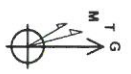




Belle Unit 2H
Ritchie County WV
Northing: 14281133.04
Easting: 1661490.68
As Drilled



To convert Magnetic North to Grid, Subtract 8.48°
 To convert True North to Grid, Subtract 0.05°

Azimuths to Grid North
 True North: -0.05°
 Magnetic North: -8.48°
 Magnetic Field
 Strength: 52311.98nT
 Dip Angle: 66.91°
 Date: 4/9/2014
 Model: BOGM2013

Frontier 25, CL 1004 + 28 RKB @ 1032.0uoft
 1004 0

WELL DETAILS: Belle Unit 2H

Ground Level:	1004.0	Longitude	
+N/-S	0.0	Northing	14281133.04
+E/-W	0.0	Easting	1661490.68
		Latitude	39° 19' 38.463 N
		Longitude	80° 59' 31.718 W

PROJECT DETAILS: Ritchie County WV

Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 83 (NADCON CONUS)
 Ellipsoid: GRS 80
 Zone: Zone 17N (84 W to 78 W)
 System Datum: Mean Sea Level

SITE DETAILS: AmmelBelle Pad

Site Center
 Site Centre Northing: 14281134.20
 Easting: 1661500.66
 Positional Uncertainty: 0.0
 Convergence: 0.05
 Local North: Grid

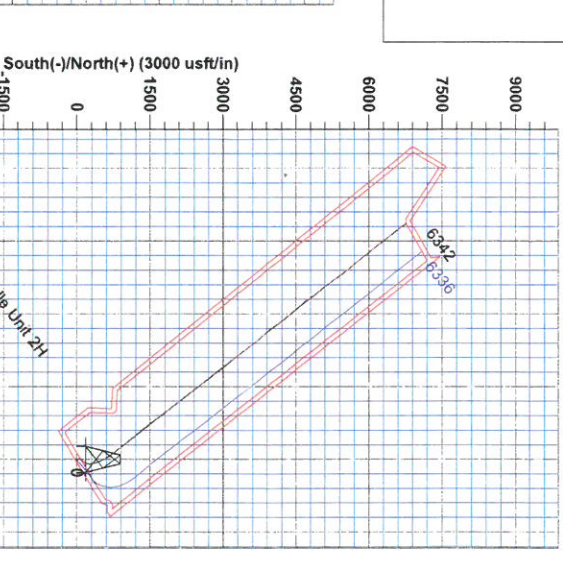
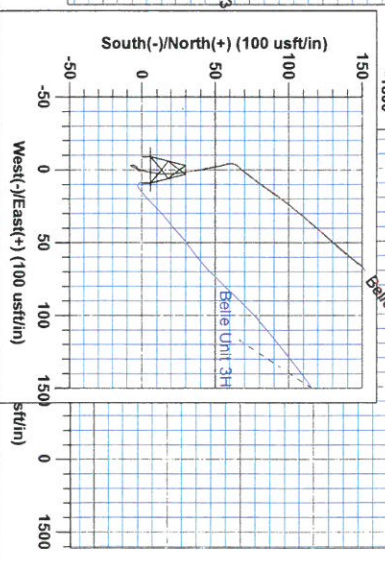
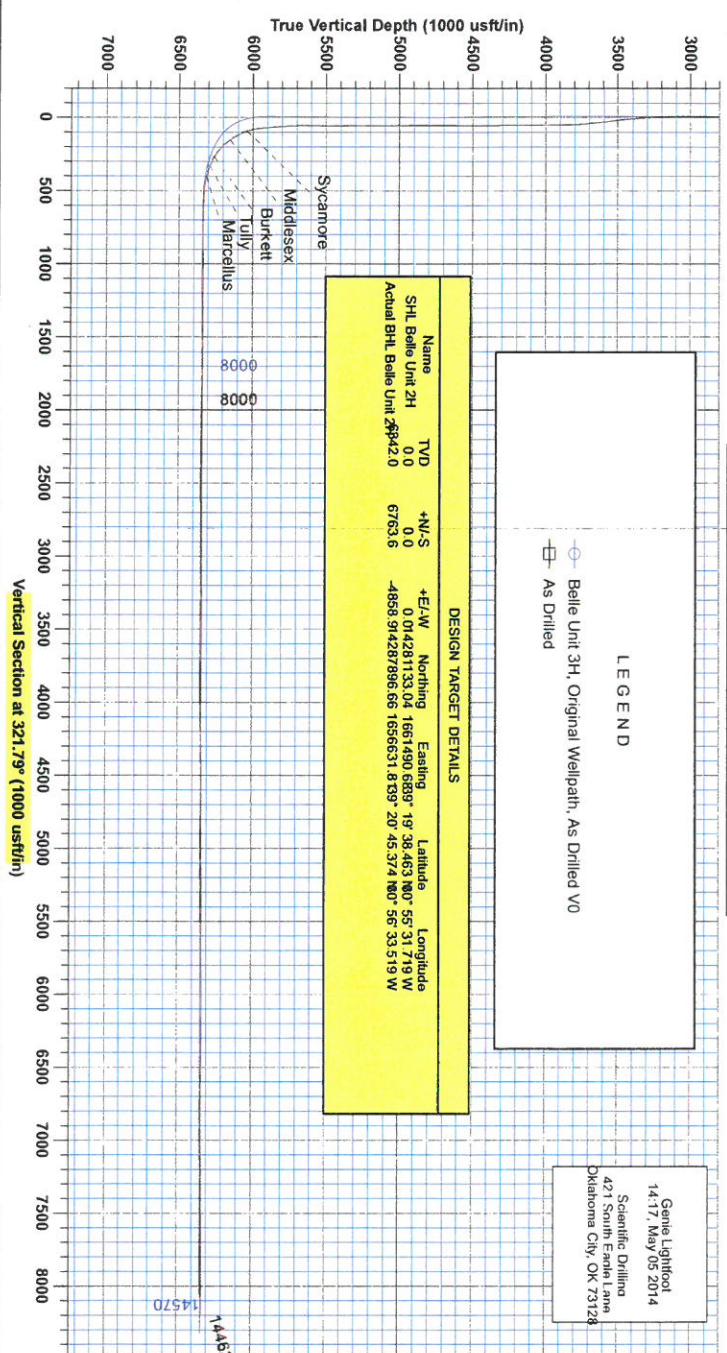
LEGEND

- Belle Unit 3H, Original Wellpath, As Drilled VO
- As Drilled

Gene Lightfoot
 14.17, May 05 2014
 Scientific Drilling
 421 South Eureka Lane
 Oklahoma City, OK 73128

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Shl. Belle Unit 2H	0.0	0.0	0.0	14281133.04	1661490.68	39° 19' 38.463 N	80° 59' 31.719 W
Actual Bhl. Belle Unit 2H	28942.0	6763.6	-4898.9	14287896.66	1659631.87	39° 20' 45.374 N	80° 56' 33.519 W



MORGANTOWN, WV
 GEOLOGICAL SURVEY
 5102 I 0 NJF

DEPARTMENT



RECEIVED
JUN 01 2015
WV GEOLOGICAL SURVEY
MORGANTOWN, WV

Antero Resources

Ritchie County WV
Annie/Belle Pad
Belle Unit 2H
Original Wellpath

Design: As Drilled

EOW Completion Report

05 May, 2014





EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Belle Unit 2H
Project:	Ritchie County WV	TVD Reference:	Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
Site:	Annie/Belle Pad	MD Reference:	Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
Well:	Belle Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Project	Ritchie County WV, Ritchie County WV, WV North		
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 Annie/Belle Pad

Site Position:		Northing:	14,281,134.20usft	Latitude:	39° 19' 38.474 N
From:	Map	Easting:	1,661,500.66usft	Longitude:	80° 55' 31.591 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.05 °

Well Belle Unit 2H, Marcellus

Well Position	+N/-S	0.0 usft	Northing:	14,281,133.04 usft	Latitude:	39° 19' 38.463 N
	+E/-W	0.0 usft	Easting:	1,661,490.68 usft	Longitude:	80° 55' 31.718 W
Position Uncertainty		2.8 usft	Wellhead Elevation:	1,032.0 usft	Ground Level:	1,004.0 usft

Wellbore Original Wellpath

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	4/9/2014	-8.43	66.91	52,312

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	321.79

Survey Program **Date** 5/5/2014

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	5,642.0	Survey #5 Final Gyro (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper
5,699.0	14,463.0	Survey #6 MWD (Original Wellpath)	MWD SDI	MWD - Standard ver 1.0.1

Survey

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	0.10	86.40	100.0	0.0	0.1	0.0	0.10
200.0	0.13	97.52	200.0	0.0	0.3	-0.2	0.04
300.0	0.45	162.07	300.0	-0.4	0.5	-0.6	0.41
400.0	0.34	163.64	400.0	-1.1	0.7	-1.3	0.11
500.0	0.42	180.44	500.0	-1.7	0.8	-1.8	0.14
600.0	0.26	185.80	600.0	-2.3	0.8	-2.3	0.16
700.0	0.20	243.24	700.0	-2.6	0.6	-2.4	0.23
800.0	0.21	243.68	800.0	-2.8	0.3	-2.3	0.01
900.0	0.28	254.65	900.0	-2.9	-0.1	-2.2	0.08
1,000.0	0.19	262.32	1,000.0	-3.0	-0.5	-2.0	0.10

JUN 01 2015



EOW Completion Report



Company: Antero Resources
Project: Ritchie County WV
Site: Annie/Belle Pad
Well: Belle Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Belle Unit 2H
TVD Reference: Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
MD Reference: Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
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)
1,100.0	0.28	247.63	1,100.0	-3.1	-0.9	-1.9	0.11
1,200.0	0.23	237.85	1,200.0	-3.3	-1.3	-1.8	0.07
1,300.0	0.09	258.71	1,300.0	-3.4	-1.6	-1.7	0.15
1,400.0	0.20	224.00	1,400.0	-3.6	-1.8	-1.7	0.14
1,500.0	0.19	293.58	1,500.0	-3.6	-2.0	-1.6	0.22
1,600.0	0.48	183.58	1,600.0	-4.0	-2.2	-1.8	0.57
1,700.0	0.17	193.83	1,700.0	-4.5	-2.3	-2.2	0.31
1,800.0	0.21	230.25	1,800.0	-4.8	-2.4	-2.3	0.12
1,900.0	0.23	223.00	1,900.0	-5.1	-2.7	-2.3	0.03
2,000.0	0.49	191.35	2,000.0	-5.6	-2.9	-2.6	0.32
2,100.0	0.18	185.27	2,100.0	-6.2	-3.0	-3.0	0.31
2,200.0	0.11	204.03	2,200.0	-6.5	-3.1	-3.2	0.08
2,300.0	0.06	291.54	2,300.0	-6.5	-3.2	-3.2	0.12
2,400.0	0.19	174.47	2,400.0	-6.7	-3.2	-3.3	0.22
2,500.0	0.08	173.97	2,500.0	-6.9	-3.2	-3.5	0.11
2,600.0	0.27	145.95	2,600.0	-7.2	-3.0	-3.7	0.20
2,700.0	0.13	169.06	2,700.0	-7.5	-2.9	-4.1	0.16
2,800.0	0.02	254.16	2,800.0	-7.6	-2.9	-4.2	0.13
2,900.0	0.11	101.35	2,900.0	-7.6	-2.8	-4.2	0.13
3,000.0	0.12	323.95	3,000.0	-7.5	-2.8	-4.2	0.21
3,050.0	0.31	104.63	3,050.0	-7.5	-2.7	-4.3	0.82
3,100.2	0.57	18.92	3,100.2	-7.3	-2.5	-4.2	1.25
3,200.0	3.14	27.08	3,199.9	-4.4	-1.1	-2.8	2.58
3,300.0	5.42	13.42	3,299.6	2.6	1.3	1.3	2.48
3,400.0	5.86	6.16	3,399.1	12.3	2.9	7.8	0.84
3,500.0	7.97	352.12	3,498.4	24.2	2.5	17.5	2.69
3,600.0	7.73	350.22	3,597.5	37.7	0.4	29.4	0.35
3,700.0	5.90	348.06	3,696.8	49.4	-1.8	39.9	1.85
3,800.0	2.56	345.99	3,796.5	56.6	-3.4	46.5	3.34
3,900.0	1.39	353.82	3,896.4	59.9	-4.1	49.6	1.20
4,000.0	1.02	6.72	3,996.4	62.0	-4.1	51.3	0.46
4,100.0	0.78	19.53	4,096.4	63.6	-3.7	52.3	0.31
4,200.0	0.61	35.66	4,196.4	64.6	-3.2	52.8	0.26
4,300.0	0.53	46.40	4,296.4	65.4	-2.6	53.0	0.13
4,400.0	0.58	50.28	4,396.4	66.0	-1.8	53.0	0.06
4,500.0	0.45	50.23	4,496.4	66.6	-1.1	53.0	0.13
4,600.0	0.49	50.43	4,596.4	67.1	-0.5	53.1	0.04
4,700.0	0.49	30.14	4,696.4	67.8	0.0	53.2	0.17
4,800.0	0.49	38.47	4,796.4	68.5	0.5	53.5	0.07
4,900.0	0.51	40.07	4,896.4	69.1	1.1	53.7	0.02
5,000.0	0.71	41.21	4,996.4	69.9	1.8	53.9	0.20
5,100.0	0.69	33.97	5,096.3	70.9	2.5	54.2	0.09
5,200.0	0.75	30.56	5,196.3	72.0	3.2	54.6	0.07
5,300.0	0.64	45.33	5,296.3	72.9	3.9	54.9	0.21

RECEIVED

JUN 01 2015



WV GEOLOGICAL SURVEY
MORGANTOWN, WV

EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Belle Unit 2H
Project:	Ritchie County WV	TVD Reference:	Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
Site:	Annie/Belle Pad	MD Reference:	Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
Well:	Belle Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
5,400.0	0.62	46.89	5,396.3	73.7	4.7	55.0	0.03
5,500.0	0.38	39.16	5,496.3	74.3	5.3	55.1	0.25
5,600.0	0.30	25.61	5,596.3	74.8	5.6	55.3	0.11
5,642.0	0.03	175.96	5,638.3	74.9	5.7	55.3	0.78
5,699.0	1.06	32.05	5,695.3	75.3	5.9	55.5	1.90
5,731.0	4.84	38.99	5,727.3	76.6	7.0	55.9	11.84
5,762.0	8.88	36.71	5,758.0	79.6	9.2	56.8	13.06
5,794.0	13.19	34.07	5,789.4	84.6	12.7	58.6	13.56
5,826.0	16.44	35.30	5,820.4	91.3	17.4	61.0	10.20
5,857.0	18.99	37.59	5,849.9	98.9	23.0	63.5	8.53
5,889.0	21.72	39.70	5,879.9	107.6	30.0	66.0	8.83
5,921.0	24.62	41.81	5,909.3	117.1	38.2	68.4	9.43
5,952.0	28.05	42.16	5,937.1	127.3	47.4	70.7	11.08
5,984.0	31.04	40.31	5,964.9	139.2	57.8	73.6	9.77
6,016.0	32.89	35.13	5,992.1	152.6	68.1	77.7	10.33
6,048.0	33.33	26.86	6,018.9	167.5	77.1	83.9	14.18
6,076.0	33.54	19.39	6,042.3	181.7	83.1	91.3	14.71
Sycamore							
6,079.0	33.59	18.60	6,044.8	183.3	83.7	92.2	14.71
6,111.0	34.65	12.36	6,071.3	200.5	88.5	102.9	11.42
6,142.0	36.84	8.32	6,096.4	218.4	91.7	114.9	10.38
6,174.0	39.83	6.03	6,121.5	238.0	94.2	128.8	10.34
6,206.0	42.82	2.78	6,145.6	259.1	95.8	144.4	11.50
6,219.0	43.55	0.89	6,155.0	268.0	96.0	151.2	11.44
Middlesex							
6,238.0	44.67	358.21	6,168.7	281.2	95.9	161.6	11.44
6,270.0	46.34	353.55	6,191.1	304.0	94.3	180.5	11.62
6,301.0	49.07	348.81	6,212.0	326.6	90.8	200.5	14.33
6,333.0	52.94	345.20	6,232.1	350.8	85.1	223.0	14.93
6,365.0	57.33	343.36	6,250.4	376.1	78.0	247.3	14.51
6,389.0	61.09	342.02	6,262.7	395.8	71.9	266.5	16.36
Burkett							
6,397.0	62.34	341.60	6,266.5	402.5	69.7	273.1	16.36
6,428.0	66.30	340.55	6,279.9	428.9	60.6	299.5	13.13
6,460.0	68.85	339.67	6,292.1	456.7	50.6	327.6	8.36
6,461.0	68.94	339.63	6,292.5	457.6	50.2	328.5	9.86
Tully							
6,492.0	71.75	338.35	6,302.9	484.8	39.8	356.4	9.86
6,524.0	75.27	335.80	6,312.0	513.1	27.8	385.9	13.39
6,540.0	76.27	334.16	6,315.9	527.1	21.2	401.0	11.71
Marcellus							
6,555.0	77.21	332.64	6,319.4	540.2	14.7	415.3	11.71
6,587.0	79.14	328.50	6,325.9	567.4	-0.7	446.3	14.03
6,618.0	82.57	326.31	6,330.9	593.2	-17.2	476.7	13.08
6,670.0	87.58	325.25	6,335.3	636.0	-46.3	528.4	9.85

RECEIVED

JUN 01 2015



WV GEOLOGICAL SURVEY
MORGANTOWN, WV

EOW Completion Report



Company: Antero Resources
Project: Ritchie County WV
Site: Annie/Belle Pad
Well: Belle Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Belle Unit 2H
TVD Reference: Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
MD Reference: Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
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)
6,733.0	88.29	324.29	6,337.6	687.5	-82.6	591.3	1.89
6,829.0	90.22	322.79	6,338.8	764.7	-139.7	687.2	2.55
6,925.0	91.01	322.62	6,337.8	841.0	-197.8	783.2	0.84
7,020.0	90.40	322.00	6,336.6	916.2	-255.9	878.2	0.92
7,114.0	89.69	321.21	6,336.6	989.9	-314.3	972.2	1.13
7,210.0	89.16	321.56	6,337.5	1,064.9	-374.2	1,068.2	0.66
7,305.0	90.22	321.56	6,338.0	1,139.3	-433.2	1,163.2	1.12
7,401.0	89.34	321.56	6,338.4	1,214.5	-492.9	1,259.2	0.92
7,496.0	90.04	321.12	6,338.9	1,288.7	-552.3	1,354.2	0.87
7,592.0	89.96	321.65	6,338.9	1,363.7	-612.2	1,450.2	0.56
7,687.0	89.34	321.03	6,339.5	1,437.9	-671.5	1,545.2	0.92
7,782.0	90.48	320.51	6,339.7	1,511.4	-731.6	1,640.1	1.32
7,877.0	89.34	321.91	6,339.8	1,585.5	-791.1	1,735.1	1.90
7,972.0	89.78	321.74	6,340.5	1,660.2	-849.8	1,830.1	0.50
8,067.0	90.04	322.53	6,340.7	1,735.2	-908.1	1,925.1	0.88
8,163.0	88.29	323.41	6,342.1	1,811.8	-965.9	2,021.1	2.04
8,258.0	88.90	323.58	6,344.4	1,888.1	-1,022.4	2,116.0	0.67
8,353.0	89.25	322.35	6,345.9	1,964.0	-1,079.7	2,211.0	1.35
8,448.0	88.90	322.00	6,347.5	2,039.0	-1,137.9	2,306.0	0.52
8,542.0	89.78	321.74	6,348.6	2,112.9	-1,195.9	2,400.0	0.98
8,637.0	89.87	322.26	6,348.9	2,187.8	-1,254.4	2,495.0	0.56
8,728.0	90.57	321.91	6,348.5	2,259.6	-1,310.3	2,586.0	0.86
8,819.0	90.22	321.65	6,347.9	2,331.1	-1,366.6	2,677.0	0.48
8,909.0	90.31	321.39	6,347.5	2,401.5	-1,422.6	2,767.0	0.31
9,000.0	90.04	321.83	6,347.2	2,472.8	-1,479.2	2,858.0	0.57
9,091.0	90.57	321.65	6,346.7	2,544.3	-1,535.5	2,949.0	0.62
9,182.0	89.78	322.18	6,346.4	2,615.9	-1,591.6	3,040.0	1.05
9,272.0	90.22	322.97	6,346.4	2,687.4	-1,646.3	3,129.9	1.00
9,362.0	89.78	321.39	6,346.4	2,758.5	-1,701.5	3,219.9	1.82
9,452.0	88.90	321.56	6,347.5	2,828.9	-1,757.6	3,309.9	1.00
9,542.0	89.43	321.03	6,348.8	2,899.1	-1,813.8	3,399.9	0.83
9,633.0	89.34	321.56	6,349.7	2,970.1	-1,870.7	3,490.9	0.59
9,723.0	89.87	321.56	6,350.4	3,040.6	-1,926.7	3,580.9	0.59
9,818.0	90.75	320.59	6,349.9	3,114.5	-1,986.4	3,675.9	1.38
9,912.0	90.31	321.21	6,349.0	3,187.5	-2,045.7	3,769.9	0.81
10,007.0	89.87	320.86	6,348.8	3,261.3	-2,105.4	3,864.9	0.59
10,103.0	90.75	321.30	6,348.3	3,336.0	-2,165.7	3,960.9	1.02
10,198.0	90.40	321.47	6,347.4	3,410.2	-2,225.0	4,055.9	0.41
10,291.0	90.48	323.23	6,346.6	3,483.9	-2,281.8	4,148.8	1.89
10,386.0	91.45	323.85	6,345.0	3,560.3	-2,338.2	4,243.8	1.21
10,480.0	90.75	323.14	6,343.2	3,635.8	-2,394.2	4,337.7	1.06
10,574.0	89.78	321.30	6,342.8	3,710.1	-2,451.7	4,431.7	2.21
10,668.0	90.40	320.16	6,342.7	3,782.9	-2,511.2	4,525.7	1.38
10,763.0	89.43	320.51	6,342.8	3,856.0	-2,571.9	4,620.7	1.09
10,857.0	90.22	320.24	6,343.1	3,928.4	-2,631.8	4,714.6	0.89

RECEIVED
JUN 01 2015



EOW Completion Report



Company: Antero Resources
Project: Ritchie County WV
Site: Annie/Belle Pad
Well: Belle Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Belle Unit 2H
TVD Reference: Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
MD Reference: Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
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)
10,951.0	89.08	321.12	6,343.7	4,001.1	-2,691.4	4,808.6	1.53
11,046.0	89.96	320.77	6,344.5	4,074.9	-2,751.2	4,903.6	1.00
11,140.0	89.78	322.00	6,344.7	4,148.3	-2,809.9	4,997.6	1.32
11,234.0	90.22	323.23	6,344.7	4,223.0	-2,867.0	5,091.6	1.39
11,329.0	91.19	323.43	6,343.5	4,299.2	-2,923.7	5,186.5	1.04
11,424.0	90.75	322.97	6,341.9	4,375.3	-2,980.6	5,281.5	0.67
11,518.0	89.52	322.09	6,341.7	4,449.9	-3,037.8	5,375.5	1.61
11,613.0	90.13	321.74	6,342.0	4,524.6	-3,096.4	5,470.5	0.74
11,707.0	89.08	321.03	6,342.6	4,598.1	-3,155.0	5,564.5	1.35
11,801.0	89.08	320.16	6,344.1	4,670.7	-3,214.7	5,658.4	0.93
11,895.0	90.13	320.95	6,344.8	4,743.3	-3,274.4	5,752.4	1.40
11,989.0	89.60	321.30	6,345.0	4,816.5	-3,333.4	5,846.4	0.68
12,084.0	89.96	322.44	6,345.4	4,891.2	-3,392.1	5,941.4	1.26
12,177.0	88.99	322.62	6,346.2	4,965.0	-3,448.6	6,034.4	1.06
12,272.0	89.08	322.00	6,347.8	5,040.2	-3,506.7	6,129.4	0.66
12,366.0	90.66	320.51	6,348.0	5,113.5	-3,565.5	6,223.4	2.31
12,460.0	90.57	321.56	6,347.0	5,186.6	-3,624.7	6,317.4	1.12
12,554.0	90.97	322.97	6,345.7	5,260.9	-3,682.2	6,411.3	1.56
12,648.0	90.13	323.23	6,344.8	5,336.1	-3,738.6	6,505.3	0.94
12,743.0	91.19	323.58	6,343.7	5,412.3	-3,795.2	6,600.3	1.18
12,837.0	88.90	323.85	6,343.7	5,488.1	-3,850.9	6,694.2	2.45
12,931.0	90.04	322.26	6,344.5	5,563.2	-3,907.4	6,788.2	2.08
13,025.0	91.28	321.83	6,343.5	5,637.3	-3,965.2	6,882.2	1.40
13,119.0	90.22	320.95	6,342.2	5,710.8	-4,023.8	6,976.2	1.47
13,213.0	89.34	320.59	6,342.6	5,783.6	-4,083.3	7,070.1	1.01
13,307.0	89.87	320.51	6,343.2	5,856.2	-4,143.0	7,164.1	0.57
13,402.0	91.01	320.33	6,342.5	5,929.4	-4,203.5	7,259.1	1.21
13,496.0	90.40	320.24	6,341.4	6,001.7	-4,263.6	7,353.0	0.66
13,591.0	89.16	321.30	6,341.7	6,075.3	-4,323.7	7,448.0	1.72
13,685.0	90.13	321.03	6,342.3	6,148.5	-4,382.6	7,542.0	1.07
13,779.0	90.57	321.30	6,341.7	6,221.7	-4,441.5	7,636.0	0.55
13,873.0	89.47	322.79	6,341.7	6,295.8	-4,499.4	7,730.0	1.97
13,968.0	90.40	322.44	6,341.8	6,371.3	-4,557.0	7,825.0	1.05
14,063.0	89.69	322.18	6,341.7	6,446.5	-4,615.1	7,920.0	0.80
14,157.0	90.22	321.91	6,341.8	6,520.6	-4,672.9	8,014.0	0.63
14,252.0	89.34	322.79	6,342.2	6,595.8	-4,731.0	8,109.0	1.31
14,346.0	89.87	322.79	6,342.8	6,670.7	-4,787.8	8,203.0	0.56
14,406.0	90.57	322.53	6,342.6	6,718.4	-4,824.2	8,262.9	1.24
14,463.0	90.57	322.53	6,342.0	6,763.6	-4,858.9	8,319.9	0.00



Company: Antero Resources
Project: Ritchie County WV
Site: Annie/Belle Pad
Well: Belle Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Belle Unit 2H
TVD Reference: Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
MD Reference: Frontier 25: GL 1004' + 28' RKB @ 1032.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Oklahoma District

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,076.0	6,042.3	181.7	83.1	Sycamore
6,219.0	6,155.0	268.0	96.0	Middlesex
6,389.0	6,262.7	395.8	71.9	Burkett
6,461.0	6,292.5	457.6	50.2	Tully
6,540.0	6,315.9	527.1	21.2	Marcellus

Checked By: _____ Approved By: _____ Date: _____

RECEIVED
 JUN 01 2015
 WV GEOLOGICAL SURVEY
 MORGANTOWN, WV