

# STRUCTURE AND ECONOMIC GEOLOGY

PENNSYLVANIA  
WAYNESBURG QUADRANGLE



## LEGEND

**SEDIMENTARY ROCKS**  
(Areas of subaqueous deposits are shown by patterns of parallel lines; subaerial deposits by patterns of dots and circles)

Qal

Alluvium  
(in flood plains of present streams)

Qcm

Carmichaels formation  
(clay, sand, and boulders on terraces and old valley floors)

Cg

Greene formation  
(shale and sandstone, with thin limestone and beds of coal)

Cw

Washington formation  
(sandy shale and coarse sandstone, with thin limestone and beds of coal)

Cm

Monongahela formation  
(shale, limestone, and occasionally coarse sandstone; Pittsburgh coal at the bottom; Wyanosburg coal at the top and coal beds of local importance between)

Coal mines  
X Local coal banks  
O Oil wells  
• Gas wells  
• Dry holes or product wells

Sections of lettered wells are shown on well-section sheet. Numbered wells are referred to in the text.

Known productive areas

Coal outcrops

(Waynesburg, Wb, Sewickley, sw, and Pittsburgh, pb, cover the entire area of the quadrangle, except the flood plain at the mouth of Tinnelle Creek, is underlain by Pittsburgh coal.)

Structure contours

(showing the elevation above sea and the lay of the Pittsburgh coal; broken lines indicate uncertain location of contours)

H. M. Wilson, Geographer in charge.  
Triangulation by Sledge Tatam.  
Topography by Frank Sutton, T. G. Basinger, and J. D. Forster.  
Surveyed in 1901.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

APPROXIMATE MEAN  
DECLINATION 1901.

Scale 1:25,000  
1 2 3 4 5 Miles  
1 2 3 4 5 Kilometers

Contour interval 20 feet.

Datum is mean sea level.

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Geology by Ralph W. Stone,  
assisted by M. I. Goldman,  
under the direction of Mariu  
Surveyed in 1907

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