

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

DATE: 03/29/12
API #: 47-103-02683

Farm name: Henderson, Howard M. Operator Well No.: North Henderson Unit 1H

LOCATION: Elevation: 1,356' Quadrangle: Littleton 7.5'

District: Center County: Wetzel
Latitude: 5.435' Feet South of 39 Deg. 42 Min. 30.0 Sec.
Longitude 10.241' Feet West of 80 Deg. 32 Min. 30.0 Sec.

Company: Grenadier Energy Partners, LLC

Address: <small>CT Corporation 707 Virginia Street East 15th Floor Charleston, WV 25301</small>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Agent: <u>Dianna Stamper</u>	24"	40'	40'	Grouted In
Inspector: <u>Derek Haught</u>	16"	429'	429'	432 cu.ft (CTS)
Date Permit Issued: <u>06/27/2011</u>	11-3/4"	1647'	1647'	1129 cu.ft (CTS)
Date Well Work Commenced: <u>09/14/2011</u>	8-5/8"	2722'	2722'	738 cu.ft (CTS)
Date Well Work Completed: <u>12/19/2011</u>	5-1/2"	13,110'	13,110'	2336 cu.ft (CTS)
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7531'</u>				
Total Measured Depth (ft): <u>13,140'</u>				
Fresh Water Depth (ft.): <u>Est. 285'</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>N/A</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) 7548' - 13044' MD (7531' TVD)

Gas: Initial open flow 11687 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 4450 psig (surface pressure) after 168 Hours

Second producing formation _____ Pay zone depth (ft) _____

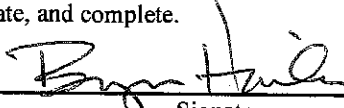
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

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

4/2/12
Date

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 Yes - Gamma Ray

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:

Perforations: Total Perforated Interval (7548' - 13044' MD)

Fluid: 149,128 bbl Slickwater pumped in 15 Stages

Sand: 3,275,101 lbs 100 mesh sand, 3,570,053 lbs 40/70 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>		

See Attached Sheet

North Henderson Unit 1H

Formation/Lithology	From	To
Shale	47	80
Red Rock	80	120
Sand & Shale	120	130
Red Rock	130	206
Sand & Shale	206	268
Red Rock	268	285
Sand & Shale	285	405
Red Rock	405	420
Sand & Shale	420	1080
Shale	1080	1095
Sand	1095	1115
Sand & Shale	1115	1230
Sand	1230	1253
Sand & Shale	1253	1455
Lime	1455	1463
Red Rock	1463	1515
Sand	1515	1554
Shale	1554	1720
Sand	1720	1782
Sand & Shale	1782	1803
Sand	1803	2130
Sand & Shale	2130	2323
Lime	2323	2358
Big Lime	2358	2460
Injun	2460	2611
Sand & Shale	2611	3228
Gordon	3228	3265
Sand & Shale	3265	7265
Genesee Shale	7265	7318
Geneseo Shale	7318	7342
Tully Lime	7342	7346
Hamilton	7346	7466
Marcellus Shale	7466	N/A