

Received

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

DEC 21 2015

Office of Oil and Gas  
WV Dept. of Environmental Protection

API 47-043-03472 County LINCOLN District DUVAL  
Quad GRIFFITHSVILLE 7.5' Pad Name EPHRAIM GRIFFITH Field/Pool Name GRIFFITHSVILLE  
Farm name BENDER, JASON, ET UX Well Number 215  
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 4,230,886 M Easting 416,768 M  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing \_\_\_\_\_ Easting \_\_\_\_\_

Elevation (ft) 887' 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 9/9/14 Date drilling commenced 11/13/14 Date drilling ceased 11/20/14  
Date completion activities began 12/1/14 Date completion activities ceased 6/4/15  
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 N  
Salt water depth(s) ft 1070' Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 445'-450' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

  
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WR-35  
Rev. 8/23/13

API 47- 043 - 03472 Farm name BENDER, JASON, ET UX Well number 215

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	17 1/2"	13 3/8"	30'	New	LS		Sand In
Surface	12 1/4"	9 5/8"	547'	New	LS	84'	Y
Coal	8 7/8"	7"	1688'	New	LS		Y
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	4098.15'	New	J-55		N
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 95 sks to surface on 9 5/8" casing. Circulated Est. 10 sks to surface on 7" casing.

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	230	15.6	1.18	271	Surface	8
Coal							
Intermediate 1	Reg Neat	315	15.6	1.18	372	Surface	
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix/Unitropic	75/90	14.2/14.4	1.27/1.62	95/146	1950'	8
Tubing							

Drillers TD (ft) 4115'  
Deepest formation penetrated Devonian Shale  
Plug back procedure N/A

Loggers TD (ft) 4112'  
Plug back to (ft) N/A

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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 84' from bottom on 4 1/2". Centralizer placed mid string on 7" & 9 5/8"

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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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Berea</u>	<u>2363'- 2382'</u>	TVD _____ MD _____
<u>Devonian Shale</u>	<u>2382'- 4115'</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 \_\_\_\_\_ Oil \_\_\_\_\_ NGL \_\_\_\_\_ Water \_\_\_\_\_  
 11 mcfpd \_\_\_\_\_ bpd \_\_\_\_\_ bpd \_\_\_\_\_ 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	445	0		
Pittsburgh Coal	445	450			
Sand/Shale	450	1690			
Big Lime	1690	1854			
Big Injun	1854	1946			
Shale	1946	2342			
Coffee Shale	2342	2363			
Berea	2363	2382			
Devonian Shale	2382	4115			
TD	4115				

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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 14 Sewer Plant 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 L. Heldman Telephone 304 420 1107  
 Signature [Signature] Title Operations Manager Date 12/16/15

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





