

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: 1/11/2013  
API #: 47-033-05621

Farm name: Lowe, Francis L. & Nancy P. Operator Well No.: Lowe Unit 1H

RECEIVED

LOCATION: Elevation: 1214' Quadrangle: West Milford

JAN 14 2013

District: Union County: Harrison  
Latitude: 8757' Feet South of 39 Deg. 15 Min. 00 Sec.  
Longitude 617' Feet West of 90 Deg. 25 Min. 00 Sec.

WV GEOLOGICAL SURVEY  
MORGANTOWN, WV

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.
Agent: CT Corporation System	13 3/8" 48#	576'	576'	800 Cu. Ft. Class A
Inspector: Tristan Jenkins	9 5/8" 36#	2676'	2676'	1090 Cu. Ft. Class A
Date Permit Issued: 6/7/2012	5 1/2" 23#	16227'	16227'	4010 Cu. Ft. Class H
Date Well Work Commenced: 6/12/2012				
Date Well Work Completed: 11/2/2012				
Verbal Plugging: N/A				
Date Permission granted on: N/A	2 3/8" 4.7#	6981'		
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6946' TVD				
Total Measured Depth (ft): 16227' MD				
Fresh Water Depth (ft.): est. 195'				
Salt Water Depth (ft.): est. 623'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): Pad constructed on reclaimed PHG strip bench				
Void(s) encountered (N/Y) Depth(s) None				

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

Producing formation Marcellus Pay zone depth (ft) 6873' TVD (Top)

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

Final open flow 9886 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.

Shamod Redi  
Signature

1/11/13  
Date

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 - CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Wagner Unit 1H, AP# 47-033-05485). Please reference the wireline logs submitted with Form WR-35 for Wagner 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: 7062'-16163' (1884 holes)

Frac'd w/ 14,000 gals 15% HCL Acid, 188,434 bbls Slick Water carrying 1,014,691# 100 mesh, 3,828,095# 40/70 and 2,321,422# 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.	1453'	1564'
Big Injun est.	1565'	1972'
Fifty Foot Sandstone est.	1973'	2115'
Gordon est.	2116'	2382'
Fifth Sandstone est.	2383'	2435'
Bayard est.	2436'	3089'
Speechley est.	3090'	3305'
Balltown est.	3306'	3817'
Bradford est.	3816'	4482'
Benson est.	4483'	4786'
Alexander est.	4787'	5013'
Elk est.	5014'	5541'
Rhinestreet est.	5542'	6464'
Middlesex	6465'	6552'
West River Shale	6553'	6649'
Burket	6650'	6678'
Tully	6679'	6872'
Marcellus	6873'	6946' TVD

WELL NAME: Low Unit 1H

API #: 47-033-05621

## List of Additives Used for Fracturing Or Stimulating Well

ADDITIVES	CHEMICAL ABSTRACT SERVICE NUMBER (CAS #)
Sodium Persulfate	7775-27-1
Plexslick 921 (Petroleum distillate hydrotreated)	64742-47-8
Plexcide 15G	Mixture
Glutaraldehyde	111-30-8
Didecyl dimethyl ammonium chloride	7173-51-5
Alkyl dimethyl benzyl ammonium chloride	68424-85-1
Ethanol	64-17-5
Plexaid 673	Mixture
Organic Acid Salts	Trade Secret
Methyl Alcohol	67-56-1
LRG-01 (solvent napatha, petroleum heavy aliphatic)	64742-96-7
Ferriplex 66	Mixture
Acetic Acid	64-19-7
Citric Acid	77-92-9
Plexbreak 145 (methyl alcohol)	67-56-1
Plexhib 256	Mixture
Methyl Alcohol	67-56-1
Propargyl alcohol	107-19-7
HCl (Hydrochloric Acid 10.1%-15%)	7647-01-0