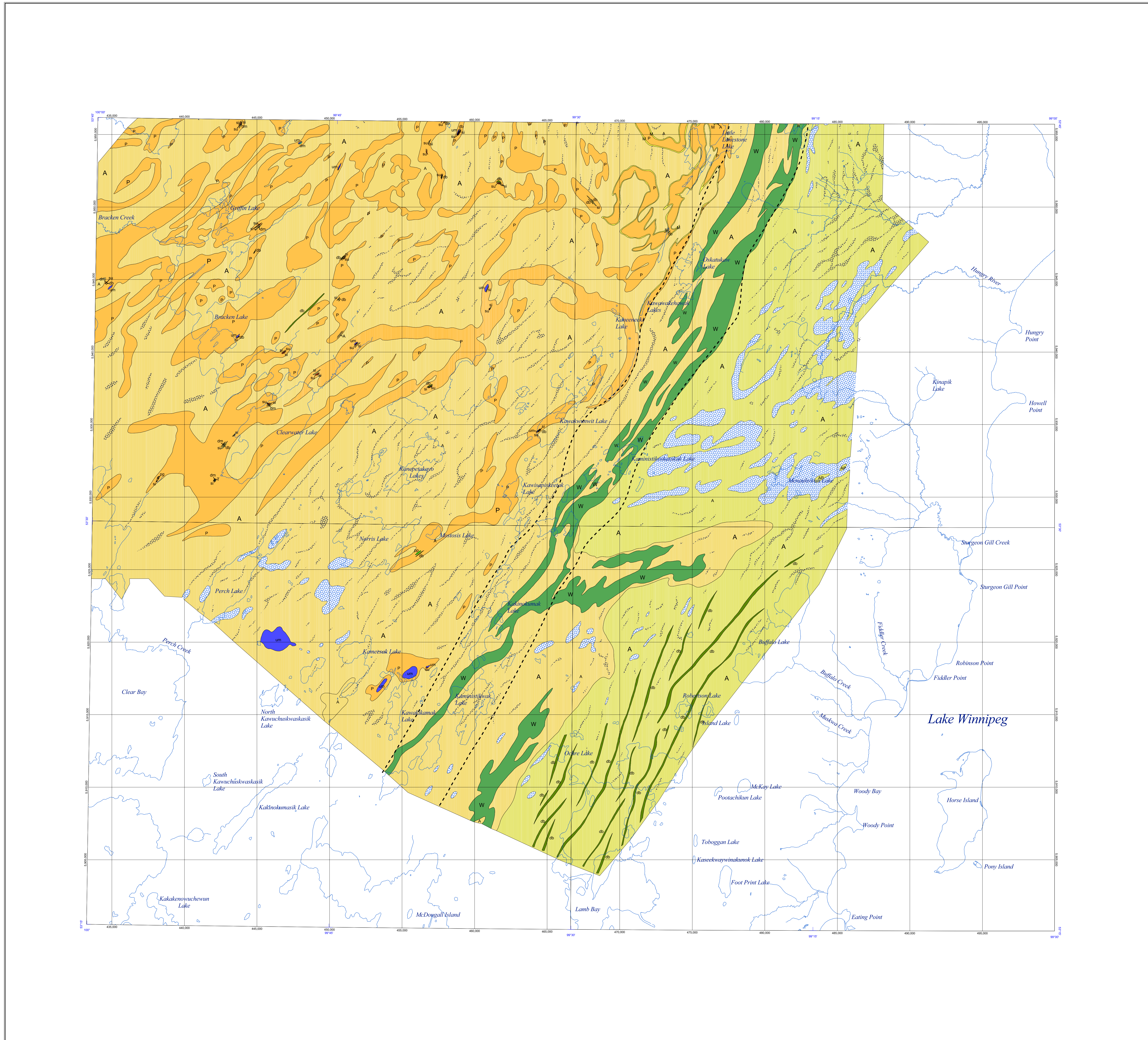


Geology of Perch Lake (63G/5), Eating Point (63G/06), Howell Point (63G/11) and Bracken Lake (63G/12) areas



Legend

INTRUSIVE ROCKS, ORTHOGNEISS

- ib Metabasite or metabasite dykes. In O or A, usually belong to Molson dyke swarm
- pg Pegmatite
- g Granite, granitoid rocks
- bg Biotite granite
- qs Quartz syenite
- sb Metagabbro, usually associated with um or occurring as subvolcanic sills
- um Danite (serpentinized), metaperidotite, metapyroxenite, serpentinite, derived ultramafic schist; usually as sills in Ospwagan Group sequence

G GRASS RIVER GROUP, undivided; mainly magnetite-bearing paragneiss; locally hornblende-, biotite-, garnet- or sillimanite-bearing; laminated, thinly layered; in places crossbedded, pebbly, migmatitized; minor intercalations of felsic metavolcanic rocks

B BURNWOOD GROUP, undivided; greywacke-mudstone metasediments, garnet- and graphite-enriched; locally cordierite- and sillimanite-bearing; includes derived migmatite

W WINNIPEGOSIS BELT ASSEMBLAGE, undivided; ultramafic to mafic volcanic flows, massive, zoned, locally olivine- or clinopyroxene spinifer-textured; aphanitic to ophitic texture common; pillowed flows, hyaloclastite; also includes sub-greenschist facies thinly layered siliceous siltstone and calcareous siltstone

O OSPWAGAN GROUP SUPRACRISTAL ROCKS, undivided; a sequence of clastic, chemical and metamorphic rocks belonging to M, T, P, S Formations and Ba assemblage. If M Formation is not on the map, then areas of undivided Ospwagan group are defined solely on the basis of geophysical signature. In addition, the sequence might be much narrower than shown by the contacts. In some instances, Ospwagan Group might not be present and the magnetic anomalies are reflection of increased magnetic content in basement only.

Ba Bah Lake assemblage, undivided; metabasalt flows, pillowed or massive, local breccia; derived amphibolite; metabasite - diabase subvolcanic sills; pyritic sills; minor interflow chert, iron formation, volcanogenic sediment.

ps Pectic, massive or porphyroblastic

S Setting Formation, undivided; foliographic quartzite and metapelite interlayered in varying proportions in a metabasite sequence

P Pipe Formation, undivided; sequence of sulphide, silicate and oxide facies iron formations, sulphidic; chert; metapelite; minor dolomite marble, calc-silicate; near the top sandstone - pelite metarhyolite.

dm Dolomite marble intercalation enclosed in silicate facies iron formation of P3

ox Iron formation, oxide facies, found only in P3

si Iron formation, silicate facies, stratigraphic position unknown unless determined by its host P1 or P3

red Iron formation, sulphide facies, stratigraphic position unknown unless determined by its host P1 or P2

if Iron formation, facies unspecified, stratigraphic position unknown

T Thompson Formation, undivided; marble or marble, layered, varied in composition and texture; chlorite - phlogopite - diopside marble, coarse grained

M Manassan Formation, undivided; basal clastic rocks; metaconglomerate, sandstone, minor shale, graded beds, fining upwards; scapolite schist, rhythmically layered, calc-silicate layer near the top; pegmatite segregations; high grade metamorphic derivatives

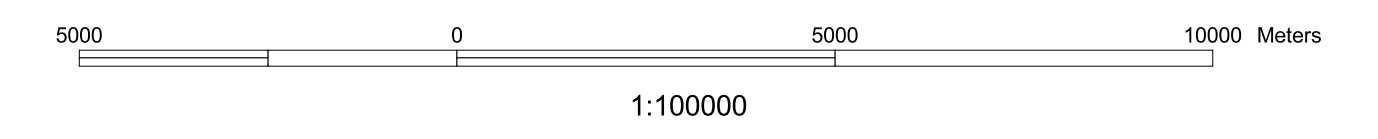
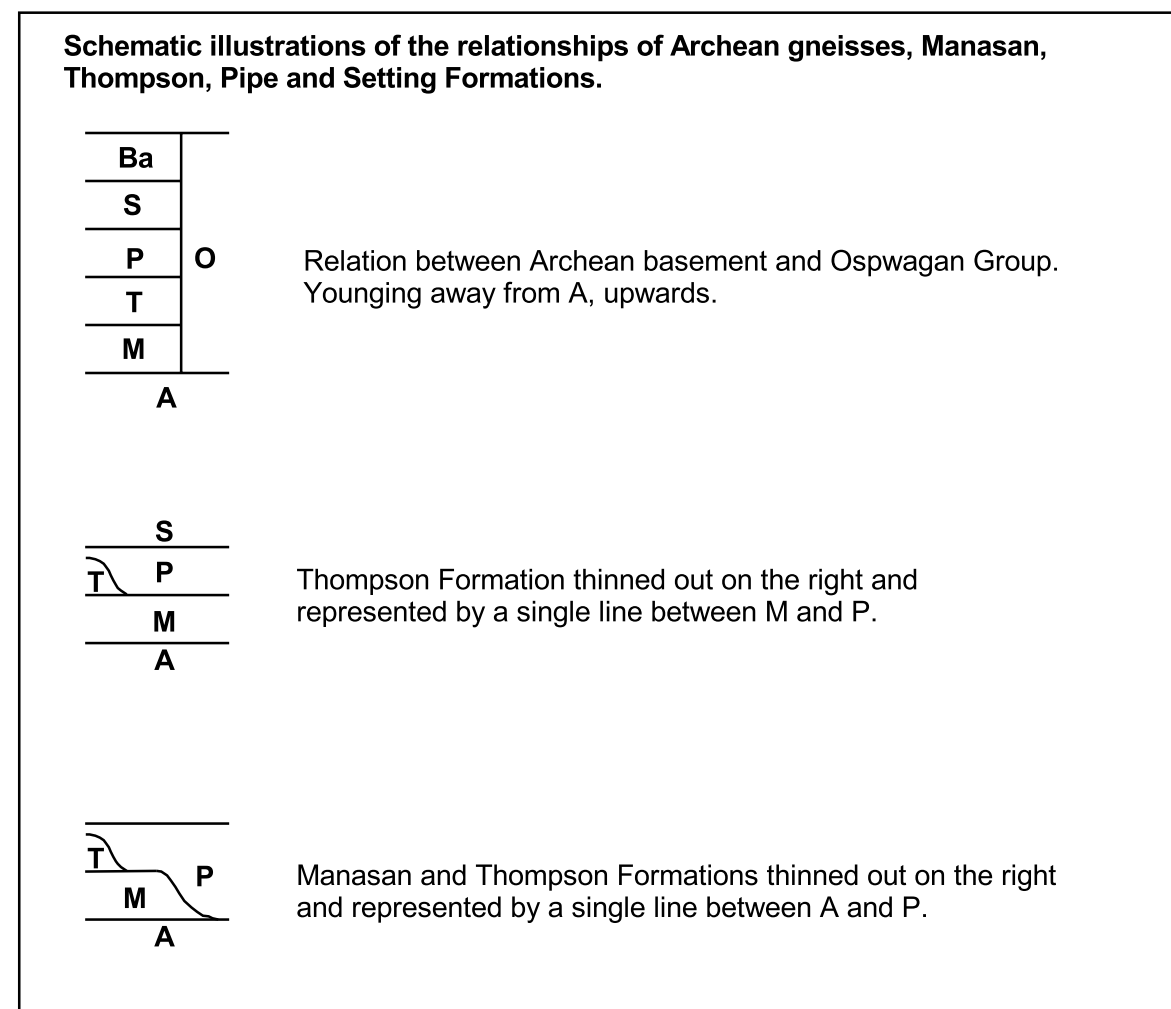
A ARCHEAN BASEMENT ACHMATITE - GNEISS, undivided, retrogressed, isograding to dioritic in composition, host to distinct bodies of orthogneiss (1 to 6), ages uncertain

6 Biotite granite orthogneiss

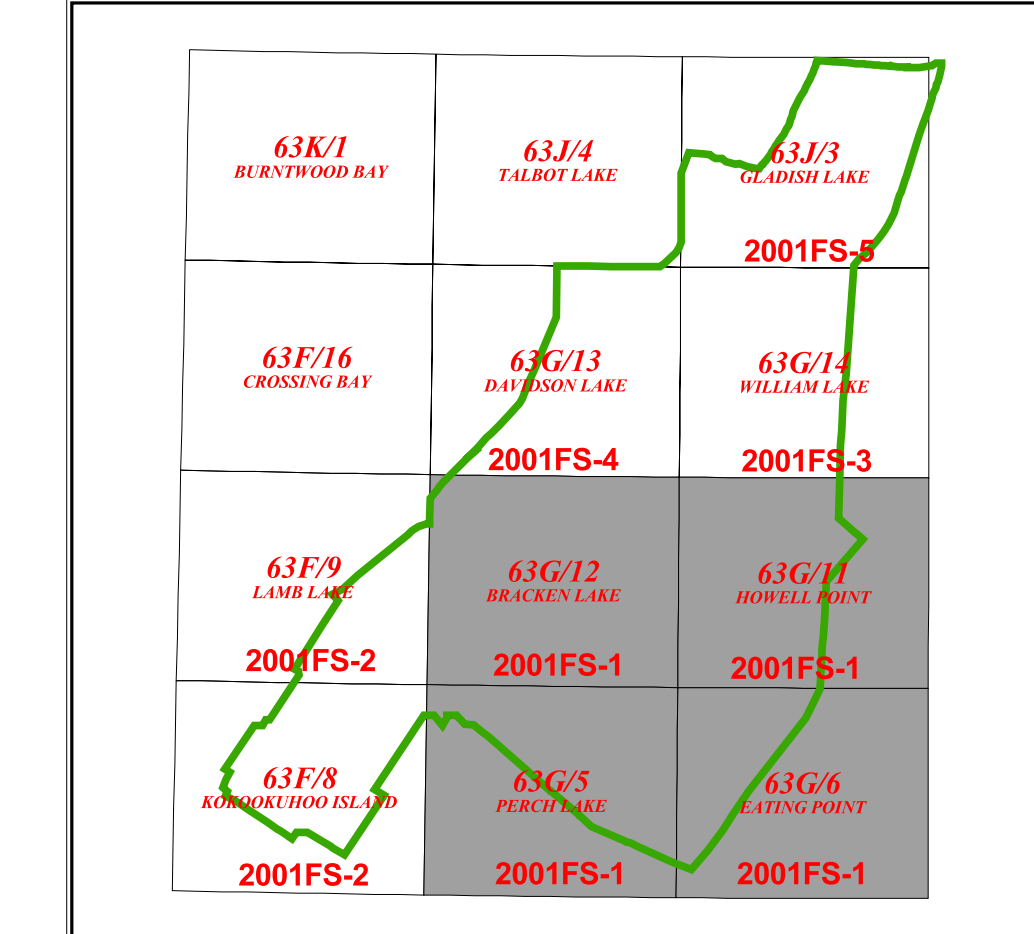
AP ARCHEAN PIKWTONEI GRANULITE BASEMENT, undivided, leucocratic to melanocratic migmatite and gneiss, orthopyroxene-bearing

SYMBOLS

- Fault
- Structural trend derived from the vertical gradient of a magnetic anomaly
- Geophysical anomaly of unknown origin
- Contact



Index Map



Published 2001

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This map is a preliminary representation of the results of a mapping and compilation program. It is not to be regarded as a final interpretation of the geology of the area. The data used in producing this map was transferred from un-revised airphotos and this is subject to change. No attempt was made to remove this distortion for this preliminary release.

Suggested reference:
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 2001: THOMPSON NICKEL BELT GEOLOGY; Manitoba Geological Survey, Preliminary Map 2001FS-1, Geology of Perch Lake (63G/5), Eating Point (63G/06), Howell Point (63G/11) and Bracken Lake (63G/12) areas, scale 1 : 100 000.