

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

API 47 - 043 - 03602 County LINCOLN District DUVAL  
Quad GRIFFITHSVILLE 7.5' Pad Name MASON & TACKETT Field/Pool Name GRIFFITHSVILLE  
Farm name RUSSELL & KATHRYN WRIGHT Well Number 518  
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 4,233,101 M Easting 415,640 M  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing 4,233,011 M Easting 415,531 M

Elevation (ft) 1,006' 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

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Date permit issued 4/24/20 Date drilling commenced 11/29/21 WV Department of Environmental Protection Date drilling ceased 12/3/21  
Date completion activities began 12/21/21 Date completion activities ceased 1/5/22  
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 N/A Open mine(s) (Y/N) depths None  
Salt water depth(s) ft N/A Void(s) encountered (Y/N) depths None  
Coal depth(s) ft 315, 502' Cavern(s) encountered (Y/N) depths None  
Is coal being mined in area (Y/N) N

Reviewed by:

[Signature]

03/04/2022

API 47- 043 - 03602

Farm name RUSSELL & KATHRYN WRIGHT Well number 518

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"	19'	New	LS		Sand In
Surface	8 3/4"	7"	586.97'	New	LS	64'	N
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2700.48'	New	LS		Y
Tubing							
Packer type and depth set							

Comment Details Did not circulate Cement to surface, Ran Radial Bond log, TOC @ 5', grouted to Surface. Circulated Est. 35 sks to surface on 4 1/2" cement job.

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	170	15.6	1.18	201	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	115/125	13.2/14.2	1.64/1.27	189/159	224'	8
Tubing							

Drillers TD (ft) 2750' Loggers TD (ft) 2750'

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

Plug back procedure N/A

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Kick off depth (ft) 650'

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

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Well cored  Yes  No Conventional Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

10 Centralizers every 88 from bottom on 4 1/2". Centralizer placed mid string and 42' from bottom 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

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PRODUCING FORMATION(S)	DEPTHS		
Berea	2480'- 2498'	TVD	2542'- 2560' 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	502	0	502	
Pittsburgh Coal	502	508	502	508	
Sand/Shale	508	1762	508	1802	
Big Lime	1762	1955	1802	2002	
Big Injun	1955	2067	2002	2118	
Shale	2067	2460	2118	2522	
Coffee Shale	2460	2480	2522	2542	
Berea	2480	2498	2542	2560	Drilled directional S 50.6° W a distance of 463'
Shale	2498	2687	2560	2750	
TD	2687		2750		

Please insert additional pages as applicable.

Drilling Contractor Noah Horn Well Drilling  
Address 1070 Sandy Valley Lane City Vansant State VA Zip 24656

Logging Company Appalachian Well Surveys  
Address 10291 Ohio Avenue City Cambridge State OH Zip 43725

Cementing Company Lightning Energy Services  
Address PO Box 580 City Bridgeport State WV Zip 26339

Stimulating Company Reliance Well Services  
Address 510 Cranberry Street Suite 230 City Erie State PA Zip 16507

Please insert additional pages as applicable.

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Completed by Roger Heldman Telephone 304-420-1107  
Signature *Roger Heldman* Title Operations Manager Date 2/24/22

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

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# Reliance

WELL SERVICES LLC

510 Cranberry Street  
 Suite 230  
 Erie, PA 16507  
 Phone 814.454.1644  
 Fax 814.454.1164  
 24 Hour 412.906.0992

# Invoice

<b>P.O.#</b>	<b>Inv. Date</b>	<b>Invoice #</b>
12050	1/5/2022	12187

<b>Job Date</b>	<b>DUE DATE</b>
1/5/2022	2/4/2022

HG Energy, LLC  
 5260 DuPont Rd  
 Parkersburg, WV 26101

API#	Lease	Well#	State	County	Stages	Terms & Type
	Mason Tackett	518	WV	Lincoln	1	Oil/Gas

Description	Quantity	Unit Price	Amount
Pump Truck Charge (#134)	1	18,000.00	18,000.00
Blender Truck Charge (#209)	1	14,000.00	14,000.00
Control Van Charge (#710)	1	4,500.00	4,500.00
Acid Truck Charge (#507)	1	5,000.00	5,000.00
Acid HCL 15%	250	0.68	167.50
AI-600 - Acid Inhibitor (in acid)	1	13.94	13.94
ICA 400 - Iron Sequestering Agent (in acid)	1	11.56	11.56
Sand: Bulk 20/40 API/100 LB (#626)	50	4.50	225.00
AP-1 - Oxidizing Breaker	10	1.38	13.80
Pro Gel 4.0L - Liquid Guar	30	9.75	292.50
BXL 10C - Crosslinker	10	14.72	147.20
BXL-A - Breaker Activator	10	12.06	120.60
Pro CLA Firm LP - Clay Control	10	10.91	109.10
Pro Flo II - Surfactant	10	10.41	104.10
BioClear 1000 - Dry Biocide	1	8.68	8.68
DISCOUNT FOR PAYMENT WITHIN TERMS	1	-23,250.00	-23,250.00
<b>NON DISCOUNTED ITEMS</b>			
Mileage (5 Trucks @ 200 miles/way)	2,000	2.10	4,200.00
Fuel Surcharge (Per Stage Under 1 Hr)	1	925.00	925.00

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Thank you for your business. **Total** 22,475.00

Terms are Net 30, based on the job completion date. Balances not paid after 30 days are subject to a monthly 1.5% service charge in addition to the Non Discounted total amount due. **Balance Due** 22,475.00

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