

by

Willard P. Puffett

EXPLANATION

Kd

Diabase

md

Metadiabase

Shown by symbol only
in some places
age uncertain
Might be several
different ages.
Some Lower Precambrian.

am
conglomerate
iron-formation
am
quartzite *am*

Michigamme Slate

Basal quartzite, chert-hematite-goethite iron-formation,
and zone of chert conglomerate shown separately.

Unconformity

Michigamme Slate crops out only in drainage
of Dead River and rests unconformably on pluton.
Not in contact with older metasedimentary rocks
of the Animikie Series.

an

Negaunee Iron-formation

as

Siamo Slate

aa

Ajibik Quartzite

Unconformity

aw

Wewe Slate
(does not crop out)

ak

Kona Dolomite

am

Mesnard Quartzite

qel

Conglomerate, slate, arkose, and sericitic
quartzite similar to that near Enchantment
Lake, Marquette quadrangle.

Unconformity

arc

Conglomerate, slate, arkose,
quartzite, tillite, like that
exposed near Reany Creek north
of Dead River.
Age uncertain, probably
basal Animikie.

fp *qp*

Meta-felsic porphyry (*fp*) or meta-quartz porphyry (*qp*).
Generally as thin sills or dikes. Crop out north of
Dead River. Cataclastic textures common.

mg

metagabbro
Massive, possibly recrystallized *mlp*

fel

Metafelsic rock as thin sills or
dikes; outlines not shown as outcrops are
small. General location of outcrop indicated
by arrow. Some are mineralogically similar
to the gneiss (*cgg*). Some possibly are
crystal tuffs. Most are sheared;
cataclastic textures common.

Pg Ps Pd

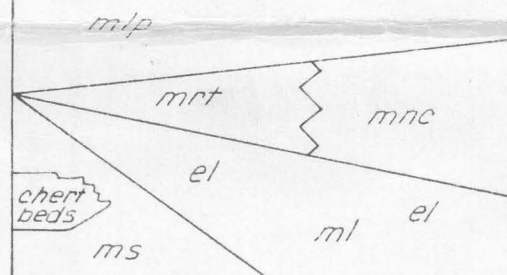
Pluton in and south of Dead River
Pg - granodiorite porphyry
Pd - diorite
Ps - coarsely porphyritic hornblende syenite.
age uncertain-possibly Lower Middle Precambrian.

cgg

Gneiss like that near Compeau Creek
in the Marquette quadrangle. Medium-grained,
pinkish gray; tonolitic composition. Silicified
zones stippled.

ks

Kitchi Schist
Fragmental metavolcanic rocks of latite
to rhyodacite composition. Large - often
rounded, clasts in tuffaceous matrix.
Crystal tuffs and crystal-lithic tuffs common.



Mona Schist

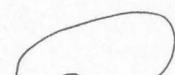
ms- undifferentiated greenstone. South of the Carp River
shear zone is generally sheared and includes felsic
rocks; possibly Kitchi Schist present in part. North
of Dead River is mainly fine-grained, massive greenstone
containing abundant felsic and coarse metadiabase
intrusions. Chert-magnetite iron-formation bounded by
coarse metadiabase occurs north of Dead River; fine-grained
sphalerite and chalcocopyrite occur locally in iron-formation.

mlp- fine-grained layered amphibolite; generally coarser-
grained and less distinctly layered near contact with
gneiss; zone of abundant felsic augen is shown by cross-
hatched color pattern.

mrt- sheared rhyolite tuff; coarsely fragmental locally.

mnc- quartz-feldspar-sericite-chlorite schist. Biotite present
near contact with pluton in sec. 18, T. 48 N., R 26 W.
Possibly a metamorphosed tuff of intermediate composition.

ml- massive, generally fine-grained, metabasalt. Large pillow
structures common; *el* indicates areas of pillow structures.



Limit of outcrop or outcrop area

Contact

Dashed where approximately located: queried where very
uncertain



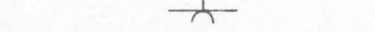
Strike and dip of beds



Strike and dip of overturned beds



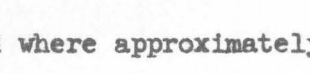
Strike and dip of layers of pillow
structures in greenstone



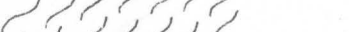
Fault

Dashed where approximately located or inferred: queried where
uncertain

U, upthrown side; D, downthrown side.



Shear zone



Syncline

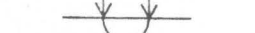
Showing trace of axial plane and bearing and plunge
of axis. Dashed where approximately located.



Overturned syncline



Plunge of minor anticline



Plunge of minor syncline

Strike and dip of foliation
includes layering in *mlp*



Trend of foliation, showing dip

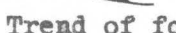
Strike and dip of cleavage



Bearing and plunge of lineation



Vertical lineation



Strike and dip of joint



Vein

Commonly quartz-carbonate



Prospect pit



Gravel pit



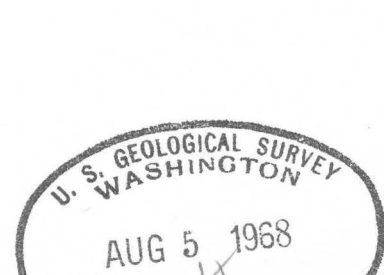
Diamond drill hole



Abundant pyrite in gneiss

Pb Zn Cu

Areas containing lead, zinc,
or copper sulfides



U.S. Geological Survey
OPEN FILE MAP
This map is preliminary and has
not been edited or reviewed for
conformity with Geological Survey
standards or nomenclature.

Michigan (Negaunee quad.) Geol. 1:12,500. 1968.

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