

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

API 47 - 087 - 04760 County ROANE District SMITHFIELD
Quad LOONEYVILLE 7.5' Pad Name SMITH, A.B. Field/Pool Name CLOVER
Farm name CHADWELL, RONALD & BRENDA Well Number 122
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 4,284,289 M Easting 474,949 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4,284,321 M Easting 475,184 M

Elevation (ft) 1,148' 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


RECEIVED
Office of Oil and Gas
NOV 06 2020

WV Department of
Environmental Protection

Date permit issued 9/14/20 Date drilling commenced N/A Date drilling ceased N/A
Date completion activities began 9/17/20 Date completion activities ceased 9/17/20
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

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 1860' 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:

11-8-20

WR-35
Rev. 8/23/13

API 47-087 - 04760 Farm name CHADWELL, RONALD & BRENDA Well number 122

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	12 1/4"	11 5/8"	30'	Used	LS		Existing
Surface	8 3/4"	7"	550'	New	LS	64'	Existing
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2607'	New	J-55		Existing
Tubing		2 3/8"	2370'	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 Casing/Cement program*

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	130	15.6	1.18	154	Surface	Existing
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	110/125	13.2/14.2	1.64/1.27	180/186	246'	Existing
Tubing							

Drillers TD (ft) 2660' Loggers TD (ft) 2636'
 Deepest formation penetrated Big Injun Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 650'

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING 20 Centralizers every 88 from bottom on 4 1/2", Centralizer placed mid string on 7" *Existing*

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 _____

JJZ

API 47- 087 - 04760 Farm name CHADWELL, RONALD & BRENDA Well number 122

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
Big Injun	2170'- 2188'	TVD 2448'- 2474' 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 ₂ S, ETC)
Sand/Shale	0	1566	0	1614	
Sand	1566	1598	1614	1652	
Shale	1598	1644	1652	1705	
Sand	1644	1654	1705	1719	
Shale	1654	1688	1719	1759	
Sand	1688	1998	1759	2184	
Little Lime	1998	2012	2184	2206	
Pencil Cave	2012	2020	2206	2218	
Big Lime	2020	2140	2218	2400	
Keener	2140	2170	2400	2448	
Big Injun	2170	2188	2448	2474	Drilled directional N 78.3° E a distance of 849'
Shale	2188	2320	2474	2660	
TD	2320		2660		

Please insert additional pages as applicable.

Drilling Contractor Decker Drilling
Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International
Address 777 North River Avenue City Weston State WV Zip 26452

RECEIVED
Office of Oil and Gas
26452
NOV 06 2020

Cementing Company Universal Services
Address Hall Rd City Buckhannon State WV Zip 26201

Department of
Environmental Protection

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





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
9/17/2020
Well: A.B Smith#122
Roane County, WV

Casing

OD: 4.5"
ID: N/A
Weight: 10.5 lb.
TD: 2660 ft.

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: 700 psi
Average: 663 psi
Displacement: 705 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: 2462 ft.
Bottom Perf: 2468 ft.

Rates

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

Notes:

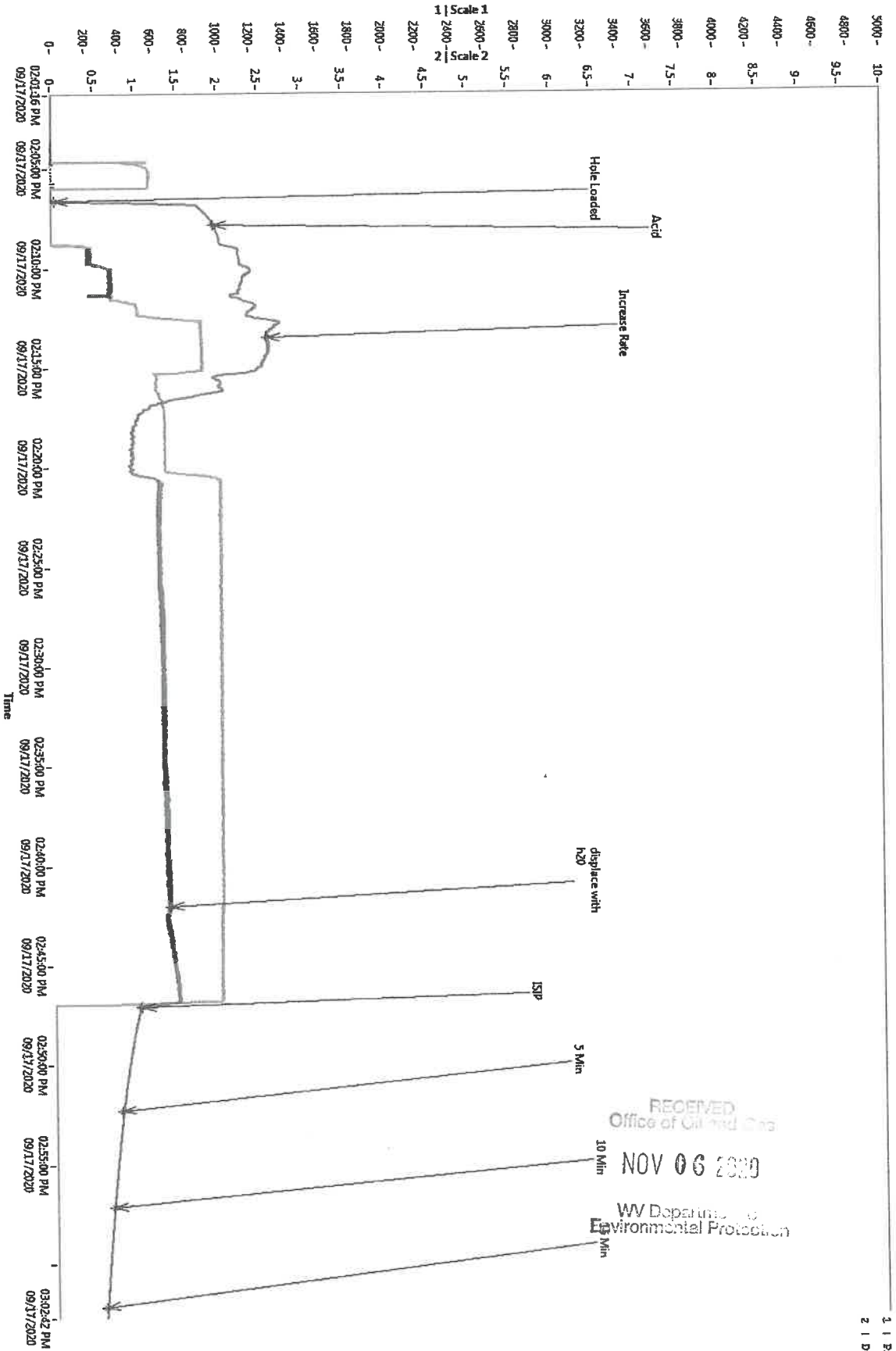
Invoice #: 23831

RECEIVED
Office of Oil and Gas

NOV 06 2020

WV Department of
Environmental Protection





1 | Pressure 1
2 | Discharge Rate

RECEIVED
Office of Oil and Gas
NOV 06 2020
WV Department of
Environmental Protection

SPZ



Timestamp	Annotation	Pressure 1	Discharge Rate	Stage Total (gal)	Grand Total (gal)	Stage Total (bbf)	Grand Total (bbf)
9/17/2020 2:04:45 PM	open well	-11.47	0.98	4.88	4.88	0.12	0.12
9/17/2020 2:06:34 PM	Hole Loaded	20.94	0.01	63.80	63.80	1.52	1.52
9/17/2020 2:07:51 PM	Acid	985.36	0.00	64.72	64.72	1.54	1.54
9/17/2020 2:13:29 PM	Increase Rate	1304.21	1.81	248.09	248.09	5.91	5.91
9/17/2020 2:42:04 PM	displace with h2o	698.98	2.04	2528.63	2528.63	60.21	60.21
9/17/2020 2:47:05 PM	ISIP	523.89	0.00	413.96	2944.00	9.89	70.10
9/17/2020 2:52:19 PM	5 Min	402.97	0.00	413.96	2944.00	9.89	70.10
9/17/2020 2:57:08 PM	10 Min	340.94	0.00	413.96	2944.00	9.89	70.10
9/17/2020 3:02:11 PM	15 Min	293.42	0.00	413.96	2944.00	9.89	70.10

RECEIVED
Office of Oil and Gas

NOV 06 2020

WV Department of
Environmental Protection

SPZ

