

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 #: 47-103-02710

PM R

Farm name: Lemons, Gary & Judy Operator Well No.: Lemons #1H

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

District: Magnolia County: Wetzel
Latitude: 5,700 Feet South of 39 Deg. 40 Min. 00 Sec.
Longitude 610 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.
<u>6000 Hampton Center, Suite B</u> <u>Morgantown, WV 26505</u>	<u>20"</u>	<u>48'</u>	<u>48'</u>	<u>GTS</u>
Agent: <u>Tim McGregor</u>	<u>13.375"</u>	<u>1,300'</u>	<u>1,300'</u>	<u>1,098 - CTS</u>
Inspector: <u>Derek Haught</u>	<u>9.625"</u>	<u>2,693'</u>	<u>2,693'</u>	<u>768 Lead - 464 Tail - CTS</u>
Date Permit Issued: <u>10/11/2011</u>	<u>5.5"</u>		<u>11,624'</u>	<u>889 Lead - 1,850 Tail</u>
Date Well Work Commenced: <u>8/29/2012</u>	<u>2.375"</u>		<u>7,545'</u>	
Date Well Work Completed: <u>6/22/2013</u>				
Verbal Plugging:	<u>Set KOP #1 from 1,724' to 1,453' - Details Next Page</u>			
Date Permission granted on:	<u>Set KOP #2 from 1,434' to 1,285' - Details Next Page</u>			
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>6,754</u>				
Total Measured Depth (ft): <u>11,624</u>				
Fresh Water Depth (ft.): <u>50</u>				
Salt Water Depth (ft.): <u>2,308</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>741 to 742</u>				
Void(s) encountered (N/Y) Depth(s) <u>N/A</u>				

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

Producing formation Marcellus Pay zone depth (ft) 7,678' - 11,523'
Gas: Initial open flow 440 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 2,300 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 166 Hours
Static rock Pressure 1,800 psig (surface pressure) after 22 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

2/14/2014
Date

103.02710

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 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 11,523' to 7,678'. Performed 15 individual stages of slick water stimulation using 5,254,917 gals fresh water. Sand - 589,324 lbs 100 Mesh and 5,274,787 lbs 40/70. AvBDP = 7,017 psi, AvTP = 7,423 psi, AvMTP = 9,126 psi, AvInjRate = 81.3 bpm, and AvISIP = 4,868 psi.

See Attachment for FracFocus information.

Plug Back Details Including Plug Type and Depth(s): KOP #1 was set from 1,724' to 1,453' with Class "A" + 1.0% CaCl2 mixed @ 16.0 ppg. KOP #2 was set from 1,434' to 1,285' with Class "A" + 1.0% CaCl2 mixed @ 16.0 ppg.

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
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See attached sheet for formations encountered and their depths.

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LEMONS #1H
API 47-103-02710

Stone Energy Corporation

	Horizontal		Bottom (ft TVD)	Bottom (ft MD)
	Top (ft TVD)	Top (ft MD)		
Sandstone & Shale	Surface	*	741	FW @ 50'
Coal	741	*	742	
Sandstone & Shale	742	*	2313	SW @ 2308'
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	*	6189	6227
Rhinestreet	6189	6227	~ 6545	6701
Cashaqua	6545	6701	~ 6682	6950
Middlesex	6682	6950	~ 6709	7010
West River	6709	7010	~ 6750	7135
Geneseo	6750	7135	~ 6775	7178
Tully Limestone	6775	7178	~ 6812	7318
Hamilton	6812	7318	~ 6853	7559
Marcellus	6853	7559	~ 6754	11624
TD			6754	11624

* From Pilot Hole Log and Driller's Log

~ From MWD Gamma Log

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Hydraulic Fracturing Fluid Product Component Information Disclosure

103-02710

Fracture Date:	5/31/2013
State:	West Virginia
County/Parish:	Wetzel County
API Number:	
Operator Name:	Stone
Well Name and Number:	Lemons 1H
Longitude:	
Latitude:	
Long/Lat Projection:	
Production Type:	
True Vertical Depth (TVD):	0
Total Water Volume (gall):	5254917

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, Slidewater, 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 - Prepping	Water (Including Mix Water Supplied by Client)*	NA		88.00805%	
			Crystalline silica	14808-60-7	98.26917%	11.78701%	
			Hydrogen chloride	7847-01-0	0.73038%	0.08758%	
			Guar gum	8000-30-0	0.48427%	0.05807%	
			Acrylamide, 2-acrylamido-2-methylpropanesulfonic acid, sodium salt polymer	38183-60-1	0.09515%	0.01141%	
			Ammonium sulfate	7783-20-2	0.08993%	0.01076%	
			Polyethylene glycol monobutyl ether	31726-34-8	0.05957%	0.00714%	
			Glutaraldehyde	111-30-8	0.05104%	0.00812%	
			Sodium sulfate	7757-82-6	0.03887%	0.00488%	
			Sodium chloride	7847-14-5	0.03886%	0.00439%	
			Magnesium chloride	7786-30-3	0.03429%	0.00411%	
			Diammonium carbonate	7727-54-0	0.02817%	0.00338%	
			Polymer of 2-acrylamido-2-methylpropanesulfonic acid sodium salt and methyl acrylate	136793-29-8	0.01018%	0.00122%	
			Urea	57-13-6	0.00826%	0.00075%	
			Calcium chloride	10043-52-4	0.00480%	0.00058%	
			Trisodium orthophosphate	7601-54-9	0.00327%	0.00039%	
			Sodium erythorbate	6381-77-7	0.00268%	0.00032%	
			Methanol	67-58-1	0.00268%	0.00032%	
			Dicoco dimethyl quaternary ammonium chloride	61769-77-3	0.00261%	0.00031%	
			Non-crystalline silica	7831-86-9	0.00223%	0.00027%	
			Fatty acids, tall-oil	61790-12-3	0.00185%	0.00023%	
			Thiourea, polymer with formaldehyde and 1-oxo-2-imidazole	66527-49-1	0.00161%	0.00019%	
			Ethane-1,2-diol	107-21-1	0.00093%	0.00011%	
			Potassium chloride	7447-40-7	0.00091%	0.00011%	
			Alcohols, C14-15, branched (TEC)	68951-67-7	0.00076%	0.00009%	
			Polypropylene glycol	25322-69-4	0.00070%	0.00008%	
			Propan-2-ol	67-63-0	0.00052%	0.00006%	
			Prop-2-yn-1-ol	107-19-7	0.00050%	0.00006%	
			Alkenes, C>10 a-	84743-02-8	0.00033%	0.00004%	
			Tetrasodium ethylenediaminetetraacetate	84-02-8	0.00020%	0.00002%	
			Potassium hydroxide	1310-58-3	0.00012%	0.00001%	
			Dimethyl siloxanes and silicones	63148-82-9	0.00009%	0.00001%	
			Siloxanes and Silicones, di-Me, reaction products with silica	67782-90-7	0.00001%	< 0.00001%	
			Octamethylcyclotetrasiloxane	558-67-2	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