

WR-35
Rev. 8/23/13

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

API 47-087-04745 County ROANE District SMITHFIELD
Quad LOONEYVILLE 7.5' Pad Name KINKEAD, S.B. Field/Pool Name CLOVER
Farm name MCCLAIN, JOHN R. & KEATON Well Number 103
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 4,285,475 M Easting 475,126 M
Landing Point of Curve Northing Easting
Bottom Hole Northing 4,285,549 M Easting 475,173 M

Elevation (ft) 1,114' 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 10/13/20 Date drilling commenced N/A Date drilling ceased N/A
Date completion activities began 11/12/20 Date completion activities ceased 11/12/20
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

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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:

04/15/2022

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CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/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"	558'	New	LS	64'	Existing
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2364.7'	New	J-55		Existing
Tubing							
Packer type and depth set							

Comment Details Grouted w/ Est. 50 sks to surface on 7" surface cement job. Circulated Est. 25 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	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	148/186	40'	Existing
Tubing							

Drillers TD (ft) 2380' Loggers TD (ft) 2384'
 Deepest formation penetrated Big Injun 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 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 _____
23 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 _____

JOZ

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	2/4/15	2234'	2242'	32	Big Injun

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

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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 (gals)	Amount of Nitrogen/other (units)	Amount of HCL
1	2/10/15	5	418	1459	421	2,500	140		
1	11/12/20	1	601	857	593		9		2250 gals HCL

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PRODUCING FORMATION(S)	DEPTHS	
Big Injun	2178'- 2196'	TVD 2234'- 2242' 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	1003	0	1008	
Sand	1003	1112	1008	1118	
Shale	1112	1200	1118	1211	
Sand	1200	1292	1211	1304	
Shale	1292	1700	1304	1730	
Sand	1700	1990	1730	2032	
Little Lime	1990	2012	2032	2054	
Pencil Cave	2012	2026	2054	2070	
Big Lime	2026	2152	2070	2200	
Keener	2152	2178	2200	2228	
Big Injun	2178	2196	2228	2246	Drilled directional N 33° E a distance of 369'
Shale	2196	2326	2246	2380	
TD	2326		2380		

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Please insert additional pages as applicable.

Drilling Contractor Decker Drilling FEB 14 2022
 Address 11555 State Route 676 City Vincent State OH Zip 45784
 Logging Company Weatherford International WV Department of
 Address 777 North River Avenue City Weston State WV Zip 26452 Environmental Protection
 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 [Signature] Title Operations Manager Date 12/1/20

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry [Signature]

04/15/2022