

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

API 47 - 043 - 03500 County LINCOLN District DUVAL
Quad GRIFFITHSVILLE 7.5' Pad Name FOWLER, THOMAS Field/Pool Name GRIFFITHSVILLE
Farm name MCCLURE, ANDY & REBECCA Well Number 250
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 4,231,736 M Easting 416,495 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 1,003' 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 6/29/15 Date drilling commenced 7/11/16 Date drilling ceased 7/14/16
Date completion activities began 7/21/16 Date completion activities ceased 7/21/16
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 1130', 1430' Void(s) encountered (Y/N) depths None
Coal depth(s) ft 490'- 497' Cavern(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) N

APPROVED

viewed by:
NAME: Jeff Smith
DATE 1-20-17 02/03/2017

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API 47- 043 - 03500 Farm name MCCLURE, ANDY & REBECCA Well number 250

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"	551'	New	LS	64'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2589.5'	Used	J-55		Y
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 50 sks to surface on 7" surface cement job. Circulated Est. 25 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	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	110/125	13.2/14.2	1.64/1.27	180/186	80'	8
Tubing							

Drillers TD (ft) 2630' Loggers TD (ft) 2634'
 Deepest formation penetrated Berea 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 12 Centralizers every 88 from bottom on 4 1/2", Centralizer placed mid string on 7"

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No, DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Berea</u>	<u>2479'- 2497'</u>	<u>TVD</u>	<u>MD</u>

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

<u>LITHOLOGY/ FORMATION</u>	<u>TOP DEPTH IN FT NAME TVD</u>	<u>BOTTOM DEPTH IN FT TVD</u>	<u>TOP DEPTH IN FT MD</u>	<u>BOTTOM DEPTH IN FT MD</u>	<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)</u>
Sand/Shale	0	490	0		
Pittsburgh Ccal	490	497			
Sand/Shale	497	1760			
Big Lime	1760	1978			
Big Injun	1978	2066			
Shale	2066	2459			
Coffee Shale	2459	2479			
Berea	2479	2497			
Shale	2497	2630			
TD	2630				

Please insert additional pages as applicable.

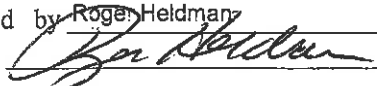
Drilling Contractor Decker Drilling
 Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International
 Address 11000 Performance PL City Youngstown State OH Zip 44502

Cementing Company Baker Hughes
 Address 2228 Philippi Pike City Clarksburg State WV Zip 26301

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 7/22/16

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