

GEOLOGY OF THE
LITTLE STULL LAKE AREA

Legend

- PALEOPROTEROZOIC**
18) diabase dykes (Molson dyke swarm)
- ARCHEAN**
Granitoid rocks
17) Tonalite; white to grey weathering, medium- to coarse-grained, hornblende bearing
16) Granodiorite
15) Rorke Lake granite
15a) Granite
15b) Quartz monzonite
14) Kistigan Lake granodiorite
14a) Granodiorite, tonalite
14b) Quartz diorite
- Tectonites**
13) Tectonite and mylonite
Wolf Bay' shear zone; mafic to felsic tectonite
13a) Annealed mafic cataclastite and fault breccia
13b) Highly schistose and laminated phyllonitic, mafic to felsic, tectonite and mylonite.
- Oxford Lake Group**
'Sedimentary' subgroup
Little Stull Lake arkosic sedimentary rocks: fluvial-alluvial sedimentary rocks
12a) Crossbedded arkosic sandstone and pebbly sandstone
12b) Crossbedded sandstone
12c) Conglomerate; polymictic, pebble - cobble, clast supported, thick bedded, poorly sorted
- 'Volcanic' subgroup**
11) Iron formation; thinly layered oxide or sulphide iron formation - occurs sporadically throughout the 'volcanic' subgroup
- 'Minnow' Bay 'volcanic' sequence**
10a) Rhyodacitic lapilli tuff and reworked felsic fragmental rocks; plagioclase phyrlic or quartz-plagioclase phyrlic
10b) Sandstone, pebbly sandstone; plagioclase crystal rich, clasts dominantly plagioclase phyrlic
10c) Polymictic conglomerate; matrix and clast supported, poorly sorted, pebble - boulder, clasts dominantly felsic to intermediate plagioclase phyrlic volcanic rock
10d) Intermediate tuff and reworked tuff
9) Plagioclase phyrlic andesite and rhyodacite; quartz-feldspar phyrlic rhyolite intrusion (2717 Ma)
9a) quartz-plagioclase phyrlic rhyolite intrusive rock
9b) plagioclase phyrlic rhyodacitic intrusive rock
9c) plagioclase phyrlic andesitic intrusive rock
- 'Sickle' Bay 'greywacke' sequence**
8a) Greywackes; thin to medium bedded, turbidite bedforms, interbeds of argillite
8b) Feldspar rich greywacke; thin- to thick-bedded, turbidite bedforms, rarely with granule to pebble clasts
8c) Iron formation; thinly layered magnetite iron formation
- 'Lodge' Bay 'volcanic' sequence**
7a) Rhyodacite; massive and fragmental felsic volcanic rocks, interbedded with argillite and iron formation
- Isthmus 'volcaniclastic' sequence: mafic to intermediate volcanoclastic rocks**
6a) Intermediate to mafic, aphyric, fragmental rocks: tuff, lapilli tuff and tuff breccia interlayered with reworked volcanoclastic rocks
6b) Andesite; pillowed and massive flows
6c) Hornblende phyrlic, intermediate to mafic fragmental rocks; possibly shoshonitic
- Hayes River Group**
Kistigan Lake 'basalts'
5) Iron formation: thinly layered chert-magnetite iron formation.
4) Gabbro: fine grained basaltic gabbro dykes and sills - intrude unit 3 basalt
4a) Fine grained equigranular gabbro
4b) Pyroxene (pseudomorphed by amphibole) phyrlic gabbro
3) Basalt: pillowed and massive flows
3a) Dark green to green grey, aphyric, pillowed and massive
3b) Dark green to black, massive and pillowed, high magnesium 'komatiitic basalt'
3c) Layered amphibolite derived from basalt
- Rapson Bay mafic complex**
2) Gabbro: Fine grained basaltic gabbro dykes and sills - intrude unit 1 basalt.
2a) Fine grained equigranular gabbro
2b) Pyroxene (pseudomorphed by amphibole) phyrlic gabbro
2c) Plagioclase phyrlic and/or glomeroporphyritic gabbro
1) Basalt: pillowed and massive flows
1a) Dark green to green grey, aphyric, pillowed and massive
1b) Dark green to green grey, pyroxene (pseudomorphed by amphibole) phyrlic, massive and pillowed
1c) Layered amphibolite derived from basalt

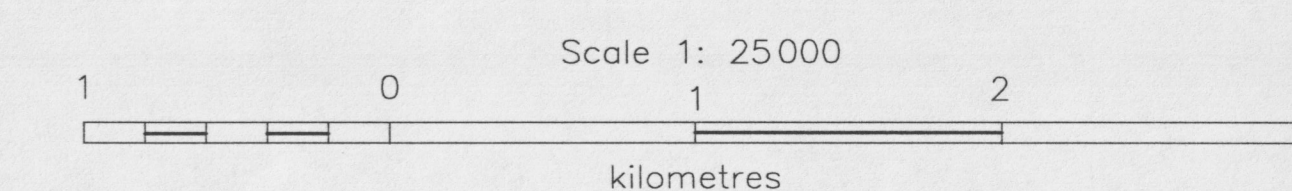
Symbols

- Ken Bay alteration zone
white weathering, amphibole (tremolite?) and feldspar alteration
white weathering, variable silicification with patchy, pyrite-rich gossans
- Intrusion breccia and stockwork; units 1, 2 and 13 intruded by unit 17
- Bedding (top: unknown, known, overturned)
- Pillows (tops unknown, known)
- Foliation (generation: unknown, 1st)
- Spaced cleavage (generation: unknown, 1st, 2nd)
- Shear zone (sense: unknown, dextral, sinistral)
- Contact (approximate, under water)
- Shear zone
- Fault

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



Reference: Corkery, M.T., Skulski, T., Whalen, J.B., 1998: Geology of the Little Stull Lake Area (part of NTS 53K/10SE and 7NE), Preliminary map 1998S-2, 1:25 000.

