State of West Virginia Department of Environmental Protection - Office of Oil and Gas Well Operator's Report of Well Work

API 47 - 103 - 02863	County Wetzel	Dis	strict Magnolia				
Quad New Martinsville	Pad Name Stone		Field/Pool Name Mary				
Farm name Stone Energy Corp		W	ell Number #7H				
Operator (as registered with the O	OG) Stone Energy Cor	poration					
Address 1300 Fort Pierpont D	r Suite 201 City Mo	rgantown	State WV	Zip <u>26508</u>			
As Drilled location NAD 83/UT Top hole	Northing 4,389,058	ed plat, profile view, and de Easting	eviation survey 5 518,706				
Landing Point of Curve	Northing 4,389,492		518,871				
Bottom Hole	Northing 4,390,974	Easting	518,277				
Elevation (ft) 1,215	GL Type of Well	□New	Type of Report	□Interim B Final			
Permit Type Deviated	Horizontal Horizon	ntal 6A 🗆 Vertical	Depth Type	□ Deep ■ Shallow			
Type of Operation □ Convert	□ Deepen □ Drill □	Plug Back Redrillin	g 🗆 Rework	■ Stimulate			
Well Type □ Brine Disposal □	CBM ■ Gas □ Oil □ Sec	condary Recovery	ion Mining Stor	rage Other			
Type of Completion ■ Single □ Drilled with □ Cable ■ Rotar Drilling Media Surface hole ■ Production hole ■ Air ■ Mud	y IAir □ Mud IFresh Wa	nter Intermediate hold		□ Other ■ Fresh Water □ Brine			
Mud Type(s) and Additive(s) Saturated salt mud which inc			erma-Lose HT, X	an-Plex D, X-Cide 102			
Soda Ash, and Sodium Chlo	The second secon						
Date permit issued 4/1/201	3 Date drilling comm	menced6/2/2013 Date completion activity	RECEIVED	aser 1/4/2014 0/25/2014			
Date completion activities began		_ Date completion activity	es ceased	0/23/2014			
Verbal plugging (Y/N) N	Date permission grante	d .	Chapied Dio				
Please note: Operator is required Freshwater depth(s) ft	to submit a plugging applic	ation within 5 days of veit	Modernission to ple ironmental	nt of ugtection			
Freshwater denth(s) ft	95	Onen mine(s) (V/N) dent	he	N			
	one Reported	Void(s) encountered (Y/I		N			
	36 & 911	Cavern(s) encountered (Y		N			
Is coal being mined in area (Y/N)	N						

Reviewed by: 44 5/26/15 V

Rev. 8/23/13 Farm name Stone Energy Corporation API 47- 103 -02863 _Well number__#7H **CASING** Hole Casing New or Grade Basket Did cement circulate (Y/N) **STRINGS** wt/ft Size Size Depth Used Depth(s) * Provide details below* Conductor 24" 20" 80' New LS N - GTS Surface 17.5" 13.375" 1,229' KB - 1,214' GL New **J55** 104' & 222' Y-CTS Coal 17.5" 13.375" 1,229' KB - 1,214' GL New J55 104' & 222' Y - CTS Intermediate 1 12.25" 9.625" 2,461' **J**55 New Y - CTS Intermediate 2 Intermediate 3 Production 8.75" 5.5" 12,943 New P110 Y - TOC @ 1,290' Tubing N/A 2.375" 7,440' New N80 N/A Packer type and depth set Circulated 18 bbls cement to surface on 13.375" casing string. Circulated 39 bbls cement to surface on the 9.625" casing string. Circulated 16 bbls cement to surface on 5.5" casing string. TOC on 5.5" after running CBL @ 1,290'. WOC CEMENT Class/Type Yield Number Slurry Volume Cement DATA of Cement of Sacks (ft³/sks) (Ω^2) Top (MD) wt (ppg) (hrs) Conductor Surface Type 1 34 15.6 40 1.18 24.0 Surface Class "A" 855 15.6 1.19 1,017 Surface 8.0 Coal Class "A" 855 15.6 1.19 1.017 Surface 8.0 Intermediate 1 Lead-FlexSeal Tail-Class "A" Lead-490 Tail-310 Lead-15.0 Tail 15.6 Lead-1.26 Tail-1.19 Lead-617 Tail-369 Surface 12.0 Intermediate 2 Intermediate 3 Production 1,290 Lead-FlexSeal Tail-Class "A" Lead-747 Tail-1,934 Lead- 15.0 Tail-15.6 Lead-1.26 Tail-1.19 Lead-941 Tail-2,301 7.0 Tubing Drillers TD (ft) 12,946 MD / 6,717 TVD Loggers TD (ft) N/A Deepest formation penetrated Marcellus Shale Plug back to (ft) Plug back procedure Kick off depth (ft) 5,860 MD / 5,848' TVD Check all wireline logs run □ caliper □ density ■ deviated/directional □ induction □ neutron □ resistivity □ temperature ■ gamma ray □sonic Conventional Sidewall Were cuttings collected ■ Yes □ No Well cored □ Yes ■ No DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

Joints 2, 5, 8, 11, 14, 17, 20, 23, 26 and 29. Intermediate casing had bow spring centralizers placed on joints 2, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52 electron in the production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 2 to joint 166. Ran a total of 42 rigid spiral centralizers. Ran bow spring centralizers from joint 169 to joint 271 on every third Joint. A total of 34 bow spring centralizers were run. WV Department of Environmental Protection WAS WELL COMPLETED AS SHOT HOLE No **DETAILS** WAS WELL COMPLETED OPEN HOLE? **DETAILS** □ Yes 🖪 No WERE TRACERS USED □ Yes ■ No TYPE OF TRACER(S) USED

WR-35 Rev. 8/23/13

API 47- 103 _ 02863 Farm name Stone Energy Corporation Well number #7H

PERFORATION RECORD

Stage		Perforated from	Perforated to	Number of	
No.	Perforation date	MD ft.	MD ft.	Perforations	Formation(s)
1	4/16/14	12,654	12,657	72	Marcellus Shale
2	5/5/14	12,384	12,572	72	Marcellus Shale
3	5/7/14	12,138	12,309	72	Marcellus Shale
4	5/8/14	11,888	12,065	72	Marcellus Shale
5	5/9/14	11,641	11,818	72	Marcellus Shale
6	5/10/14	11,390	11,573	72	Marcellus Shale
7	5/11/14	11,144	11,323	72	Marcellus Shale
8	5/12/14	10,891	11,072	72	Marcellus Shale
9	6/26/14	10,630	10,818	72	Marcellus Shale
10	7/9/14	10,377	10,563	72	Marcellus Shale
11	7/14/14	10,124	10,305	72	Marcellus Shale
12	7/15/14	9,870	10,051	72	Marcellus Shale
13	7/18/14	9,612	9,794	72	Marcellus Shale
14	7/19/14	9,361	9,548	72	Marcellus Shale
15	7/21/14	9,105	9,288	72	Marcellus Shale
16	7/22/14	8,852	9,037	72	Marcellus Shale

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	5/5/14	85.2	7,605	6,615	5,005	345,380	8,238	
2	5/7/14	84.4	8,052	7,403	5,349	419,540	8,308	
3	5/8/14	84.7	8,045	6,697	5,262	423,280	8,526	
4	5/9/14	85.4	8,068	6,708	5,550	423,380	8,445	
5	5/10/14	82.4	8,040	7,500	5,807	427,500	8,324	
6	5/11/14	84.0	8,078	7,561	5,664	420,640	8,412	
7	5/12/14	84.1	8,193	7,328	5,463	414,760	8,728	
8	5/13/14	74.8	7,918	6,833	5,606	418,120	8,809	
9	7/8/14	73.2	8,335	7,572	4,793	424,280=0	CEO, 943,	Gas
10	7/14/14	77.0	7,961	7,859	5,280	418,720	t Gibagio	
11	7/15/14	77.9	8,208	8,292	4,201	4 (2) 4 (2) 4 (3)	11,409,1	
12	7/18/14	59.8	8,870	8,855	9,063	2,566	R61839	
13	7/19/14	73.4	7,719	6,366	5,730	120,440	7,131	ent of
14	7/21/14	80.3	7,537	6,337	5,205	173,887,	newro.	entection
15	7/22/14	80.3	7,182	7,516	4,805	422,940	188814B1	101
16	7/31/14	81.8	7,080	7,721	4,315	41 E,0 660	8,460	

Please insert additional pages as applicable.

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API 47- 103 _ 02863 Farm name Stone Energy Corporation _Well number_#7H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
17	7/31/14	8,599	8,781	72	Marcellus Shale
18	8/1/14	8,348	8,533	72	Marcellus Shale
19	8/3/14	8,091	8,278	72	Marcellus Shale
20	8/4/14	7,840	8,023	72	Marcellus Shale
21	8/6/14	7,598	7,773	72	Marcellus Shale

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
17	8/1/14	82.3	7,346	6,842	4,659	416,760	8,460	
18	8/3/14	82.1	7,098	7,304	4,948	419,740	8,865	
19	8/4/14	80.1	6,822	6,288	4,502	423,800	8,888	
20	8/6/14	80.6	6,789	6,630	4,516	427,454	8,201	
21	8/7/14	77.2	8,656	7,562	5,357	52,360	3,682	
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Please insert additional pages as applicable.

API 47- 103	_ 02863	Farm	name_Sto	ne E	nergy C	orpoi	ration	_Well 1	number_#	7H	
PRODUCING Marcelllus Shale	FORMATION(e	<u>S)</u>	DEPTHS 6,796' to		_TVD	7,5	598' to 12,657	MD			
					-	_		_			
Please insert ad	Iditional pages a	s applicable.			_	_		_			
GAS TEST	■ Build up □	Drawdown	■ Open	Flow		OIL	TEST 🗆 F	low [Pump		
SHUT-IN PRE	SSURE Surf	ace 2,797	psi	Botto	m Hole 4	,563 cald	culated psi	DURAT	TION OF	TEST	94 hrs
OPEN FLOW	Gas 1,544 mcf	Oil pd		NGL 2.6	_ bpd	Wa 454.:			NEASUR		
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD 0	BOTTOM DEPTH IN FT TVD	TOI DEPTH ME	IN FT	BOTTO DEPTH II MD	N FT					QUANTITYAND E, OIL, GAS, H ₂ S, ETC)
See Attached Sheet	0		0								
			1								
Please insert ad	ditional pages a	s applicable.									
	ctor Nomac (top			norizon City		orris / 1	The Woodlands	State	PA / TX	Zip 2	5312 / 77381
Logging Compa	any Scientific Dr	illing and Schl	umberger								
Address 3475 W	/ashington Ave / 11	78 US HWY 33	East	City	Finleyville	e / Wes	ston	_State	PA / WV	Zip 1	5332 / 26452
Cementing Con Address 1178 U	mpany Schlumbe S HWY 33 East	erger		City	Weston			_ State	WV	Zip 2	6452
	mpany Schlum	berger		1941	10/	_		3.77.7	14/1/	0	00,450
Address 1178 U Please insert ad	ditional pages a	s applicable.		City	Weston			State	WV	Zip 2	0452
Completed by	W. Lee Hornsby	,					Telephone	304-225	-1600		
Signature	الم حرا	Sound	Ti	tle D	rilling Engir	neer	- Lucius -		Date 4/27	/2015	
Submittal of Hy	ydraulic Fracturi	ng Chemical	Disclosur	e Info	rmation	At	tach copy of	FRACE	OCUS R	egistry	,

Stone #7H API 47-103-02863 Stone Energy Corporation

Horizontal

	Тор	Тор		Bottom (ft	Bottom	
	(ft TVD)	(ft MD)	1	TVD)	(ft MD)	_
Sandstone & Shale	Surface		*	836		FW @ 95
Coal	836		*	839		
Sandstone & Shale	839		*	911		
Coal	911			915		
Sandstone & Shale	915			2,086		
Little Lime	2,086		*	2,116		
Big Lime	2,116		*	2,216		
Big Injun	2,216		*	2,316		
Sandstone & Shale	2,316		*	2,689		No SW Reported
Berea Sandstone	2,689		*	2,719		
Shale	2,719		*	2,894		
Gordon	2,894		*	2,944		
Undiff Devonian Shale	2,944		*	5,840	5,851	L
Rhinestreet	5,840	5,851	~	6,366	6,692	2
Cashaqua	6,366	6,692	~	6,421	6,846	5
Middlesex	6,421	6,846	~	6,601	7,021	L
West River	6,601	7,021	~	6,677	7,148	3
Geneseo	6,677	7,148	~	6,693	7,114	l .
Tully Limestone	6,693	7,114	~	6,731	7,287	•
Hamilton Shale	6,731	7,287	~	6,781	7,485	;
Marcellus	6,781	7,485	~	6,717	12,946	5
TD				6,717	12,946	5

^{*} From Pilot Hole Log and Driller's Log

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[~] From MWD Gamma Log

Hydraulic Fracturing Fluid Product Component Information Disclosure 8/7/2014 Fracture Date: State West Virginia Wetzel County County/Parish: 47-103-02863 API Number: Operator Name: Stone Energy Well Name and Number: Stone 7H Longitude: 518,706 4,389,058 Latitude: Long/Lat Projection: **Production Type:** True Vertical Depth (TVD) 7347132 Total Water Volume (gal)*

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
H015, Slickwater, WF115	Schlumberger	r Corrosion Inhibitor, Bactericide (Myacide GA25), Scale Inhibitor, Surfactant , Acid, Breaker, Gelling Agent, Friction Reducer, Iron Control Agent, Clay Control Agent, Buffer, Propping Agent, Fluid	Water (Including Mix Water Supplied by Client)*	NA		89.27875%	
			Crystalline silica	14808-60-7	98.16495%	10.52451%	
			Ammonium sulfate	7783-20-2	1.99278%	0.21365%	
			Hydrochloric acid	7647-01-0	1.11363%	0.11940%	
			Carbohydrate polymer	Proprietary	0.69089%	0.07407%	
			Urea	57-13-6	0.33213%	0.03561%	
			Polyethylene glycol	31726-34-8	0.07701%	0.00826%	
			Glutaraldehyde	111-30-8	0.06149%	0.00659%	
			Diammonium peroxidisulphate	7727-54-0	0.02881%	0.00309%	
			Dicoco dimethyl quaternary ammonium	61789-77-3	0.00592%	0.00064%	
			Sodium carbonate	497-19-8	0.00541%	0.00058%	
			Methanol	67-56-1	0.00445%	0.00048%	
			Trisodium ortho	7601-54-9	0.00441%	0.00047%	
			Ethane-1,2-diol	107-21-1	0.00441%	0.00047%	
			Sodium erythorbate	6381-77-7	0.00384%	0.00041%	
			Aliphatic alcohols, ethoxylated #2	Proprietary	0.00334%	0.00036%	
			Aliphatic acids	Proprietary	0.00334%	0.00036%	
			Calcium chloride	10043-52-4	0.00140%	0.00015%	
			Prop-2-yn-1-ol	107-19-7	0.00111%	0.00012%	

^{*} Total Water Volume sources may include fresh water, produced water, and/or recycled water

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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

Office of Oil and Gas

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^{**} Information is based on the maximum potential for concentration and thus the total may be over 100%

