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

API 47 - 87 - 04716 County Roane District Smithfield  
Quad Looneyville Pad Name \_\_\_\_\_ Field/Pool Name \_\_\_\_\_  
Farm name Willard Thompson, Et Ux Well Number C.E. Lamb 12  
Operator (as registered with the OOG) Raven Ridge Energy, LLC  
Address 3230 Pennsylvania Avenue City Charleston State WV Zip 25302

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing N/A Easting N/A  
Landing Point of Curve Northing N/A Easting N/A  
Bottom Hole Northing N/A Easting N/A

Elevation (ft) 862' 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)  
Soap

Date permit issued 3/05/2012 Date drilling commenced 5/21/2012 Date drilling ceased 5/25/2012  
Date completion activities began 11/27/2012 Date completion activities ceased 12/11/2012  
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 200' Open mine(s) (Y/N) depths \_\_\_\_\_  
Salt water depth(s) ft 1,300' - 1,800' Void(s) encountered (Y/N) depths \_\_\_\_\_  
Coal depth(s) ft None of Record Cavern(s) encountered (Y/N) depths \_\_\_\_\_  
Is coal being mined in area (Y/N) No

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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	14 1/4"	13 3/8"	30'	New	J-55	None	Yes - Cemented by Rig
Surface	12 1/4"	9 5/8"	350'	New	J-55	90'	Yes
Coal							
Intermediate 1	8 3/4"	7"	1740'	New	J-55	350'	Yes
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2366'	New	J-65	1000'	Yes
Tubing							
Packer type and depth set							

Comment Details \_\_\_\_\_

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	Class I	10 - Cemented by Hand				Ground Level	8
Surface	Class I	150	15.6	1.18	31.6 bbls.	Ground Level	8
Coal							
Intermediate 1	Class I	240	15.6	1.36	58.13	Ground Level	8
Intermediate 2							
Intermediate 3							
Production	Class I	400	15.6	1.36	96.88		8
Tubing							

Drillers TD (ft) 2455' Loggers TD (ft) 2438'  
 Deepest formation penetrated Coffee Shale Plug back to (ft) 2366'  
 Plug back procedure Cement

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 \_\_\_\_\_

4 1/2" Every 3 Joints - Total 3

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

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WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

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WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

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PRODUCING FORMATION(S)	DEPTHS		
Squaw	1878	TVD	1912 MD
Big Injun	1816		1844

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump  
 SHUT-IN PRESSURE Surface 80 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST 12 hrs  
 OPEN FLOW Gas 8 mcfpd Oil 2 bpd NGL \_\_\_\_\_ bpd Water 60 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	590	0		
Sand	590	760			
Sand - Shale	760	1435			
Salt Sand	1435	1605			
Shale	1605	1620			
Maxton	1620	1725			
Shale	1725	1740			
Little Lime	1740	1760			
Big Lime	1760	1795			
Big Injun	1795	1865			
Squaw	1865	1915			
Shale	1915	2300			
Coffee Shale	2300	2310			
Shale	2310	2438			

Please insert additional pages as applicable.

Drilling Contractor R & R Well Service  
 Address Ambler Ridge City Walton State WV Zip 25286

Logging Company Superior Well Services  
 Address 1650 Hackers Creek Road City Jane Lew State WV Zip 26378

Cementing Company Universal Well Services  
 Address 5 Hall Run Road City Buckhannon State WV Zip 26201

Stimulating Company Universal Well Services  
 Address 5 Hall Run Road City Buckhannon State WV Zip 26201

Please insert additional pages as applicable.

Completed by Danielle N. Boggs Telephone 304-344-9291  
 Signature Danielle N. Boggs Title Operations Manager Date 11/12/2013

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry  
 WV Department of Environmental Protection  
 RECEIVED Office of Oil and Gas  
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