

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: 9/4/2013
API #: 47-017-06170

Farm name: Vogt, Gregory R. & Carolyn S. Operator Well No.: Seaborn Unit 2H

LOCATION: Elevation: 1,109' Quadrangle: West Union 7.5'

District: Central County: Doddridge
Latitude: 8,211' Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 5,222' Feet West of 80 Deg. 50 Min. 00 Sec.

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Company: Antero Resources Corporation

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
1625 17th Street Denver, CO 80202	20" 94#	59'	59'	56 Cu. Ft. Class A
Agent: CT Corporation System	13 3/8" 48#	355'	355'	493 Cu. Ft. Class A
Inspector: Douglas Newlon	9 5/8" 36#	2,493'	2,493'	1015 Cu. Ft. Class A
Date Permit Issued: 1/23/2013	5 1/2" 20#	14,593'	14,593'	3607 Cu. Ft. Class H
Date Well Work Commenced: 4/10/2013				
Date Well Work Completed: 8/19/2013	2 3/8" 4.7#	6526'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6682' TVD (Deepest Point Drilled)				
Total Measured Depth (ft): 14,594' MD, 6675' TVD, (BHL)				
Fresh Water Depth (ft.): 155'				
Salt Water Depth (ft.): 1,647', 1,650'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 1170', 3240'				
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) 6570' (TOP)
Gas: Initial open flow --- MCF/d Oil: Initial open flow --- Bbl/d
Final open flow 8,092 MCF/d Final open flow --- Bbl/d
Time of open flow between initial and final tests --- 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.

Kaitlin Buck
Signature

12/11/2013
Date

Greenwood (89) 6-6

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

Antero plans to run wireline logs on the Violet Unit 1H AP#47-017-06206 once it is drilled. Please reference the Violet Unit 1H logs once they have been submitted.

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.

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Perforated Intervals, Fracturing, or Stimulating:

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Perforations: 7,220'- 14,538' (2,592 Holes)

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Frac'd w/ 21,500 gals 15% HCL Acid, 220,232 bbls Slick Water carrying 609,000# 100 mesh,

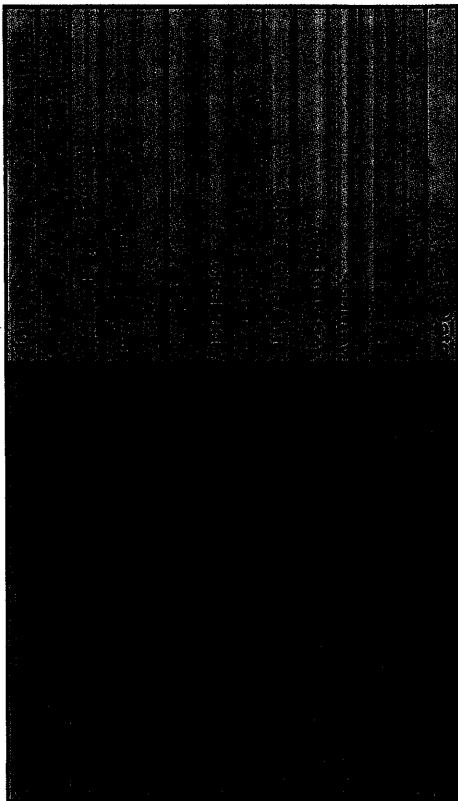
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3,685,800# 40/70 sand and 1,376,600# 20/40 sand.

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. 2078'	2759'
Fifty Foot Sandstone	est. 2760'	2871'
Gordon	est. 2872'	3131'
Fifth Sandstone	3132'	3148'
Bayard	3149'	3898'
Speechley	3899'	4162'
Balltown	4163'	4599'
Bradford	4600'	5032'
Benson	5033'	5290'
Alexander	5291'	5864'
Rhinestreet	5865'	5439'
Elk	5440'	6226'
Sycamore	6227'	6390'
Middlesex	6391'	6537'
Tully	6538'	6561'
Hamilton	6562'	6569'
Marcellus	6570'	6682' TVD

Hydraulic Fracturing Fluid Product Component Information Disclosure



Hydraulic Fracturing Fluid Composition:

Water	ANTERO RESOURCES	Water	Water	Maximum Ingredient Concentration in HF Fluid (ppmv (mass))			
WV Specific 40/70 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Water	7732-18-5	100.00000	92.14378	
			Crystalline Silica, quartz	14808-60-7	99.90000	4.80958	
			Aluminum Oxide	1344-28-1	1.10000	0.05286	
			Iron Oxide	1309-37-1	0.10000	0.00481	
			Titanium Oxide	13463-67-7	0.10000	0.00481	
WV Specific 20/40 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia					
			Crystalline Silica, quartz	14808-60-7	99.90000	1.92402	
			Aluminum Oxide	1344-28-1	1.10000	0.02119	
			Iron Oxide	1309-37-1	0.10000	0.00183	
			Titanium Oxide	13463-67-7	0.10000	0.00193	
WV Specific 100 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Crystalline Silica, quartz	14808-60-7	99.90000	0.64723	
			Aluminum Oxide	1344-28-1	1.10000	0.00713	

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			Iron Oxide	1309-37-1	0.10000	0.00065
			Titanium Oxide	13463-67-7	0.10000	0.00065
LSG-100L	Nabors Completion and Production Services	Gelling Agents				
			Petroleum Distillates	64742-47-8	70.00000	0.04998
HCl Acid (12.5%-18.0%)	Nabors Completion and Production Services	Bulk Acid				
			Hydrogen Chloride	7647-01-0	18.00000	0.04660
WFR-3B	Nabors Completion and Production Services	Friction Reducer				
			Hydroreated light distillates, non-aromatic, BTEX free	64742-47-8	30.00000	0.02625
			Ethoxylated alcohols	68002-97-1	15.00000	0.01312
			Ethoxylated oleylamine	26635-93-8	5.00000	0.00437
Super GREEN SOLV	Nabors Completion and Production Services	Paraffin & Scale Additives				
			BTEX Free Aliphatic Hydrocarbon	64742-96-7	100.00000	0.01113
SUPER TSC-LTS	Nabors Completion and Production Services	Paraffin & Scale Additives				
			Water	7732-18-5	60.00000	0.01017
KR-153SL	Nabors Completion and Production Services	Biocides				
			Polyethylene-Glycol	25322-68-3	50.00000	0.00881
			2,2-dibromo-3-nitropropanamide	10222-01-2	20.00000	0.00273
DB-2LT	Nabors Completion and Production Services	Gel Breakers				
			Ammonium Persulfate	7727-54-0	85.00000	0.00653
			Crystalline Silica (in the form of quartz)	14808-60-7	10.00000	0.00077
Acid Inhibitor 2 (AI-2)	Nabors Completion and Production Services	Acid Corrosion Inhibitors				
			Glycol Ethers	111-46-6	40.00000	0.00320
			Propargyl Alcohol	107-19-7	40.00000	0.00020
			Isopropyl Alcohol	67-63-0	40.00000	0.00020
			Ethoxylated Nonylphenol	68412-54-4	13.00000	0.00006
			Tar bases, quinoline deriva, benzyl chloride-quaternized	72480-70-7	10.00000	0.00005
EB-4L	Nabors Completion and Production Services	Gel Breakers				
			Ethylene Glycol	107-21-1	40.00000	0.00316

Ingredients shown above are subject to 29 CFR 1910.1200 and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

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Other Ingredients	Nabors Completion and Production Services	Other Ingredients						
	Water		7/32-18-5	87.50000	0.22652			
	guar gum		9000-30-0	50.00000	0.03570			
	Anionic Polyacrylamide		910644-97-2	40.00000	0.03500			
	Water		7/32-18-5	40.00000	0.03500			
	Propylene glycol		57-55-6	15.00000	0.01312			
	Water		7/32-18-5	80.00000	0.01090			
	Proprietary		Proprietary	15.00000	0.00254			
	Proprietary		Proprietary	15.00000	0.00254			
	Proprietary		Proprietary	15.00000	0.00254			
	Proprietary		Proprietary	2.00000	0.00175			
	Surfactant		68439-51-0	2.00000	0.00143			
	Crystalline Silica (in the form of quartz)		14808-60-7	2.00000	0.00143			
	Alkali Chloride salt		Proprietary	15.00000	0.00115			
	Proprietary		Proprietary	100.00000	0.00040			
	Sugar		57-50-1	100.00000	0.00040			
	Water		7/32-18-5	48.00000	0.00023			
	Water		7/32-18-5	100.00000	0.00020			
	Z-Butoxyethanol		111-76-2	13.00000	0.00006			
	Dioxane		123-91-1	1.00000	0.00001			
	Proprietary		Proprietary	1.00000	0.00000			
	Proprietary		Proprietary	1.00000	0.00000			
	Proprietary		Proprietary	1.00000	0.00000			
	Proprietary		Proprietary	1.00000	0.00000			
	Organophilic Clay		88953-58-2	1.00000	0.00000			

* 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%
 Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
 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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