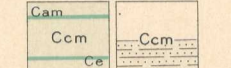


EXPLANATION
SEDIMENTARY ROCKS

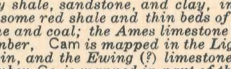
SHEET SECTION SYMBOL



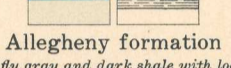
Monongahela formation
(sandy and clay shale with Pittsburgh coal at base; only the lower few feet of formation present)



Conemaugh formation with Ames and Ewing (?) limestone members
(gray shale, sandstone, and clay, including some red shale and thin beds of limestone and coal; the Ames limestone member. Ca is mapped in the Lagoneer Basin, and the Ewing (?) limestone member. Ca is mapped in part of the Johnstown Basin)



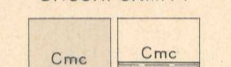
Allegheny formation
(shaly gray and dark shale with local beds of clay and sandstone and several workable beds of coal; Upper Freeport coal at top; Johnstown limestone member directly underlies the Upper Kittanning coal)



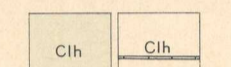
Pottsville formation
(heavy-bedded gray sandstone with interbedded shale, clay, and thin beds of coal)



Much Chunk shale
(red and green shale with subordinate sandstone and thin lenses of limestone)



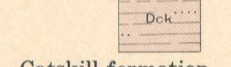
Loyahanna limestone
(siliceous limestone)



Pocono formation
(gray sandstone and sandy shale)



Catskill formation



Coal outcrops
dk Pittsburgh coal
uk Upper Freeport coal
lk Upper Kittanning coal and underlying Johnstown limestone member
lk Lower Kittanning coal



Structure contours drawn on horizon of Johnstown limestone member of Allegheny formation, immediately underlying the Upper Kittanning coal
(contour interval, 50 feet; datum, mean sea level)

Pennsylvanian

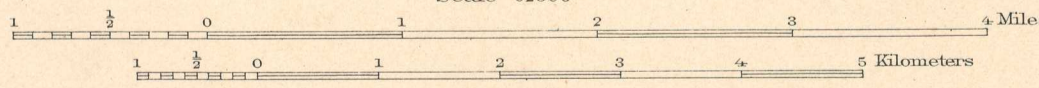
Mississippian

Upper Devonian

CARBONIFEROUS

DEVONIAN

R.B. Marshall, Chief Geographer.
Frank Sutton, Geographer in charge.
Topography by Robert Muldrow, T.F. Slaughter, and F.W. Farnsworth.
Control by Geo. T. Hawkins, L.F. Biggs, and T.A. Green.
Surveyed in 1912-1913.



Geology by G. B. Richardson.
Surveyed in 1913.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

APPROXIMATE MEAN DECLINATION 1926.

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