

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: 2/3/2012  
API #: 47-033-05554

Farm name: Matheny, C. Norman & Wandal Operator Well No.: Hawker Unit 2H

LOCATION: Elevation: 1273' Quadrangle: West Milford

District: Union County: Harrison  
Latitude: 3827 Feet South of 39 Deg. 15 Min. 00 Sec.  
Longitude 873 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.      |
|--|---|------------------|----------------|-----------------------------|
| <u>1625 17th Street</u><br><u>Denver, CO 80202</u>   | <u>20" 94#</u>  | <u>40'</u>       | <u>40'</u>     | <u>38 Cu. Ft. Class A</u>   |
| Agent: <u>CT Corporation System</u>  | <u>13-3/8" 54.5#</u>  | <u>501'</u>      | <u>501'</u>    | <u>686 Cu. Ft. Class A</u>  |
| Inspector: <u>Tristan Jenkins</u>  | <u>9-5/8" 36#</u>   | <u>2,458'</u>    | <u>2,458'</u>  | <u>1001 Cu. Ft. Class A</u> |
| Date Permit Issued: <u>6/8/2011</u>  | <u>5-1/2" 20#</u>   | <u>15,712'</u>   | <u>15,712'</u> | <u>3834 Cu. Ft. Class H</u> |
| Date Well Work Commenced: <u>6/12/2011</u>   |   |                  |                |                             |
| Date Well Work Completed: <u>11/16/2011</u>  | <u>2 3/8" 4.7#</u>  | <u>7192'</u>     |                |                             |
| Verbal Plugging: <u>N/A</u>  | Cement Plug   | Top:             | Bottom:        |                             |
| Date Permission granted on: <u>N/A</u>   |   | <u>800'</u>      | <u>1100'</u>   | <u>1418 Cu. Ft. Class A</u> |
| Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/> |   |                  |                |                             |
| Total Vertical Depth (ft): <u>7030' TVD (deepest point drilled)</u>                                    |   |                  |                |                             |
| Total Measured Depth (ft): <u>15712' MD, 7030' TVD (BHL)</u>   |   |                  |                |                             |
| Fresh Water Depth (ft.): <u>40'</u>  |   |                  |                |                             |
| Salt Water Depth (ft.): <u>560', 1216', 1330', 2125'</u>   |   |                  |                |                             |
| Is coal being mined in area (N/Y)? <u>No</u>   |   |                  |                |                             |
| Coal Depths (ft.): <u>*None available</u>  | *Due to air drilling, Antero was unable to identify accurate coal depths for reporting. |                  |                |                             |
| 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) 6949' TVD (Top)

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

Final open flow 12,306 MCF/d Final open flow N/A Bbl/d

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

Static rock Pressure 3200 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.

Cashew Mikalovic  
Signature

6/4/12  
Date

08/31/2012

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 - Cement Bond Log/Gamma Ray/CCL Log

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Hawker Unit 1H AP# 47-033-05653). Please reference wireline logs submitted with Form WR-35 for Hawker 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: 7,722' – 15,729' MD

Frac'd w/ 6,250 gals 15% HCl Acid, 142,614 bbls Slick Water carrying 586,100# 100 mesh, 2,679,500# 40/70 and 1,733,100# 20/40 sand.

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

| Formations Encountered:<br>Surface: | Top Depth | / | Bottom Depth |
|-------------------------------------|-----------|---|--------------|
| **Sycamore                          | 6158'     |   | 6743'        |
| Tully                               | 6744'     |   | 6869'        |
| Hamilton                            | 6870'     |   | 6948'        |
| Marcellus                           | 6949'     |   | 7030' TVD    |

\*\*Antero only runs wireline logs on the first well on a multi-well pad (Hawker Unit 1H). Since this is a subsequent well, our logging started at the top of the Sycamore.

Therefore, we are unable to accurately identify formation tops from surface. Please reference the additional formation logs submitted on Form WR-35 for the Hawker Unit 1H AP# 47-033-05653.

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