

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: 11/20/2012  
API #: 47-033-05596

Farm name: Williams, Betty Ann Operator Well No.: Andrews Unit 1H

LOCATION: Elevation: 1215' Quadrangle: Wolf Summit

District: Tennile County: Harrison  
Latitude: 3,395 Feet South of 39 Deg. 17 Min. 30 Sec.  
Longitude 8,860 Feet West of 80 Deg. 27 Min. 30 Sec.

Company: Antero Resources Appalachian Corp

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
1625 17th Street Denver, CO 80202	20" 94#	67'	67'	64 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 54.5#	502'	502'	697 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2587'	2587'	1053 Cu. Ft. Class A
Date Permit Issued: 5/17/2012	5-1/2" 20#	14,552'	14,552'	3576 Cu. Ft. Class H
Date Well Work Commenced: 5/19/2012				
Date Well Work Completed: 9/9/2012	2-3/8" 4.7#	7058'		
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): 7,065' TVD				
Total Measured Depth (ft): 14,552' MD				
Fresh Water Depth (ft.): 136', 207', 297'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 116', 196', 221'				
Void(s) encountered (N/Y) Depth(s) No, N/A				

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

Producing formation Marcellus Pay zone depth (ft) 6,940' TVD (Top)

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

Final open flow 11,758 MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests N/A Hours

Static rock Pressure 3600 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

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.

Lisa B. Finelli  
Signature

11/20/12  
Date

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. Anltero only runs wireline logs on the first well on a multi-pad (Post East Unit 5H API# 47-033-05560). Please reference wireline logs submitted with Form WR-35 for Post East Unit 5H.

**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: 7099'-14,487' MD (1596 holes)

Frac'd w/ 13,986 gals 15% HCL Acid, 158,343 bbls Slick Water carrying 776,059# 100 mesh, 2,936,779# 40/70 and 1,765,469# 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.)	1,586'	2,120'
Fifty Foot Sand (est.)	2,121'	2,247'
Gordon (est.)	2,248'	2,532'
Fifth Sandstone (est.)	2,533'	2,583'
Bayard (est.)	2,584'	3,239'
Speechley (est.)	3,240'	3,467'
Balltown (est.)	3,468'	4,001'
Bradford (est.)	4,002'	4,578'
Benson (est.)	4,579'	4,871'
Alexander (est.)	4,872'	5,100'
Elk (est.)	5,101'	5,628'
Rhinstreet (est.)	5,629'	6,297'
Sycamore (est.)	6,298'	6,554'
Middlesex	6,555'	6,558'
Sonyea	6,559'	6,630'
West River Shale	6,631'	6,683'
Genundewa	6,684'	6,720'
Burket	6,721'	6,746'
Tully	6,747'	6,939'
Marcellus	6,940'	7,065' TVD

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DEC 4 2012

WV GEOLOGICAL SURVEY  
NORTH BRIDGE WV

WELL NAME: Andrews Unit 1H

API #: 47-033-05596

**Antero Resources Appalachian Corporation**

**Addendum to Form WR-35 - List of Additives Actually Used for Fracturing Or Stimulating Well**

<b>ADDITIVES</b>	<b>CHEMICAL ABSTRACT SERVICE NUMBER (CAS #)</b>
WFRA-405	Mixture
Sodium Chloride	7647-14-5
Ammonium Chloride	12125-02-9
Petroleum Distillate Hydrotreated	64742-47-8
Alcohols, C12-16, Ethoxylated	68551-12-2
SI-1000	Mixture
Ethylene Glycol	107-21-1
Sodium Polyacrylate Copolymer	25987-30-8
Bioclear 2000 (2,2-Dibromo-3-Nitrilopropionamide)	10222-01-2
LGC-15	Unknown/Unavailable
API-1 (Ammonium Persulfate)	7727-54-0
Hydrochloric Acid	7647-01-0
Water	7732-18-5
AI-300	Mixture
Ethylene Glycol	107-21-1
Ethoxylated Nonylphenol	68412-54-4
Isopropanol (Isopropyl Alcohol)	67-63-0
1-Decanol	112-30-1
1-Octanol	111-87-5
2-Butoxyethanol	111-76-2
Triethyl Phosphate	78-40-0
Cinnamaldehyde	104-55-2
N,N-Dimethylformamide	68-12-2
Tar Bases, Quinoline Derivs, benzyl chloride-quaternized	72480-70-7