

PEFILE
SBR 201

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

API 47-087-04750 County ROANE District SMITHFIELD
Quad LOONEYVILLE 7.5' Pad Name KINKEAD, S.B. Field/Pool Name CLOVER
Farm name SNODGRASS, REVA ET AL Well Number 201
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 4,285,360 M Easting 475,286 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 1,110' 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 2/1/21 Date drilling commenced N/A Date drilling ceased N/A
Date completion activities began 3/3/21 Date completion activities ceased 3/3/21
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 1700' 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:

JDT
03/19/2021

API 47-087 - 04750 Farm name SNODGRASS, REVA ET AL Well number 201

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		Sand In
Surface	8 3/4"	7"	550'	New	LS	64'	Existing
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2323.15'	New	J-55		Existing
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 50 sks to surface on 7" surface cement job. Circulated Est. 15 sks to surface on 4 1/2" cement job.

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	140	15.6	1.18	165	Surface	Existing
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	90/125	13.2/14.2	1.64/1.27	147.6/186	54'	Existing
Tubing							

Drillers TD (ft) 2363' Loggers TD (ft) 2362'
 Deepest formation penetrated Big Injun Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) N/A

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 _____

20 Centralizers every 88 from bottom on 4 1/2', Centralizer placed mid string on 7'

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 _____

ISPT
03/19/2021

API 47-087 - 04750 Farm name SNODGRASS, REVA ET AL Well number 201

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	2/4/15	2174'	2182'	32	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	2/12/15	5	438	1132	335	2,500	140	
1	3/3/21	6.3	416	406	491	14,000	215	

Please insert additional pages as applicable.

Joe
03/19/2021

API 47- 087 - 04750 Farm name SNODGRASS, REVA ET AL Well number 201

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
Big Injun	TVD	2166'- 2184' 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		0	994	
Sand			994	1288	
Shale			1288	1343	
Sand			1343	1366	
Shale			1366	1700	
Sand			1700	1974	
Little Lime			1974	2000	
Pencil Cave			2000	2012	
Big Lime			2012	2140	
Keener			2140	2166	
Big Injun			2166	2184	
Shale			2184	2363	
TD			2363		

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

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

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 *Roger Heldman* Title Operations Manager Date 3/8/21

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

JRZ
03/19/2021



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

Frac

HG Energy

Company Rep: Dustin Hendershot
Treater: Daniel L Graham
3/3/2021
Well: S.B Kinkead #201
Roane County, WV

Casing

OD: 4.5"
ID: N/A
Weight: 10.5 lb.
TD: 2363 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: 2689 psi
Breakdown: 406 psi
Max: 469 psi
Average: 416 psi
Displacement: 475 psi

Volumes:

Pad 60 BBL
Treatment: 127 BBL
0.15% Acid: 250 Gal
Total: 215 BBL
Flush: 33 Bbl

Open Hole

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

Perforations

of Shots: N/A
Top Perf: 2174 ft.
Bottom Perf: 2181 ft.

Rates

Average: 6 bbl/min
Max: 6 bbl/min

Notes:

Invoice #: 23846



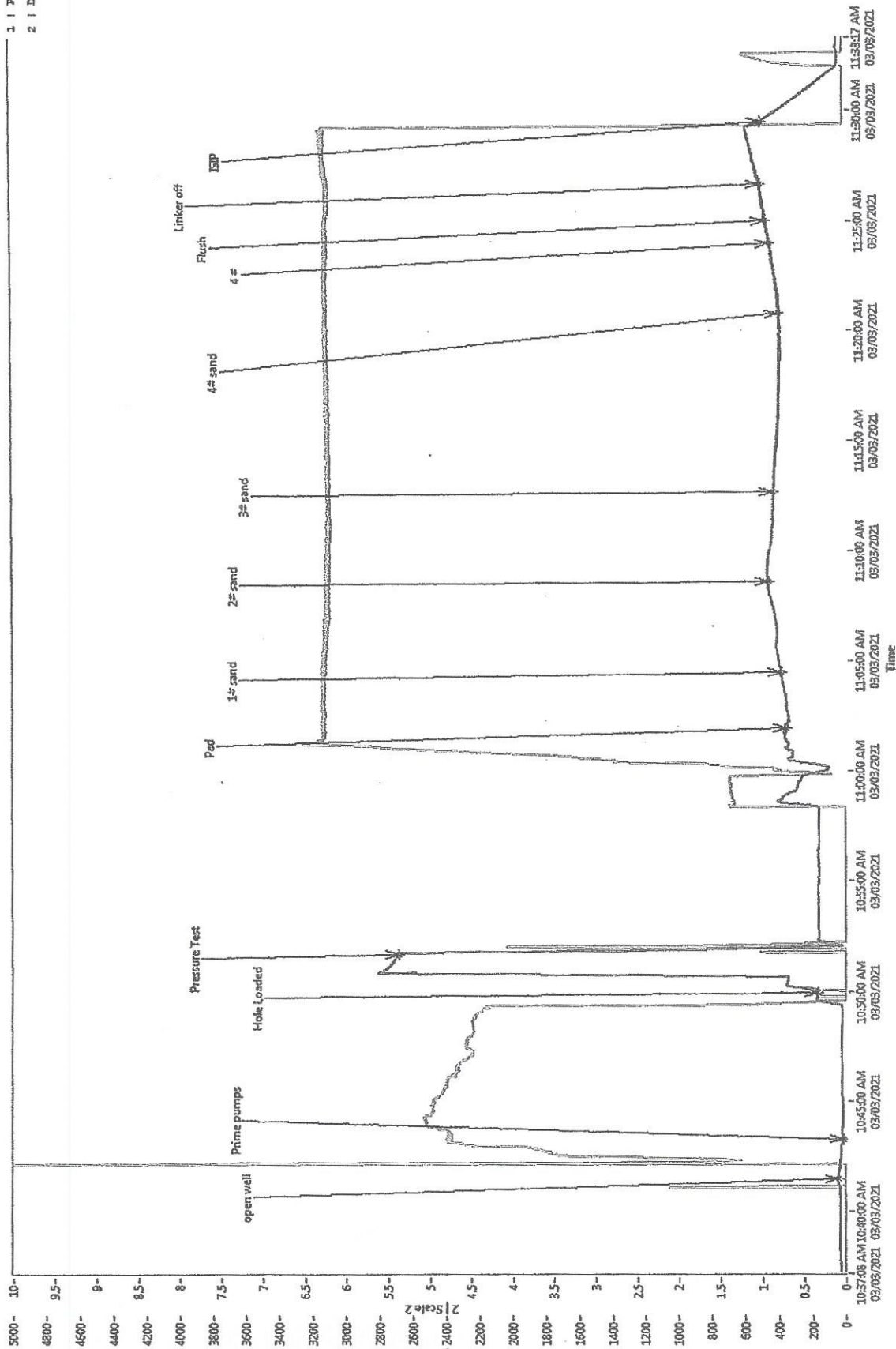
JGZ

03/19/2021

Mar 03, 2021

HG Energy S B Kinead #201 INV#23846

1 | Pressure 1
2 | Discharge Rate



JSP



03/19/2021



Timestamp	Annotation	Pressure 1	Discharge Rate	Stage Total (gal)	Grand Total (gal)	Stage Total (bb)	Grand Total (bb)
3/3/2021 10:41:29 AM	open well	45.52	0.00	5.08	5.08	0.12	0.12
3/3/2021 10:43:16 AM	Prime pumps	19.42	4.76	178.32	178.32	4.25	4.25
3/3/2021 10:49:57 AM	Hole Loaded	171.25	0.00	1393.89	1393.89	33.19	33.19
3/3/2021 10:51:40 AM	Pressure Test	2687.98	0.00	1394.18	1394.18	33.19	33.19
3/3/2021 11:01:57 AM	Pad	357.25	6.24	1854.46	1854.46	44.15	44.15
3/3/2021 11:04:28 AM	1# sand	384.69	6.23	2521.06	2521.06	60.03	60.03
3/3/2021 11:08:36 AM	2# sand	459.25	6.19	3598.04	3598.04	85.67	85.67
3/3/2021 11:12:39 AM	3# sand	426.77	6.22	4657.10	4657.10	25.22	110.88
3/3/2021 11:20:47 AM	4# sand	395.86	6.25	2111.69	6777.45	50.38	161.37
3/3/2021 11:23:24 AM	Flush	436.61	6.21	675.50	7457.30	16.19	177.55
3/3/2021 11:23:58 AM	4#	446.48	6.22	147.99	7609.66	3.63	181.18
3/3/2021 11:25:03 AM	Flush	468.47	6.22	270.02	7888.42	6.53	187.82
3/3/2021 11:26:40 AM	Linker off	497.92	6.18	691.10	8309.49	16.56	197.85
3/3/2021 11:29:29 AM	ISIP	493.90	0.00	1393.33	9011.72	33.28	214.56

SDZ

