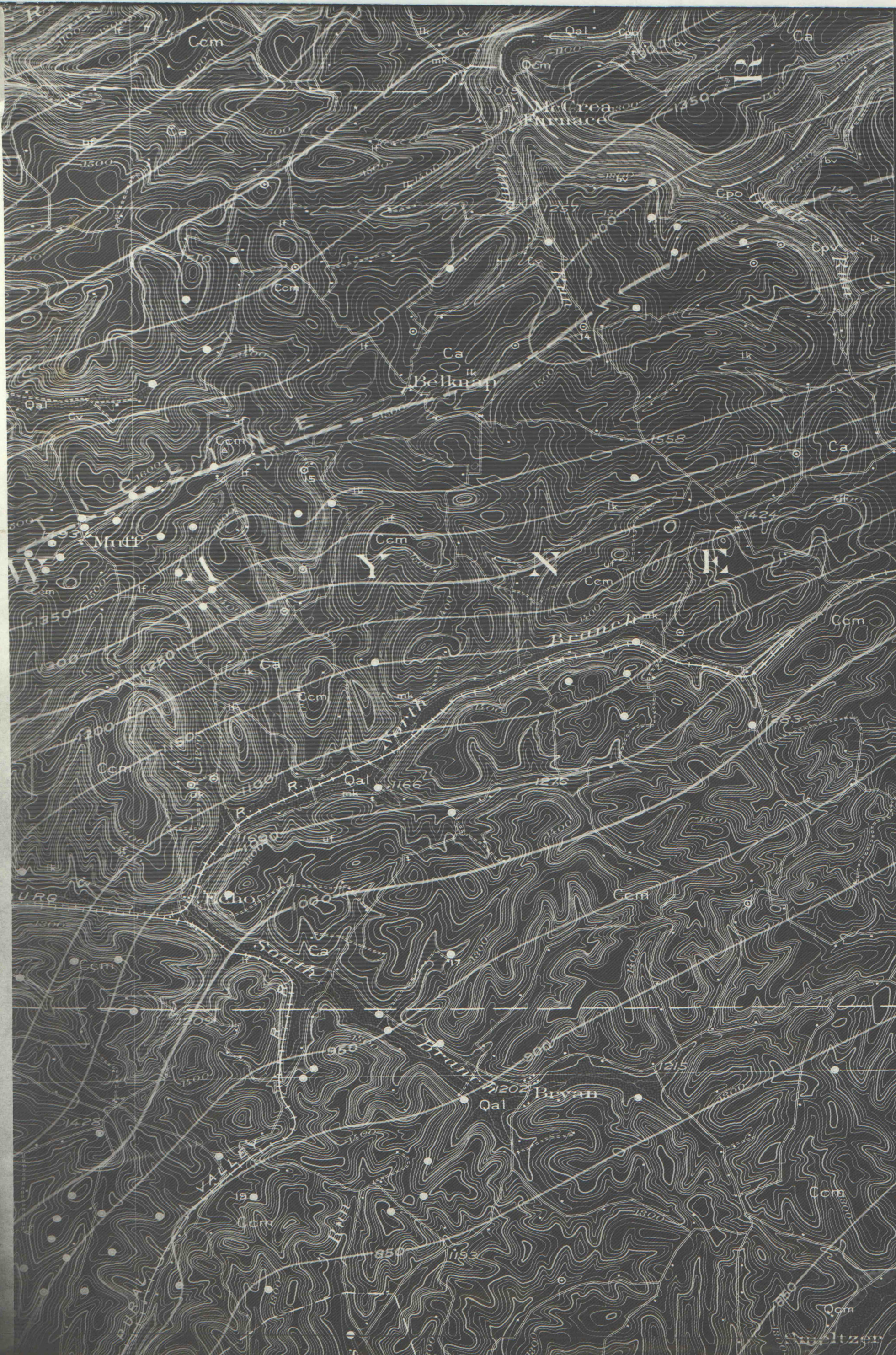


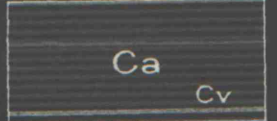


Pennsylvanian

Mississippian

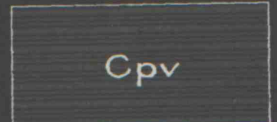
Conemaugh formation

(sandy shale and coarse sandstone with a few thin beds of limestone and coal, some red clay shale beds give color to the soil)



Allegheny formation and Vanport limestone lenticle

(shale with thin to massive sandstones and limestone lenticle, several valuable beds of coal, fire clay, and iron ore, Upper Freeport coal at the top)



Pottsville formation

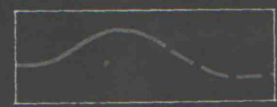
(coarse sandstone or conglomerate, sometimes massive, with shale and thin coal seams)



Pocono formation

(coarse massive sandstone with irregular beds of shale)

Known productive formations



Coal outcrops

(continuous lines represent coal beds of workable or probably workable thickness; dashed lines, coals of possibly workable thickness)

- uf, Upper Freeport coal
- lf, Lower Freeport coal
- uk, Upper Kittanning coal
- mk, Middle Kittanning coal
- lk, Lower Kittanning coal
- bv, Brookville coal



Structure contours drawn on the top of the Vanport limestone lenticle

(contour interval is 50 feet, datum is mean sea level)

Mines and quarries

Coal mines, unless otherwise noted

- Oil wells
- Gas wells
- Dry wells, or production wells

Sections of numbered wells are shown on well-section sheet