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:	1/24/2013	
API#:	47-033-05591	

Farm name: Mountain Lakes Limited	Operator Wel	I No.: Kermit Un	it 3H	
LOCATION: Elevation: 1386'	Quadrangle: _\	West Milford		
District: Union	County: Harris	son		
Latitude: 3180' Feet South of 39 Deg.	15 Min.	Se	).	
Longitude 9628' Feet West of 80 Deg.	27 Min	. 30 Sec	<b>&gt;.</b>	
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#	41'	41'	38 Cu. Ft. Class A
Agent: CT Corporation System	13 3/8" 48#	543'	543'	754 Cu. Ft. Class A
Inspector: Tristan Jenkins	9 5/8" 36#	2571'	2571'	1047 Cu. Ft. Class A
Date Permit Issued: 1/24/2012	5 1/2" 23#	14172'	14172'	3477 Cu. Ft. Class H
Date Well Work Commenced: 6/20/2012	0 112 2011	14172	17172	STATE CLESS T
Date Well Work Completed: 11/13/2012				<del> </del>
But Work Completed.		<u> </u>		<del>   </del>
voroat i tugging.	0.0/07.4.7//	74041		
Date Permission granted on: N/A	2 3/8" 4.7#	7161'		
Rotary Cable Rig				
Total Vertical Depth (ft): 7179' TVD				
Total Measured Depth (ft): 14172' 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				
			<u> </u>	
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay 2				heet)
Gas: Initial open flowMCF/d Oil: Initial open flow	one depth (ft) <u>7</u> ow <sup>N/A</sup> Bb		'1	
Final open flow 4811 MCF/d Final open flow				
Time of open flow between initial and final tests N/A	Hours			
Static rock Pressure 3600 psig (surface pressure) aft	ter Hour	S		RECEIVED
Second producing formation Pay zon	1d- (0)			
Gas: Initial open flow MCF/d Oil: Initial open flow	ue depth (ft) owBb	1/4		JAN 25 2013
Final open flow MCF/d Final open flow			WV	GEOLOGICAL SURVEY
Time of open flow between initial and final tests		· <del>-</del>		MORGANTOWN, WV
Static rock Pressure psig (surface pressure) aft		S		•
I cartify under panelty of law that I have not all	_1 6 ***	",		
I certify under penalty of law that I have personally examined a all the attachments and that, based on my inquiry of those indiv	na am tamiliar ' iduals immediat	With the inform	ation submitted	on this document and
that the information is true, accurate, and complete.		ora responsible	voi opisiming fi	ne httolustiou I delieve

Were core samples taken? Yes	re core samples taken? YesNo_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/ Gamma Ray and Dual Laterolog Gamma Ray					
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING	PUT THE FOLLOWING: 1, PHYSICAL CHANGE, ETC. RD OF THE TOPS AND BO	i). DETAILS OF PERFORATED INTERVALS 2). THE WELL LOG WHICH IS A SYSTEMATIC OTTOMS OF ALL FORMATIONS, INCLUDING TO TOTAL DEPTH.			
Perforated Intervals, Fracturing, or Stimu	llating:				
Perforations: 7580'-14406' (1368	holes)				
Frac'd w/ 9,576 gals 15% HCL A	cid, 135,719 bbls Slick Wat	er carrying 699.100# 100 mesh			
2,712,240# 40/70 and 1,644,440		yang aran saan saan saan			
Plug Back Details Including Plug Type a	nd Depth(s): N/A				
Formations Encountered: Surface:	Top Depth	/ Bottom Depth			
Big Lime	1756'	1863'			
Big Injun	1864'	2149'			
Gantz Sand	2150'	2251'			
Fifty Foot Sandstone	2252'	2369'			
Gordon	2370'	2660'			
ifth Sandstone	2661'	<b>2715</b> '			
Bayard	2716'	3346'			
Speechley	3347'	3587'			
Balltown Bradford	3588'	4098'			
Benson	4099' 4678'	4677'			
Nexander	4678 4874'	4873'			
Elk	5226'	5225' 6748'			
ionyea	6749'	6761'			
Middlesex	6762'	6832'			
West River Shale	6833'	6882'			
Senundewa	6883'	6941'			
Burket	6942'	6949'			
Tully	6950'	7064'			
lamilton	7065'	7140'			
// arcelius	7141'	7179' TVD			

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JAN 25 2013

## Hydraulic Fracturing Fluid Product Component Information Disclosure Fracture Date 11/9/2012 State County 47-038-05891 API Number Operator Name Antero Resources Well Name and Number Kernet SH Longitude **80.4675683** Latitude

Long/Lat Projection

True Vertical Depth (TVD)

Total Water Volume" (gal)

Production Type

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JAN 25 2013

WV GEOLOGICAL SURVEY MORGANTOWN, WV

## Hydraulic Fracturing Fluid Composition:

Al-200   U.S. Well Services, LLC   Acti-Bockeria Agent   Al-200   Acti-Bockeria Agent   Ac	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
Cinsusralidehyde   194-8-2   6.00%   5.00002%	u-300	U.S. Well Services, (J.C	Acid Corresion Inhibitors	2-Butoxyethanol	111-76-2	7.00%		- Charles of the Control of the Cont
Bitylene Glycol   107-21-1   27.89%   0.00011%					104-65-2	5.00%		
Bitylene Olycol   107-21-1   31.89%   0.00011%					88412-54-4	6.80%	0.00002%	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
Isopropyl Alcohol   67-83-0   3.00%   0.00001%			The second secon		107-21-1	31.00%	0.00011%	1
M.NDimethylformanishs   69-12-2   18.00%   0.80004%	ARTERIAL PROPERTY AND				67-63-0	3,00%		
Tar bases, quinoline derirs, bezzyl chloride quaternized   73480-78-7   13.00%   0.80004%				N,N-Dimethylformamide	68-12-2			
Triettyl Phosphate   78-0-3 3.86% 0.00001%				Tar bases, quincline derivs, bonzyl chloride quaternized	72480-79-7			
Water   1732-18-5   29.89%   0.00006%   2.2-dibrone-3-nitrifopropionanide   10222-01-2   29.89%   0.00076%				Triethyl Phosphate	78-40-0			
Anti-Bacterial Agent   2,2-dibromo-3-nitrifopropionamide   16222-01-2   28.98%   0.00476%				Topic Pie Water is the second of the second	7732-18-5			
Defonitional Water    1732-18-3   28.86%   0.00273%	iociear 2000	U.S. Well Services, LLC	Anti-Bacterial Agent	2,2-dibronio-3-nitriliopropionamide				
U.S. Well Services, LLC   Gelling Agents   Guar Gum   S000-30-0   50.00%   0.88456%				Dolonized Water				
Petroleum Distillates   64742-47-8   60.00%   0.06867%     Surfactant   68439-61-9   3.00%   0.6887%     Surfactant   68449-61-9   3.00%   0.6887%     Suppending agent (solid)   14898-80-7   3.80%   0.06887%     Suppending agent (solid)   14898-80-7   108.00%   0.00887%     Suppending agent (solid)   14898-80-7   108.00%   0.00887%     Surfactant   14898-80-7   108.00%   0.00124%     U.S. Well Services, LLC   Friction Reducer   Amonstum Persulfate   7727-84-0   108.00%   0.00124%     Ethosylated alcohol Dend   Proprietary   Proprietary     Water   7732-10-0   40.00%   0.88272%     Amenonium Chloride   12125-82-0   6.80%   0.00284%     Surfactant   14898-80-7   107-21-1   28.00%   0.00397%     Surfactant   1499-80-7   1499-80   107-21-1   108.00%   0.00397%     Surfactant   1499-80   109-21-1   108.00%   0.00397%     Surfactant   1499-8	GC-15	U.S. Well Services, LLC	Gelling Agents	Guar Gum				
Surfactant   Surfactant   Set39-81-9   3.00%   0.66817%     Suppending agent (solid)   14898-80-7   3.80%   0.06887%     Amonstum Persuitate   7727-84-0   168.65%   0.00124%     NFRA-405   U.S. Well Services, LLC   Friction Reducer   Anionic Polyacrylamide   Proprietary   Proprietary     Ethocytated alcohol blend   Proprietary   5.00%   0.00124%     Water   7732-18-5   40.00%   0.00244%     Water   7732-18-5   5.80%   0.00284%     Petroleum Distillates   64742-47-3   5.80%   0.00284%     Petroleum Distillates   64742-47-3   22.09%   0.00397%     Water   7732-18-5   30.00%   0.00397%     Water   7732-18-5   30.00%   0.00397%     Water   7732-18-5   30.00%   0.00397%     Sond   U.S. Well Services, LLC   Proppant   Crystalline Billica, quartz   1488-80-7   190.00%   9.9125%     Content Claration Billica, quartz   1488-80-7   190.00%   9.9125%     Water   7732-18-5   97.50%   0.05780%     Water   7732-18-5   97.50%   0.05780%     Water   7732-18-5   97.50%   0.0387%     Water   7732-18-5   97.50%   0.03867%     Water   7732-18-5		1		Petroleum Distiliates				
Suspending agent (solid)   1488-80-7   3.89%   0.0887%			-	Surfactant				
Description   U.S. Well Services, LLC   Gel Breakers   Ammonitum Persulfate   7727-84-0   198.85%   0.00124%				Suspending agent (solid)				
Proprietary   Proprietary   Proprietary   Proprietary   Proprietary   Ethnoxylated alcohol blend   Proprietary   5,00%   9,82284%   Proprietary   5,00%   9,82284%   Proprietary   5,00%   9,82284%   Proprietary   7732-18-5   40,00%   9,82272%   Proprietary   Propriet				Ammonium Persuitate				
Ethoxylsted alcohol blend	FRA-405	U.S. Well Services, LLC	Friction Reducer	Anionic Polyacrylamide			VAVIZAR	
Water							0.002040/	
Amenoliura Chloride 12125-82-9 5.80% 0.00284%, Petrolaum Distiliates 64742-47-8 22.88% 0.01006% 8-1000 U.S. Well Services, LLC Scale Inhibitor Ethylene Glycol 107-21-1 28.09% 0.00397% Water 7732-18-5 30.00% 0.00397% For Inhibitor Proprietary Prop				Water				<del></del>
Petroleum Distillates   94742-47-8   22.8%   0.01006%				Ammonium Chloride				
U.S. Well Services, LLC Scale Inhibitor Ethylene Glycol 107-21-1 26.08% 0.00397% Water 7732-18-5 30.09% 9.00331% Anionic Copolymer Proprietary Proprietary Proprietary CL. Acid (12.5%-18.0%) U.S. Well Services, LLC Proppart (Crystalline Billica, quartz: 14885-89-7 190.00% 9.91255% CL. Acid (12.5%-18.0%) U.S. Well Services, LLC Bulk Acid Hydrogen Chloride 7641-01-1 18.89% 0.05789% Water 7732-18-5 97.58% 0.13861%				Petroleum Distillates				
Water   7732-18-5 30.00% 9.80331%	<u>-1900</u>	U.S. Well Services, LLC	Scale Inhibitor	Ethylene Glycol				
Anionic Copolymer Proprietary								
946   U.S. Well Services, LLC				Anionic Copolymer	1		2,0000170	
CL Acid (12.5%-18.0%) U.S. Well Services, LLC Bulk Acid Hydrogen Chloride 1764-01-1 18.89% 0.05789% Water 7732-18-5 97.59% 0.13861%			Proppant				0.040000	·
Water	CL Acid (12.5%-18.0%)	U.S. Well Services, LLC	Bulk Acid					
Carrier Carrier Chair								<del></del>
	ater		Carrier/Base Fluid					-
		A SAN THE SAN			1100-10-3	100,00%	30.03443%	
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		1			<del>                                     </del>			
					+			-

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NAD27

Gas

7,179

5,007,430

"Total Water Volume sources mey include fresh water, produced water, end/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 Materiel Safety Data Sheets (MSDS). As such, the Operator is not responsible for insecurate 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 "proprietury", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to