

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 #: 47-017-06169

Farm name: Vogt, Gregory R. and Carol Operator Well No.: Seaborn Unit 1H

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

District: Central County: Doddridge
Latitude: 8,221' Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 5,220 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#	40'	40'	57 Cu. Ft. Class A
Agent: CT Corporation System	13 3/8" 48#	415'	415'	576 Cu. Ft. Class A
Inspector: Douglas Newlon	9 5/8" 36#	2,494'	2,494'	1015 Cu. Ft. Class A
Date Permit Issued: 1/22/2013	5 1/2" 20#	14,795'	14,795'	3662 Cu. Ft. Class H
Date Well Work Commenced: 4/11/2013				
Date Well Work Completed: 8/10/2013	2 3/8" 4.7#	6,985'		
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): 6788' TVD				
Total Measured Depth (ft): 14,795' MD				
Fresh Water Depth (ft.): 155'				
Salt Water Depth (ft.): 1647', 1650'				
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) 6547' (TOP)

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

Final open flow 10,261 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 (09) 6-6

Were core samples taken? Yes _____ No

Were cuttings caught during drilling? Yes _____ 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 API#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.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 6,983'-14,742' (2,808 Holes)

Frac'd w/ 23,000 gals 15% HCL Acid, 231,150 bbls Slick Water carrying 621,300# 100 mesh, 4,882,500# 40/70 sand and 2,281,600# 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'
Elk	5865'	5439'
Rhinestreet	5440'	6193'
Sycamore	6194'	6370'
Middlesex	6371'	6512'
Tully	6513'	6536'
Hamilton	6537'	6546'
Marcellus	6547'	6788' TVD

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Hydraulic Fracturing Fluid Product Component Information Disclosure

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Hydraulic Fracturing Fluid Composition:

			(% by mass)	(% by mass)	
Water	ANTERO RESOURCES	Water	7732-18-5	100.00000	90.04438
WV Specific 40/70 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Crystaline Silica, quartz	14808-60-7	5.85402
			Aluminum Oxide	1344-28-1	0.06446
			Titanium Oxide	13463-67-7	0.00586
			Iron Oxide	1309-37-1	0.00586
WV Specific 20/40 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Crystaline Silica, quartz	14808-60-7	2.98862
			Aluminum Oxide	1344-28-1	0.03291
			Iron Oxide	1309-37-1	0.00299
			Titanium Oxide	13463-67-7	0.00299
WV Specific 100 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Crystaline Silica, quartz	14808-60-7	0.68783
			Aluminum Oxide	1344-28-1	0.00757

			Titanium Oxide Iron Oxide	13463-67-7 1309-37-1	0.10000 0.10000	0.00068 0.00068	
SG-100L	Nabors Completion and Production Services	Gelling Agents	Petroleum Distillates	64742-47-8	70.00000	0.04421	
HCl Acid (12.5%- 18.0%)	Nabors Completion and Production Services	Bulk Acid	Hydrogen Chloride	7647-01-0	18.00000	0.04183	
WFR-3B	Nabors Completion and Production Services	Friction Reducer	Hydro-treated light distillates, non-aromatic, BTEX free Ethoxylated alcohols Ethoxylated oxyamine	64742-47-8 68002-97-1 26635-93-8	30.00000 15.00000 5.00000	0.02141 0.01071 0.00357	
Super GREEN SOLV	Nabors Completion and Production Services	Paraffin & Scale Additives	BTEX Free Aliphatic Hydrocarbon	64742-96-7	100.00000	0.01112	
KR-153SL	Nabors Completion and Production Services	Biocides	Polyethylene-Glycol 2,2-dibromo-3- nitropropanamide	25322-68-3 10222-01-2	50.00000 20.00000	0.00712 0.00285	
SUPER TSC-LTS	Nabors Completion and Production Services	Paraffin & Scale Additives	Water	7732-18-5	60.00000	0.00908	
OB-2LT	Nabors Completion and Production Services	Gel Breakers	Ammonium Persulfate Crystalline Silica (in the form of quartz)	7727-54-0 14808-60-7	85.00000 10.00000	0.00618 0.00073	
Acid Inhibitor 2 (AI-2)	Nabors Completion and Production Services	Acid Corrosion Inhibitors	Propargyl Alcohol Glycol Ethers isopropyl Alcohol Ethoxylated Nonylphenol Tar bases, quinoline derivs, benzyl chloride-quaternized	107-19-7 111-46-6 67-63-0 68412-54-4 72480-70-7	40.00000 40.00000 40.00000 13.00000 10.00000	0.00018 0.00018 0.00018 0.00006 0.00004	
EB-4L	Nabors Completion and Production Services	Gel Breakers	Ethylene Glycol	107-21-1	40.00000	0.00021	

Ingredients shown above are subject to 29 CFR 1910.1200(i) 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	0.20334			
		guar gum	9000-30-0	50.00000	0.03158			
		Water	7/32-18-5	40.00000	0.02855			
		Anionic Polyacrylamide	910644-97-2	40.00000	0.02855			
		Water	7/32-18-5	80.00000	0.01139			
		Propylene glycol	57-55-6	15.00000	0.01071			
		Proprietary	Proprietary	15.00000	0.00227			
		Proprietary	Proprietary	15.00000	0.00227			
		Proprietary	Proprietary	15.00000	0.00227			
		Proprietary	Proprietary	2.00000	0.00143			
		Crystalline Silica (in the form of quartz)	14808-60-7	2.00000	0.00126			
		Surfactant	88439-51-0	2.00000	0.00126			
		Alkali Chloride salt	Proprietary	15.00000	0.00109			
		Sugar	57-50-1	100.00000	0.00051			
		Proprietary	Proprietary	100.00000	0.00051			
		Water	7/32-18-5	100.00000	0.00026			
		Water	7/32-18-5	48.00000	0.00021			
		2-Butoxyethanol	111-76-2	13.00000	0.00006			
		Proprietary	Proprietary	1.00000	0.00001			
		Proprietary	Proprietary	1.00000	0.00001			
		Proprietary	Proprietary	1.00000	0.00001			
		Proprietary	Proprietary	1.00000	0.00001			
		Dioxane	123-91-1	1.00000	0.00001			
		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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