

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: 10/27/2010  
API #: 47-033-05361  
UPDATED: 4/20/12

Farm name: Williams, Edgar H. Operator Well No.: Marsh Unit 1H

LOCATION: Elevation: 1190' Quadrangle: Wolf Summit

District: Coal County: Harrison  
Latitude: 7441 Feet South of 39 Deg. 20 Min. 00 Sec.  
Longitude 9133 Feet West of 80 Deg. 22 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#	40'	40'	12 yds Grout
Agent: CT Corporation System	13-3/8" 48#	916'	916'	1272 Cu. Ft. Class A
Inspector: <u>Tristan Jenkins</u>	9-5/8" 36#	2433'	2433'	967 Cu. Ft Class A
Date Permit Issued: <u>12/01/2009</u>	5-1/2" 20#	13,335'	13,335'	2746 Cu. Ft. Class H
Date Well Work Commenced: <u>1/11/2010</u>				
Date Well Work Completed: <u>6/29/2010</u>	2-3/8" 4.7#	7076'		
Verbal Plugging: <u>N/A</u>				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7048' TVD (deepest point drilled)</u>				
Total Measured Depth (ft): <u>13,345' MD, 7,048' TVD (BHL)</u>				
Fresh Water Depth (ft.): <u>*None available</u>				
Salt Water Depth (ft.): <u>*None available</u>	<u>*Due to air drilling, Antero was unable to identify fresh water, salt water and/or coal depths for reporting.</u>			
Is coal being mined in area (N/Y)? <u>NO</u>				
Coal Depths (ft.): <u>*None Available</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) 6959' TVD (Top)  
Gas: Initial open flow --- MCF/d Oil: Initial open flow N/A Bbl/d  
Final open flow 3019 MCF/d Final open flow N/A Bbl/d  
Time of open flow between initial and final tests N/A Hours  
Static rock Pressure 4000 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.

*Ashtley Mikalau*  
Signature

4-2012  
Date

05/04/2012

Were core samples taken? Yes \_\_\_\_\_ No **X**

Were cuttings caught during drilling? Yes **X** No \_\_\_\_\_

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes - Cement Bond Log/Gamma Ray/CCL Log  
Photo Density/ Compensated Neutron/ Dual Laterlog

**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: 7322' - 13,271' MD (1008 holes)

Frac'd w/ 3,528 gals 15% HCL Acid, 114,358 bbls Slick Water carrying 498,651# 100 mesh, 2,671,897# 40/70 and 1,612,770# 20/40 sand.

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

Formations Encountered: / Top Depth / Bottom Depth  
Surface:

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
Big Lime	1400'	1884'
Gantz	1885'	2145'
Gordon	2146'	3108'
Speechley	3109'	3328'
Balltown	3329'	4483'
Benson	4484'	5004'
Elk	5005'	6284'
Sycamore	6285'	6736'
Tully	6737'	6869'
Hamilton	6870'	6958'
Marcellus	6959'	7048' TVD

APR 24 2012