

LEGEND

SURFICIAL ROCKS

(Areas of surficial rocks are shown by patterns of dots and circles.)

- Pal  
Alluvium  
(in flood plains of present streams)
- Pcm  
Carnichael clay  
(clay sand and bowlders on terraces and in abandoned channels of the larger streams)

SEDIMENTARY ROCKS

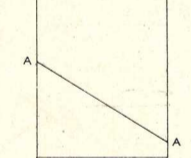
(Areas of sedimentary rocks are shown by patterns of parallel lines.)

- Cd  
Dunkard formation  
(sandy shale and coarse sandstone with thin limestone and beds of many of workable size)
- Cm  
Monongahela formation  
(shale, limestone, and occasionally coarse sandstone. Pittsburgh comes at the top with the upper part of the local importance between)
- Ccm  
Conemaugh formation  
(sandstone, shale, and limestone with a few small coal beds)
- Ca  
Allegheny formation  
(shale, sandstone, and clay with several workable coal beds. Upper Freeport coal at the top)
- Cpv  
Pottsville sandstone  
(coarse massive white sandstone or conglomerate with some shale and usually a coal bed at the middle)
- Cmc  
Mauch Chunk shale  
(red and green shale and thin bedded green sandstone)
- Cgr  
Greenbrier limestone lentil  
(thin blue fossiliferous limestone in the Mauch Chunk shale)
- Cpo  
Pocono sandstone  
(coarse sandstone grading into very sandy limestone at the top and usually containing sandy shale)

DEVONIAN

- Dck  
Catskill formation  
(green and red shale and green sandstone)

Section



- Coal mines
- BALLAST Rock crushed for road ballast
- SANDSTONE Sandstone crushed for glass sand
- CLAY Pottery clay

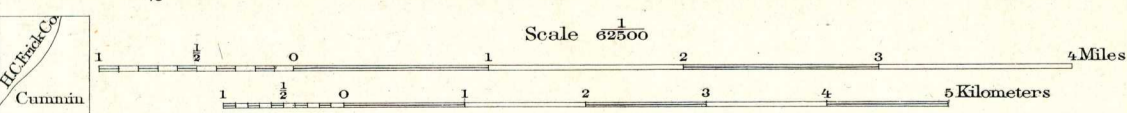
Known productive formations

- Coal beds  
(outcrops of coal beds which are probably of workable thickness)
- Cm  
Coal  
(Monongahela formation contains the Pittsburgh, Wayne, and other coal beds)
- Cd-Ca  
Coal  
(Dunkard formation includes the Washington and other coal beds of local importance. Allegheny formation contains the Freeport and Kittanning coal beds)
- Ccm-Cpv  
Coal  
(Conemaugh formation and Pottsville sandstone contain thin coal beds)

Contour lines showing lay of coal beds

(west of Laurel Ridge the lines indicate position of the Pittsburgh coal, east of the ridge they indicate position of the Upper Freeport coal. Elevation above sea level is shown by figures on contour lines.)

H.M. Wilson, Geographer in charge.  
 Control by S. S. Gannett, A. C. Roberts, Sledge Tatum, and W. R. Harper.  
 Topography by Frank Sutton, R. D. Curmin, and H. G. Frick. Coke Company  
 Surveyed in 1899 in cooperation with the State of Pennsylvania.



Geology by Marius R. Campbell.  
 Assisted by John Dirving  
 and Myron L. Fuller.  
 Surveyed in 1900.