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 #: 47-033-05626

RECEIVED
JAN 14 2013
WV GEOLOGICAL SURVEY
MORGANTOWN, WV

Farm name: Jones, John R. & Catherine V. Operator Well No.: Hurst Unit 1H

LOCATION: Elevation: 1176' Quadrangle: Wolf Summit

District: Sardis County: Harrison

Latitude: 12651' Feet South of 39 Deg. 20 Min. 00 Sec.

Longitude 5658' Feet West of 80 Deg. 22 Min. 30 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	72'	72'	69 Cu. Ft. Class A
Agent: CT Corporation System	13 3/8" 68#	347'	347'	482 Cu. Ft. Class A
Inspector: Tristan Jenkins	9 5/8" 36#	2578'	2578'	1050 Cu. Ft. Class A
Date Permit Issued: 6/19/2012	5 1/2" 20#	13549'	13549'	3303 Cu. Ft. Class H
Date Well Work Commenced: 6/26/2012				
Date Well Work Completed: 10/31/2012				
Verbal Plugging: N/A				
Date Permission granted on: N/A	2 3/8" 4.7#	7367'		
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7140' TVD (deepest point drilled)				
Total Measured Depth (ft): 7032' TVD (BHL), 13549' MD				
Fresh Water Depth (ft.): est. 230'				
Salt Water Depth (ft.): est. 685', 1060'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): Pad is constructed on reclaimed PHG coal 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) 7095' TVD (Top)

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

Final open flow 7600 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.

Shawna Reed
Signature

1/11/2013
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,
Photo Density/ Compensated Neutron/ Temperature and Gamma Ray/ Array Induction

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: 7,382'-13,488' (1344 holes)

Frac'd w/ 10,080 gals 15% HCL Acid, 128,496 bbls Slick Water carrying 662,409# 100 mesh, 2,544,445# 40/70 and 1,620,170# 20/40 sand.

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

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Big Lime	1436'		1486'
Big Injun	1487'		2028'
Fifty Foot Sandstone	2029'		2210'
Gordon	2211'		2455'
Fifth Sandstone	2456'		2487'
Bayard	2488'		3133'
Speechley	3134'		3333'
Balltown	3334'		3858'
Bradford	3859'		4489'
Benson	4490'		4797'
Alexander	4798'		5158'
Elk	5159'		6661'
Middlesex	6662'		6849'
Burket	6850'		6877'
Tully	6878'		7094'
Marcellus	7095'		7140' TVD

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date	10/26/2012
State:	WV
County:	Harrison
API Number:	47-033-05626
Operator Name:	Antero Resources
Well Name and Number:	Hurst 1H
Longitude:	-80.4195167
Latitude:	39.3174528
Long/Lat Projection:	NAD27
Production Type:	Gas
True Vertical Depth (TVD):	7,032
Total Water Volume* (gal):	5,396,832

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Compositional or Formulary Components Disclosed	Chemical Abstract Service Number (CAS #) - If applicable	Maximum Component Concentration in Additive (% by mass)**	Maximum Component Concentration in HF Fluid (% by mass)**	Comments
AI-300	U.S. Well Services, LLC	Acid Corrosion Inhibitors	2-Butoxyethanol	111-76-2	7.00%	0.00002%	
			Cinnamaldehyde	104-55-2	5.00%	0.00002%	
			Ethoxylated Nonylphenol	68412-54-4	5.00%	0.00002%	
			Ethylene Glycol	107-21-1	31.00%	0.00011%	
			Isopropyl Alcohol	67-63-0	3.00%	0.00001%	
			N,N-Dimethylformamide	68-12-2	15.00%	0.00004%	
			Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	13.00%	0.00004%	
			Triethyl Phosphate	78-40-0	3.00%	0.00001%	
			Water	7732-18-5	20.00%	0.00007%	
Bioclear 2000	U.S. Well Services, LLC	Anti-Bacterial Agent	2,2-dibromo-3-nitrilopropionamide	10222-01-2	20.00%	0.00528%	
			Deionized Water	7732-18-5	28.00%	0.00302%	
LGC-15	U.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00%	0.00501%	
			Petroleum Distillates	64742-47-8	60.00%	0.06887%	
			Surfactant	68439-51-0	3.00%	0.06887%	
			Suspending agent (solid)	14808-60-7	3.00%	0.06887%	
AP One	U.S. Well Services, LLC	Gel Breakers	Ammonium Persulfate	7727-54-0	100.00%	0.00223%	
WFRA-405	U.S. Well Services, LLC	Friction Reducer	Anionic Polyacrylamide	Proprietary	Proprietary		
			Ethoxylated alcohol blend	Proprietary	5.00%	0.00247%	
			Water	7732-18-5	40.00%	0.01979%	
			Ammonium Chloride	12125-02-9	5.00%	0.00247%	
			Petroleum Distillates	64742-47-8	22.00%	0.00876%	
SI-1000	U.S. Well Services, LLC	Scale Inhibitor	Ethylene Glycol	107-21-1	20.00%	0.00394%	
			Water	7732-18-5	30.00%	0.00329%	
			Anionic Copolymer	Proprietary	Proprietary		
Sand	U.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00%	9.66029%	
HCL Acid (12.5%-18.0%)	U.S. Well Services, LLC	Bulk Acid	Hydrogen Chloride	7641-01-1	18.00%	0.06072%	
			Water	7732-18-5	87.50%	0.14597%	
Water		Carrier/Base Fluid	Water	7732-18-5	100.00%	90.03319%	

*Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.