



# Marcellus Shale in West Virginia

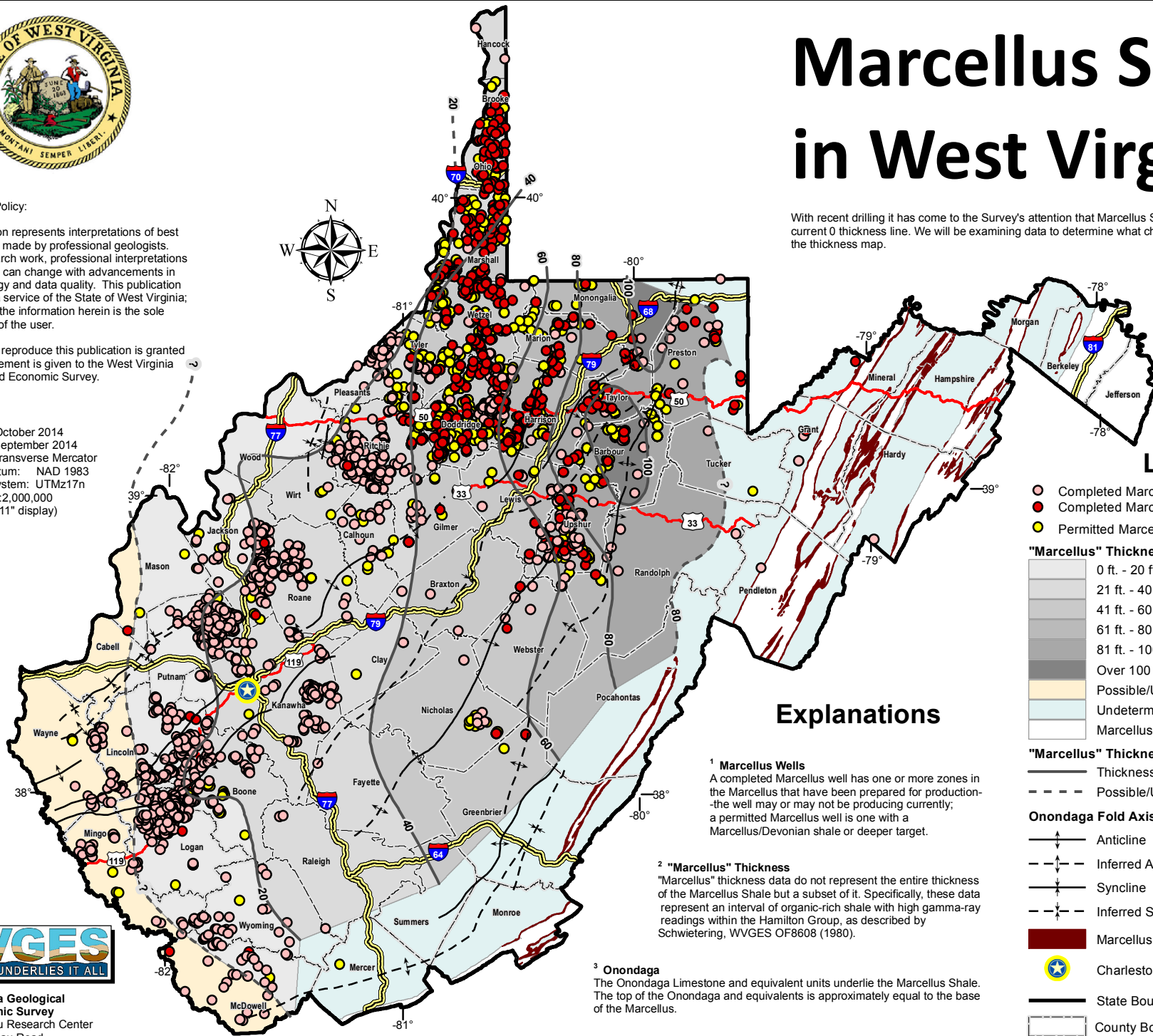
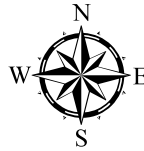
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Map Date: October 2014  
 Data Date: September 2014  
 Projection: Transverse Mercator  
 Horizontal Datum: NAD 1983  
 Coordinate System: UTMz17n  
 Map Scale: 1:2,000,000  
 (for full 8.5" x 11" display)

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 Wells<sup>1</sup>
- Completed Marcellus Deviated Wells<sup>1</sup>
- Permitted Marcellus Wells<sup>1</sup>

### "Marcellus" Thickness (Isopach)<sup>2</sup>

- 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) Contours<sup>2</sup>

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

### Onondaga Fold Axis<sup>3</sup>

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

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

## Explanations

### <sup>1</sup> 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.

### <sup>2</sup> "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).

### <sup>3</sup> 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.wvges.wvnet.edu

