

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

DATE: 07/31/2012
API #: 47-091-01228

Farm name: Anderson, Rodney J. & Deborah A. Operator Well No.: Rodney J. Anderson 5HM

LOCATION: Elevation: 1377' GL / 1395' KB Quadrangle: Grafton 7.5'

District: Court House County: Taylor
Latitude: 149 Feet South of 39° Deg. 17 Min. 30 Sec.
Longitude: 7,484 Feet West of 80° Deg. 02 Min. 30 Sec.

Company: PDC Mountaineer

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>120 Genesis Blvd.</u> <u>Bridgeport, WV 26330</u>	<u>20"</u>	<u>42'</u>	<u>42'</u>	<u>Sand In</u>
Agent: <u>Bob Williamson</u>	<u>13 3/8"</u>	<u>470'</u>	<u>470'</u>	<u>672</u>
Inspector: <u>Bryan Harris</u>	<u>9 5/8"</u>	<u>2780'</u>	<u>2780'</u>	<u>1,009</u>
Date Permit Issued: <u>05/20/2011</u>	<u>5 1/2"</u>	<u>13,640'</u>	<u>13,640'</u>	<u>3,615</u>
Date Well Work Commenced: <u>06/15/2011</u>				
Date Well Work Completed: <u>11/22/2011</u>				
Verbal Plugging:				
Date Permission granted on:	<u>2 7/8"</u>		<u>2529'</u>	
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7,886'</u>				
Total Measured Depth (ft): <u>13,640'</u>				
Fresh Water Depth (ft.): <u>155'</u>				
Salt Water Depth (ft.): <u>870'</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>Air Drilled - Unknown</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

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

Producing formation Marcellus Shale Pay zone depth (ft) 7882' TVD
Gas: Initial open flow N/A MCF/d Oil: Initial open flow --- Bbl/d
Final open flow 4,220.4 MCF/d Final open flow --- Bbl/d
Time of open flow between initial and final tests 720 Hours
Static rock Pressure 1750 psig (surface pressure) after 72 Hours

Second producing formation N/A 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, that the information is true, accurate, and complete.


Signature

01/25/2013
Date

Office of Oil and Gas
02/01/2013
JAN 28 2013

Were core samples taken? Yes _____ No XX

Were cuttings caught during drilling? Yes XX No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Mudlog , Directional Surveys, TVD & MD Gamma Ray LWD (limited depth), Cased Hole Sonic Scanner log with Bond Log & CCL to 8020'. No logs run above 6112'.

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:

Perforated interval 8,452 ft - 13,536 ft (790 shots). Frac'd 16 stages using 381 bbls 15% HCL, and 132,900 bbls of Slickwater carrying 1,274,400 lbs of 100-mesh sand, 4,900,200 lbs of 40/70 sand, and 335,100 lbs of 30/50 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
<u>Surface:</u>		
Big Lime(est)	*1562	1641
Gantz (est)	1994	2016
50 Foot (est)	2045	2100
30 Foot (est)	2108	2134
Gordon (est)	2231	2259
4th Sand (est)	2478	2567
5th Sand (est)	2583	2622
Benson (est)	4497	4550
Sycamore Grit	6798'	6923'
Geneseo/Burket Shale	7551'	7565'
Tully LS	7565'	7654'
Hamilton Group	7655'	7789'
Marcellus SH	7802'	Not Drilled
Est fm. tops based on 47-091-00809	TD: 7,886' TVD / 13,640' MD	

KOP at 7455' MD / 7341' TVD LP at 8564' MD / 7882' TVD * All measurements are taken from KB and are TVD unless noted as MD.

Received
Office of Oil & Gas

02/01/2013