

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 #: 47-033-05593

Farm name: Mountain Lakes Limited Operator Well No.: Kermit Unit 1H

LOCATION: Elevation: 1386' Quadrangle: West Milford

District: Union County: Harrison
Latitude: 3201' Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude 9833' Feet West of 80 Deg. 27 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'	38 Cu. Ft. Class A
Agent: CT Corporation System	13 3/8" 48#	529'	529'	735 Cu. Ft. Class A
Inspector: Tristan Jenkins	9 5/8" 36#	2580'	2580'	1050 Cu. Ft. Class A
Date Permit Issued: 2/28/2012	5 1/2" 23#	13959'	13959'	3415 Cu. Ft. Class H
Date Well Work Commenced: 7/24/2012				
Date Well Work Completed: 11/25/2012				
Verbal Plugging: N/A				
Date Permission granted on: N/A	2 3/8" 4.7#	7331'		
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7204' TVD (deepest point drilled)				
Total Measured Depth (ft): 7122' TVD (BHL), 13959' MD				
Fresh Water Depth (ft.): est. 90'				
Salt Water Depth (ft.): None available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 191', 274', 306'				
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) 7166' TVD (Top)

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

Final open flow 9053 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

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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.

Shafer
Signature

1/24/13
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 (Kermit Unit 3H, API# 47-033-05891). Please reference the wireline logs submitted with Form WR-35 for Kermit Unit 3H.

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: 7490'-13893' (1344 holes)

Frac'd w/ 10,080 gals 15% HCL Acid, 133,786 bbls Slick Water carrying 693,308# 100 mesh, 2,612,985# 40/70 and 1,641,350# 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.	1756'	1863'
Big Injun est.	1864'	2149'
Gantz Sand est.	2150'	2251'
Fifty Foot Sandstone est.	2252'	2369'
Gordon est.	2370'	2660'
Fifth Sandstone est.	2661'	2715'
Bayard est.	2716'	3346'
Speechley est.	3347'	3587'
Balltown est.	3588'	4098'
Bradford est.	4099'	4677'
Benson est.	4678'	4873'
Alexander est.	4874'	5225'
Elk est.	5226'	6470'
Sycamore	6471'	6749'
Sonyea	6750'	6825'
West River Shale	6826'	6843'
Burket	6944'	6969'
Tully	6970'	7085'
Hamilton	7086'	7165'
Marcellus	7166'	7204' TVD

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	11/18/2012
State:	West Virginia
County:	Harrison
API Number:	47-033-05893
Operator Name:	Antero Resources
Well Name and Number:	Kermit 1H
Longitude:	-80.4696333
Latitude:	39.2235528
Long/Lat Projection:	NAD27
Production Type:	Gas
True Vertical Depth (TVD):	7,122
Total Water Volume (gal)*:	5,619,012

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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water		Carrier/Base Fluid	Water	7732-18-5	100.00%	90.17491%	
AI-300	U.S. Well Services, LLC	Acid Corrosion Inhibitors	2-Butoxyethanol	111-78-2	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%	0.00006%	
Bioclear 2000	U.S. Well Services, LLC	Anti-Bacterial Agent	2,2-dibromo-3-nitropropionamide	10222-01-2	20.00%	0.00496%	
			Deionized Water	7732-18-5	28.00%	0.00283%	
LGC-15	U.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00%	0.00442%	
			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%	0.00123%	
WFRA-405	U.S. Well Services, LLC	Friction Reducer	Anionic Polyacrylamide	Proprietary	Proprietary		
			Ethoxylated alcohol blend	Proprietary	5.00%	0.00258%	

			Water	7732-18-5	40.00%	0.02067%
			Ammonium Chloride	12125-02-9	5.00%	0.00258%
			Patroleum Distillates	64742-47-8	22.00%	0.00915%
SI-1000	U.S. Well Services, LLC	Scale Inhibitor	Ethylene Glycol	107-21-1	20.00%	0.00404%
			Water	7732-18-5	30.00%	0.00337%
			Anionic Copolymer	Proprietary	Proprietary	
Sand	U.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00%	9.53192%
HCL Acid (12.5%-18.0%)	U.S. Well Services, LLC	Bulk Acid	Hydrogen Chloride	1/1/7641	18.00%	0.05841%
			Water	7732-18-5	87.50%	0.14042%

* 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%
 Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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