06/02/2017

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

API 47 - 103 _ 02955	County Wetzel	Г	District Proctor	
Quad New Martinsville	Pad Name Erlev		Field/Pool Name Mary	
Farm name Erlewine, Richard			Well Number #10H	
Operator (as registered with the OO	G) Stone Energy Co	rporation		
Address 1300 Fort Pierpont Dr.	- Suite 201 City Mo	organtown	State WV	Zip 26508
As Drilled location NAD 83/UTM Top hole Landing Point of Curve	M Attach an as-dril Northing 4,392,650 Northing 4,392,476		deviation survey ng 517,398 ng 517,861	
Bottom Hole	Northing 4,391,159		ng 518,315	
Type of Operation Convert Well Type Brine Disposal Character Type of Completion Single Norilled with Cable Rotary Drilling Media Surface hole Production hole Air Mud Mud Type(s) and Additive(s)	BM ■ Gas □ Oil □ So Multiple Fluids Prod Air □ Mud ■Fresh W □ Fresh Water □ Brit	□ Plug Back □ Redrill econdary Recovery □ Sol luced □ Brine □Gas dater Intermediate hone	ing Rework Solution Mining Storage NGL Oil Coll	Other Fresh Water Brine
Saturated salt mud which inclu		arite, Lime, New-Drill, I	Perma-Lose HT, Xan	-Plex D, X-Cide 102,
Soda Ash, and Sodium Chloric	ue			
Date permit issued 1/8/2014 Date completion activities began	Date drilling com	nmenced 7/30/2014	Date drilling cease ities ceased Not Yet	ed12/15/2014 Completed
Verbal plugging (Y/N) N	Date permission grante			
Please note: Operator is required to			Offic	RECEIVED ce of Oil and Gas
Freshwater depth(s) ft	106	Open mine(s) (Y/N) de	puis	
Salt water depth(s) ft	1,678	Void(s) encountered (Y		MAR 1 3 2017
Coal depth(s) ft153, 374, 444		Cavern(s) encountered	(Y/N) depths	N V Department of
Is coal being mined in area (Y/N)	PPR	OVED	0.0	onmenial Protection Reviewed by:

WR-35 Rev. 8/23/13

API 47- 103	02955		Farm name_E	rlewine, Ric	hard		We	ll nu	_{mber_} #10	Н	
CASING STRINGS	Hole Size		ising ize D		w or sed	Grade wt/ft		Bas Dep	ket th(s)		ent circulate (Y/N) de details below*
Conductor	24"		20"	90' N	lew	LS - 9	94.1 ppf				N - GTS
Surface	17.5"	1	3.375" 1,	205' N	lew	J55 -	54.5 ppf	12	0' & 234'		Y - CTS
Coal	17.5"	1	3.375" 1,	205' N	lew	J55 - 54.5 ppf		12	0' & 234'		Y-CTS
Intermediate 1	12.25"	9	9.625" 2,	406' N	lew	J55 -	J55 - 36 ppf				Y - CTS
Intermediate 2											
Intermediate 3											-
Production	8.75"		5.5" 12	,097'	lew	P110	- 20 ppf			N - TOO	@ 1,285' Calculated
Tubing											
Packer type and d	lepth set	TAM (CAP Inflatable Pack	er on 9.625" Ca	asing @	1,115'				·/	
	Circulated 30 bbls			asing string. Circula	ated 18 bbl	s cement to			o" casing string.	. Did not ci	
CEMENT DATA	Class/Type of Cement		Number of Sacks	Slurry		ield ³/sks)	Volum (ft ³_)	e	Cemer Top (M		WOC (hrs)
Conductor	Type 1		of Sacks 34	wt (ppg) 15.6		.18	40		Surfac		24.0
Surface	Premimum NE-1 CI	ass "A"	880	15.6	1	.18	1,038	3	Surface		8.0
Coal	Premimum NE-1 CI	ass "A"	880	15.6	1	.18	1,038		Surface		8.0
Intermediate 1	HalCem Class	s "A"	825	15.6	1	.21	998		Surfac	ce	12.0
Intermediate 2											
Intermediate 3					<u> </u>						
Production	Lead-TunedSpacer3 Tail	-VariCem	Lead-178 Tail-2,257	Lead-14.5 Tail-15.2	Lead-2.3	7 Tail-1.21	Lead-422 Tail-2,731		1,285' Cal	culated	7.0
Tubing											
Deepest forma	t) 12,098 MD / 6,710 ation penetrated ocedure		lus Shale			O (ft) <u>N/A</u> o (ft)				-	i
Kick off depth Check all wire	n (ft) <u>5,708 MD / 5,6</u> eline logs run	85 TVD	· ·		deviate gamma	d/directi ray		indu temį	ction perature	□sonic	2
Well cored	⊐ Yes 📱 No		Conventional	Sidewall		W	ere cuttin	gs co	llected =	Yes c	No No
joints 3, 8, 13, 18, 23, 26	and 29. intermediato casi	ng had bow	PLACEMENT U spring centrelizers placed on jo	ints 4, 8, 12, 16, 20, 24, 2	8 and 32.						
	d rigid spiral centralize A total of 6 bow sprin			ning with joint 4 to join	1 224. Ran	a total of 56 r	rigid spiral cent	ralizers.	Ran bow spring	g centralizer	s from joint 232 to joint 272
		9 00110 0111									
WAS WELL	COMPLETED	AS SI	HOT HOLE 🛚	Yes 🖪 No	DE	TAILS					
WAS WELL	COMPLETED	OPEN	I HOLE? □ Ye	es 🖪 No	DETA	AILS					
WERE TRAC	ERS USED 1	⊃ Yes	■ No TY	PE OF TRAC	ER(S) L	SED _					

Page	3	of	

WR-35 Rev. 8/23/13

API	₄₇₋ 103 _	02955	Farm name Erlewine, Richard	Well number #10H
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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
			-		

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)
								H-1

Please insert additional pages as applicable.

WR-35 Rev. 8/23/13								Page 4 of _
API 47- 103	_ 02955	Farm	_{name} Erlewine	e, Richard	d	Well n	umber_#10H	
PRODUCING	FORMATION(9)	<u>DEPTHS</u>					
		<u> </u>	DEFTIIS					
Not Yet Comple	eted			_TVD	-	MD		
Please insert ad	lditional pages a	s applicable.		_		_		
	□ Build up □		□ Open Flow		OIL TEST	Flow 🗆	Pump	
SHUT-IN PRE	SSURE Surf	`ace	_psi Botto	m Hole_	psi	DURAT	TION OF TEST _	hrs
OPEN FLOW	Gas mcf	Oil pd	NGL bpd	_ bpd			TEASURED BY nated □ Orifice	□ Pilot
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN MD	FT DESCRIBE		E AND RECORD QUA	A second control of the control of t
	0	1172	0		11120111	JOID (TRE	STUTTER, BRITE, O.	11, 67.6, 1125, 110)
See Attached Sheet								
		/						
Please insert ad	lditional pages a	s applicable.						
	Nomac (top						DA LTV OFOA	0.177004
	Martins Branch Rd /			Mount Mo	rris / The vvoodian	ds State	PA / TX Zip 2531	21/1381
	any Scientific Di sta Drive / 1178 US		mberger City	Charleroi	/ Weston	State	PA/WV Zip 1502	22 / 26452
	0,40,000		City			State	Zip	
Address 1178 U	npany Schlumb IS HWY 33 East	erger	City	Weston		State	WV Zip 2645	52
Stimulating Co	mpany							
Address	- FJ		City			State	Zip	
	lditional pages a	s applicable.				-		
Completed by	Greg Zofchak	1.1			_ Telephone			
Signature	Dy go		Title D	rilling Engine	eer		Date 2/16/17	
Submittal of Hy	ydraulic Fractur	ing Chemical I	Disclosure Info	rmation	Attach copy o	of FRACE	OCUS Registry	

Erlewine #10H API 47-103-02955

Stone Energy Corporation

Horizontal

	Тор	Top		Bottom (ft	Bottom	
	(ft TVD)	(ft MD)		TVD)	(ft MD)	
Sandstone & Shale	Surface		*	153		FW @ 106'
Coal	153		*	162		
Sandstone & Shale	162		*	374		
Coal	374		*	378		
Sandstone & Shale	378		*	444		
Coal	444		*	446		
Sandstone & Shale	446		*	644		ı
Coal	644		*	646		ı
Sandstone & Shale	646		*	868		•
Coal	868		*	871		
Sandstone & Shale	871		*	999		
Coal	999		*	1,003		
Sandstone & Shale	1,003		*	2,022		SW @ 1,678'
Little Lime	2,022		*	2,052		
Big Lime	2,052		*	2,152		
Big Injun	2,152		*	2,252		•
Sandstone & Shale	2,252		*	2,620		
Berea Sandstone	2,620		*	2,650		
Shale	2,650		*	2,865		
Gordon	2,865		*	2,915		
Undiff Devonian Shale	2,915		*	5,682	5,705	
Rhinestreet	5,682	5,705	~	6,108	6,169	
Cashaqua	6,108	6,169	~	6,356	6,569	
Middlesex	6,356	6,569	~	6,382	6,623	
West River	6,382	6,623	~	6,445	6,772	
Geneseo	6,445	6,772	~	6,460	6,811	
Tully Limestone	6,460	6,811	~	6,505	6,967	
Hamilton Shale	6,505	6,967	~	6,554	7,170	
Marcellus	6,554	7,170	~	6,710	12,098	
TD				6,710	12,098	

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

[~] From MWD Gamma Log