



**McConnell Unit 2H**  
**Doddridge County WV**  
**Northing: 14270661.20**  
**Eastings: 1727223.45**  
**As Drilled**

FRONTIER 23: McConnell 2H 1180 GL + 22 KB @ 1202.0 usft  
 1180.0

**WELL DETAILS:** McConnell Unit 2H  
 Ground Level: 1180.0  
 Easting: 1727223.45  
 Longitude: 41° 35.371' W  
 Latitude: 37° 53.551' N

+N/-S +E/-W  
 0.0 0.0 14270661.20 1727223.45

**SITE DETAILS:**  
 Holden/Langfit/Vanscoy/McConnell Pac  
 Site Center: Holden 2H  
 Site Centre Northing: 14270672.18  
 Easting: 1727282.25  
 Positional Uncertainty: 2.8  
 Convergence: 0.19  
 Local North: Grid

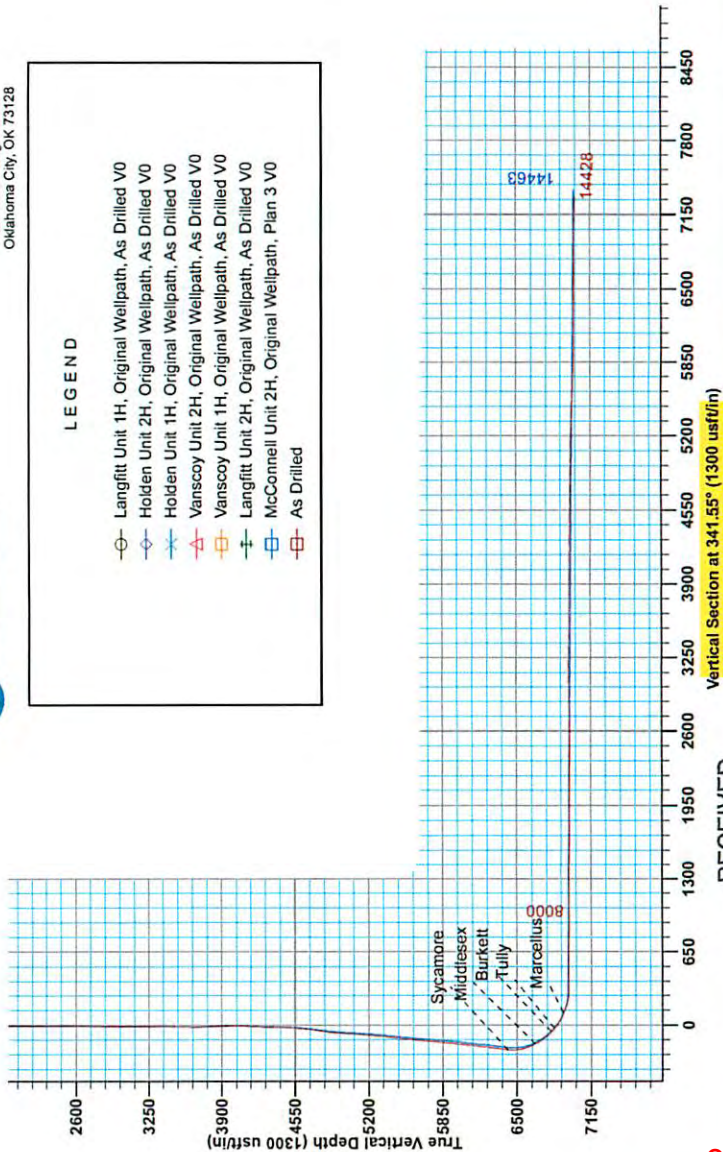
**PROJECT DETAILS:** Doddridge County WV  
 Geodetic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1927 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: Zone 17N (84 W to 78 W)  
 System Datum: Mean Sea Level



Genie Lightfoot  
 16.16, April 16 2014  
 Scientific Drilling  
 421 South Eagle Lane  
 Oklahoma City, OK 73128

**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
- Langfit Unit 2H, Original Wellpath, As Drilled V0
- McConnell Unit 2H, Original Wellpath, Plan 3 V0
- As Drilled



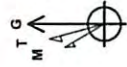
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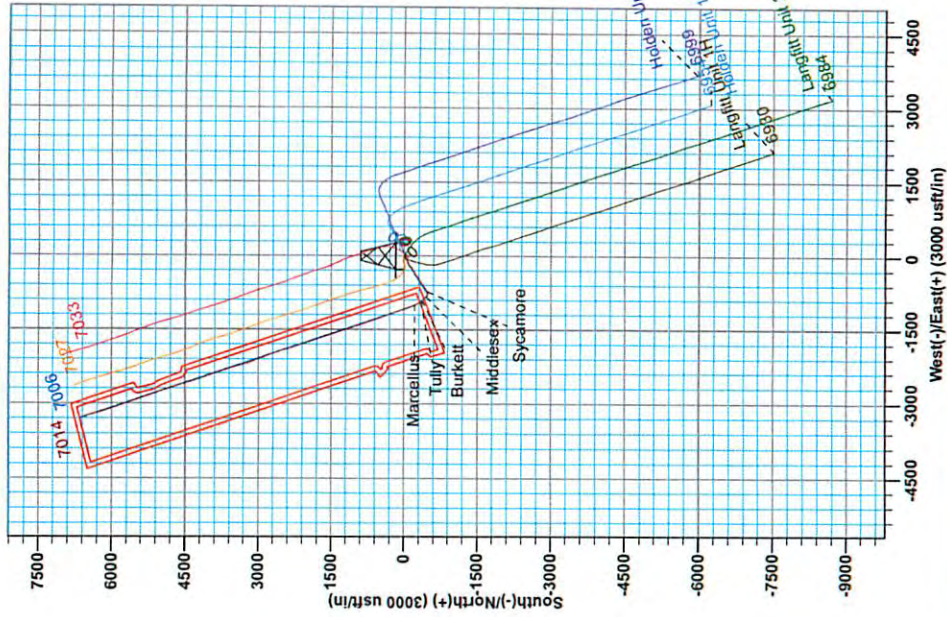
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 Environmental Protection

06/05/2015



Azimuths to Grid North  
 True North: -0.19°  
 Magnetic North: -8.72°  
 Strength: 52318.1 nT  
 Dip Angle: 66.83°  
 Date: 3/18/2014  
 Model: IGRF2010

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





# Antero Resources

Doddridge County WV  
Holden/Langfitt/Vanscoy/McConnell Pad  
McConnell Unit 2H  
Original Wellpath

Design: As Drilled

## EOW Completion Report

16 April, 2014

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well McConnell Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	FRONTIER 23: McConnell 2H 1180 GL + 22 KB @
<b>Site:</b>	Holden/Langfitt/Vanscoy/McConnell Pad	<b>MD Reference:</b>	FRONTIER 23: McConnell 2H 1180 GL + 22 KB @
<b>Well:</b>	McConnell Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

<b>Project</b>	Doddridge County WV, McClellan District		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Zone 17N (84 W to 78 W)		

<b>Site</b>	Holden/Langfitt/Vanscoy/McConnell Pad				
<b>Site Position:</b>	<b>Northing:</b>	14,270,672.18 usft	<b>Latitude:</b>	39° 17' 53.658 N	
<b>From:</b> Map	<b>Easting:</b>	1,727,282.25 usft	<b>Longitude:</b>	80° 41' 34.622 W	
<b>Position Uncertainty:</b>	2.8 usft	<b>Slot Radius:</b>	13-3/16"	<b>Grid Convergence:</b>	0.19 °

<b>Well</b>	McConnell Unit 2H					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,270,661.20 usft	<b>Latitude:</b>	39° 17' 53.551 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	1,727,223.45 usft	<b>Longitude:</b>	80° 41' 35.371 W
<b>Position Uncertainty</b>	2.8 usft	<b>Wellhead Elevation:</b>	1,202.0 usft	<b>Ground Level:</b>	1,180.0 usft	

<b>Wellbore</b>	Original Wellpath				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	3/18/2014	-8.53	66.83	52,318

<b>Design</b>	As Drilled				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	341.55	

<b>Survey Program</b>	Date 4/16/2014				
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
100.0	3,688.4	Survey #4 Final Gyro (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
3,688.4	6,350.6	Survey #6 Gyro SS (Original Wellpath)	MWD SDI	MWD - Standard ver 1.0.1	
6,350.7	14,428.0	Survey #8 SDI MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1	

<b>Survey</b>										
<b>MD (usft)</b>	<b>Inc (°)</b>	<b>Azi (azimuth) (°)</b>	<b>TVD (usft)</b>	<b>N/S (usft)</b>	<b>E/W (usft)</b>	<b>V. Sec (usft)</b>	<b>DLeg (°/100usft)</b>			
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0			
100.0	0.72	199.35	100.0	-0.6	-0.2	-0.5	0.72			
200.0	0.77	209.33	200.0	-1.8	-0.7	-1.4	0.14			
300.0	0.49	201.06	300.0	-2.8	-1.2	-2.2	0.29			
400.0	0.46	199.72	400.0	-3.5	-1.5	-2.9	0.03			
500.0	0.39	192.10	500.0	-4.2	-2.1	-3.5	0.09			
600.0	0.48	193.41	600.0	-5.0	-2.1	-4.1	0.09			
700.0	0.36	192.71	700.0	-5.7	-2.1	-4.8	0.12			
800.0	0.43	194.29	800.0	-6.4	-2.3	-5.3	0.07			
900.0	0.27	175.91	900.0	-7.0	-2.3	-5.9	0.19			

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EOW Completion Report



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well McConnell Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	FRONTIER 23: McConnell 2H 1180 GL + 22 KB @
<b>Site:</b>	Holden/Langfitt/Vanscoy/McConnell Pad	<b>MD Reference:</b>	FRONTIER 23: McConnell 2H 1180 GL + 22 KB @
<b>Well:</b>	McConnell Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
1,000.0	0.32	182.31	1,000.0	-7.5	-2.3	-6.4	0.06
1,100.0	0.37	183.25	1,100.0	-8.1	-2.3	-6.9	0.05
1,200.0	0.30	180.67	1,200.0	-8.7	-2.3	-7.5	0.07
1,300.0	0.35	211.32	1,300.0	-9.2	-2.5	-7.9	0.18
1,400.0	0.34	221.44	1,400.0	-9.7	-2.9	-8.3	0.06
1,500.0	0.27	200.60	1,500.0	-10.1	-3.1	-8.6	0.13
1,600.0	0.18	239.25	1,600.0	-10.4	-3.4	-8.8	0.17
1,700.0	0.14	230.71	1,700.0	-10.6	-3.6	-8.9	0.05
1,800.0	0.15	288.52	1,800.0	-10.6	-3.8	-8.9	0.14
1,900.0	0.16	232.40	1,900.0	-10.7	-4.0	-8.8	0.15
2,000.0	0.17	269.18	2,000.0	-10.7	-4.3	-8.8	0.10
2,100.0	0.15	184.32	2,100.0	-10.9	-4.5	-8.9	0.22
2,200.0	0.19	239.67	2,200.0	-11.1	-4.6	-9.1	0.16
2,300.0	0.14	171.69	2,300.0	-11.3	-4.7	-9.2	0.19
2,400.0	0.17	158.64	2,400.0	-11.6	-4.7	-9.5	0.05
2,500.0	0.34	221.70	2,500.0	-11.9	-4.8	-9.8	0.30
2,600.0	0.40	201.63	2,600.0	-12.5	-5.1	-10.2	0.14
2,700.0	0.46	203.02	2,699.9	-13.2	-5.4	-10.8	0.06
2,800.0	0.70	214.85	2,799.9	-14.0	-5.9	-11.4	0.27
2,900.0	0.60	210.21	2,899.9	-15.0	-6.5	-12.1	0.11
3,000.0	0.55	213.80	2,999.9	-15.8	-7.1	-12.8	0.06
3,100.0	0.75	206.71	3,099.9	-16.8	-7.6	-13.5	0.22
3,200.0	0.54	207.54	3,199.9	-17.8	-8.1	-14.3	0.21
3,300.0	0.78	209.56	3,299.9	-18.8	-8.7	-15.1	0.24
3,400.0	0.66	208.09	3,399.9	-19.9	-9.3	-16.0	0.12
3,500.0	0.71	216.82	3,499.9	-20.9	-9.9	-16.7	0.12
3,600.0	0.55	196.97	3,599.9	-21.9	-10.5	-17.4	0.27
3,688.4	0.76	210.12	3,688.3	-22.8	-10.9	-18.2	0.29
3,770.0	5.21	286.92	3,769.8	-22.2	-14.7	-16.4	6.24
3,866.0	6.85	274.72	3,865.2	-20.4	-24.6	-11.6	2.16
3,962.0	8.90	256.16	3,960.3	-21.8	-37.5	-8.8	3.38
4,059.0	9.60	243.66	4,056.1	-27.1	-52.0	-9.3	2.19
4,155.0	11.52	238.98	4,150.5	-35.6	-67.4	-12.5	2.19
4,252.0	13.81	237.67	4,245.1	-46.8	-85.5	-17.3	2.38
4,348.0	13.96	246.83	4,338.3	-57.5	-105.8	-21.0	2.29
4,445.0	15.95	243.49	4,432.0	-68.1	-128.5	-23.9	2.23
4,540.0	18.88	244.45	4,522.6	-80.5	-154.1	-27.6	3.10
4,637.0	20.52	237.05	4,614.0	-96.5	-182.5	-33.8	3.07
4,733.0	20.27	227.38	4,704.0	-116.9	-208.9	-44.8	3.52
4,829.0	18.02	222.99	4,794.7	-139.1	-231.2	-58.7	2.78
4,926.0	17.36	235.14	4,887.1	-158.3	-253.3	-70.0	3.86
5,022.0	18.60	241.09	4,978.4	-173.9	-278.5	-76.8	2.31
5,119.0	19.76	241.22	5,070.1	-189.3	-308.4	-82.6	1.20
5,215.0	22.66	241.53	5,159.5	-205.9	-336.9	-88.7	3.02
5,311.0	21.99	236.74	5,248.4	-224.6	-368.4	-96.5	2.02

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PASS 5000.1 Build 70  
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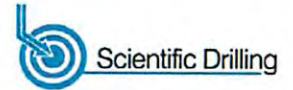


<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well McConnell Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	FRONTIER 23: McConnell 2H 1180 GL + 22 KB @
<b>Site:</b>	Holden/Langfit/Vanscoy/McConnell Pad	<b>MD Reference:</b>	FRONTIER 23: McConnell 2H 1180 GL + 22 KB @
<b>Well:</b>	McConnell Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
5,407.0	22.02	234.91	5,337.4	-244.8	-397.9	-106.3	0.71	
5,503.0	19.94	234.85	5,427.0	-264.6	-426.1	-116.1	2.17	
5,600.0	18.79	233.86	5,518.5	-283.3	-452.2	-125.6	1.23	
5,695.0	19.40	236.85	5,608.3	-301.0	-477.8	-134.3	1.21	
5,791.0	21.16	239.49	5,698.3	-318.5	-506.0	-142.0	2.07	
5,888.0	18.75	236.38	5,789.5	-336.0	-534.1	-149.7	2.71	
5,983.0	19.65	234.21	5,879.2	-353.8	-559.8	-158.4	1.21	
6,080.0	20.83	234.27	5,970.2	-373.4	-587.0	-168.4	1.22	
6,176.0	21.49	233.91	6,059.7	-393.7	-615.1	-178.8	0.70	
6,272.0	21.99	236.90	6,148.9	-413.9	-644.3	-188.7	1.27	
6,521.0	20.05	230.43	6,381.4	-466.6	-716.3	-215.9	1.21	
6,553.0	19.32	231.78	6,411.5	-473.3	-724.7	-219.7	2.69	
6,564.0	19.20	236.45	6,421.9	-475.5	-727.6	-220.7	14.05	
<b>Sycamore</b>								
6,585.0	19.29	245.41	6,441.7	-478.8	-733.7	-222.0	14.05	
6,618.0	20.28	258.02	6,472.8	-482.3	-744.2	-221.9	13.25	
6,650.0	22.83	268.11	6,502.6	-483.6	-755.9	-219.6	14.03	
6,682.0	24.97	276.93	6,531.8	-483.0	-768.8	-214.9	13.00	
6,714.0	26.90	283.52	6,560.6	-480.5	-782.5	-208.2	10.83	
6,746.0	29.13	290.36	6,588.9	-476.1	-796.9	-199.4	12.21	
6,778.0	30.26	298.53	6,616.7	-469.5	-811.3	-188.7	13.12	
6,810.0	31.10	305.92	6,644.2	-460.8	-825.1	-176.0	12.07	
6,829.0	31.99	309.12	6,660.4	-454.8	-832.9	-167.8	9.98	
<b>Middlesex</b>								
6,842.0	32.65	311.21	6,671.4	-450.3	-838.2	-161.9	9.98	
6,874.0	34.63	314.35	6,698.0	-438.3	-851.2	-146.3	8.23	
6,906.0	36.96	318.87	6,724.0	-424.6	-864.1	-129.4	11.01	
6,938.0	40.38	322.03	6,749.0	-409.2	-876.8	-110.7	12.34	
6,970.0	44.49	324.56	6,772.6	-391.9	-889.7	-90.2	13.91	
7,002.0	46.86	325.91	6,794.9	-373.1	-902.7	-68.2	8.00	
7,011.0	47.55	326.25	6,801.0	-367.6	-906.4	-61.9	8.14	
<b>Burkett</b>								
7,035.0	49.39	327.12	6,817.0	-352.6	-916.3	-44.5	8.14	
7,053.0	51.59	327.37	6,828.4	-340.9	-923.8	-31.0	12.27	
<b>Tully</b>								
7,067.0	53.30	327.56	6,836.9	-331.6	-929.7	-20.3	12.27	
7,099.0	57.79	328.17	6,855.0	-309.2	-943.8	5.3	14.12	
7,131.0	61.17	328.15	6,871.3	-285.8	-958.3	32.2	10.56	
7,163.0	63.56	329.65	6,886.1	-261.5	-973.0	59.8	8.55	
7,195.0	65.72	332.89	6,899.8	-236.2	-986.8	88.3	11.37	
7,217.0	67.64	334.19	6,908.6	-218.1	-995.8	108.3	10.26	
<b>Marcellus</b>								
7,228.0	68.60	334.82	6,912.6	-208.9	-1,000.2	118.4	10.26	
7,260.0	70.82	337.12	6,923.7	-181.5	-1,012.5	148.3	9.67	
7,292.0	73.02	338.21	6,933.7	-153.3	-1,024.8	178.6	7.60	

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COMPASS 5000.1 Build 70  
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<b>Site:</b>	Holden/Langfitt/Vanscoy/McConnell Pad	<b>MD Reference:</b>	FRONTIER 23: McConnell 2H 1180 GL + 22 KB @
<b>Well:</b>	McConnell Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
7,324.0	77.61	340.57	6,941.8	-124.4	-1,034.9	209.5	16.02
7,356.0	81.36	341.27	6,947.6	-94.6	-1,045.2	241.0	11.91
7,371.0	84.00	341.35	6,949.5	-80.6	-1,049.9	255.9	17.61
7,432.0	91.01	341.96	6,952.2	-22.7	-1,069.1	316.8	11.54
7,475.0	91.89	341.44	6,951.1	18.1	-1,082.6	359.8	2.38
7,572.0	90.31	339.50	6,949.2	109.5	-1,115.0	456.7	2.58
7,667.0	89.60	339.41	6,949.3	198.4	-1,148.4	551.7	0.75
7,763.0	88.90	339.41	6,950.6	288.3	-1,182.1	647.6	0.73
7,859.0	88.81	339.85	6,952.5	378.3	-1,215.5	743.5	0.47
7,955.0	88.90	339.24	6,954.4	468.2	-1,249.1	839.4	0.64
8,051.0	90.04	342.58	6,955.3	558.9	-1,280.5	935.4	3.68
8,147.0	90.22	342.05	6,955.1	650.3	-1,309.6	1,031.4	0.58
8,243.0	88.72	339.77	6,956.0	741.1	-1,341.0	1,127.4	2.84
8,338.0	89.60	340.29	6,957.4	830.3	-1,373.5	1,222.3	1.08
8,434.0	90.04	340.38	6,957.7	920.7	-1,405.8	1,318.3	0.47
8,530.0	90.57	341.70	6,957.2	1,011.5	-1,437.0	1,414.3	1.48
8,625.0	90.22	342.31	6,956.5	1,101.9	-1,466.3	1,509.3	0.74
8,720.0	88.72	341.79	6,957.4	1,192.2	-1,495.6	1,604.3	1.67
8,817.0	88.90	341.35	6,959.4	1,284.2	-1,526.2	1,701.3	0.49
8,913.0	89.16	342.58	6,961.0	1,375.5	-1,556.0	1,797.2	1.31
9,009.0	88.99	341.61	6,962.6	1,466.9	-1,585.5	1,893.2	1.03
9,099.0	89.52	340.73	6,963.7	1,552.0	-1,614.5	1,983.2	1.14
9,190.0	90.13	341.26	6,964.0	1,638.1	-1,644.2	2,074.2	0.89
9,281.0	90.48	340.21	6,963.5	1,724.0	-1,674.2	2,165.2	1.22
9,372.0	90.04	341.88	6,963.1	1,810.0	-1,703.7	2,256.2	1.90
9,462.0	89.34	339.85	6,963.6	1,895.1	-1,733.2	2,346.2	2.39
9,552.0	90.22	342.31	6,963.9	1,980.2	-1,762.4	2,436.2	2.90
9,643.0	90.40	342.23	6,963.5	2,066.9	-1,790.1	2,527.2	0.22
9,735.0	89.25	339.94	6,963.7	2,153.9	-1,819.9	2,619.1	2.79
9,825.0	90.92	343.63	6,963.6	2,239.4	-1,848.1	2,709.1	4.50
9,916.0	90.92	343.46	6,962.1	2,326.6	-1,873.8	2,800.1	0.19
10,008.0	91.10	343.37	6,960.5	2,414.8	-1,900.1	2,892.0	0.22
10,099.0	90.57	343.11	6,959.2	2,501.9	-1,926.3	2,982.9	0.65
10,195.0	91.28	343.46	6,957.6	2,593.8	-1,953.9	3,078.9	0.82
10,291.0	90.48	341.70	6,956.2	2,685.4	-1,982.7	3,174.9	2.01
10,388.0	89.25	338.62	6,956.4	2,776.6	-2,015.6	3,271.8	3.42
10,481.0	89.78	338.54	6,957.2	2,863.2	-2,049.6	3,364.7	0.58
10,579.0	89.52	337.83	6,957.8	2,954.2	-2,086.0	3,462.5	0.77
10,675.0	88.81	337.83	6,959.2	3,043.1	-2,122.2	3,558.3	0.74
10,771.0	88.46	338.54	6,961.5	3,132.2	-2,157.9	3,654.1	0.82
10,868.0	90.40	342.58	6,962.4	3,223.6	-2,192.9	3,751.1	4.62
10,964.0	90.04	344.42	6,962.1	3,315.7	-2,217.4	3,847.0	1.95
11,059.0	89.16	344.42	6,962.7	3,407.2	-2,242.9	3,941.9	0.93
11,156.0	88.90	342.58	6,964.4	3,500.2	-2,270.5	4,038.8	1.92
11,252.0	89.78	343.72	6,965.5	3,592.0	-2,298.3	4,134.8	1.50

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EOW Completion Report



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well McConnell Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	FRONTIER 23: McConnell 2H 1180 GL + 22 KB @
<b>Site:</b>	Holden/Langfitt/Vanscoy/McConnell Pad	<b>MD Reference:</b>	FRONTIER 23: McConnell 2H 1180 GL + 22 KB @
<b>Well:</b>	McConnell Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
11,348.0	89.96	343.37	6,965.7	3,684.1	-2,325.5	4,230.7	0.41
11,444.0	89.52	340.82	6,966.1	3,775.4	-2,355.0	4,326.7	2.70
11,540.0	88.37	339.15	6,967.9	3,865.6	-2,387.8	4,422.6	2.11
11,637.0	89.16	341.17	6,970.0	3,956.8	-2,420.8	4,519.6	2.24
11,733.0	90.13	341.17	6,970.6	4,047.7	-2,451.7	4,615.6	1.01
11,829.0	88.81	343.11	6,971.5	4,139.1	-2,481.2	4,711.6	2.44
11,925.0	88.55	341.96	6,973.7	4,230.6	-2,510.0	4,807.5	1.23
12,020.0	88.29	341.79	6,976.3	4,320.9	-2,539.5	4,902.5	0.33
12,116.0	88.90	343.28	6,978.7	4,412.4	-2,568.3	4,998.4	1.68
12,213.0	89.52	343.55	6,980.0	4,505.4	-2,596.0	5,095.4	0.70
12,308.0	88.90	342.93	6,981.3	4,596.3	-2,623.4	5,190.3	0.92
12,404.0	89.25	342.84	6,982.9	4,688.1	-2,651.6	5,286.3	0.38
12,501.0	87.76	342.40	6,985.4	4,780.6	-2,680.6	5,383.2	1.60
12,597.0	87.58	342.31	6,989.3	4,872.0	-2,709.7	5,479.1	0.21
12,693.0	88.02	342.31	6,993.0	4,963.4	-2,738.8	5,575.1	0.46
12,789.0	87.41	341.35	6,996.8	5,054.5	-2,768.7	5,671.0	1.18
12,885.0	89.16	341.26	6,999.7	5,145.4	-2,799.5	5,766.9	1.83
12,981.0	88.81	338.45	7,001.4	5,235.5	-2,832.6	5,862.9	2.95
13,077.0	90.40	340.82	7,002.0	5,325.5	-2,866.0	5,958.8	2.97
13,173.0	90.75	340.12	7,001.1	5,416.0	-2,898.1	6,054.8	0.82
13,269.0	89.52	340.47	7,000.8	5,506.4	-2,930.4	6,150.7	1.33
13,365.0	89.52	341.61	7,001.7	5,597.1	-2,961.6	6,246.7	1.19
13,462.0	89.43	338.45	7,002.5	5,688.3	-2,994.7	6,343.7	3.26
13,558.0	88.99	342.40	7,003.9	5,778.7	-3,026.9	6,439.6	4.14
13,655.0	88.81	340.29	7,005.7	5,870.6	-3,057.9	6,536.6	2.18
13,751.0	90.66	342.58	7,006.2	5,961.6	-3,088.5	6,632.6	3.07
13,847.0	89.96	343.72	7,005.7	6,053.5	-3,116.3	6,728.6	1.39
13,944.0	89.78	340.91	7,005.9	6,145.9	-3,145.8	6,825.5	2.90
14,040.0	89.25	342.67	7,006.7	6,237.1	-3,175.8	6,921.5	1.91
14,137.0	88.46	344.69	7,008.6	6,330.1	-3,203.0	7,018.4	2.24
14,233.0	88.81	345.04	7,010.9	6,422.8	-3,228.1	7,114.3	0.52
14,329.0	89.60	345.57	7,012.2	6,515.6	-3,252.4	7,210.0	0.99
14,428.0	88.50	343.90	7,013.9	6,611.1	-3,278.5	7,308.9	2.02

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<b>Well:</b>	McConnell Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,564.0	6,421.9	-475.5	-727.6	Sycamore
6,829.0	6,660.4	-454.8	-832.9	Middlesex
7,011.0	6,801.0	-367.6	-906.4	Burkett
7,053.0	6,828.4	-340.9	-923.8	Tully
7,217.0	6,908.6	-218.1	-995.8	Marcellus

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

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