

JUN 01 2015

WV GEOLOGICAL SURVEY
MORGANTOWN, WV



Vanscoy Unit 1H
Doddridge County WV
Northing: 14270663.37
Easting: 1727233.41
As Drilled



Azimuths to Grid North
True North: -0.19°
Magnetic North: -8.72°
Magnetic Field
Strength: 52322.1erT
Dip Angle: 66.83°
Date: 3/6/2014
Model: IGRF2010

To convert Magnetic North to Grid, Subtract 8.72°
To convert True North to Grid, Subtract 0.19°

WELL DETAILS Vanscoy Unit 1H
Ground Level: 1180.0
Easting: 1727233.41
Northing: 14270663.37
Longitude: 80° 41' 35.244 W
Latitude: 39° 17' 53.572 N

PROJECT DETAILS: Doddridge County WV
Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 83 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Zone 17N (84 W to 78 W)
System Datum: Mean Sea Level

Genie Lightfoot
9.23, March 31 2014
Scientific Drilling
421 South Fannie Lane
Oklahoma City, OK 73128

FORMATION TOP DETAILS
No formation data is available

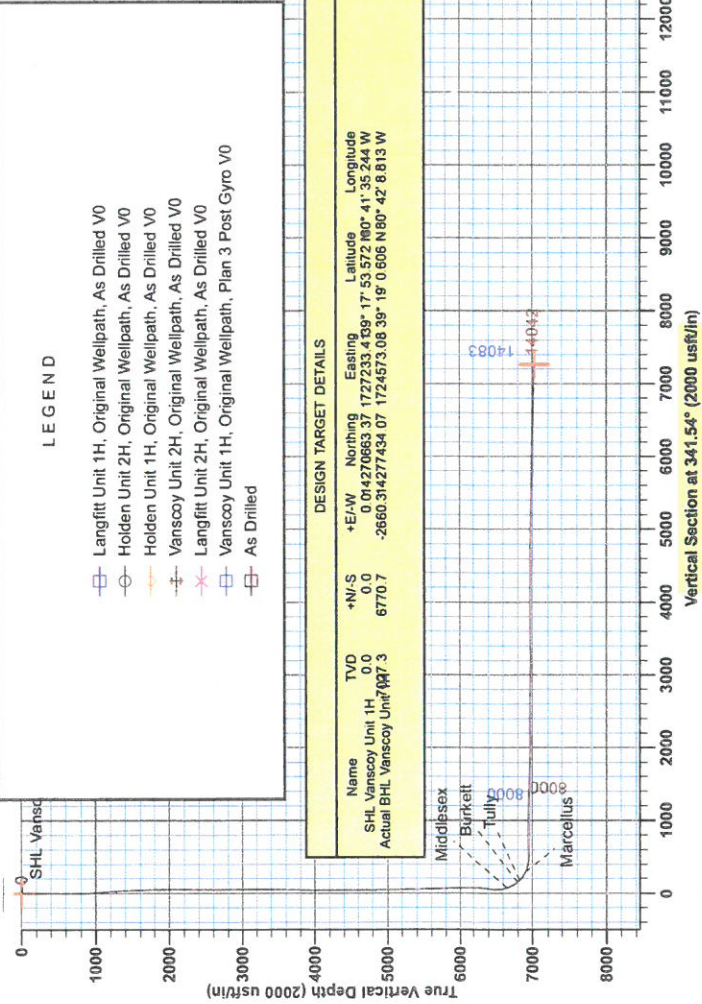
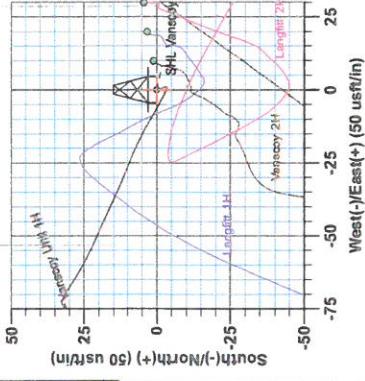
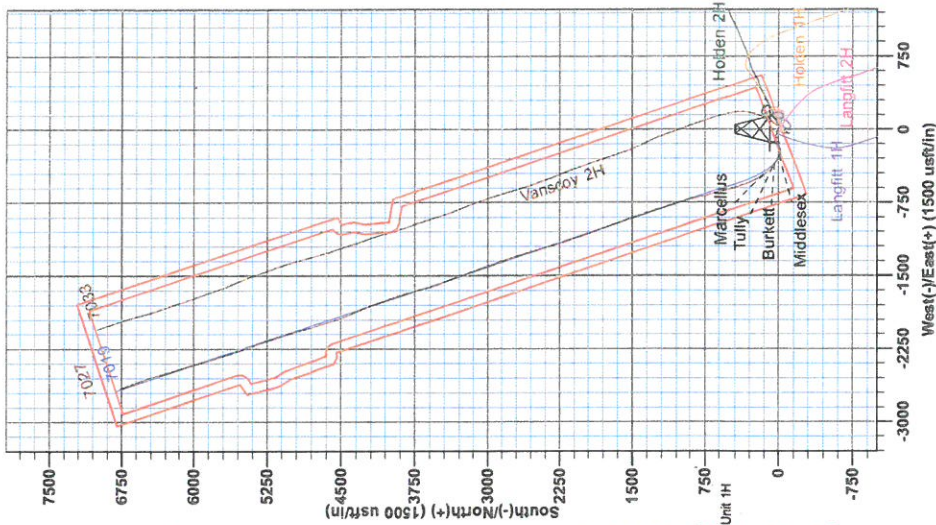
SITE DETAILS: Holden/Langfit/Vanscoy/McConnell Pad
Site Center: Holden 2H
Site Centre Northing: 14270672.18
Easting: 1727282.25
Positional Uncertainty: 2.0
Convergence: 0.19
Local North: Grid

LEGEND

- Langfit Unit 1H, Original Wellpath, As Drilled V0
- Holden Unit 2H, Original Wellpath, As Drilled V0
- Holden Unit 1H, Original Wellpath, As Drilled V0
- Vanscoy Unit 2H, Original Wellpath, As Drilled V0
- Vanscoy Unit 1H, Original Wellpath, As Drilled V0
- Vanscoy Unit 1H, Original Wellpath, Plan 3 Post Gyro V0
- As Drilled

DESIGN TARGET DETAILS

Name	TVD	+N/S	+E/W	Northing	Easting	Latitude	Longitude
SHL Vanscoy Unit 1H	0.0	0.0	0.0	14270663.37	1727233.41	39° 17' 53.572 N	80° 41' 35.244 W
Actual BHL Vanscoy Unit 1H	0.0	0.0	0.0	14270663.37	1727233.41	39° 17' 53.572 N	80° 41' 35.244 W



Frontier 23, Vanscoy 1H 1180 GL + 22 KB @ 1202.0umf



RECEIVED
JUN 01 2015
WV GEOLOGICAL SURVEY
MORGANTOWN, WV

Antero Resources

**Doddridge County WV
Holden/Langfitt/Vanscoy/McConnell Pad
Vanscoy Unit 1H
Original Wellpath**

Design: As Drilled

EOW Completion Report

31 March, 2014



JUN 01 2015



WV GEOLOGICAL SURVEY
MORGANTOWN, WV

EOW Completion Report



Company: Antero Resources	Local Co-ordinate Reference: Well Vanscoy Unit 1H
Project: Doddridge County WV	TVD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
Site: Holden/Langfitt/Vanscoy/McConnell Pad	MD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
Well: Vanscoy 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 Fee	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 17N (84 W to 78 W)		

Site Holden/Langfitt/Vanscoy/McConnell Pad

Site Position:	Northing: 14,270,672.18 usft	Latitude: 39° 17' 53.658 N
From: Map	Easting: 1,727,282.25 usft	Longitude: 80° 41' 34.622 W
Position Uncertainty: 2.0 usft	Slot Radius: 13-3/16"	Grid Convergence: 0.19 °

Well Vanscoy Unit 1H, Marcellus

Well Position	+N/-S 0.0 usft	Northing: 14,270,663.37 usft	Latitude: 39° 17' 53.572 N
	+E/-W 0.0 usft	Easting: 1,727,233.41 usft	Longitude: 80° 41' 35.244 W
Position Uncertainty	2.0 usft	Wellhead Elevation: 1,202.0 usft	Ground Level: 1,180.0 usft

Wellbore Original Wellpath

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/6/2014	-8.53	66.83	52,322

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	341.54

Survey Program		Date	3/31/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	5,787.0	Survey #4 Def Gyro to KOP (Original Well)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
5,787.0	14,042.0	Survey #5 SDI 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	0.38	160.23	100.0	-0.3	0.1	-0.3	0.38
200.0	0.47	166.53	200.0	-1.0	0.3	-1.1	0.10
300.0	0.34	156.58	300.0	-1.7	0.5	-1.8	0.15
400.0	0.34	161.60	400.0	-2.2	0.7	-2.4	0.03
500.0	0.37	166.82	500.0	-2.8	0.9	-3.0	0.04
600.0	0.40	157.96	600.0	-3.5	1.1	-3.7	0.07
700.0	0.78	288.08	700.0	-3.6	0.6	-3.6	1.08
800.0	2.51	295.33	799.9	-2.4	-2.0	-1.7	1.74
900.0	4.36	302.34	899.8	0.5	-7.2	2.8	1.89
1,000.0	5.04	297.73	999.4	4.6	-14.3	8.9	0.78

RECEIVED
JUN 01 2015



EOW Completion Report



Company: Antero Resources
Project: Doddridge County WV
Site: Holden/Langfitt/Vanscoy/McConnell Pad
Well: Vanscoy Unit 1H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Vanscoy Unit 1H
TVD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
MD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
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	5.89	292.74	1,099.0	8.6	-22.9	15.4	0.97
1,200.0	6.18	293.96	1,198.4	12.8	-32.6	22.5	0.32
1,300.0	5.20	294.07	1,297.9	16.8	-41.6	29.2	0.98
1,400.0	4.35	294.84	1,397.6	20.3	-49.2	34.8	0.85
1,500.0	3.40	295.87	1,497.3	23.2	-55.3	39.5	0.95
1,600.0	2.70	297.21	1,597.2	25.5	-60.1	43.2	0.70
1,700.0	2.00	303.16	1,697.1	27.6	-63.7	46.3	0.74
1,800.0	1.43	302.34	1,797.1	29.2	-66.2	48.6	0.57
1,900.0	1.14	300.49	1,897.0	30.4	-68.1	50.3	0.29
2,000.0	0.84	302.84	1,997.0	31.3	-69.6	51.7	0.30
2,100.0	0.51	297.88	2,097.0	31.9	-70.6	52.6	0.33
2,200.0	0.40	297.80	2,197.0	32.2	-71.3	53.1	0.11
2,300.0	0.34	287.06	2,297.0	32.5	-71.9	53.6	0.09
2,400.0	0.27	291.07	2,397.0	32.7	-72.4	53.9	0.07
2,500.0	0.20	271.94	2,497.0	32.7	-72.8	54.1	0.10
2,600.0	0.24	241.70	2,597.0	32.7	-73.1	54.1	0.12
2,700.0	0.48	245.13	2,697.0	32.4	-73.7	54.0	0.24
2,800.0	0.52	217.94	2,797.0	31.8	-74.3	53.7	0.24
2,900.0	0.52	227.82	2,897.0	31.2	-75.0	53.3	0.09
3,000.0	0.53	225.95	2,997.0	30.6	-75.6	52.9	0.02
3,100.0	0.62	216.80	3,097.0	29.8	-76.3	52.4	0.13
3,200.0	0.64	212.41	3,197.0	28.9	-76.9	51.8	0.05
3,300.0	0.69	209.32	3,297.0	27.9	-77.5	51.0	0.06
3,400.0	0.79	209.07	3,397.0	26.8	-78.1	50.1	0.10
3,500.0	0.61	213.98	3,497.0	25.7	-78.8	49.3	0.19
3,600.0	0.66	206.98	3,597.0	24.8	-79.3	48.6	0.09
3,700.0	0.65	211.83	3,697.0	23.8	-79.9	47.8	0.06
3,800.0	0.66	215.49	3,796.9	22.8	-80.5	47.1	0.04
3,900.0	0.57	202.15	3,896.9	21.9	-81.0	46.4	0.17
4,000.0	0.52	201.22	3,996.9	21.0	-81.4	45.7	0.05
4,100.0	0.54	207.90	4,096.9	20.2	-81.8	45.0	0.06
4,200.0	0.50	219.77	4,196.9	19.4	-82.3	44.5	0.11
4,300.0	0.55	229.12	4,296.9	18.8	-82.9	44.1	0.10
4,400.0	0.49	248.64	4,396.9	18.3	-83.7	43.9	0.19
4,500.0	0.54	261.67	4,496.9	18.1	-84.5	43.9	0.13
4,600.0	0.64	270.21	4,596.9	18.0	-85.6	44.2	0.13
4,700.0	0.77	276.24	4,696.9	18.1	-86.8	44.6	0.15
4,800.0	0.95	290.36	4,796.9	18.5	-88.2	45.4	0.28
4,900.0	1.07	289.62	4,896.9	19.1	-89.9	46.5	0.12
5,000.0	1.18	295.00	4,996.9	19.8	-91.7	47.8	0.15
5,100.0	1.23	297.88	5,096.8	20.7	-93.6	49.3	0.08
5,200.0	1.18	299.45	5,196.8	21.7	-95.4	50.8	0.06
5,300.0	1.37	304.97	5,296.8	22.9	-97.3	52.6	0.23
5,400.0	1.52	306.37	5,396.8	24.4	-99.4	54.6	0.15

RECEIVED
JUN 01 2015



WV GEOLOGICAL SURVEY
MORGANTOWN, WV

EOW Completion Report



Company: Antero Resources
Project: Doddridge County WV
Site: Holden/Langfitt/Vanscoy/McConnell Pad
Well: Vanscoy Unit 1H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Vanscoy Unit 1H
TVD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
MD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)
5,500.0	1.70	307.33	5,496.7	26.1	-101.6	56.9	0.18
5,600.0	1.78	310.92	5,596.7	28.0	-104.0	59.5	0.14
5,700.0	1.83	312.45	5,696.6	30.1	-106.3	62.2	0.07
5,787.0	1.89	319.22	5,783.5	32.1	-108.3	64.8	0.26
5,845.0	2.02	314.48	5,841.5	33.6	-109.6	66.5	0.36
5,941.0	1.93	307.45	5,937.5	35.7	-112.1	69.4	0.27
6,037.0	1.67	294.36	6,033.4	37.3	-114.7	71.7	0.51
6,133.0	2.64	253.93	6,129.4	37.3	-118.1	72.7	1.82
6,197.0	3.96	244.79	6,193.3	35.9	-121.5	72.5	2.21
6,230.0	5.72	239.51	6,226.1	34.6	-123.9	72.1	5.50
6,262.0	9.22	236.84	6,257.9	32.4	-127.5	71.1	10.99
6,294.0	12.57	230.37	6,289.3	28.8	-132.3	69.2	11.13
6,326.0	13.81	229.49	6,320.4	24.1	-137.9	66.5	3.93
6,358.0	15.48	236.17	6,351.4	19.2	-144.3	63.9	7.41
6,390.0	16.71	238.81	6,382.2	14.4	-151.8	61.8	4.47
6,422.0	18.47	240.48	6,412.7	9.6	-160.2	59.8	5.72
6,454.0	21.10	241.89	6,442.8	4.3	-169.6	57.8	8.35
6,486.0	23.30	241.80	6,472.4	-1.4	-180.3	55.8	6.88
6,518.0	25.32	243.64	6,501.6	-7.4	-192.0	53.8	6.74
6,550.0	24.71	255.86	6,530.6	-12.1	-204.6	53.3	16.23
6,582.0	25.15	266.06	6,559.6	-14.2	-217.9	55.6	13.49
6,615.0	25.85	274.67	6,589.4	-14.1	-232.1	60.1	11.42
6,647.0	27.61	282.14	6,618.0	-11.9	-246.3	66.7	11.84
6,679.0	29.19	288.12	6,646.1	-7.9	-261.0	75.1	10.16
6,687.0	29.62	289.08	6,653.1	-6.7	-264.7	77.4	7.97
Middlesex							
6,711.0	30.95	291.81	6,673.8	-2.5	-276.0	85.0	7.97
6,743.0	33.77	293.48	6,700.9	4.1	-291.8	96.3	9.24
6,776.0	36.58	297.61	6,727.8	12.4	-309.0	109.5	11.15
6,807.0	39.67	300.60	6,752.2	21.7	-325.7	123.7	11.61
6,839.0	42.91	302.88	6,776.3	32.8	-343.6	139.9	11.16
6,865.0	45.33	305.91	6,794.9	43.0	-358.5	154.3	12.34
Burkett							
6,871.0	45.90	306.57	6,799.1	45.6	-362.0	157.8	12.34
6,903.0	48.01	311.14	6,821.0	60.2	-380.2	177.5	12.34
6,905.0	48.20	311.39	6,822.3	61.2	-381.3	178.8	13.31
Tully							
6,935.0	51.09	315.01	6,841.7	76.9	-397.9	198.9	13.31
6,967.0	54.17	318.09	6,861.2	95.3	-415.4	221.9	12.29
7,000.0	58.04	320.99	6,879.6	116.2	-433.2	247.3	13.81
7,031.0	61.42	323.58	6,895.2	137.4	-449.5	272.6	13.07
7,053.0	64.59	325.26	6,905.2	153.3	-460.9	291.3	15.95
Marcellus							
7,063.0	66.04	326.00	6,909.3	160.8	-466.1	300.1	15.95
7,095.0	69.82	327.40	6,921.4	185.6	-482.3	328.7	12.49

JUN 01 2015



EOW Completion Report



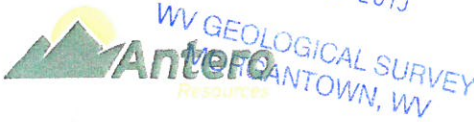
Company: Antero Resources
Project: Doddridge County WV
Site: Holden/Langfitt/Vanscoy/McConnell Pad
Well: Vanscoy Unit 1H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Vanscoy Unit 1H
TVD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
MD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
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)
7,127.0	75.01	329.42	6,931.0	211.6	-498.3	358.4	17.30
7,159.0	80.20	331.18	6,937.9	238.7	-513.8	389.1	17.08
7,191.0	83.10	332.33	6,942.5	266.6	-528.8	420.3	9.73
7,223.0	83.71	338.04	6,946.2	295.4	-542.1	451.9	17.83
7,298.0	93.91	342.26	6,947.8	365.9	-567.5	526.7	14.71
7,428.0	92.07	343.05	6,941.0	489.8	-606.2	656.5	1.54
7,524.0	89.96	344.81	6,939.3	582.0	-632.8	752.4	2.86
7,621.0	89.43	344.98	6,939.8	675.6	-658.1	849.2	0.57
7,717.0	88.81	345.42	6,941.3	768.4	-682.6	945.0	0.79
7,813.0	89.16	346.04	6,943.0	861.5	-706.2	1,040.7	0.74
7,910.0	88.99	345.07	6,944.6	955.4	-730.4	1,137.5	1.02
8,006.0	87.93	342.34	6,947.1	1,047.5	-757.4	1,233.4	3.05
8,102.0	88.90	342.70	6,949.8	1,139.0	-786.2	1,329.3	1.08
8,198.0	87.93	341.91	6,952.5	1,230.4	-815.4	1,425.3	1.30
8,295.0	88.11	340.94	6,955.8	1,322.3	-846.2	1,522.2	1.02
8,390.0	88.29	340.85	6,958.8	1,412.1	-877.3	1,617.2	0.21
8,487.0	87.67	340.15	6,962.2	1,503.4	-909.7	1,714.1	0.96
8,583.0	88.90	340.59	6,965.1	1,593.8	-941.9	1,810.0	1.36
8,674.0	89.96	340.41	6,966.0	1,679.6	-972.3	1,901.0	1.18
8,764.0	89.69	340.32	6,966.3	1,764.4	-1,002.5	1,991.0	0.32
8,855.0	89.78	340.24	6,966.7	1,850.0	-1,033.2	2,082.0	0.13
8,946.0	91.54	341.58	6,965.6	1,936.0	-1,063.0	2,172.9	2.43
9,036.0	91.10	341.38	6,963.6	2,021.3	-1,091.6	2,262.9	0.54
9,127.0	89.52	341.82	6,963.1	2,107.7	-1,120.3	2,353.9	1.80
9,218.0	88.72	340.67	6,964.5	2,193.8	-1,149.5	2,444.9	1.54
9,309.0	88.99	344.98	6,966.3	2,280.7	-1,176.4	2,535.8	4.74
9,399.0	88.90	343.31	6,967.9	2,367.3	-1,201.0	2,625.7	1.86
9,490.0	88.64	343.84	6,969.9	2,454.5	-1,226.7	2,716.6	0.65
9,581.0	90.57	344.89	6,970.5	2,542.2	-1,251.2	2,807.5	2.41
9,673.0	88.99	342.17	6,970.9	2,630.4	-1,277.3	2,899.5	3.42
9,769.0	89.43	341.93	6,972.2	2,721.7	-1,306.9	2,995.5	0.52
9,865.0	89.16	342.08	6,973.4	2,813.0	-1,336.5	3,091.4	0.32
9,961.0	89.69	340.76	6,974.3	2,904.0	-1,367.1	3,187.4	1.48
10,057.0	90.57	340.32	6,974.1	2,994.5	-1,399.1	3,283.4	1.02
10,153.0	90.84	340.41	6,972.9	3,084.9	-1,431.4	3,379.4	0.30
10,249.0	89.78	340.32	6,972.4	3,175.3	-1,463.6	3,475.4	1.11
10,346.0	90.04	339.97	6,972.6	3,266.6	-1,496.6	3,572.3	0.45
10,442.0	90.31	338.57	6,972.3	3,356.3	-1,530.6	3,668.3	1.49
10,538.0	89.78	338.65	6,972.2	3,445.7	-1,565.6	3,764.1	0.56
10,634.0	90.48	341.47	6,972.0	3,536.0	-1,598.3	3,860.1	3.03
10,730.0	90.92	343.75	6,970.8	3,627.6	-1,627.0	3,956.1	2.42
10,826.0	91.71	344.89	6,968.6	3,720.0	-1,652.9	4,051.9	1.44
10,923.0	91.63	345.42	6,965.8	3,813.7	-1,677.8	4,148.7	0.55
11,019.0	88.20	341.82	6,965.9	3,905.8	-1,704.8	4,244.6	5.18

RECEIVED
JUN 01 2015



EOW Completion Report



Company: Antero Resources
 Project: Doddridge County WV
 Site: Holden/Langfitt/Vanscoy/McConnell Pad
 Well: Vanscoy Unit 1H
 Wellbore: Original Wellpath
 Design: As Drilled

Local Co-ordinate Reference: Well Vanscoy Unit 1H
 TVD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
 MD Reference: Frontier 23: Vanscoy 1H 1180 GL + 22 KB @ 120
 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)
11,115.0	89.52	341.38	6,967.8	3,996.8	-1,735.1	4,340.6	1.45
11,212.0	88.46	338.92	6,969.5	4,088.0	-1,768.1	4,437.5	2.76
11,305.0	89.87	340.76	6,970.9	4,175.3	-1,800.1	4,530.5	2.49
11,401.0	89.08	337.51	6,971.8	4,265.0	-1,834.3	4,626.4	3.48
11,498.0	89.25	334.96	6,973.2	4,353.8	-1,873.4	4,722.9	2.63
11,593.0	90.88	340.09	6,973.1	4,441.5	-1,909.7	4,817.7	5.67
11,689.0	88.81	339.01	6,973.4	4,531.5	-1,943.2	4,913.6	2.43
11,785.0	89.08	342.96	6,975.1	4,622.2	-1,974.5	5,009.5	4.12
11,881.0	88.64	342.96	6,977.0	4,714.0	-2,002.6	5,105.5	0.46
11,977.0	89.16	344.10	6,978.9	4,806.0	-2,029.8	5,201.4	1.31
12,073.0	89.08	342.87	6,980.3	4,898.0	-2,057.1	5,297.4	1.28
12,170.0	88.81	343.05	6,982.1	4,990.8	-2,085.5	5,394.3	0.33
12,265.0	89.60	341.99	6,983.5	5,081.4	-2,114.1	5,489.3	1.39
12,361.0	89.16	342.26	6,984.5	5,172.7	-2,143.5	5,585.3	0.54
12,457.0	88.99	341.38	6,986.0	5,263.9	-2,173.5	5,681.3	0.93
12,553.0	89.25	340.24	6,987.5	5,354.6	-2,205.0	5,777.2	1.22
12,649.0	89.96	339.80	6,988.2	5,444.8	-2,237.8	5,873.2	0.87
12,745.0	87.49	340.32	6,990.3	5,535.0	-2,270.6	5,969.1	2.63
12,841.0	89.78	341.91	6,992.6	5,625.8	-2,301.6	6,065.1	2.90
13,034.0	88.11	343.66	6,996.2	5,810.1	-2,358.7	6,258.0	1.25
13,130.0	87.85	343.58	6,999.5	5,902.2	-2,385.8	6,353.9	0.28
13,227.0	87.93	342.87	7,003.1	5,995.0	-2,413.8	6,450.8	0.74
13,323.0	89.34	343.75	7,005.4	6,086.9	-2,441.3	6,546.7	1.73
13,419.0	88.29	343.31	7,007.4	6,178.9	-2,468.5	6,642.6	1.19
13,515.0	89.78	345.33	7,009.0	6,271.3	-2,494.5	6,738.5	2.61
13,609.0	86.70	344.81	7,011.9	6,362.1	-2,518.7	6,832.2	3.32
13,706.0	85.38	341.64	7,018.6	6,454.8	-2,546.6	6,929.0	3.53
13,802.0	88.20	339.18	7,024.0	6,545.0	-2,578.7	7,024.8	3.90
13,898.0	89.08	340.32	7,026.2	6,635.1	-2,611.9	7,120.7	1.50
13,983.0	90.04	340.50	7,026.9	6,715.2	-2,640.4	7,205.7	1.15
14,042.0	89.10	340.10	7,027.3	6,770.7	-2,660.3	7,264.7	1.73

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,687.0	6,653.1	-6.7	-264.7	Middlesex
6,865.0	6,794.9	43.0	-358.5	Burkett
6,905.0	6,822.3	61.2	-381.3	Tully
7,053.0	6,905.2	153.3	-460.9	Marcellus

Checked By: _____ Approved By: _____ Date: _____