

LEGEND

- Post-Missive Intrusive Suite (units Gp to Pg)
Pg 65 Non-foliated granitic pegmatite dykes (51 1767 +/-1 Ma)
Gp Plagioclase-phyric gabbro
Gpb Foliated to weakly gneissic biotite granodiorite
Gbd Foliated hornblende granodiorite and tonalite; minor biotite granodiorite, quartz diorite and diorite
Gbh Hornblende porphyroblastic gabbro (probably derived from unit Gp)
Gt BOUNDARY INTERSECTIONS: whiteite, pyroxene, hornblende, gabbro, diorite, quartz diorite, monzonite, tonalite and granodiorite
Gtp 63 Plagioclase-phyric granodiorite and tonalite (1.1839 +/-0.8 Ma)

- Middle Proterozoic
M1 Intermediate to mafic volcanic and volcanoclastic rocks
M2 Arenalite and minor interlayered feldspathic quartzite and wacke
M3 Calcic arenite and minor interlayered calcic wacke, arenite, pebbly arenite and polytictic conglomerate
M4 Interlayered polytictic conglomerate, pebbly arenite, arenite and minor wacke

- Intermediate to mafic volcanic and volcanoclastic rocks (units Gb to Gdb)
Gdb Foliated biotite granite, granodiorite and tonalite
Gdh 62 Foliated hornblende granodiorite and tonalite (1.1832 +/-1.2 Ma); Minor biotite granodiorite, quartz diorite and diorite
Gg Coarse-grained to porphyritic phase gneissic to migmatitic varieties
Dg 61 Massive to layered quartz monzonite-gabbro intrusions (1.186 +/-0.6 Ma)
Gb Gabbro and diorite

- Mafic Group (units Am to Aq, not necessarily in stratigraphic order)
Aq Interlayered arenite, feldspathic quartzite and minor mudstone
Aa Massive to layered arenite; minor wacke
Av Weakly layered white mica-bearing wacke; minor arenite
Aw Weakly layered wacke
Ac Weakly layered calcic wacke
As Interlayered volcanoclastic wacke, mudstone, tuff and minor arenite
At Massive to weakly layered felsic tuff
Ai Felsic volcanic and volcanoclastic rocks; minor intrusive equivalents
Al Intermediate to mafic volcanic and volcanoclastic rocks
Am Mafic volcanic and volcanoclastic rocks; minor gabbro

- Median to coarse-grained gneissic rocks (units GAf to GAh)
GAh Quartzofeldspathic kiotite +/- garnet gneiss (mainly derived from unit Ma)
GAg Granodioritic to dioritic hornblende +/- garnet +/- biotite gneiss (mainly derived from units Gb, Gg, Am, Al and Aq)
GAW Semi-pelitic biotite +/- garnet gneiss (mainly derived from unit Aw)
GAf Felsic biotite +/- garnet +/- hornblende gneiss (mainly derived from units Af, At, As, Aa and Ag)

- Geological contact
Main regional foliation (inclined, vertical, horizontal)
Mineral or extension lineation (inclined, horizontal)
Axis of minor fold (inclined, horizontal)
Major shear zone
Shear zone or fault (inclined, vertical)
Location of rock sampled for U/Pb age
Mineral Occurrences
Au gold
Cu copper-silica
Ni nickel-copper
Fe iron sulphides
Co cobaltite/-antophyllite/-garnet
or muscovite and/or anthophyllite/-garnet

- Metamorphic isograds (in white mica-bearing rocks)
Sillimanite-biotite-garnet isograd
Sillimanite-biotite isograd
Staurolite-biotite isograd
Garnet isograd
Biotite isograd
Metamorphic bathozones (approximate; Carmichael, 1978)
Bathograd 5
Bathograd 4
Bathograd 3

Geology by K.E. Ashton, K.J. Wheatley, K.M. Wilcox, D. Paul, D. Nowar and J. de Tonne (1985-88)
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada
Base-map assembled by the Geological Survey of Canada from maps published at the same scale by the Survey and Mapping Branch between 1971 and 1981

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Geology, Mari Lake Area, Saskatchewan
(63L/16, parts of 63K/13, 63L/15, 63M/1 and 63N/4)

Scale 1:50 000 - Echelle 1:50 000
Universal Transverse Mercator Projection
Projections: Universality de Métrier
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