

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 2/7/2014
API #: 47-017-06165

Farm name: Erwin, John F. Operator Well No.: Schulte Unit 1H

LOCATION: Elevation: 1,218' Quadrangle: New Milton 7.5'

District: New Milton County: Doddridge
Latitude: 8.295° Feet South of 39 Deg. 10 Min. 00 Sec.
Longitude 3.629° Feet West of 80 Deg. 40 Min. 00 Sec.

Company: Antero Resources Corporation

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
1625 17th Street Denver, CO 80202	20" 51#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13 3/8" 48#	541'	541'	752 Cu. Ft. Class A
Inspector: Douglas Newlon	9 5/8" 36#	2,500'	2,500'	1,018 Cu. Ft. Class A
Date Permit Issued: 1/21/2013	5 1/2" 20#	15,386'	15,386'	3,824 Cu. Ft. Class H
Date Well Work Commenced: 4/1/2013				
Date Well Work Completed: 12/29/2013	2 3/8" 4.7#	7420'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7246' TVD (Deepest Point Drilled)				
Total Measured Depth (ft): 15,386' MD, 7115' TVD (BHL)				
Fresh Water Depth (ft.): 290'				
Salt Water Depth (ft.): 762', 857', 1130'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 680', 1850'				
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7208' (TOP)

Gas: Initial open flow --- MCF/d Oil: Initial open flow --- Bbl/d

Final open flow 11,137 MCF/d Final open flow --- Bbl/d

Time of open flow between initial and final tests --- Hours

Static rock Pressure 3950 psig (surface pressure) after --- Hours

Second producing formation --- Pay zone depth (ft) ---

Gas: Initial open flow --- MCF/d Oil: Initial open flow --- Bbl/d

Final open flow --- MCF/d Final open flow --- Bbl/d

Time of open flow between initial and final tests --- Hours

Static rock Pressure --- psig (surface pressure) after --- Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Kaitlin Buck
Signature

2/10/2014
Date

New Milton South (507) 6-6

Were core samples taken? Yes _____ No **X**

Were cuttings caught during drilling? Yes _____ No **X**

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list **Yes, CBL**

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Hinterer Unit 2H AP#47-017-06104). Please reference the wireline logs submitted with Form WR-35 for Hinterer Unit 2H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7,478- 15,330' (2100 Holes)

Frac'd w/ 22,500 gals 15% HCL Acid, 245,548 bbls Slick Water carrying 1,179,220# 100 mesh, 4,138560# 40/70 sand and 2,561,370# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): **N/A**

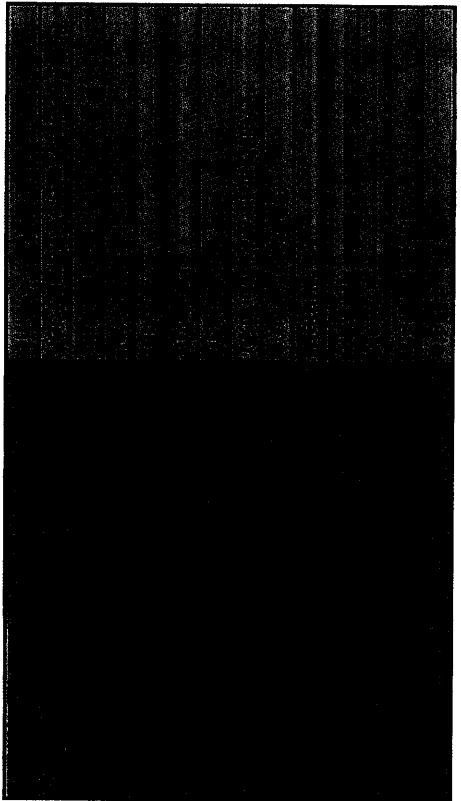
<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
<u>Surface:</u>		
Big Lime	est. 2242'	2370'
Big Injun	est. 2371'	2602'
Gantz Sand	est. 2603'	2755'
Fifty Foot Sandstone	est. 2756'	2947'
Gordon	est. 2948'	3303'
Fifth Sandstone	est. 3304'	3351'
Bayard	est. 3352'	3941'
Speechley	est. 3942'	4138'
Balltown	est. 4139'	4779'
Bradford	est. 4780'	5232'
Benson	est. 5233'	5499'
Alexander	est. 5500'	5707'
Elk	est. 5708'	6247'
Rhinestreet	est. 6248'	6952'
Middlesex Shale	6953'	7081'
Burkett Shale	7082'	7121'
Tully	7122'	7200'
Hamilton	7201'	7207'
Marcellus	7208'	7246' TVD

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Hydraulic Fracturing Fluid Product Component Information Disclosure



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Hydraulic Fracturing Fluid Composition:

Ingredient	Supplier	Base Fluid	Chemical Name	Chemical Service Number (CAS #)	Quantity (lb/gal)	Maximum Concentration (lb/gal)	Concentration (%)
Water	Antero Resources	Base Fluid	Water	7732-18-5	100.00000	91.27789	
Sand	U.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	8.41298	
HCl Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.50000	0.08442	
			Hydrogen Chloride	7641-01-1	18.00000	0.02017	
GC-15	U.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00000	0.04229	
			Petroleum Distillates	84742-47-8	60.00000	0.04006	
			Suspending agent (solid)	14808-60-7	3.00000	0.00647	
			Surfactant	88439-51-0	3.00000	0.00254	
WFR-A-405	U.S. Well Services, LLC	Friction Reducer	Water	7732-18-5	40.00000	0.02630	
			Anionic Polyacrylamide	Proprietary		0.02630	
			Petroleum Distillates	84742-47-8	22.00000	0.02117	
			Ethoxylated alcohol blend	Proprietary	5.00000	0.00329	

SI-1000	U.S. Well Services, LLC	Scale Inhibitor	Crystalline Salt	12125-02-9	5.00000	0.00328
			Acrylic Copolymer	Proprietary		0.00466
			Ethylene Glycol	107-21-1	20.00000	0.00412
			Water	7732-18-5	30.00000	0.00343
HI Flow 3-NE	U.S. Well Services	Surfactants & Foamers	Propylene Glycol	57-55-6	30.00000	0.00580
			Oxirane, methyl-, polymer with oxirane, mono(2-ethylhexyl) ether	64366-70-7	13.00000	0.00240
			Propylene Glycol n-butyl ether	5131-66-8	5.00000	0.00082
			D-Limonene	9028-48-6	5.00000	0.00078
			Isopropyl Alcohol	67-63-0	5.00000	0.00074
			1-Decanol	112-30-1	2.50000	0.00041
			1-Octanol	111-87-5	2.50000	0.00039
K-BAC 1020	U.S. Well Services, LLC	Anti-Bacterial Agent				
			2,2-dibromo-3-nitrochlorophenol	10222-01-2	20.00000	0.00486
			Deionized Water	7732-18-5	28.00000	0.00278
AP One	U.S. Well Services, LLC	Gel Breakers	Ammonium Persulfate	7727-54-0	100.00000	0.00123
AL300	U.S. Well Services, LLC	Acid Corrosion Inhibitors	Ethylene Glycol	107-21-1	31.00000	0.00023
			N,N-Dimethylformamide	68-12-2	15.00000	0.00007
			Tar bases, quinoline derivs, benzyl chloride-quantized	72480-70-7	13.00000	0.00006
			Cinnamaldehyde	104-55-2	5.00000	0.00006
			2-Butoxyethanol	111-76-2	7.00000	0.00005
			Water	7732-18-5	20.00000	0.00002
			Ethoxylated Nonylphenol	68412-54-4	5.00000	0.00002
			Isopropyl Alcohol	67-63-0	3.00000	0.00001
			Triethyl Phosphate	78-40-0	3.00000	0.00001

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS

* Total Water Volume sources may include fresh water, produced water, and/or recycled water
 ** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
 Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety

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