

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: February 14, 2014
API #: 47-103-02712

pm JK

Farm name: Lemons, Gary & Judy Operator Well No.: Lemons #5H

LOCATION: Elevation: 1,327' Quadrangle: New Martinsville

District: Magnolia County: Wetzel
Latitude: 5,670 Feet South of 39 Deg. 40 Min. 00 Sec.
Longitude: 580 Feet West of 80 Deg. 47 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"	50'	50'	GTS
Agent: Tim McGregor	13.375"	1,287'	1,287'	1,098 - CTS
Inspector: Derek Haught	9.625"	2,716'	2,716'	768 Lead - 454 Tail - CTS
Date Permit Issued: 9/30/2011	5.5"		11,308'	1,108 Lead - 1,817 Tail
Date Well Work Commenced: 7/25/2012	2.375"		7,209'	
Date Well Work Completed: 8/16/2013				
Verbal Plugging:	KCP #1 - See Next Page for Details			
Date Permission granted on:	KCP #2 - See Next Page for Details			
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>	KCP #3 - See Next Page for Details			
Total Vertical Depth (ft): 6,783				
Total Measured Depth (ft): 11,315				
Fresh Water Depth (ft.): 70				
Salt Water Depth (ft.): 1,840				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 1,026 to 1,034				
Void(s) encountered (N/Y) Depth(s) N/A				

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

Producing formation Marcellus Pay zone depth (ft) 7,319' - 11,218'
Gas: Initial open flow 180 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1,560 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 104 Hours
Static rock Pressure 1,275 psig (surface pressure) after 5 Hours

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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.


Signature

2/14/2014
Date

103.02712

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 15 intervals from 11,218' to 7,319'. Performed 15 individual stages of slick water stimulation using 5,454,328 gals fresh water, Sand - 609,425 lbs 100 Mesh and 5,246,489 lbs 40/70. AvBDP = 6,851 psi, AvTP = 7,374 psi, AvMTP = 9,053 psi, AvInjRate = 81.6 bpm, and AvISIP = 4,829 psi.

See Attachment for FracFocus information.

Plug Back Details Including Plug Type and Depth(s): KOP #1 - Class "H" cement w/ 0.05% D801 & 0.04% D080 @ 17.5 ppg for a plug from 2,071' to 1,470' set in two stages. KOP #2 - Class "A" cement w/ 2.0% CaCl2 @ 15.6 ppg for a plug from 1,550' to 1,341'. KOP #3 - Class "A" cement w/ 2.0% CaCl2 @ 15.6 ppg for a plug from 1,341' to 1,196'

Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			

See attached sheet for formations encountered and their depths.

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LEMONS #5H
 API 47-103-02712
 Stone Energy Corporation

	Horizontal			Bottom (ft		
	Top (ft TVD)	Top (ft MD)		TVD)	MD)	
Sandstone & Shale	Surface		*	1026		FW @ 70'
Pittsburgh Coal	1026		*	1034		
Sandstone & Shale	1034		*	2313		SW @ 1840'
Little Lime	2313		*	2343		
Big Lime	2343		*	2443		
Big Injun	2443		*	2543		
Sandstone & Shale	2543		*	2873		
Berea Sandstone	2878		*	2928		
Shale	2928		*	3048		
Gordon	3048		*	3098		
Undiff Devonian Shale	3098		*	6177	6189	
Rhinestreet	6177	6189	~	6549	6601	
Cashaqua	6549	6601	~	6689	6789	
Middlesex	6689	6789	~	6718	6810	
West River	6718	6810	~	6769	6919	
Geneseo	6769	6919	~	6787	6952	
Tully Limestone	6787	6952	~	6824	7030	
Hamilton	6824	7030	~	6868	7152	
Marcellus	6868	7152	~	6783	11315	
TD				6783	11315	

* From Pilot Hole Log and Driller's Log

~ From MWD Gamma Log

Hydraulic Fracturing Fluid Product Component Information Disclosure

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Fracture Date:	6/2/2013
State:	West Virginia
County/Parish:	Wetzel County
API Number:	
Operator Name:	Stone
Well Name and Number:	Lemons 5H
Longitude:	
Latitude:	
Long/Lat Projection:	
Production Type:	
True Vertical Depth (TVD):	0
Total Water Volume (gall):	5454328

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
15% HCl, Slickwater, WF115	Schlumberger	Corrosion Inhibitor, Bactericide (Myocide 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		88.35014%	
			Crystalline silica	14808-60-7	88.25689%	11.44679%	
			Hydrogen chloride	7847-01-0	0.77218%	0.08868%	
			Guar gum	9000-30-0	0.44879%	0.05205%	
			Acrylamide, 2-acrylamido-2-methylpropanesulfonic acid, sodium salt polymer	38183-80-1	0.10728%	0.01250%	
			Ammonium sulfate	7783-20-2	0.10140%	0.01181%	
			Polyethylene glycol monobutyl ether	31728-34-8	0.06088%	0.00710%	
			Glutaraldehyde	111-30-8	0.05241%	0.00611%	
			Sodium sulfate	7757-82-6	0.04383%	0.00511%	
			Sodium chloride	7647-14-5	0.03855%	0.00449%	
			Magnesium chloride	7786-30-3	0.03814%	0.00421%	
			Diammonium phosphate	7727-54-0	0.02876%	0.00312%	
			Polymer of 2-acrylamido-2-methylpropanesulfonic acid sodium salt and methyl acrylate	138783-29-8	0.01150%	0.00134%	
			Urea	57-13-6	0.00706%	0.00082%	
			Calcium chloride	10043-52-4	0.00508%	0.00059%	
			Sodium orthophosphate	7601-54-9	0.00333%	0.00039%	
			Sodium erythorbate	8381-77-7	0.00283%	0.00033%	
			Methanol	67-58-1	0.00281%	0.00033%	
			Dicoco dimethyl quaternary ammonium chloride	61769-77-3	0.00267%	0.00031%	
			Non-crystalline silica	7831-86-9	0.00224%	0.00026%	
			Fatty acids, tall oil	61780-12-3	0.00207%	0.00024%	
			Thiourea, polymer with formaldehyde and 1-phenylthiourea	68527-49-1	0.00170%	0.00020%	
			Polypropylene glycol	25322-69-4	0.00139%	0.00016%	
			Potassium chloride	7447-40-7	0.00088%	0.00011%	
			Ethane-1,2-diol	107-21-1	0.00085%	0.00011%	
			Alcohols, C14-15, ethoxylated (ZEO)	88951-87-7	0.00078%	0.00009%	
			Propan-2-ol	67-63-0	0.00053%	0.00006%	
			Prop-2-yn-1-ol	107-19-7	0.00053%	0.00006%	
			Alkenes, C>10 a-	64743-02-8	0.00035%	0.00004%	
			Tetra sodium ethylenediaminetetraacetate	64-02-8	0.00022%	0.00003%	
			Potassium hydroxide	1310-58-3	0.00012%	0.00001%	
			Dimethyl siloxanes and silicones	63148-62-9	0.00010%	0.00001%	
			Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	0.00001%	< 0.00001%	
			Octamethylcyclotetrasiloxane	556-67-2	0.00001%	< 0.00001%	
			Sodium hydroxide	1310-73-2	0.00001%	< 0.00001%	
			Decamethyl cyclotetrasiloxane	541-02-6	0.00001%	< 0.00001%	
			Dodecamethylcyclohexasiloxane	540-97-6	< 0.00001%	< 0.00001%	

† Proprietary Technology

* 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%

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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