

pm JK

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: March 26, 2014  
API #: 47-103-02818

Farm name: Greathouse, James Arnold Operator Well No.: Mason-Conlon Unit 1 - #4H

LOCATION: Elevation: 1,202' Quadrangle: Wileyville

District: Proctor County: Wetzel  
Latitude: 14,690 Feet South of 39 Deg. 40 Min. 00 Sec.  
Longitude 5,140 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: **Stone Energy Corporation**

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
6000 Hampton Center, Suite B Morgantown, WV 26505	20"	30'	30'	GTS
Agent: Tim McGregor	13.375"	1,200'	1,200'	1,148 CTS
Inspector: Derek Haught	9.625"	2,627'	2,627'	587 Lead - 515 Tail CTS
Date Permit Issued: 12/4/2012	5.5"		12,315'	1,348 Lead - 1,683 Tail
Date Well Work Commenced: 1/13/2013	2.375"		7,688'	
Date Well Work Completed: 10/28/2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6,970				
Total Measured Depth (ft): 12,325				
Fresh Water Depth (ft.): 90				
Salt Water Depth (ft.): 1,420				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 698 - 707				
Void(s) encountered (N/Y) Depth(s) N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,736' - 12,227'

Gas: Initial open flow 600 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 3,270 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 116 Hours

Static rock Pressure 1,850 psig (surface pressure) after 1 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.

W. J. [Signature]  
Signature

3/26/2014  
Date

05/02/2014

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 MWD Gamma Ray, Mud Log, and CBL

**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:

Perforated 17 intervals from 12,227' to 7,736'. Performed 17 individual stages of slick water stimulation using 5,497,333 gals fresh water, Sand - 624,198 lbs 100 Mesh and 5,291,103 lbs 40/70. AvBDP = 7,239 psi, AvTP = 8,024 psi, AvMTP = 9,135 psi, AvInjRate = 79.5 bpm, and AvISIP = 5,385 psi.

See Attachment for FracFocus information.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			

See attached sheet for formations encountered and their depths.

## Mason Colon Unit 1 - #4H

API 47-103-02818

Stone Energy Corporation

	Top	Top	Horizontal	Bottom (ft	Bottom (ft
	(ft TVD)	MD)	(ft	TVD)	MD)
Red Rock	Surface		*	251	FW @ 90'
Sandstone & Shale	251		*	698	
Coal	698		*	707	
Sandstone & Shale	707		*	2162	SW @ 1420'
Little Lime	2162		*	2182	
Big Lime	2182		*	2325	
Big Injun	2325		*	2445	
Sandstone & Shale	2445		*	2779	
Berea Sandstone	2779		*	2825	
Undiff Devonian Shale	2825		*	5634	
Rhinestreet	5634		~	6611	6841
Cashaqua	6611	6841	~	6825	7138
Middlesex	6825	7138	~	6844	7176
West River	6844	7176	~	6903	7282
Geneseo	6903	7282	~	6921	7329
Tully Limestone	6921	7329	~	6949	7550
Hamilton	6949	7550	~	7011	7608
Marcellus	7011	7608	~	6970	12325
TD				6970	12325

\* From Pilot Hole Log &amp; Driller's Log

~ From MWD Gamma Log

# Hydraulic Fracturing Fluid Product Component Information Disclosure

103-02818

Fracture Date:	9/10/2013
State:	West Virginia
County/Parish:	Wetzel County
API Number:	
Operator Name:	Stone
Well Name and Number:	Mason Conlon #4
Longitude:	
Latitude:	
Long/Lat Projection:	
Production Type:	
True Vertical Depth (TVD):	0
Total Water Volume (gal)*:	5497333

## 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
Slickwater, HCl 15%, WF115	Schlumberger	Corrosion Inhibitor, Bactericide (Myacide GA25), Scale Inhibitor, AntiFoam Agent, Surfactant, Acid, Breaker, Gelling Agent, Friction Reducer, Iron Control Agent, Clay Control Agent, Fluid Loss Additive, Propping	Water (Including Mix Water Supplied by Client)*	NA		87.76664%	
			Crystalline silica	14808-60-7	98.40227%	12.03791%	
			Hydrochloric acid	7647-01-0	0.80951%	0.09903%	
			Carbohydrate polymer	Proprietary	0.51082%	0.06249%	
			Ammonium sulfate	Proprietary	0.18939%	0.02317%	
			Polyethylene glycol monohexyl ether	31726-34-8	0.07007%	0.00857%	
			Glutaraldehyde	111-30-8	0.05071%	0.00620%	
			Diammonium peroxodisulfate	7727-54-0	0.02512%	0.00307%	
			Calcium chloride	10043-52-4	0.01073%	0.00131%	
			Methanol	67-56-1	0.00388%	0.00048%	
			Trisodium ortho phosphate	7601-54-9	0.00339%	0.00041%	
			Ethane-1,2-diol	107-21-1	0.00339%	0.00041%	
			Aliphatic acids	Proprietary	0.00291%	0.00036%	
			Aliphatic alcohols, ethoxylated #2	Proprietary	0.00291%	0.00036%	
			Sodium erythorbate	6381-77-7	0.00244%	0.00030%	
			Prop-2-yn-1-ol	107-19-7	0.00097%	0.00012%	
			Polypropylene glycol	25322-69-4	0.00065%	0.00008%	

\* 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%

Report ID: RPT-18813 (Generated on 9/12/2013 1:07 PM)

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.

05/02/2014