

UTM Zone 15, NAD83
The magnetic declination in 2012 at the centre of the map is 1°52' East, and annual change 7.6" West

Printed 2012

Legend

Archean

- 12 Pegmatite
- 11a Tonalite, trondhjemite, granodiorite: medium to coarse grained, locally porphyritic (biotite, ± amphibole); may postdate the Mayville intrusion
- Granodiorite, granite: fine to coarse grained, locally porphyritic (biotite, zirconovite, ± garnet); probably postdate the Mayville intrusion

Mayville mafic-ultramafic intrusion

- 10 Quartz diorite to tonalite: very fine to fine grained dike
- 9 Diabasic/gabbroic rock: fine to medium grained dike and/or sill
- 8 Gabbro: medium grained; locally strongly magnetic
- 7 Leucogabbro: coarse to very coarse grained, locally megacrystic
- 6 Gabbroic anorthosite to anorthosite: megacrystic, glomeroporphyritic

Metasedimentary, metavolcanic and related intrusive rocks

- 5 Heterolithic breccia: very coarse grained to megacrystic leucogabbro, anorthosite and basalt fragments (sub-metres to decimetres in size) in a mafic to ultramafic matrix, locally with massive to disseminated sulphide minerals and/or disruptive chromite layering
- 4 Basic mafic-ultramafic rocks: fine to medium grained metagabbro; medium to coarse grained, locally strongly foliated, magnetite-bearing chlorite schist and/or amphibolite (after pyroxenite and/or olivine pyroxenite)

Metasedimentary, metavolcanic and related intrusive rocks

- 3 Lithic greywacke, siltstone, conglomerate with felsic volcanic and granitoid clasts, and garnet-bearing gneiss; minor metavolcanic sandstone, lapillstone
- 2 MORB-type basalt: very fine to fine grained, pillowed to massive basalt and diagenetic phytic basalt; synvolcanic gabbro and diabase
- 2a Gabbro: fine to medium grained

Granitoid intrusive rocks (pre-dates Mayville mafic-ultramafic intrusions)

- 1 Maswaka Lake Batholith: medium to coarse grained, locally porphyritic granite, granodiorite, tonalite, and quartz diorite (2844 ± 12 Ma¹, 2852.8 ± 1.1 Ma²)

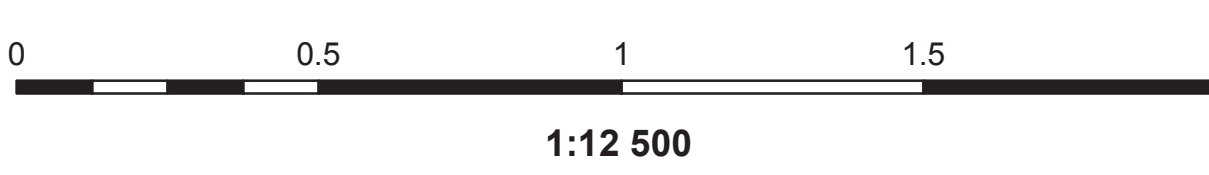
Structural symbols

- Bedding: top unknown
- Dike
- Flow contact: top unknown
- Foliation: generation unknown
- Fault: sense unknown
- Gneissosity: generation unknown
- Igneous layering: top unknown
- Shear zone: sense unknown, dextral

Symbols

- Geological contact: defined
- Geological contact: approximate
- Fault
- Fold axial trace
- Ore deposit
- Mineralized occurrence
- Limit of mapping
- Powerline
- Road: unpaved
- Trail
- Swamp

Bedrock geology of the Cat Creek area, Bird River greenstone belt, southeastern Manitoba (part of NTS 52L12)



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Geology by: X.M. Yang

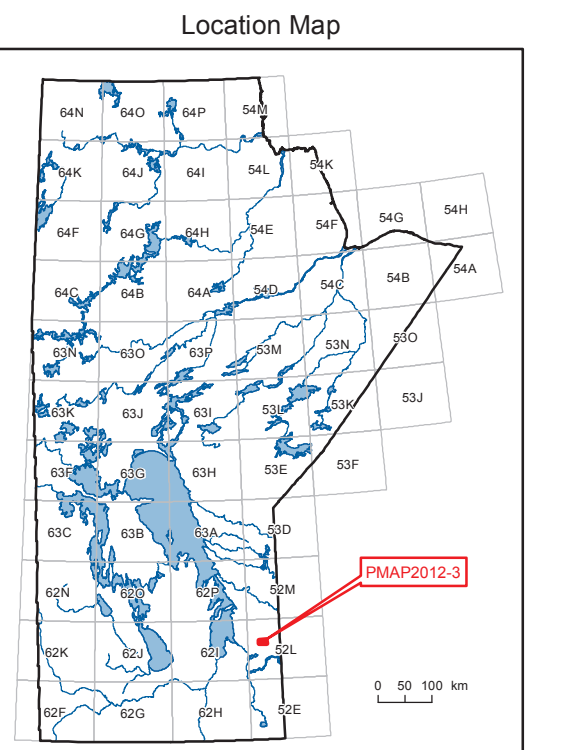
Cartography by: M.E. McFarlane

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This map is a provisional summary of work carried out during the summer field season and is produced directly from the geologist's manuscript. It is not to be regarded as a final interpretation of the geology of the area.

SUGGESTED REFERENCE:
Yang, X.M. 2012. Bedrock geology of the Cat Creek area, Bird River greenstone belt, southeastern Manitoba (part of NTS 52L5). Manitoba Innovation, Energy and Mines, Manitoba Geological Survey, Preliminary Map PMAP2012-3, scale 1:12 500.



¹Wang, 1993; ²Gilbert et al., 2008

