

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 #: 47-033-05594

Farm name: Mountain Lakes Limited Operator Well No.: Kermit Unit 2H

LOCATION: Elevation: 1386' Quadrangle: West Milford

District: Union County: Harrison
Latitude: 3198' Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude 9822' 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#	41'	41'	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#	2589'	2589'	1658 Cu. Ft. Class A
Date Permit Issued: 2/28/2012	5 1/2" 23#	13805'	13805'	3370 Cu. Ft. Class H
Date Well Work Commenced: 6/18/2012				
Date Well Work Completed: 11/18/2012				
Verbal Plugging: N/A				
Date Permission granted on: N/A	2 3/8" 4.7#	7276'		
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7198' TVD (deepest point drilled)				
Total Measured Depth (ft): 7157' TVD (BHL), 13805' MD				
Fresh Water Depth (ft.): est. 50', 90', 111'				
Salt Water Depth (ft.): None available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 270', 545', 645'				
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) 7159' TVD (Top)

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

Final open flow 7521 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.

[Signature]
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 (Karnit Unit 3H, API# 47-033-05501). Please reference the wireline logs submitted with Form WR-35 for Karnit 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: 7328'-13739' (1320 holes)

Frac'd w/ 10,584 gals 15% HCL Acid, 132,394 bbls Slick Water carrying 680,390# 100 mesh, 2,600,934# 40/70 and 1,603,910# 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'	6749'
Sonyea	6750'	6755'
Middlesex	6756'	6831'
West River Shale	6832'	6831'
Burket	6932'	6959'
Tully	6960'	7084'
Hamilton	7085'	7158'
Marcellus	7159'	7198' TVD

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Hydraulic Fracturing Fluid Product Component Information Disclosure

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Fracture Date:	11/13/2012
State:	WV
County:	Harrison
API Number:	47-033-00004
Operator Name:	Antero Resources
Well Name and Number:	Karna# 2H
Longitude:	-80.469625
Latitude:	39.228908
Long/Lat Projection:	NAD83
Production Type:	Gas
True Vertical Depth (TVD):	7,157'
Total Water Volume* (gal):	8,950,548

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	104-65-2	5.00%	0.00002%	
			Ethoxylated Nonylphenol	68412-54-4	6.00%	0.00002%	
			Ethylene Glycol	107-21-1	31.00%	0.00012%	
			Isopropyl Alcohol	67-63-0	3.00%	0.00001%	
			N,N-Dimethylformamide	68-12-2	15.00%	0.00005%	
			Tar bases, quinoline deriva, benzyl chloride-quaternized	72480-70-7	13.00%	0.00006%	
Bioclear 2000	U.S. Well Services, LLC	Anti-Bacterial Agent	Triethyl Phosphate	78-49-0	3.00%	0.00001%	
			Water	7732-18-5	20.00%	0.00007%	
			2,2-dibromo-3-nitriopropionamide	10222-01-2	20.00%	0.00483%	
			Deionized Water	7732-18-5	28.00%	0.00278%	
			Guar Gum	9000-30-0	50.00%	0.00441%	
LGC-15	U.S. Well Services, LLC	Gelling Agents	Petroleum Distillates	64742-47-8	60.00%	0.05887%	
			Surfactant	68439-51-0	3.00%	0.06887%	
			Suspending agent (solid)	14808-60-7	3.00%	0.06887%	
			Ammonium Persulfate	7727-54-0	100.00%	0.00135%	
AP One	U.S. Well Services, LLC	Gel Breakers	Proprietary	Proprietary			
			Proprietary	Proprietary	5.00%	0.00277%	
			Water	7732-18-5	40.00%	0.02217%	
WFR-405	U.S. Well Services, LLC	Friction Reducer	Ammonium Chloride	12125-02-9	5.00%	0.00277%	
			Petroleum Distillates	64742-47-8	22.00%	0.00982%	
			Ethylene Glycol	107-21-1	20.00%	0.00428%	
SI-1000	U.S. Well Services, LLC	Scale Inhibitor	Water	7732-18-5	30.00%	0.00357%	
			Anionic Copolymer	Proprietary	Proprietary		
			Crystalline Silica, quartz	14808-60-7	100.00%	9.39137%	
Sand	U.S. Well Services, LLC	Proppant	Hydrogen Chloride	7641-01-1	18.00%	0.05212%	
			Water	7732-18-5	87.50%	0.14835%	
HCL Acid (12.5%-18.0%)	U.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	100.00%	89.39004%	
			Water	7732-18-5	100.00%		
Water		Carrier/Base Fluid	Water	7732-18-5	100.00%		
			Water	7732-18-5	100.00%		

*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.