.9	1,307.9	0.19
7,897.0	89.60	335.56	6,635.5	1,146.4	-853.5	1,401.9	0.46
7,992.0	90.04	335.03	6,635.8	1,232.7	-893.2	1,496.9	0.73
8,086.0	90.40	334.60	6,635.4	1,317.7	-933.2	1,590.9	0.60
8,180.0	87.76	334.16	6,636.9	1,402.5	-973.9	1,684.9	2.85
8,274.0	90.31	334.51	6,638.5	1,487.2	-1,014.6	1,778.9	2.74
8,369.0	92.68	333.98	6,636.0	1,572.7	-1,055.8	1,873.8	2.56
8,463.0	89.96	334.68	6,633.8	1,657.4	-1,096.5	1,967.8	2.99
8,557.0	91.36	333.72	6,632.8	1,742.0	-1,137.4	2,061.8	1.81
8,651.0	90.66	332.49	6,631.1	1,825.8	-1,179.9	2,155.7	1.51
8,745.0	90.75	334.95	6,629.9	1,910.1	-1,221.6	2,249.7	2.62
8,840.0	90.04	335.65	6,629.3	1,996.4	-1,261.3	2,344.7	1.05
8,934.0	90.57	334.33	6,628.8	2,081.6	-1,301.0	2,438.7	1.51
9,027.0	91.63	334.42	6,627.0	2,165.4	-1,341.2	2,531.7	1.14
9,122.0	91.54	334.07	6,624.4	2,251.0	-1,382.5	2,626.6	0.38
9,216.0	91.98	334.86	6,621.5	2,335.8	-1,423.0	2,720.6	0.96
9,310.0	90.48	335.56	6,619.5	2,421.1	-1,462.4	2,814.5	1.76
9,404.0	89.25	335.74	6,619.7	2,506.7	-1,501.1	2,908.5	1.32
9,498.0	88.25	335.74	6,621.7	2,592.4	-1,539.7	3,002.5	1.06
9,592.0	89.87	335.65	6,623.3	2,678.0	-1,578.4	3,096.4	1.73

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MORGANTOWN, WV

EOW Completion Report



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Project: Doddridge County WV
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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
9,687.0	88.99	333.72	6,624.2	2,763.9	-1,619.0	3,191.4	2.23
9,781.0	88.72	333.98	6,626.1	2,848.3	-1,660.5	3,285.4	0.40
9,875.0	87.85	334.33	6,628.9	2,932.8	-1,701.4	3,379.4	1.00
9,970.0	87.76	334.24	6,632.6	3,018.4	-1,742.6	3,474.3	0.13
10,064.0	87.93	333.98	6,636.1	3,102.9	-1,783.6	3,568.2	0.33
10,158.0	89.78	334.24	6,638.0	3,187.4	-1,824.7	3,662.2	1.99
10,251.0	89.16	334.68	6,638.8	3,271.3	-1,864.8	3,755.2	0.82
10,343.0	89.34	334.42	6,640.0	3,354.4	-1,904.3	3,847.2	0.34
10,435.0	88.90	334.51	6,641.5	3,437.4	-1,943.9	3,939.2	0.49
10,526.0	89.87	333.80	6,642.4	3,519.3	-1,983.6	4,030.2	1.32
10,618.0	88.99	331.87	6,643.3	3,601.1	-2,025.6	4,122.1	2.31
10,709.0	88.90	333.19	6,645.0	3,681.8	-2,067.6	4,213.0	1.45
10,801.0	91.19	335.47	6,644.9	3,764.7	-2,107.4	4,305.0	3.51
10,892.0	90.92	335.47	6,643.3	3,847.5	-2,145.2	4,396.0	0.30
10,983.0	90.13	335.47	6,642.4	3,930.3	-2,183.0	4,487.0	0.87
11,074.0	89.16	334.95	6,643.0	4,012.9	-2,221.1	4,578.0	1.21
11,164.0	90.92	335.30	6,642.9	4,094.6	-2,259.0	4,668.0	1.99
11,257.0	90.75	335.03	6,641.6	4,179.0	-2,298.0	4,761.0	0.34
11,351.0	90.48	334.60	6,640.6	4,264.0	-2,338.0	4,854.9	0.54
11,446.0	89.52	334.51	6,640.6	4,349.8	-2,378.9	4,949.9	1.01
11,541.0	88.64	333.89	6,642.1	4,435.3	-2,420.2	5,044.9	1.13
11,635.0	90.04	334.42	6,643.2	4,519.9	-2,461.2	5,138.9	1.59
11,730.0	89.60	333.98	6,643.5	4,605.4	-2,502.5	5,233.9	0.66
11,824.0	88.90	333.45	6,644.7	4,689.7	-2,544.1	5,327.9	0.93
11,919.0	89.87	334.60	6,645.7	4,775.1	-2,585.7	5,422.9	1.58
12,014.0	89.60	335.12	6,646.2	4,861.1	-2,626.1	5,517.9	0.62
12,107.0	90.22	336.35	6,646.3	4,945.9	-2,664.3	5,610.9	1.48
12,203.0	90.66	337.06	6,645.6	5,034.1	-2,702.3	5,706.8	0.87
12,297.0	90.31	335.56	6,644.8	5,120.1	-2,740.0	5,800.7	1.64
12,391.0	89.60	334.42	6,644.9	5,205.3	-2,779.8	5,894.7	1.43
12,486.0	90.48	335.39	6,644.8	5,291.3	-2,820.1	5,989.7	1.38
12,580.0	91.54	336.97	6,643.1	5,377.3	-2,858.0	6,083.7	2.02
12,674.0	91.63	336.70	6,640.5	5,463.7	-2,895.0	6,177.6	0.30
12,768.0	91.10	336.97	6,638.3	5,550.1	-2,932.0	6,271.5	0.63
12,862.0	89.78	337.41	6,637.6	5,636.7	-2,968.4	6,365.4	1.48
12,956.0	89.87	336.09	6,637.9	5,723.1	-3,005.5	6,459.3	1.41
13,050.0	89.78	336.79	6,638.1	5,809.3	-3,043.1	6,553.2	0.75
13,144.0	89.78	335.21	6,638.5	5,895.1	-3,081.3	6,647.2	1.68
13,238.0	90.22	335.65	6,638.5	5,980.6	-3,120.4	6,741.2	0.66
13,332.0	88.99	336.09	6,639.2	6,066.4	-3,158.8	6,835.2	1.39
13,426.0	88.20	334.51	6,641.5	6,151.8	-3,198.1	6,929.1	1.88
13,520.0	91.63	336.27	6,641.6	6,237.2	-3,237.2	7,023.1	4.10
13,615.0	91.36	336.35	6,639.1	6,324.2	-3,275.4	7,118.0	0.30
13,709.0	90.84	333.36	6,637.3	6,409.3	-3,315.3	7,212.0	3.23
13,803.0	90.48	329.67	6,636.2	6,491.9	-3,360.1	7,305.8	3.94

JUL 20 2015



EOW Completion Report



Company: Antero Resources
Project: Doddridge County WV
Site: Fritz Pad: Hayden/Washington/Sheep/Hileman
Well: Washington Unit 1H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Washington Unit 1H
TVD Reference: Patt 325 Washington 1H 1053 GL + 24 KB @ 107
MD Reference: Patt 325 Washington 1H 1053 GL + 24 KB @ 107
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
13,897.0	89.87	328.88	6,635.9	6,572.7	-3,408.2	7,399.4	1.06
13,991.0	90.04	329.32	6,636.0	6,653.3	-3,456.4	7,493.0	0.50
14,085.0	89.25	327.04	6,636.6	6,733.2	-3,506.0	7,586.4	2.57
14,179.0	88.37	329.41	6,638.6	6,813.1	-3,555.5	7,679.8	2.69
14,273.0	92.33	335.83	6,638.0	6,896.5	-3,598.7	7,773.7	8.02
14,367.0	90.66	336.27	6,635.5	6,982.4	-3,636.8	7,867.6	1.84
14,461.0	90.13	336.44	6,634.9	7,068.5	-3,674.5	7,961.6	0.59
14,555.0	89.96	335.47	6,634.8	7,154.3	-3,712.8	8,055.5	1.05
14,650.0	89.60	335.56	6,635.2	7,240.8	-3,752.2	8,150.5	0.39
14,744.0	90.31	336.97	6,635.2	7,326.8	-3,790.0	8,244.5	1.68
14,838.0	89.52	336.97	6,635.4	7,413.3	-3,826.8	8,338.4	0.84
14,933.0	89.43	336.02	6,636.3	7,500.4	-3,864.7	8,433.3	1.00
15,027.0	90.57	335.47	6,636.3	7,586.1	-3,903.3	8,527.3	1.35
15,121.0	90.48	332.05	6,635.4	7,670.4	-3,944.9	8,621.3	3.64
15,207.0	90.04	329.32	6,635.0	7,745.4	-3,987.0	8,707.1	3.22
15,257.0	90.04	329.32	6,635.0	7,788.4	-4,012.5	8,756.9	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,428.0	6,395.2	24.7	-63.1	Middlesex
6,621.0	6,529.0	104.0	-175.5	Burkett
6,672.0	6,554.3	129.7	-211.6	Tully
6,777.0	6,590.7	190.4	-288.8	Marcellus

Checked By: _____ Approved By: _____ Date: _____