

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

DATE: _____
API #: 039-06305

Farm name: SAMPLES Operator Well No.: 4

LOCATION: Elevation: 973' Quadrangle: _____

District: Big SANDY County: KANAWHA
Latitude: 38.503479 Feet South of _____ Deg. _____ Min. _____ Sec.
Longitude: 81.365580 Feet West of _____ Deg. _____ Min. _____ Sec.

Company: Raven Ridge Energy

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>3230 Pennsylvania Ave Charleston WV 25302</u>				
Agent: <u>Ryan Cunningham</u>				
Inspector: <u>Terry Leiben</u>				
Date Permit Issued: <u>07/29/2011</u>		<u>9 5/8</u>	<u>375</u>	<u>CTS</u>
Date Well Work Commenced: <u>11/4/2011</u>		<u>7"</u>	<u>1767</u>	<u>CTS</u>
Date Well Work Completed: <u>12/12/2011</u>		<u>4 1/2</u>	<u>2308</u>	<u>120 sks</u>
Verbal Plugging: <u>N/A</u>				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>2351</u>				
Total Measured Depth (ft): <u>2351</u>				
Fresh Water Depth (ft.): <u>N/A</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (NY)?				
Coal Depths (ft.): <u>N/A</u>				
Void(s) encountered (NY) Depth(s)				

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MAY 18 2012
WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation WEIR Pay zone depth (ft) 1944
Gas: Initial open flow 300 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 280 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 210 psig (surface pressure) after 54 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

[Signature]
Signature

5/14/12
Date

10/26/2012

Were core samples taken? Yes _____ No

Were cuttings caught during drilling? Yes No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Gamma Ray / Neutron
Density / Induction / Temperature

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

PERF 1944 - 2206 (40 HOLES) 750 BBI 75%
Quality Foam Treatment w/ 500 gal 15% HCL
Acid! 36000 lbs 20/40 SAND

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: _____ Top Depth _____ / _____ Bottom Depth _____
Surface: _____

<u>SAND! SHALE 0 - 320</u>	<u>SQUAW 1855 - 1905</u>
<u>SAND 320 - 460</u>	<u>SHALE 1905 - 1980</u>
<u>SAND! SHALE 460 - 800</u>	<u>WEIR 1980 - 2110</u>
<u>SAND 800 - 830</u>	<u>SHALE 2110 - 2284</u>
<u>SAND! SHALE 830 - 1130</u>	<u>COFFE SHALE 2284 - 2300</u>
<u>SAND 1130 - 1155</u>	<u>SHALE 2300 - 2351</u>
<u>SHALE 1155 - 1218</u>	
<u>SALT SAND 1218 - 1500</u>	
<u>SHALE 1500 - 1555</u>	
<u>MAXTON 1555 - 1670</u>	
<u>SHALE 1670 - 1704</u>	
<u>LITTLE LIME 1704 - 1722</u>	
<u>PENCIL CAVE 1722 - 1730</u>	
<u>Big lime 1730 - 1760</u>	
<u>Big Injun 1760 - 1855</u>	