

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

RECEIVED
Office of Oil and Gas

OCT 13 2017

WV Department of
Environmental Protection

API 47 - 043 - 03571 County LINCOLN District DUVAL
Quad GRIFFITHSVILLE 7.5' Pad Name ROBERT FOWLER Field/Pool Name GRIFFITHSVILLE
Farm name MCCLURE, ANDY & REBECCA Well Number 266
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 4,231,525 M Easting 416,611 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4,231,458 M Easting 416,822 M

Elevation (ft) 882' 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 3/9/17 Date drilling commenced 8/21/17 Date drilling ceased 8/26/17
Date completion activities began 8/31/17 Date completion activities ceased 9/8/17
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 1050', 1150' Void(s) encountered (Y/N) depths None
Coal depth(s) ft 331'- 336' Cavern(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) N

APPROVED

NAME: Jeffrey Smith
DATE: 11-15-17

Reviewed by: _____
01/05/2018

API 47-043 - 03571 Farm name MCCLURE, ANDY & REBECCA Well number 266

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"	16'	New	LS		Sand In
Surface	8 7/8"	7"	423.25'	New	LS	84'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2651.55'	New	J-55		Y
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 20 sks to surface on 7" surface cement job. Circulated Est. 18 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	110	15.6	1.18	130	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	125/125	13.2/14.2	1.64/1.27	205/186	100'	8
Tubing							

Drillers TD (ft) 2677 Loggers TD (ft) 2677

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

Plug back procedure N/A

Kick off depth (ft) 550'

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 _____

18 Centralizers every 84 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 _____

API 47- 043 - 03571 Farm name MCCLURE, ANDY & REBECCA Well number 266

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	8/31/17	2496'	2504'	32	Berea

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	9/8/17	4	661	2256	549	1,000	142	

Please insert additional pages as applicable.

API 47- 043 - 03571 Farm name MCCLURE, ANDY & REBECCA Well number 266

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Berea</u>	<u>2330'- 2347'</u> TVD	<u>2490'- 2509'</u> 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	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
Sand/Shale	0	331	0	331	
Pittsburgh Coal	331	336	331	336	
Sand/Shale	336	1614	336	1676	
Big Lime	1614	1625	1676	1910	
Big Injun	1825	1920	1910	2023	
Shale	1920	2311	2023	2468	
Coffee Shale	2311	2330	2468	2490	
Berea	2330	2347	2490	2509	Drilled directional S 72.4° E a distance of 725'
Shale	2347	2496	2509	2677	
TD	2496		2677		

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 Weatherford International
 Address 13211 Old Hwy 50 City Flora State IL Zip 62839

Cementing Company C & J Energy Services
 Address 580 Hawthorn Dr City Norton State VA Zip 24273

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 9/19/2017

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

Prepared for:

H G Energy

Dustin Hendershot

304-481-7342


**PRODUCERS
SERVICE CORP.**

Prepared by:

Producers Service Corp

Daniel L Graham

109 S. Graham St.

Zanesville, OH 43702

740-454-6253

INVOICE #: 20006

WELL NAME: Robert Fowler#266

COUNTY/STATE: Lincoln/WV

TOWNSHIP/FIELD: Griffithsville

DATE of SERVICE: 9/8/2017

CUSTOMER PO#:

Description	Notes	Amount	Units	Unit Cost	Total Cost
FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS		1	EA		
BLENDER CHARGE 0-10 BPM		1	EA		
MILEAGE CHARGE PER UNIT ONE WAY	2 Units @200 Miles		MI		
IC ACID 15%		250	GAL		
PRO HIB II		0.5	GAL		
ACID DELIVERY		2	HR		
PRO CLA FIRM LP		6	GAL		
PRO NE-21		6	GAL		
PRO GEL 4		150	LB		
BUFFER I		50	LB		
DATA VAN		1	STAGE		
BIO CLEAR 750		1	LB		
IRONTRONOL		50	LB		
SAND 20/40 OTTAWA		10	CWT		
SAND DELIVERY / TON MILES		100	TMILE		

Customer Approval: _____

01/05/2018