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

API 47 103 02892	County Wetzel	Di	strict Magnolia	
Quad New Martinsville			eld/Pool Name Ma	ry
Farm name Stone Energy Cor	poration		/ell Number #8H	
Operator (as registered with the C	OOG) Stone Energy Corp	poration		
Address 1300 Fort Pierpont [Or Suite 201 City Mor	gantown	State WV	Zip 26508
As Drilled location NAD 83/U Top hole	Northing 4,389,057	ed plat, profile view, and d Eastin	leviation survey g 518,712	
Landing Point of Curve			g 519,191	
Bottom Hole	Northing 4,387,771	Easting	g 519,931	
		□New ■ Existing	Type of Report	
Permit Type Deviated	□ Horizontal	tal 6A	Depth Type	□ Deep Shallow
Type of Operation □ Convert	□ Deepen □ Drill □	Plug Back Redrillin	ng 🗆 Rework	■ Stimulate
Well Type □ Brine Disposal □	CBM ■ Gas □ Oil □ Sec	condary Recovery	ation Mining Stor	age Other
Type of Completion Single 1	Multiple Fluids Produ	ced ■ Brine ■Gas	□ NGL □ Oil □	□ Other
		ced a Dinie agas	DINGE DOIL	other
Drilled with □ Cable ■ Rota	Ту			
Drilling Media Surface hole	■ Air □ Mud ■Fresh Wa	ter Intermediate hol	le ■ Air □ Mud	■ Fresh Water □ Brine
Production hole Air Mud	d □ Fresh Water □ Brine	2		
Mud Type(s) and Additive(s) Saturated salt mud which inc	cludes Caustic Soda, Bar	rite, Lime, New-Drill, P	erma-Lose HT, X	an-Plex D, X-Cide 102,
Soda Ash, and Sodium Chlo	oride			
Date permit issued 6/27/20	13 Date drilling comm	nenced7/2/2013	Date drilling ce	eased 12/23/2013
Date completion activities began	1/7/2011	Date completion activit		
Verbal plugging (Y/N)	American Company of the Company of t	d		
retout plugging (1711)				
Please note: Operator is required Freshwater depth(s) ft	I to submit a plugging applica	ation within 5 days of ver	bal permatical to plus	ED Shd Gas
Freshwater depth(s) ft	96	Open mine(s) (Y/N) dep	oths APR 28	2016
Salt water depth(s) ft	1,988	Void(s) encountered (Y/	N) depths Al II	N of
Coal depth(s) ft	836	Void(s) encountered (Y/Cavern(s) encountered (Y/N) depths TeD8	rtment of tal Protection Reviewed by:
Is coal being mined in area (Y/N)	N	()	Marrien	tal Protection
13 coar being mined in area (1/14)			Environme	Reviewed by:

Rev. 8/23/13 Farm name Stone Energy Corporation _Well number_#8H 02892 API 47-103 -**CASING** Hole Casing New or Grade Basket Did cement circulate (Y/N) **STRINGS** Used wt/ft * Provide details below* Size Size Depth Depth(s) Conductor 24" 20" 80' New LS N-GTS Surface Y-CTS 17.5" 13.375" 1,215' KB - 1,200' GL New **J55** 118' & 194' Coal 17.5" 13.375" 1,215' KB - 1,200' GL New **J55** 118' & 194' Y-CTS Intermediate 1 12.25" 9.625" 2,464' New J55 Y-CTS Intermediate 2 Intermediate 3 Production 8.75" 5.5" 12,300 New P110 N - TOC @ 1,925' Tubing N/A 2.375" 7,440' New N80 N/A Packer type and depth set TOC on 5.5" after running CBL @ 1,925'. Class/Type CEMENT Number Yield Volume WOC Slurry Cement (ft^2) DATA of Cement of Sacks wt (ppg) (ft 3/sks) Top (MD) (hrs) Conductor Type 1 34 15.6 1.18 40 Surface 24.0 Surface Class "A" 935 15.6 1.19 1,113 Surface 8.0 Coal 935 Surface 8.0 15.6 1.19 Class "A" 1,113 Intermediate 1 Lead-15.0 Tail 15.6 Lead-1.26 Tail-1.19 Lead-620 Tail-368 Surface Lead-FlexSeal Tail-Class "A" Lead-492 Tail-309 12.0 Intermediate 2 Intermediate 3 Production 1.925 Lead-FlexSeal Tail-Class "A" Lead-770 Tail-1,660 Lead- 15.0 Tail-15.6 Lead-1,26 Tail-1,19 Lead-970 Tail-1,975 7.0 **Tubing** Drillers TD (ft) 12,325 MD / 6,764 TVD Loggers TD (ft) N/A Deepest formation penetrated Marcellus Shale Plug back to (ft) Plug back procedure Kick off depth (ft) 5,989 MD / 5,947' TVD ■ deviated/directional Check all wireline logs run □ caliper □ density □ induction □ resistivity □ neutron 🖹 gamma ray □ temperature □sonic Well cored □ Yes ■ No Conventional Sidewall Were cuttings collected ■ Yes □ No DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

Surface casing had bow spring centralizers placed on joints 2, 6, 10, 14, 22, 26 and 30. Intermediate casing had bow spring centralizers placed on joints 2, 6, 10, 14, 18, 22, 26, 30, 34, 38, 42, 46, 50, 54 and 58. Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 1 to joint 145. Ran a total of 37 rigid spiral centralizers. Ran bow spring centralizers from joint 148 to joint 241 on every third joint. A total of 32 bow spring centralizers were run. Office of Oil and Gas WAS WELL COMPLETED AS SHOT HOLE □ Yes 🖪 No DETAILS WV Department of WAS WELL COMPLETED OPEN HOLE? DETAILS □ Yes Environmental Protection WERE TRACERS USED □ Yes ■ No TYPE OF TRACER(S) USED __

WR-35 Rev. 8/23/13

API 47- 103 - 02892 Farm name Stone Energy Corporation

Well number#8H

PERFORATION RECORD

Stage		Perforated from	Perforated to	Number of	
No.	Perforation date	MD ft.	MD ft.	Perforations	Formation(s)
1	4/16/14	12,051	12,220	72	Marcellus Shale
2	5/5/14	11,801	11,983	72	Marcellus Shale
3	5/6/14	11,547	11,731	72	Marcellus Shale
4	5/7/14	11,290	11,479	72	Marcellus Shale
5	5/8/14	11,037	11,223	72	Marcellus Shale
6	5/9/14	10,780	10,966	72	Marcellus Shale
7	5/10/14	10,527	10,713	72	Marcellus Shale
8	5/12/14	10,280	10,457	72	Marcellus Shale
9	5/14/14	10,028	10,218	72	Marcellus Shale
10	5/15/14	9,772	9,963	72	Marcellus Shale
11	5/16/14	9,520	9,708	72	Marcellus Shale
12	5/17/14	9,274	9,458	72	Marcellus Shale
13	5/23/14	9,024	9,208	72	Marcellus Shale
14	5/28/14	8,778	8,958	72	Marcellus Shale
15	5/31/14	8,517	8,703	72	Marcellus Shale
16	6/1/14	8,260	8,448	72	Marcellus Shale

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

No. Da 1 5/5/6	14 83.5	7,376	Pressure (PSI) 6,082	4,632	Proppant (lbs)	Water (bbls)	Nitrogen/other (units)
			0,002		360,200	8,337	
2 3/0/	14 00.0	/ ////	5,866	4,603	410,100	8,452	
0 57	44 000	7,470	 		' 		
3 5/7		7,447	6,251	4,889	429,560	8,498	
4 5/8	14 85.5	7,354	6,781	5,148	420,880	8,250	
5 5/9/	14 85.2	7,241	6,203	4,860	418,740	8,269	
6 5/10	/14 85.1	7,149	6,372	4,804	426,340	8,409	
7 5/12	/14 80.2	6,843	6,905	4,860	417,780	8,306	
8 5/14	/14 80.3	6,981	6,478	4,574	421,740	8,254	
9 5/15	/14 79.9	6,905	5,577	5,233	421,180	8,426	
10 5/16	14 78.7	6,961	6,125	5,090	418,700	9,528	
11 5/17	74 78.6	7,436	6,660	5,350	419,240	8,314	
12 5/22	714 73.3	7,408	6,218	4,632	276,020	9,091	
13 5/27	/14 78.5	6,764	5,806	4,860	422,720	8.048=1	
14 5/30	14 80.4	7,045	6,505	4,546	419,840R	E8368.7	d Gas
15 5/31	14 69.0	7,173	6,854	5,150	224-040e	08,388	
16 6/1/	14 73.6	7,143	6,639	5,979	205,720	7,198 2	n15

Please insert additional pages as applicable.

WV Department of Environmental Protection 06/05/2015 WR-35 Rev. 8/23/13

API 47-	103 _	02892	Farm name_Stone Energy Corporation	_Well number_#8H
				_ ** *** ******************************

PERFORATION RECORD

Stage	.	Perforated from	Perforated to	Number of	-
No.	Perforation date	MD ft.	MD ft.	Perforations	Formation(s)
17	6/2/14	8,009	8,193	72	Marcellus Shale
18	6/3/14	7,760	7,937	72	Marcellus Shale
19	6/4/14	7,510	7,693	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	6/2/14	83.4	6,836	6,484	4,517	419,390	8,814	
18	6/3/14	84.8	6,573	6,469	5,009	419,580	8,281	
19	6/6/14	85.0	6,484	6,427	4,861	417,640	8,582	
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						of of	Oil and	
						Office of	2 9 2015	

Please insert additional pages as applicable.

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RODUCING	FORMATION(S	<u>S)</u>	DEPTHS						
Marcelllus Shal	е		6,791' to 6,767'	TVD	7,510' to 12,2	20' MD			
1100 - 1000 - 1000				_1\D	100000000000000000000000000000000000000	IVID			
				-					
		_		-					
	1.000		-			_			
lease insert ad	ditional pages a	s applicable.							
AS TEST	■ Build up □	Drawdown	■ Open Flow		OIL TEST	Flow D	ump		
HUT-IN PRE	CCLIDE Com	ace 2,772	psi Botto	m Hala 4.53	6 calculated psi	DUDATI	ON OF T	TEST 46.1 hrs	
HUI-IN PRE	SSURE Sun			in Hole	psi	DUKATI	JN OF I	EST 46.1 hrs	
PEN FLOW	Gas 1,966 mcf	Oil pd	bpd 132.8		Water 109.6 bpd	GAS ME □ Estima			
ITHOLOGY/	ТОР	воттом	TOP	воттом					
ORMATION	DEPTH IN FT	DEPTH IN FI		DEPTH IN I		E ROCK TYPE	AND REC	ORD QUANTITYAND	
	NAME TVD	TVD	MD	MD				BRINE, OIL, GAS, H ₂ S,	ETC)
	0		0						
ee Attached Sheet									
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	V.		1						
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lease insert ad	lditional pages a	s applicable.							
rilling Contra	ctor Nomac (top	-hole) & Saxo	n Drilling (horizon	tal)					
	lartins Branch Rd /				is / The Woodla	nds State F	PA/TX	Zip 25312 / 77381	
	any Scientific Dr Vashington Ave / 1			Finleyville /	Weston	Ctota F	PA/WV	Zip 15332 / 26452	
address off t	ruomington / tvo / 1	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	City	Timoy vino r	TTOOLON	State _		Zip_70002720.02	
	npany Schlumbe	erger				100.00			
ddress 1178 U	S HWY 33 East		City	Weston		State _V	VV	Zip 26452	
timulating Co	mpany Schlum	berger							
	S HWY 33 East		City	Weston		State_\	VYFIV	26452	
lease insert ac	lditional pages a	s applicable.				RI	of Oil	and Gas	
	W. Lee Hornshy	V			Talanhan	304-225-1	600	and Gas	
ompleted by	50 1.011150)			rilling Engine	relephon	D	600 MP P4/2011	27113	-
Completed by	N DA H	made	Title Di	ming Lingine	-1		TIE I TILE	2010	
And the second second second	A-B. C	L	Title Di	ming Engine			atte in the	erament of tal Protection 06/05	

Stone #8H API 47-103-02892

Stone Energy Corporation

	Storic	Literal Corp		20011		
	Тор	Horizontal Top	J	Bottom (ft	Bottom	
	(ft TVD)	(ft MD)	_	TVD)	(ft MD)	
Sandstone & Shale	Surface		*	836		FW @ 96
Coal	836		*	839		
Sandstone & Shale	839		*	2,116		SW @ 1,988
Big Lime	2,116		*	2,216		
Big Injun	2,216		*	2,316		
Sandstone & Shale	2,316		*	2,689		
Berea Sandstone	2,689		*	2,719		
Shale	2,719		*	2,894		
Gordon	2,894		*	2,944		
Undiff Devonian Shale	2,944		*	5,586	5,601	
Rhinestreet	5,586	5,601	~	6,556	6,897	
Cashaqua	6,556	6,897	~	6,669	7,106	
Middlesex	6,669	7,106	~	6,694	7,171	
West River	6,694	7,171	~	6,756	7,298	
Geneseo	6,756	7,298	~	6,770	7,334	
Tully Limestone	6,770	7,334	~	6,815	7,459	
Hamilton Shale	6,815	7,459	~	6,862	7,640	
Marcellus	6,862	7,640	~	6,764	12,325	
TD				6,764	12,325	

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

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[~] From MWD Gamma Log

Hydraulic Fracturing Fluid Product Component Information Disclosure 8/8/2014 Fracture Date West Virginia State Wetzel County County/Parish API Number: 47-103-0292 **Operator Name:** Stone Energy Well Name and Number: Stone 8H Longitude: 518,712 4,389,057 Latitude Long/Lat Projection **Production Type** True Vertical Depth (TVD) 6685750 Total Water Volume (gal)*

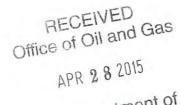
Hydraulic Fracturing Fluid Composition

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, Schlumbe WF115	Schlumberger	Corrosion Inhibitor, Bactericide (Myacide GA25), Scale Inhibitor, Surfactant, Acid, Breaker, Gelling Agent, Friction Reducer, Iron Control Agent, Clay Control Agent, Propping Agent, Fluid Loss	Water (Including Mix Water Supplied by Client)*	NA		88.06858%	
			Crystalline silica	14808-60-7	98.42930%	11.74401%	
			Hydrochloric acid	7647-01-0	0.96318%	0.11492%	
			Carbohydrate polymer	Proprietary	0.58222%	0.06947%	
			Ammonium sulfate	7783-20-2	0.17746%	0.02117%	
			Polyethylene glycol	31726-34-8	0.07362%	0.00878%	
			Glutaraldehyde	111-30-8	0.05246%	0.00626%	
			Urea	57-13-6	0.02958%	0.00353%	
			Diammonium peroxidisulphate	7727-54-0	0.02473%	0.00295%	
			Dicoco dimethyl quaternary ammonium	61789-77-3	0.00566%	0.00068%	
			Trisodium ortho	7601-54-9	0.00454%	0.00054%	
			Ethane-1,2-diol	107-21-1	0.00454%	0.00054%	
			Sodium erythorbate	6381-77-7	0.00366%	0.00044%	
			Methanol	67-56-1	0.00357%	0.00043%	
			Aliphatic acids	Proprietary	0.00268%	0.00032%	
			Aliphatic alcohols, ethoxylated #2	Proprietary	0.00268%	0.00032%	
			Calcium chloride	10043-52-4	0.00122%	0.00015%	
			Prop-2-yn-1-ol	107-19-7	0.00089%	0.00011%	

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

Report ID: RPT-29873 (Generated on 8/25/2014 1:13 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



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

