Jno. H. Renshawe, Geographer in charge
Topography by E. C. Bebb
Surveyed in 1898
Culture revised to 1909 by A. T. Fowler

Geology by C. R. Van Hise,
W. S. Bayley and J. Morgan Clements.
Surveyed 1896-1899.

GEOLOGIC MAP OF MENOMINEE IRON DISTRICT, MICHIGAN

Revised to January 1, 1909

Scale $\frac{1}{62500}$

1 ½ 0 1 2 3 4 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 20 feet.

Datum is mean sea level.

LEGEND

SEDIMENTARY ROCKS

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

CAMBRIAN AND ORDOVICIAN

- Cambrian sandstone including also small areas of Hermansville limestone *(underlying formations are shown where known.)*

ALGONKIAN

Huronian series

Upper Huronian (Animikie group)

UNCONFORMITY

- Intrusives and extrusives
- Quinnesec schist *(mainly greenstone schists derived from basic lavas and tuffs, including also a few acidic tuffaceous acidic schists. The series is cut by many basic dikes and a few acidic dikes.)*
- Michigamme (Hanbury?) slate *(chiefly clay slate and carbonate slate containing iron-bearing beds.)*
- *Heavily ferruginous slate* *(lean iron-bearing beds in the Michigamme slate)*
- Vulcan formation *(slates, conglomerates, jaspilite, and iron ore, the iron-bearing formation.)*

Middle Huronian

- Cherty quartzite in thin beds. Not separated on this map from Randville dolomite

Lower Huronian

UNCONFORMITY

- Randville dolomite *(massive light-colored dolomite. Areas of middle Huronian cherty quartzite are included in the mapping)*
- Sturgeon quartzite *(compact quartzite and conglomerate.)*

UNCONFORMITY

- Basic igneous rocks in Algonkian

- Formation not determinable *(deeply covered by glacial drift, principally Michigamme (Hanbury?) slate, may include areas of Vulcan formation.)*

ARCHEAN

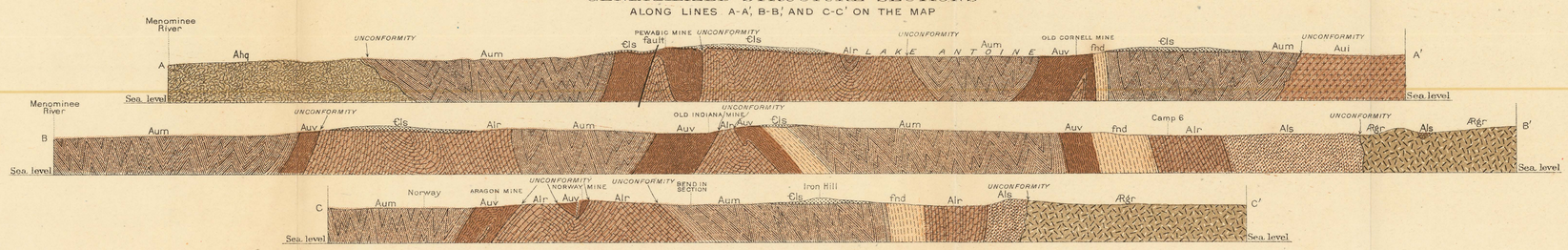
Laurentian series

- Granites, gneisses, and various schists cut by basic and acidic to red acidic intrusives. Area includes unseperated Keewatin green schists

- *Magnetic lines* *(lines of maximum magnetic deflection due to the underlying iron-bearing formation)*

GENERALIZED STRUCTURE SECTIONS

ALONG LINES A-A', B-B', AND C-C' ON THE MAP



Vertical and horizontal scale

1 ½ 0 1 2 Miles

1909