

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

API 47 - 087 - 04784 County ROANE District SMITHFIELD  
Quad LOONEYVILLE 7.5' Pad Name EDGELL, A.W. Field/Pool Name CLOVER  
Farm name WEBB, PATTY C. Well Number 127  
Operator (as registered with the OOG) H.G. ENERGY LLC  
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,285,678 M Easting 476,368 M  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing 4,285,861 M Easting 476,105 M

Elevation (ft) 1042' GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

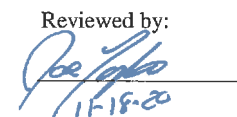
Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine  
Mud Type(s) and Additive(s)  
N/A

Date permit issued 9/16/20 Date drilling commenced N/A Date drilling ceased N/A  
Date completion activities began 10/1/20 Date completion activities ceased 10/1/20  
Verbal plugging (Y/N) N Date permission granted \_\_\_\_\_ Granted by \_\_\_\_\_

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft None Open mine(s) (Y/N) depths None  
Salt water depth(s) ft 1080' Void(s) encountered (Y/N) depths None  
Coal depth(s) ft None Cavern(s) encountered (Y/N) depths None  
Is coal being mined in area (Y/N) N

Reviewed by:  


API 47-087 - 04784 Farm name WEBB, PATTY C. Well number 127

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	15"	13 3/8"	15'	Used	LS		Existing
Surface	8 7/8"	7"	507'	New	LS	64'	Existing
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2544'	New	J-55		Existing
Tubing		2 3/8"	2340'	New	J-55		
Packer type and depth set							

Comment Details Circulated Est. 50 sks to surface on 7" surface cement job. Circulated Est. 35 sks to surface on 4 1/2" cement job. \*Existing Cement/casing program\*

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	140	15.6	1.18	165	Surface	Existing
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	240	14.2	1.27	330	80'	Existing
Tubing							

Drillers TD (ft) 2607' Loggers TD (ft) 2566'

Deepest formation penetrated Big Injun Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 600'

Check all wireline logs run  caliper  density  deviated/directional  induction  
 neutron  resistivity  gamma ray  temperature  sonic

Well cored  Yes  No Conventional Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING NOV 06 2020

20 Centralizers every 88 from bottom on 4 1/2", Centralizer placed mid string on 7" \*Existing\*

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WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

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**PERFORATION RECORD**

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	11/26/17	2428'	2438'	41	Big Injun

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	12/5/17	5	1188	2029	619	2500	150	
1	10/1/20	1.5	1263	1343	971		10	2500 gals HCL

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Please insert additional pages as applicable.

*SDZ*

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PRODUCING FORMATION(S)	DEPTHS	
<u>Big Injun</u>	<u>2062'- 2088'</u> TVD	<u>2404'- 2442'</u> MD
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump  
 SHUT-IN PRESSURE Surface \_\_\_\_\_ psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs  
 OPEN FLOW Gas \_\_\_\_\_ mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water \_\_\_\_\_ bpd GAS MEASURED BY  
 Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
Sand/Shale	0	1446	0	1450	
Sand	1446	1480	1450	1486	
Shale	1480	1586	1486	1600	
Sand	1586	1764	1600	1656	
Shale	1764	1798	1656	1930	
Sand	1798	1910	1930	1984	
Shale	1910	1930	1984	2190	
Little Lime	1930	1956	2190	2234	
Big Lime	1956	2032	2234	2354	
Keener	2032	2062	2354	2404	
Big Injun	2062	2088	2404	2442	Drilled directional N 56° W a distance of '866
Shale	2088	2168	2442	2566	
TD	2168		2566		

Please insert additional pages as applicable.


Drilling Contractor Noah Horn Well Drilling  
 Address 1070 Sandy Valley Lane City Vansant State VA Zip 24631

Logging Company Weatherford International  
 Address 13211 Old Hwy 50 City Flora State IL Zip 62839

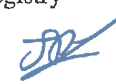
Cementing Company C&J Energy Services  
 Address 580 Hawthorn Dr. City Norton State VA Zip 24273

Stimulating Company Producers Service Corp.  
 Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman Telephone 304-420-1107  
 Signature  Title Operations Manager Date 11/2/20

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry



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Producers Service Corporation  
 109 South Graham Street  
 Zanesville, OH 43701  
 (740) 454-6253  
 www.producersservicecorp.com

# Acid

## HG Energy

Company Rep: Dustin  
 Treater: Daniel L Graham  
 10/1/2020  
 Well: C .B. Ferrell #105  
 Roane County, WV

### Casing

OD: 4.5"  
 ID: N/A  
 Weight: 10.5 lb.  
 TD: 2607 ft.

OD: N/A  
 Weight: N/A  
 From: N/A  
 To: N/A

### Tubing

Size: N/A  
 Depth: N/A

### Packers

Upper Make: N/A  
 Upper Depth: N/A  
 Lower Make: N/A  
 Lower Depth: N/A

### Pressures

PSI Test: N/A  
 Breakdown: N/A  
 Max: 1638 psi  
 Average: 1263 psi  
 Displacement: 1176 psi

### Volumes:

Pad N/A  
 Treatment: 60 BBL  
 15% Acid: 2500 Gal  
 Total: 70 BBL  
 Flush: 10 BBL

### Open Hole

Size: N/A  
 From: N/A  
 To: N/A

### Perforations

# of Shots: N/A  
 Top Perf: 2428 ft.  
 Bottom Perf: 2438 ft.

### Rates

Average: 1.5 bbl/min  
 Max: 2 bbl/min

### Notes:

Invoice #: 23832

RE  
 Office

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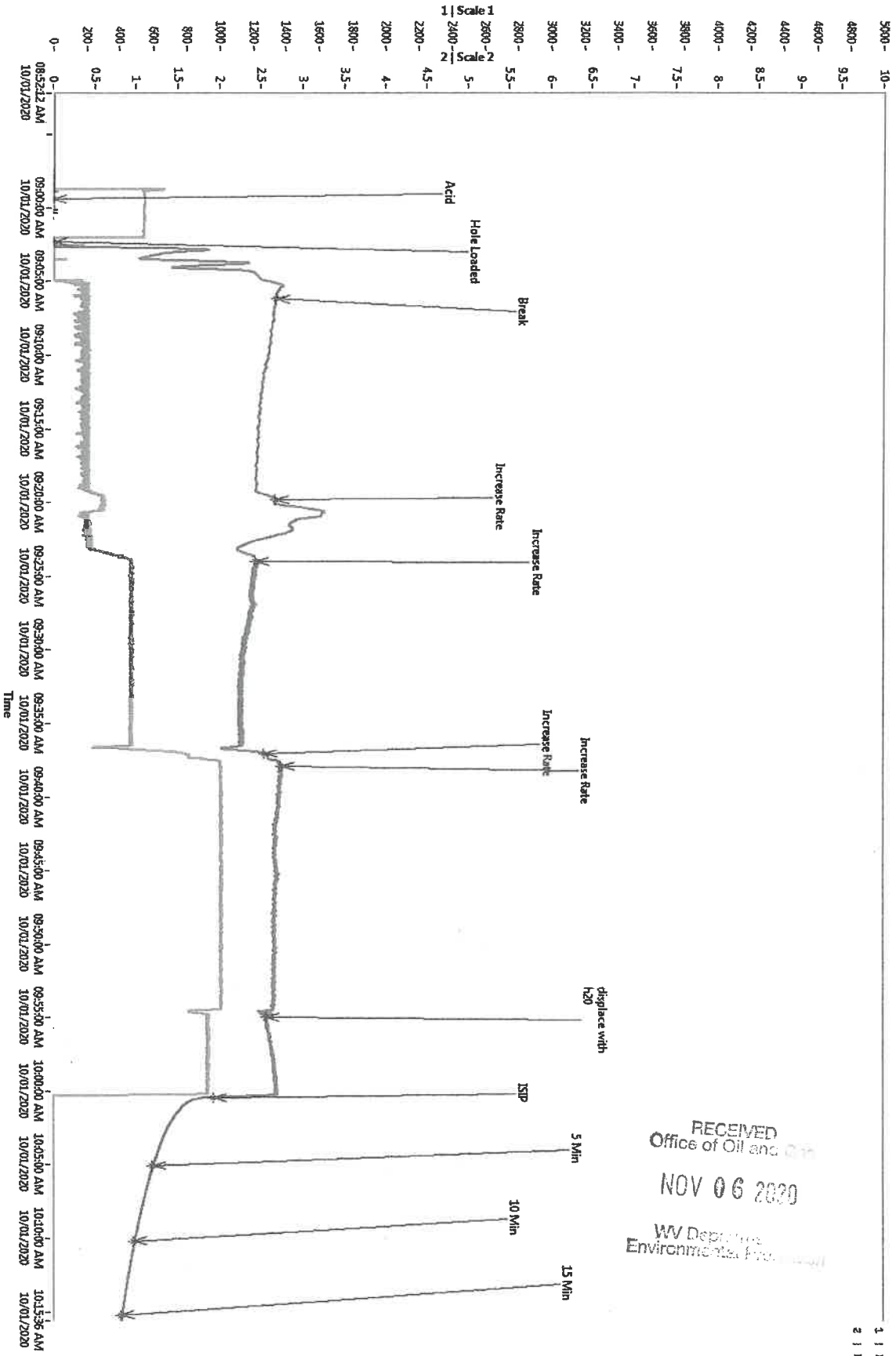
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*SOJ*

Oct 01, 2020

HG Energy A W Edgell #127 Field Ticket #23832



1 | Pressure 1  
 2 | Discharge Rate

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*[Handwritten signature]*



Timestamp	Annotation	Pressure 1	Discharge Rate	Stage Total (gal)	Grand Total (gal)	Stage Total (bb)	Grand Total (bb)
10/1/2020 8:58:49 AM	open well	-6.93	1.16	5.40	5.40	0.13	0.13
10/1/2020 8:59:20 AM	Acid	-8.27	1.11	28.40	28.40	0.68	0.68
10/1/2020 9:02:16 AM	Hole Loaded	4.54	0.00	152.40	152.40	3.63	3.63
10/1/2020 9:06:08 AM	Break	1343.30	0.32	171.71	171.71	4.09	4.09
10/1/2020 9:19:49 AM	Increase Rate	1339.69	0.64	398.74	398.74	9.49	9.49
10/1/2020 9:24:00 AM	Increase Rate	1221.45	0.96	489.37	489.37	11.65	11.65
10/1/2020 9:37:05 AM	Increase Rate	1273.52	1.57	1013.10	1013.10	24.12	24.12
10/1/2020 9:37:53 AM	Increase Rate	1375.02	2.01	1074.72	1074.72	25.59	25.59
10/1/2020 9:55:00 AM	displace with h2o	1283.16	1.88	2529.62	2529.62	60.23	60.23
10/1/2020 10:00:26 AM	ISIP	970.72	0.00	412.17	2944.40	9.84	70.10
10/1/2020 10:05:06 AM	5 Min	604.15	0.00	412.17	2944.40	9.84	70.10
10/1/2020 10:10:16 AM	10 Min	494.34	0.00	412.17	2944.40	9.84	70.10
10/1/2020 10:15:15 AM	15 Min	420.70	0.00	412.17	2944.40	9.84	70.10

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*JCP*

