



Marcellus Shale in West Virginia

Publications Policy:

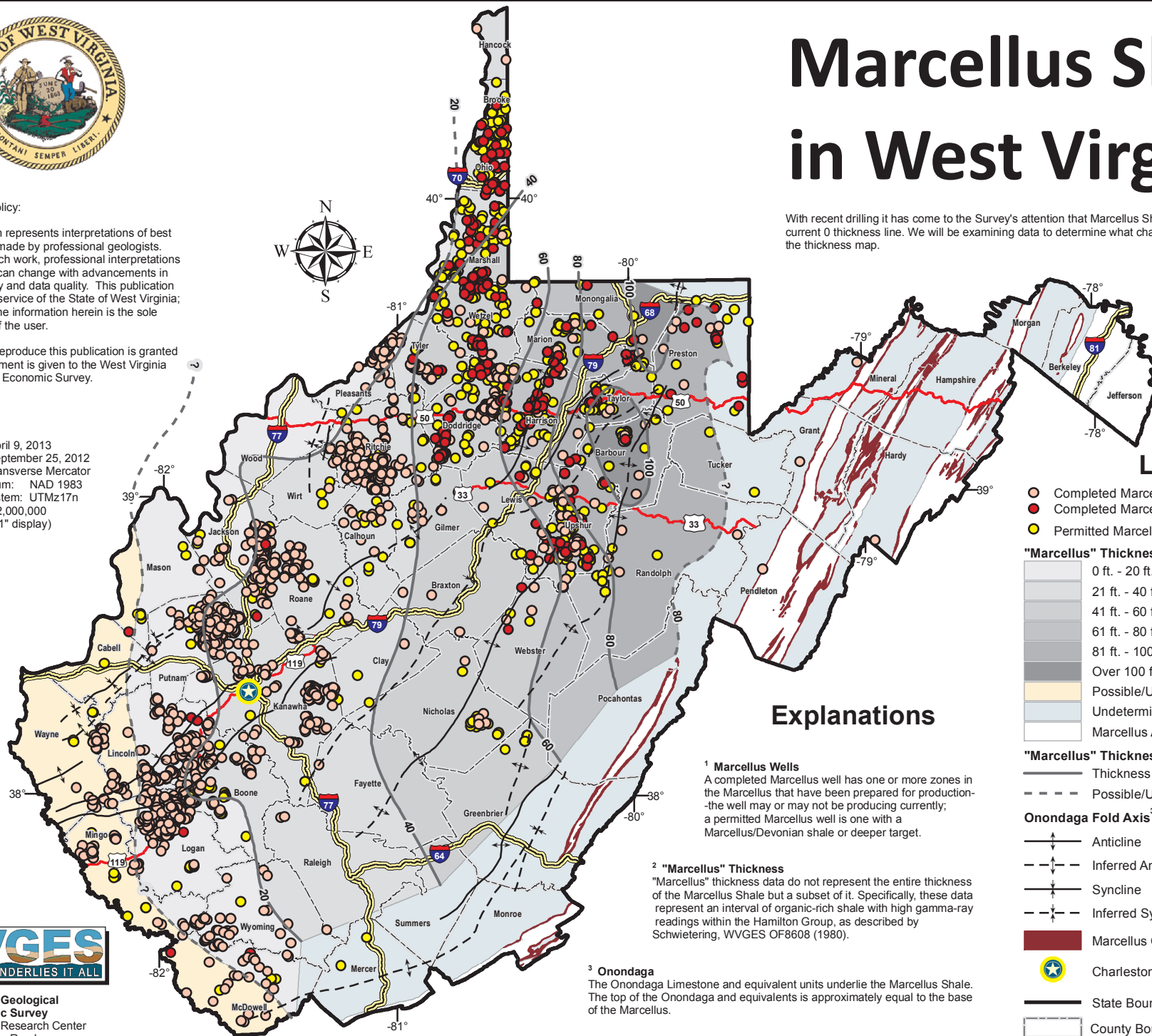
This publication represents interpretations of best available data made by professional geologists. As in all research work, professional interpretations may vary, and can change with advancements in both technology and data quality. This publication is offered as a service of the State of West Virginia; proper use of the information herein is the sole responsibility of the user.

Permission to reproduce this publication is granted if acknowledgement is given to the West Virginia Geological and Economic Survey.

Map Date: April 9, 2013
 Data Date: September 25, 2012
 Projection: Transverse Mercator
 Horizontal Datum: NAD 1983
 Coordinate System: UTMz17n
 Map Scale: 1:2,000,000
 (for full 8.5" x 11" display)



With recent drilling it has come to the Survey's attention that Marcellus Shale may exist west of the current 0 thickness line. We will be examining data to determine what changes may be needed to the thickness map.



Legend

- Completed Marcellus Vertical Wells¹
- Completed Marcellus Deviated Wells¹
- Permitted Marcellus Wells¹

"Marcellus" Thickness (Isopach)²

- 0 ft. - 20 ft.
- 21 ft. - 40 ft.
- 41 ft. - 60 ft.
- 61 ft. - 80 ft.
- 81 ft. - 100 ft.
- Over 100 ft.
- Possible/Uncertain Marcellus
- Undetermined Thickness
- Marcellus Assumed to be Absent

"Marcellus" Thickness (Isopach) Contours²

- Thickness Contour (20 ft.)
- Possible/Uncertain Marcellus Shale Present

Onondaga Fold Axis³

- Anticline
- Inferred Anticline
- Syncline
- Inferred Syncline
- Marcellus Outcrop
- ★ Charleston, WV

- State Boundary
- County Boundaries
- Interstate Highways
- U.S. Highways

Explanations

¹ Marcellus Wells

A completed Marcellus well has one or more zones in the Marcellus that have been prepared for production—the well may or may not be producing currently; a permitted Marcellus well is one with a Marcellus/Devonian shale or deeper target.

² "Marcellus" Thickness

"Marcellus" thickness data do not represent the entire thickness of the Marcellus Shale but a subset of it. Specifically, these data represent an interval of organic-rich shale with high gamma-ray readings within the Hamilton Group, as described by Schwietering, WVGES OF8608 (1980).

³ Onondaga

The Onondaga Limestone and equivalent units underlie the Marcellus Shale. The top of the Onondaga and equivalents is approximately equal to the base of the Marcellus.



West Virginia Geological and Economic Survey
 Mont Chateau Research Center
 1 Mont Chateau Road
 Morgantown, WV 26508-8079
 Phone: (304) 594-2331
 www.wvgs.wvnet.edu



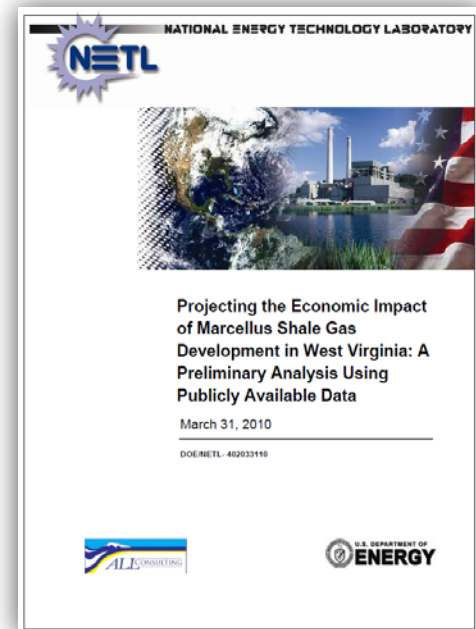
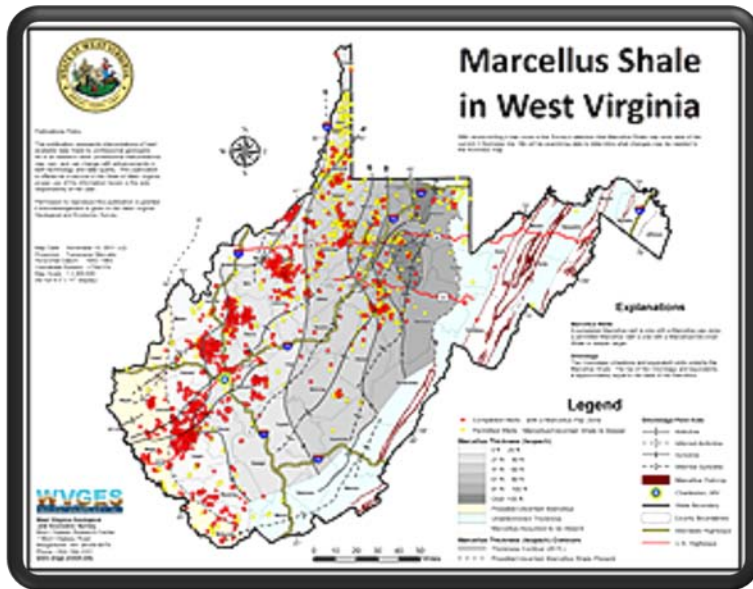
Marcellus Shale Gas in West Virginia

Selected References

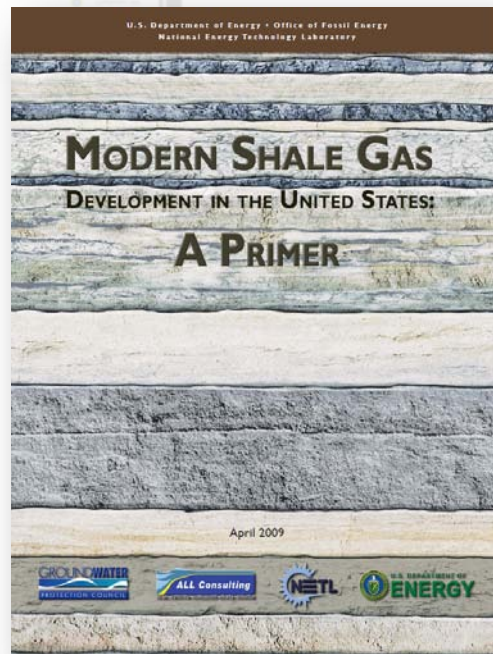
West Virginia Geological and Economic Survey

Home page: <http://www.wvgs.wvnet.edu/>

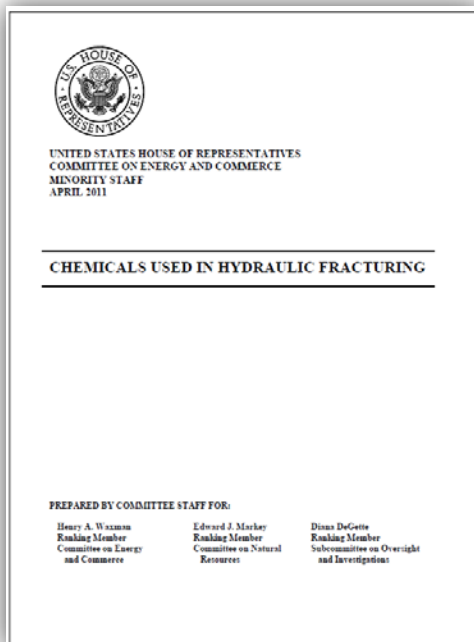
Marcellus Page: <http://www.wvgs.wvnet.edu/www/datastat/devshales.htm>



<http://www.netl.doe.gov/energy-analyses/pubs/WVMarcellusEconomics3.pdf>



http://www.netl.doe.gov/technologies/oil-gas/publications/EPreports/Shale_Gas_Primer_2009.pdf



<http://democrats.energycommerce.house.gov/sites/default/files/documents/Hydraulic%20Fracturing%20Report%204.18.11.pdf>