Rev. 8/23/13

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

Office of Mand Gas

DEC 1 0 2018

WV Dop artimens of Environmental Protection

API 47-043 - 03587 C	County LINCOLN	District DUVAL	
Quad GRIFFITHSVILLE 7.5' P	ad Name GRIFFITH, EPHRAIM		RIFFITHSVILLE
Farm name BENDER, JASON & ASHLE		Well Number 133	
	. ENERGY LLC		
Address 5260 DuPONT ROAD	City PARKERSBURG	State WV	Zip 26101
	attach an as-drilled plat, profile view ng 4,230,892 M	v, and deviation survey Easting 416,835 M	
Landing Point of Curve Northin		Easting	
Bottom Hole Northin	ng 4,230,518 M	Easting 416,847 M	
Elevation (ft) 888' GL	Type of Well New 🗆 Existing	Type of Report	□Interim ■Final
Permit Type   Deviated   Horizont	tal 🗆 Horizontal 6A 🖂 Vertic	eal Depth Type	□ Deep ■ Shallow
Type of Operation □ Convert □ Deepen	■ Drill □ Plug Back □ R	Redrilling   Rework	□ Stimulate
Well Type □ Brine Disposal □ CBM □ G	ias 🗆 Oil 💄 Secondary Recovery	□ Solution Mining □ Sto	rage   Other
Type of Completion ■ Single □ Multiple  Drilled with □ Cable ■ Rotary	Fluids Produced   Brine    G	Gas □ NGL ■ Oil	□ Other
Drilling Media Surface hole ■ Air □ M	fud ■Fresh Water Intermedi	iate hole Air - Mud	■ Fresh Water □ Brine
	ı Water ■ Brine	2711 211114	11.2.4.11
Mud Type(s) and Additive(s) N/A	T Water Elbinic		
Date permit issued 9/5/18 D	Date drilling commenced 10/5/	/18	eased 10/12/18
Date perint issued	NOC 14 O	Date drining e	11/6/18
Date completion activities began	Bate completion	activities ceased	1110/10
Verbal plugging (Y/N) N Date po	ermission granted	Granted by	
Please note: Operator is required to submit a	a plugging application within 5 days	of verbal permission to pl	ug
Freshwater depth(s) ft None	Open mine(s) (Y/	NO deaths	None
Salt water depth(s) ft 1070'		red (Y/N) depths	None
Coal depth(s) ft 440'- 445'		itered (Y/N) depths	None
Is coal being mined in area (Y/N)	N Cavern(s) cheoun	nersa (1/17) depuis	
so com only annea in the (1711)	D		Reviewed by:

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API 47- 043	- 03587	Farm na	ame_BENDE	R, JASON	& ASHLE	.YWell r	number 133		
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		asket epth(s)	Did cement circulate ( * Provide details bel	•
Conductor	15"	13 3/8"	14'	New	L	1		Sand In	
Surface	8 3/4"	7"	549.52'	New	L	s	64'	Y	
Coal						_			
ntermediate I									
ntermediate 2									
ntermediate 3				†					
roduction	6 1/4"	4 1/2*	2775.89'	New	J-:	55		Y	
ubing									
acker type and de	pth set			1	.1.				-
CEMENT DATA	Class/Type of Cement	Numbe of Sack			Yield (t <sup>3</sup> /sks)	Volume (ft <sup>1</sup> )	Cemen Top (MI	-	
Conductor									
Surface	Reg Neat	140	15.	6	1.18	165	Surfac	e 8	
Coal									
ntermediate 1									
ntermediate 2									
ntermediate 3									
roduction	50:50 Pozmi	ix 125/12	.5 13.2/°	14.2 1.0	64/1.27	205/186	104'	8	ı
ubing									
Orillers TD (ft)	) 282 <i>2</i>			Loggers 7	LD (4) 580a	·			
	tion penetrated	Berea			to (ft) N/A				PECEN
Plug back pro	-		-					Office	RECEIV of Oil
Cick off depth	(A) 650°							שני	<del>(10</del>
xick on depin	(11)	-						E- W/	Dabartu
Check all wire	line logs run	■ caliper	■ density	🖪 devia	ted/directio	nal 🗂 inc	luction	Environ	Tiental
	_	■ neutron	<b>■</b> resistivity	/ 📕 gamm	na ray	<b>≜</b> ter	mperature	□sonic	
								.,	
Well cored	Yes No	Conventi	onal Side	ewall	We	re cuttings o	collected =	Yes 🗆 No	
DESCRIBE TI	HE CENTRAL	IZER PI ACEM	ENT USED FO	OR EACH O	ASING ST	RING			
		rafator placed mid string on ?"							
			-				_		
WAS WELL C	COMPLETED .	AS SHOT HOLI	E □Yes ■	No D	ETAILS				
VAS WELL C	COMPLETED	OPEN HOLE?	□ Yes ■ ?	No DET	AILS				

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API 47- 043 - 03587 Farm name BENDER, JASON & ASHLET Well number 133	API 47- 043 _ 03587	Farm name_BENDER, JASON & ASHLEY	_Well number_133
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## PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	10/26/18	2646'	2664'	72	Berea
<b>—</b>	75.20,10			<del>                                     </del>	
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					Office of Cill and Gas
				j.	
				1	DE: 1 0 2018

Please insert additional pages as applicable.

Wy Department of Environmental Protection

## 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	11/6/18	4	986	1641	755	1,000	140	
	_							
								-
								-
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Please insert additional pages as applicable.

Page 4 of 4 WR-35 Rev. 8/23/13 Farm name BENDER, JASON & ASHLEY API 47- 043 \_ 03587 Well number 133 **DEPTHS PRODUCING FORMATION(S)** RECEIVED
Office of Ciliand Gas 2343'- 2464' 2640'- 2670' Berea TVD MD DEC 1 0 2018 W Department of Environmental Protection Please insert additional pages as applicable. □ Open Flow OIL TEST - Flow □ Pump **GAS TEST** □ Build up □ Drawdown SHUT-IN PRESSURE Bottom Hole DURATION OF TEST Surface psi psi Oil Water **OPEN FLOW** NGL Gas GAS MEASURED BY □ Pilot bpd bpd □ Estimated □ Orifice mcfpd bpd LITHOLOGY/ TOP воттом TOP **BOTTOM** DESCRIBE ROCK TYPE AND RECORD QUANTITYAND **FORMATION** DEPTH IN FT **DEPTH IN FT** DEPTH IN FT **DEPTH IN FT** 

	NAME TVD	TVD	MD	MD	TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
Sand/Shale	0	440	0	440	
Pittsburgh Coal	440	445	440	445	
Sand/Shale	445	1637	445	1694	
Big Lime	1637	1842	1694	1935	
Big Injun	1842	1924	1935	2042	
Shale	1924	2323	2042	2610	
Coffee Shale	2323	2343	2610	2640	
Berea	2343	2364	2640	2670	Drilled directional S 2.3° E a distance of 933'
Shale	2364	2468	2670	2822	
TD	2468		2822	<u></u>	
		<u>.</u>	ļ	<u> </u>	
				<u> </u>	

Drilling Contractor Noah Hom Well Drilling Address 1070 Sandy Valley Lane Zip 24656 VA Vansant State City Logging Company Weatherford International Address 13211 Old Hwy 50 State IL Zip 62839 City Flora Cementing Company C & J Energy Services Zip 24273 Address 580 Hawthom Dr Norton State VA City

Stimulating Company Producers Service Corp. Address 109 South Graham Street Zip 43701 State OH City Zanesville Please insert additional pages as applicable.

Please insert additional pages as applicable.

Completed	by Roger Heldman		Telephone	304-420-1107	i
Signature _	Un Roid	Title	Operations Manager	Date	12/5/18

PRODUCERS		109	S. Graham St.	
SERVICE CORP.			nesville, OH 43702 -454-6253	
		7.10	12.1 0200	
Notes	Amount	Units	Unit Cost	Total Cost
		EA		
2 Units @ 200miles				
	250	GAL		
	4			
	1	LB		
			DEC 1	0 2018
	Notes  2 Units @ 200miles	1 1 2 Units @ 200miles 250 4 4 0.5 50 6 6 1 1 50 150 150 150	Notes Amount Units  1 EA 1 EA 1 EA 2 Units @ 200miles MI 250 GAL 4 HR 0.5 GAL 50 LB 6 GAL 6 GAL 1 LB 50 LB 150 LB	Notes Amount Units Unit Cost  1 EA 1 EA 2 Units @ 200miles MI 250 GAL 4 HR 0.5 GAL 50 LB 6 GAL 6 GAL 1 LB 50 LB 150 LB



HG Energy, LLC 5260 Dupont Road Parkersburg, WV 26101 (304) 420-1100 - Office (304) 863-3172 - Fax

Office of Oil and Gas

DEC 1 0 2018

WV Department of Environmental Protection

Roger Heldman Operations Manager

December 6, 2018

Mr. Wade Stansberry West Virginia Dept of Environmental Protection 601 57 th. St. Charleston, WV 25304

Dear Wade,

Enclosed please find enclosed completed WR 35's for E P Bell 507 (47-043-03588 and Ephram Griffith 133 (47-043-03587). A copy of the Cement Bond Log for both wells is also enclosed.

If you should have any questions or need additional information please feel free to call. I can be reached at 304-420-1107.

Very truly yours,

Roger Heldman