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.

LOCATION: Elevation: 1190'

District: Coal

Latitude: 7441 Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude 9133 Feet West of 80 Deg. 22 Min. 30 Sec.

Longitude   9138   Feet West of   80   Deg. 22   Min. 30   Sec.	District: Coal Latitude: 7441 Feet South of 39 Deg	County: Harris			<del> </del>
Address: 1625 17th Street Casing & Used in Tubing drilling Up Cu. Ft.  Denver, CO 80202 20" 94# 40" 40" 12 yds Grout Agent: CT Corporation System 13-3/8" 48# 916' 916 1272 cu. Ft. Class / Inspector: Tristan Jenkins 9-5/8" 36# 2433' 2433' 967 Cu. Ft. Class / Date Permit Issued: 12/01/2009 5-1/2" 20# 13,335' 13,335' 2746 Cu. Ft. Class / Date Well Work Commenced: 1/11/2010  Date Well Work Completed: 6/29/2010 2-3/8" 4.7# 7076' Verbal Plugging: N/A  Date Permitsion granted on:  Rotary Cable Rig 7048' TVD (deepest point drilled)  Total Vertical Depth (ft): 7048' TVD (deepest point drilled)  Total Water Depth (ft): *None available *Due to air drilling, Antero was unable to identify fresh water, salt water and/or coal depths for reporting.  Salt Water Depth (ft): *None available *Due to air drilling, Antero was unable to identify fresh water, salt water and/or coal depths for reporting.  Coal Depths (ft): *None Available Void(s) encountered (N/Y) Depth(s) N. N/A Bbl/d  Final open flow Marcellus Pay zone depth (ft)  Final open flow MCF/d Oil: Initial open flow Bbl/d  Time of open flow between initial and final tests N/A Hours  MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Time of open flow between initial and final tests Hours					
Address: 1625 17th Street    Casing & Tubing   Used in drilling   Used in drilling   Up Cu. Pt.		s·			
Address: 1625 17th Street   Tubing   drilling   Up Cu. Ft.	Company: Antero Resources Appalachian Corp				
Agent: CT Corporation System   13-3/8" 48# 916' 916   1272 Cu. Ft. Class / Inspector: Tristan Jenkins   9-5/8" 36# 2433' 2433' 997 Cu. Ft. Class / Date Permit Issued: 12/01/2009   5-1/2" 20# 13,335' 13,335' 2746 Cu. Ft. Class / Date Well Work Commenced: 1/11/2010	Address: 1625 17th Street		1	Left in well	
Inspector: Tristan Jenkins	Denver, CO 80202	20" 94#	40'	40'	12 yds Grout
Date Permit Issued: 12/01/2009 5-1/2" 20# 13,335' 13,335' 2746 Cu. Ft. Class Initial open flow MCF/d Oil: Initial open flow MCF/d Oil: Initial open flow Pay zone depth (ft) Second producing formation pay zone depth (ft) Self.	Agent: CT Corporation System	13-3/8" 48#	916'	916	1272 Cu. Ft. Class A
Date Well Work Commenced: 1/11/2010  Date Well Work Completed: 6/29/2010 2-3/8" 4.7# 7076'  Verbal Plugging: N/A  Date Permission granted on:  Rotary ✓ Cable Rig Total Vertical Depth (ft): 7048' TVD (deepest point drilled)  Total Measured Depth (ft): 13,345' MD, 7,048' TVD (BHL)  Fresh Water Depth (ft.): *None available  Salt Water Depth (ft.): *None available  Is coal being mined in area (N/Y)? NO water, salt water and/or coal depths for reporting.  Coal Depths (ft.): *None Available  Void(s) encountered (N/Y) Depth(s) N, N/A  EN 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  Time of open flow between initial and final tests N/A 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  Final open flow between initial and final tests Hours	Inspector: Tristan Jenkins	9-5/8" 36#	2433'	2433'	967 Cu. Ft Class A
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	Final open flow MCF/d Final open flow Bbl/d			- 1	
Static rock Pressure psig (surface pressure) after Hours	Time of some flow between initial and final tasts	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.

// / / / / / / / / / / / / / / / Signature

Date

05/04/2012

Were core samples taken? Yes	No Were cuttings can	ught during drilling? Yes No
Were Electrical, Mechanical or Geophy Photo Density/ Compensated Neuron/ Dual Laterlog	sical logs recorded on this well? If yes, please	e list Yes - Cement Bond Log/Gamma Ray/CCL Log
FRACTURING OR STIMULATING DETAILED GEOLOGICAL RECO	PUT THE FOLLOWING: 1). DETA G, PHYSICAL CHANGE, ETC. 2). THE W DRD OF THE TOPS AND BOTTOMS VELLBORE FROM SURFACE TO TOTA	VELL LOG WHICH IS A SYSTEMATIC OF ALL FORMATIONS, INCLUDING
Perforated Intervals, Fracturing, or Stim	nulating:	
Perforations: 7322' - 13,271' MD	(1008 holes)	
Frac'd w/ 3,528 gals 15% HCL A	cid, 114,358 bbls Slick Water carryin	g 498,651# 100 mesh,
2,671,897# 40/70 and 1,612,770	)# 20/40 sand.	
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Plug Back Details Including Plug Type	and Depth(s): N/A	
Formations Encountered:	Top Depth /	Bottom Depth
Surface:		
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
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