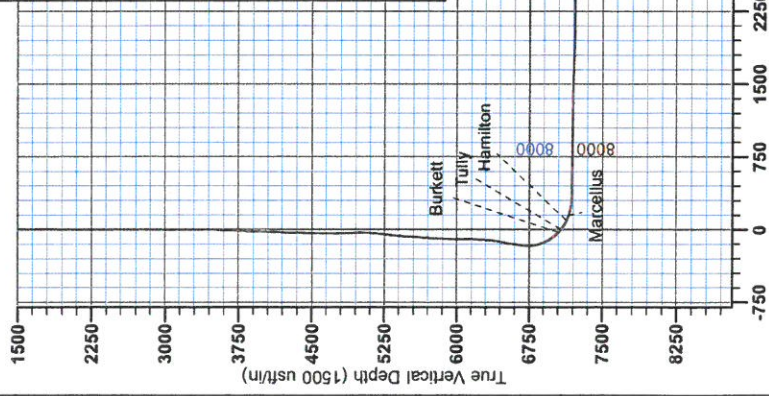


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Antero Resources
Joseph Unit 2H
Doddridge County WV
Northing: 14276925.48
Easting: 1721743.11
As Drilled



WELL DETAILS: Joseph Unit 2H
Ground Level: 1361.0
Slot

+N/S	+E/W	Northing	Easting	Longitude	Latitude
0.0	0.0	14276925.48	1721743.11	80° 42' 44.855 W	39° 18' 55.007 N

REFERENCE INFORMATION
Geoid: NAD 83 (GEOID CONUS)
Datum: NAD 83 (GEOID CONUS)
Elevation: Mean Sea Level
Z-axis: ZONE 17N (84 W to 78 W)
System Datum: Mean Sea Level

PROJECT DETAILS: Doddridge County WV
Geoid System: Universal Transverse Mercator (US Survey Foot)
Datum: NAD 83 (GEOID CONUS)
Elevation: Mean Sea Level
Z-axis: ZONE 17N (84 W to 78 W)
System Datum: Mean Sea Level

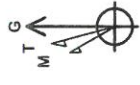
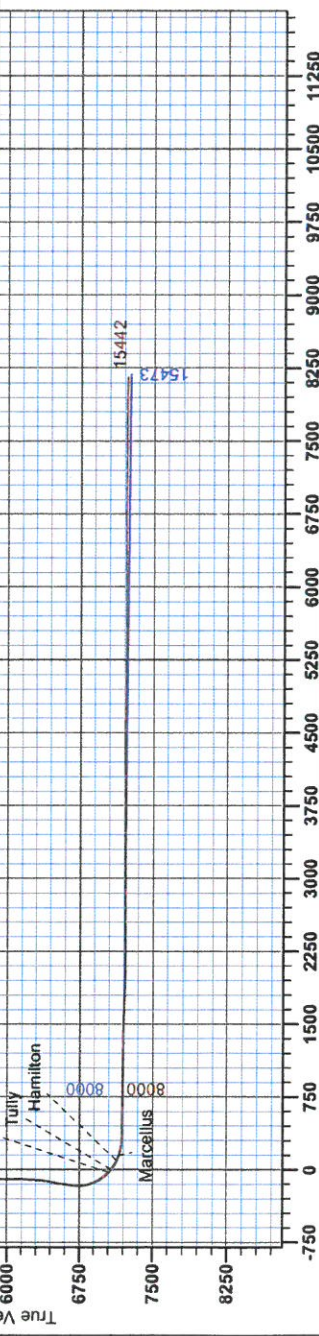
Genie Lightfoot
13:45, May 01 2014
Scientific Drilling
421 South Eagle Lane
Oklahoma City, OK



- LEGEND
- Helin Unit 1H, Original Wellpath, As Drilled V0
 - McConnell Unit 1H, Original Wellpath, As Drilled V0
 - Olivia Unit 2H, Original Wellpath, As Drilled V0
 - Joseph Unit 2H, Original Wellpath, Plan 3 Post Gyro V0
 - As Drilled

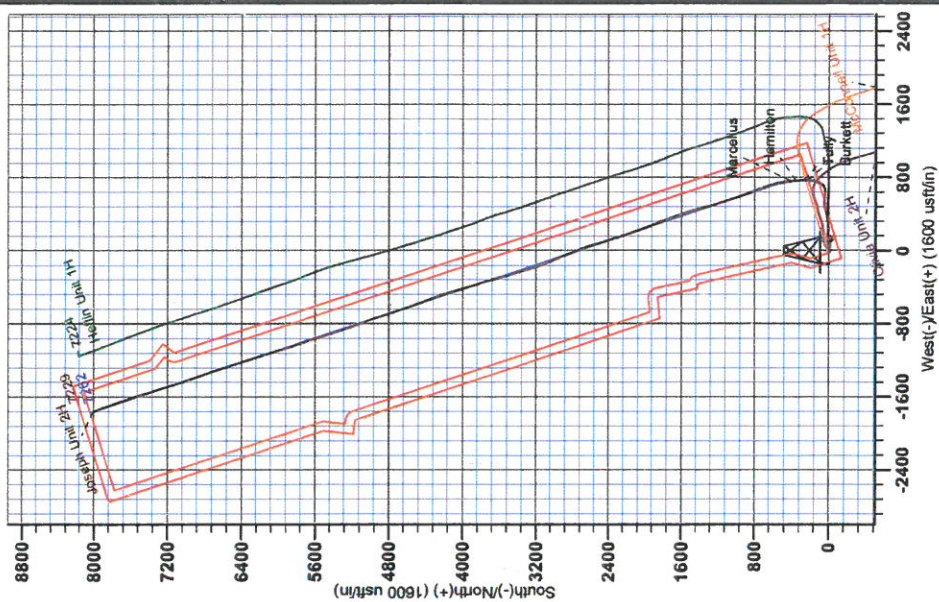
DESIGN TARGET DETAILS

Name	+N/S	+E/W	TVD	Northing	Easting	Latitude	Longitude
SHL Joseph Unit 2H	0.0	0.0	0.0	14276925.48	1721743.11	39° 18' 55.007 N	80° 42' 44.855 W
Actual BHL Joseph Unit 2H 7228.1	8008.2	-1785.214284934.65	1719977.839° 20	14.913 N	860° 43' 7.005 W		



To convert Magnetic North to Grid, Subtract 8.75°
To convert True North to Grid, Subtract 0.18°

Magnetic Field
Strength: 52281.9nT
Dip Angle: 66.87°
Date: 3/29/2014
Model: BGM2013





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WV GEOLOGICAL SURVEY
MORGANTOWN, WV

Antero Resources

Doddridge County WV
Heflin/McConnell Pad
Joseph Unit 2H
Original Wellpath

Design: As Drilled

EOW Completion Report

01 May, 2014



JUN 15 2015



EOW Completion Report



Company: Antero Resources	Local Co-ordinate Reference: Well Joseph Unit 2H
Project: Doddridge County WV	TVD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
Site: Heflin/McConnell Pad	MD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
Well: Joseph Unit 2H	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	Heflin/McConnell Pad				
Site Position:		Northing:	14,276,955.47 usft	Latitude:	39° 18' 55.964 N
From:	Map	Easting:	1,721,742.61 usft	Longitude:	80° 42' 44.860 W
Position Uncertainty:	2.8 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.18 °

Well	Joseph Unit 2H, Marcellus					
Well Position	+N/-S	0.0 usft	Northing:	14,276,925.48 usft	Latitude:	39° 18' 55.667 N
	+E/-W	0.0 usft	Easting:	1,721,743.11 usft	Longitude:	80° 42' 44.855 W
Position Uncertainty	2.8 usft		Wellhead Elevation:	1,404.0 usft	Ground Level:	1,381.0 usft

Wellbore	Original Wellpath				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	3/26/2014	-8.57	66.87	52,282

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 5/1/2014				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	6,709.0	Survey #6 Def Gyro (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
6,709.0	15,442.0	Survey #7 SDI MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. 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	0.00	
100.0	0.11	57.54	100.0	0.1	0.1	0.0	0.11	0.11	
200.0	0.08	41.44	200.0	0.2	0.2	0.1	0.04	0.04	
300.0	0.09	40.78	300.0	0.3	0.3	0.2	0.01	0.01	
400.0	0.10	120.29	400.0	0.3	0.4	0.1	0.12	0.12	
500.0	0.19	75.32	500.0	0.3	0.7	0.1	0.14	0.14	
600.0	0.13	117.41	600.0	0.3	0.9	0.0	0.13	0.13	
700.0	0.06	119.52	700.0	0.2	1.1	-0.2	0.07	0.07	
800.0	0.20	87.45	800.0	0.2	1.3	-0.2	0.15	0.15	
900.0	0.13	88.70	900.0	0.2	1.6	-0.3	0.07	0.07	
1,000.0	0.08	133.62	1,000.0	0.1	1.7	-0.4	0.09	0.09	

JUN 15 2015



EOW Completion Report



Company: Antero Resources
Project: Doddridge County WV
Site: Heflin/McConnell Pad
Well: Joseph Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Joseph Unit 2H
TVD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
MD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
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	0.18	128.40	1,100.0	0.0	1.9	-0.6	0.10
1,200.0	0.09	118.32	1,200.0	-0.1	2.1	-0.8	0.09
1,300.0	0.07	131.25	1,300.0	-0.2	2.2	-0.9	0.03
1,400.0	0.20	144.49	1,400.0	-0.4	2.4	-1.1	0.13
1,500.0	0.17	149.45	1,500.0	-0.7	2.6	-1.4	0.03
1,600.0	0.28	154.12	1,600.0	-1.0	2.7	-1.8	0.11
1,700.0	0.24	159.53	1,700.0	-1.4	2.9	-2.3	0.05
1,800.0	0.36	174.90	1,800.0	-1.9	3.0	-2.8	0.14
1,900.0	0.18	139.36	1,900.0	-2.4	3.1	-3.2	0.24
2,000.0	0.25	181.89	2,000.0	-2.7	3.2	-3.6	0.17
2,100.0	0.14	172.85	2,100.0	-3.1	3.2	-3.9	0.11
2,200.0	0.05	318.10	2,200.0	-3.1	3.2	-4.0	0.18
2,300.0	0.07	129.89	2,300.0	-3.1	3.3	-4.0	0.12
2,400.0	0.13	134.25	2,400.0	-3.3	3.4	-4.2	0.06
2,500.0	0.07	214.73	2,500.0	-3.4	3.4	-4.3	0.14
2,600.0	0.11	263.13	2,600.0	-3.5	3.3	-4.3	0.08
2,700.0	0.22	228.46	2,700.0	-3.6	3.1	-4.4	0.14
2,800.0	0.26	230.80	2,800.0	-3.9	2.7	-4.5	0.04
2,900.0	0.43	232.90	2,900.0	-4.2	2.3	-4.7	0.17
3,000.0	0.36	261.99	3,000.0	-4.5	1.7	-4.8	0.21
3,100.0	0.40	268.26	3,100.0	-4.6	1.0	-4.6	0.06
3,200.0	0.45	251.30	3,200.0	-4.7	0.3	-4.5	0.13
3,300.0	0.40	225.95	3,300.0	-5.1	-0.4	-4.7	0.19
3,400.0	0.34	247.59	3,400.0	-5.4	-0.9	-4.9	0.15
3,500.0	1.92	63.72	3,500.0	-4.8	0.4	-4.7	2.26
3,600.0	5.42	90.45	3,599.7	-4.1	6.6	-6.0	3.80
3,700.0	7.07	99.31	3,699.1	-5.1	17.4	-10.4	1.91
3,800.0	6.75	99.06	3,798.4	-7.0	29.3	-15.9	0.32
3,900.0	6.14	86.31	3,897.8	-7.6	40.4	-20.0	1.55
4,000.0	5.81	85.62	3,997.3	-6.9	50.8	-22.6	0.34
4,100.0	6.45	93.17	4,096.7	-6.8	61.4	-25.9	1.03
4,200.0	5.69	93.28	4,196.1	-7.4	72.0	-29.8	0.76
4,300.0	4.96	91.44	4,295.7	-7.8	81.3	-33.1	0.75
4,400.0	6.32	89.07	4,395.2	-7.8	91.1	-36.3	1.38
4,500.0	5.14	86.12	4,494.7	-7.4	101.1	-39.0	1.22
4,600.0	4.49	81.91	4,594.3	-6.6	109.4	-40.9	0.74
4,700.0	4.98	69.13	4,694.0	-4.5	117.3	-41.4	1.16
4,800.0	6.78	58.56	4,793.5	0.1	126.4	-39.9	2.09
4,900.0	7.93	59.50	4,892.7	6.7	137.4	-37.1	1.16
5,000.0	10.48	65.78	4,991.4	14.0	151.6	-34.8	2.74
5,100.0	10.34	83.90	5,089.7	18.6	168.9	-35.8	3.26
5,200.0	11.59	104.82	5,188.0	17.0	187.5	-43.2	4.14
5,300.0	12.91	102.47	5,285.7	12.0	208.1	-54.5	1.41
5,400.0	13.89	93.14	5,383.0	9.0	231.0	-64.6	2.37

JUN 15 2015



EOW Completion Report



Company: Antero Resources
Project: Doddridge County WV
Site: Heflin/McConnell Pad
Well: Joseph Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Joseph Unit 2H
TVD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
MD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
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	15.94	82.92	5,479.6	10.0	256.6	-71.8	3.33
5,600.0	18.26	86.38	5,575.2	12.7	285.9	-78.5	2.53
5,700.0	20.86	82.89	5,669.4	15.9	319.2	-86.0	2.85
5,800.0	18.89	79.60	5,763.4	21.0	352.8	-91.8	2.26
5,900.0	16.89	77.10	5,858.6	27.2	382.9	-95.5	2.14
6,000.0	18.73	73.67	5,953.8	34.9	412.5	-97.5	2.12
6,100.0	17.01	69.32	6,049.0	44.6	441.6	-97.5	2.18
6,200.0	14.58	84.94	6,145.3	50.9	467.8	-99.8	4.88
6,300.0	13.96	81.85	6,242.2	53.7	492.3	-104.9	0.98
6,400.0	17.17	90.10	6,338.5	55.4	519.0	-111.8	3.89
6,500.0	20.50	99.24	6,433.2	52.6	551.1	-124.6	4.44
6,600.0	23.49	96.23	6,525.9	47.6	588.2	-141.1	3.19
6,700.0	22.96	90.02	6,617.8	45.4	627.5	-155.6	2.50
6,709.0	22.90	89.66	6,626.1	45.4	631.0	-156.7	1.70
6,787.0	21.73	83.70	6,698.2	47.1	660.5	-164.5	3.26
6,818.0	23.36	74.95	6,726.9	49.3	672.2	-166.0	12.02
6,850.0	25.15	67.13	6,756.1	53.6	684.6	-165.9	11.48
6,881.0	27.18	59.37	6,783.9	59.8	696.7	-163.9	12.82
6,912.0	29.69	51.90	6,811.2	68.1	708.9	-159.8	14.03
6,944.0	31.24	44.45	6,838.7	79.0	720.9	-153.4	12.75
6,975.0	32.77	39.16	6,865.0	91.2	731.9	-145.2	10.30
7,006.0	33.31	32.99	6,891.0	104.9	741.8	-135.4	10.99
7,038.0	34.49	26.18	6,917.6	120.4	750.6	-123.5	12.42
7,069.0	35.85	19.92	6,942.9	136.8	757.5	-110.1	12.43
7,101.0	37.92	14.26	6,968.5	155.1	763.2	-94.5	12.43
7,132.0	40.49	9.17	6,992.6	174.3	767.1	-77.6	13.28
7,164.0	44.17	5.05	7,016.2	195.7	769.7	-58.1	14.40
7,195.0	47.54	2.04	7,037.8	217.9	771.1	-37.5	12.91
7,209.0	48.83	1.15	7,047.2	228.3	771.4	-27.7	10.34
Burkett							
7,227.0	50.49	0.05	7,058.8	242.0	771.5	-14.7	10.34
7,252.0	52.92	359.14	7,074.3	261.6	771.4	3.9	10.13
Tully							
7,259.0	53.60	358.89	7,078.5	267.2	771.3	9.3	10.13
7,290.0	56.95	357.89	7,096.1	292.7	770.6	33.7	11.13
7,322.0	60.38	356.86	7,112.8	320.0	769.3	59.9	11.07
7,353.0	64.43	355.71	7,127.1	347.4	767.5	86.5	13.47
7,363.0	65.63	355.42	7,131.4	356.5	766.8	95.3	12.32
Hamilton							
7,385.0	68.28	354.79	7,140.0	376.6	765.1	115.0	12.32
7,416.0	71.67	354.77	7,150.6	405.6	762.5	143.3	10.94
7,417.0	71.71	354.78	7,150.9	406.6	762.4	144.3	4.37
Marcellus							
7,448.0	73.06	354.94	7,160.3	436.0	759.7	173.0	4.37
7,480.0	75.81	353.92	7,168.9	466.7	756.7	203.1	9.13

JUN 15 2015



EOW Completion Report



Company: Antero Resources
Project: Doddridge County WV
Site: Heflin/McConnell Pad
Well: Joseph Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Joseph Unit 2H
TVD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
MD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
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)
7,510.0	79.60	351.73	7,175.3	495.8	753.1	231.8	14.51
7,543.0	82.86	348.69	7,180.3	527.9	747.5	264.0	13.43
7,574.0	84.59	346.03	7,183.7	557.9	740.8	294.7	10.19
7,606.0	86.50	342.74	7,186.2	588.7	732.2	326.5	11.86
7,651.0	91.28	340.39	7,187.0	631.3	718.0	371.5	11.84
7,746.0	90.17	339.40	7,185.8	720.5	685.3	466.5	1.57
7,841.0	88.83	339.46	7,186.7	809.5	651.9	561.4	1.41
7,936.0	89.19	339.20	7,188.3	898.3	618.4	656.3	0.47
8,031.0	89.80	339.62	7,189.1	987.3	585.0	751.2	0.78
8,126.0	89.40	339.90	7,189.8	1,076.4	552.1	846.2	0.51
8,220.0	89.16	341.78	7,191.0	1,165.2	521.3	940.2	2.02
8,315.0	89.03	345.64	7,192.5	1,256.3	494.6	1,035.1	4.06
8,409.0	89.29	347.10	7,193.9	1,347.7	472.5	1,128.7	1.58
8,503.0	88.79	346.50	7,195.4	1,439.2	451.0	1,222.3	0.83
8,597.0	89.50	341.78	7,196.8	1,529.6	425.4	1,316.2	5.08
8,687.0	88.66	339.51	7,198.3	1,614.5	395.5	1,406.1	2.69
8,777.0	88.72	340.82	7,200.3	1,699.1	365.0	1,496.1	1.46
8,868.0	86.84	338.46	7,203.9	1,784.3	333.4	1,587.0	3.31
8,958.0	86.30	338.56	7,209.3	1,867.9	300.5	1,676.7	0.61
9,048.0	87.71	338.55	7,214.0	1,951.6	267.6	1,766.4	1.57
9,139.0	88.99	339.65	7,216.6	2,036.6	235.2	1,857.3	1.85
9,229.0	89.83	340.09	7,217.5	2,121.1	204.2	1,947.3	1.05
9,320.0	89.73	339.67	7,217.9	2,206.5	172.9	2,038.2	0.47
9,412.0	89.93	342.97	7,218.1	2,293.6	143.4	2,130.2	3.59
9,501.0	89.53	344.43	7,218.5	2,379.1	118.4	2,219.1	1.70
9,592.0	90.40	345.26	7,218.6	2,466.9	94.7	2,310.0	1.32
9,683.0	89.33	341.90	7,218.8	2,554.2	68.9	2,400.9	3.87
9,778.0	90.84	342.77	7,218.7	2,644.7	40.1	2,495.9	1.83
9,872.0	90.27	339.72	7,217.8	2,733.7	9.9	2,589.9	3.30
9,967.0	89.87	334.80	7,217.6	2,821.3	-26.8	2,684.6	5.20
10,062.0	90.60	337.14	7,217.3	2,908.0	-65.5	2,779.1	2.58
10,157.0	90.17	338.23	7,216.6	2,995.9	-101.6	2,873.9	1.23
10,251.0	89.83	337.16	7,216.6	3,082.9	-137.3	2,967.7	1.19
10,345.0	90.54	340.93	7,216.3	3,170.6	-170.9	3,061.6	4.08
10,441.0	90.00	344.49	7,215.9	3,262.3	-199.4	3,157.6	3.75
10,536.0	90.77	344.05	7,215.2	3,353.7	-225.1	3,252.5	0.93
10,631.0	90.40	340.85	7,214.3	3,444.3	-253.8	3,347.4	3.39
10,725.0	90.27	343.52	7,213.7	3,533.8	-282.5	3,441.4	2.84
10,820.0	90.23	344.40	7,213.3	3,625.1	-308.8	3,536.3	0.93
10,916.0	89.97	345.06	7,213.1	3,717.7	-334.1	3,632.2	0.74
11,011.0	89.30	343.17	7,213.7	3,809.1	-360.1	3,727.1	2.11
11,106.0	89.66	343.59	7,214.6	3,900.1	-387.2	3,822.0	0.58
11,202.0	89.63	345.01	7,215.2	3,992.5	-413.2	3,917.9	1.48
11,297.0	90.47	343.20	7,215.1	4,083.9	-439.2	4,012.8	2.10

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JUN 15 2015



WV GEOLOGICAL SURVEY
MORGANTOWN, WV

EOW Completion Report



Company: Antero Resources
Project: Doddridge County WV
Site: Heflin/McConnell Pad
Well: Joseph Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Joseph Unit 2H
TVD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
MD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
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)
11,392.0	90.47	341.61	7,214.3	4,174.4	-468.0	4,107.8	1.67
11,487.0	90.71	341.78	7,213.3	4,264.6	-497.8	4,202.8	0.31
11,581.0	90.00	339.34	7,212.8	4,353.2	-529.1	4,296.8	2.70
11,676.0	90.24	336.52	7,212.6	4,441.3	-564.8	4,391.6	2.98
11,772.0	89.16	339.65	7,213.1	4,530.3	-600.6	4,487.4	3.45
11,866.0	89.63	340.50	7,214.1	4,618.7	-632.6	4,581.3	1.03
11,961.0	89.97	341.68	7,214.4	4,708.5	-663.4	4,676.3	1.29
12,056.0	88.62	341.87	7,215.6	4,798.8	-693.1	4,771.3	1.44
12,151.0	89.23	342.30	7,217.3	4,889.1	-722.3	4,866.3	0.79
12,246.0	89.63	340.73	7,218.3	4,979.2	-752.4	4,961.3	1.71
12,341.0	90.27	339.62	7,218.4	5,068.6	-784.7	5,056.3	1.35
12,436.0	89.76	339.45	7,218.3	5,157.6	-817.9	5,151.2	0.57
12,531.0	88.66	340.06	7,219.7	5,246.7	-850.8	5,246.1	1.32
12,626.0	88.99	341.97	7,221.6	5,336.5	-881.6	5,341.1	2.04
12,722.0	89.77	342.99	7,222.6	5,428.1	-910.5	5,437.1	1.34
12,817.0	90.37	343.15	7,222.5	5,519.0	-938.2	5,532.1	0.65
12,912.0	90.54	341.92	7,221.8	5,609.6	-966.7	5,627.0	1.31
13,007.0	90.81	341.27	7,220.7	5,699.7	-996.7	5,722.0	0.74
13,102.0	89.93	341.23	7,220.0	5,789.7	-1,027.2	5,817.0	0.93
13,197.0	89.73	341.27	7,220.3	5,879.6	-1,057.8	5,912.0	0.21
13,292.0	90.50	342.83	7,220.1	5,970.0	-1,087.1	6,007.0	1.83
13,387.0	91.04	343.28	7,218.9	6,060.9	-1,114.7	6,102.0	0.74
13,482.0	90.81	343.05	7,217.3	6,151.8	-1,142.3	6,196.9	0.34
13,577.0	89.23	341.77	7,217.3	6,242.3	-1,171.0	6,291.9	2.14
13,672.0	88.99	341.86	7,218.8	6,332.6	-1,200.6	6,386.9	0.27
13,767.0	89.80	341.99	7,219.8	6,422.9	-1,230.1	6,481.9	0.86
13,861.0	90.47	342.85	7,219.5	6,512.5	-1,258.5	6,575.9	1.16
13,956.0	91.71	341.77	7,217.7	6,603.0	-1,287.3	6,670.8	1.73
14,050.0	89.36	341.06	7,216.9	6,692.1	-1,317.3	6,764.8	2.61
14,145.0	89.36	339.74	7,217.9	6,781.6	-1,349.2	6,859.8	1.39
14,240.0	89.09	338.28	7,219.2	6,870.2	-1,383.2	6,954.7	1.56
14,334.0	89.40	340.30	7,220.4	6,958.2	-1,416.4	7,048.6	2.17
14,428.0	90.17	342.51	7,220.8	7,047.2	-1,446.4	7,142.6	2.49
14,524.0	89.23	343.44	7,221.3	7,139.0	-1,474.5	7,238.6	1.38
14,619.0	89.90	344.14	7,222.0	7,230.2	-1,501.0	7,333.5	1.02
14,714.0	90.71	344.66	7,221.5	7,321.7	-1,526.6	7,428.4	1.01
14,809.0	89.16	342.23	7,221.6	7,412.8	-1,553.6	7,523.3	3.03
14,904.0	89.36	341.23	7,222.8	7,503.0	-1,583.4	7,618.3	1.07
14,999.0	89.97	341.56	7,223.4	7,593.0	-1,613.7	7,713.3	0.73
15,094.0	90.54	341.35	7,223.0	7,683.1	-1,643.9	7,808.3	0.64
15,189.0	88.59	339.33	7,223.7	7,772.5	-1,675.9	7,903.3	2.96
15,281.0	88.89	340.25	7,225.7	7,858.9	-1,707.7	7,995.2	1.05
15,376.0	88.66	338.37	7,227.8	7,947.7	-1,741.2	8,090.1	1.99
15,383.0	88.39	338.38	7,227.9	7,954.2	-1,743.8	8,097.1	3.86
15,442.0	89.40	339.00	7,229.1	8,009.2	-1,765.2	8,156.0	2.01



Company: Antero Resources
Project: Doddridge County WV
Site: Heflin/McConnell Pad
Well: Joseph Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Joseph Unit 2H
TVD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
MD Reference: Frontier 3: GL 1381' + 23' RKB @ 1404.0usft
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)
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Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,209.0	7,047.2	228.3	771.4	Burkett
7,252.0	7,074.3	261.6	771.4	Tully
7,363.0	7,131.4	356.5	766.8	Hamilton
7,417.0	7,150.9	406.6	762.4	Marcellus

Checked By: _____ Approved By: _____ Date: _____

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JUN 15 2015

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MORGANTOWN, WV