

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: 11/13/2012
API #: 47-033-05603

Farm name: Patrick Cunningham Operator Well No.: Plant Unit 1H

LOCATION: Elevation: 1312' Quadrangle: Wolf Summit, WV 7.5'

District: Coal County: Harrison
Latitude: 2.639 Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude 10.410 Feet West of 80 Deg. 25 Min. 00 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#	40'	40'	38 Cu. Ft. Class A
Agent: <u>CT Corporation System</u>	13-3/8" 55#	508'	508'	706 Cu. Ft. Class A
Inspector: <u>Tristan Jenkins</u>	9-5/8" 36#	2,420'	2,420'	985 Cu. Ft. Class A
Date Permit Issued: <u>3/26/2012</u>	5-1/2" 20#	13,454'	13,454'	3325 Cu. Ft. Class H
Date Well Work Commenced: <u>4/15/2012</u>				
Date Well Work Completed: <u>7/20/2012</u>	2-3/8" 4.7#	7266'		
Verbal Plugging: <u>N/A</u>				
Date Permission granted on: <u>N/A</u>				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7274' (deepest point drilled)</u>				
Total Measured Depth (ft): <u>13454' MD, 7192' TVD (BHL)</u>				
Fresh Water Depth (ft.): <u>274'</u>				
Salt Water Depth (ft.): <u>est. 1148'</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>est. 136', 168'</u>				
Void(s) encountered (N/Y) Depth(s) <u>N, N/A</u>				

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

Producing formation Marcellus Pay zone depth (ft) 7170' TVD (Top)

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

Final open flow 3772 MCF/d Final open flow N/A Bbl/d

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

Static rock Pressure 3300 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.

Shawn Jenkins
Signature

11/13/12
Date

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11/23/2012

Were core samples taken? Yes _____ No

Were cuttings caught during drilling? Yes _____ No

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

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-pad (Haney Unit 1H API# 47-033-05427). Please reference wireline logs submitted with Form WR-35 for Haney Unit 1H.

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: 7,390'-13,389' (1056 holes)

Frac'd w/ 8,000 gals 15% HCL Acid, 113,675 bbls Slick Water carrying 614,900# 100 mesh, 2,282,900# 40/70 and 1,201,100# 20/40 sand.

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

Formations Encountered:	Top Depth	/	Bottom Depth
<u>Surface:</u>			
Sand/silt/shale	0		3,498'
Balltown	3,499'		3,961'
Bradford	3,962'		4,634
Benson	4,635'		4,931
Alexander	4,932'		5,149
Elk	5,150'		5,606
Rhinestreet	5,607'		6,468
Sycamore SS	6,469'		6,919
Burket	6,920'		6,948
Tully	6,949'		7,078
Hamilton	7,079'		7,169
Marcellus	7,170'		7,271'
Onondaga	7,272'		7,274' TVD

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WISCONSIN DEPARTMENT OF
NATURAL RESOURCES

WELL NAME: Plant Unit 1H

API #: 47-033-05603

Antero Resources Appalachian Corporation

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

ADDITIVES	CHEMICAL ABSTRACT SERVICE NUMBER (CAS #)
AI-2	Mixture
Ethylene Glycol Monobutyl Ether (2-Butoxyethanol)	111-76-2
Propargyl Alcohol	107-19-7
Isopropanol (Isopropyl Alcohol)	67-63-0
Proprietary Blend	Proprietary
EB-4L (Ethylene Glycol)	107-21-1
Hydrochloric Acid	7647-01-0
KR-153-SL	Unknown/Unavailable
LSG-100	Unknown/Unavailable
OB-2	Unknown/Unavailable
PH-15L	Unknown/Unavailable
Super TSC LT	Unknown/Unavailable
WFR-3B	Mixture
Petroleum distillate hydrotreated	64742-47-8
Mineral Spirits	8052-41-3
Propylene Glycol	57-55-6
Ethoxylated Alcohols	68551-12-2