Ministry of Energy, Mines and Petroleum Resources

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1 SHEET

GEOLOGICAL COMPILATION MAP, NORTHERN KOKANEE AND SOUTHERN GOAT RANGES

NTS 82F, 82K

GEOLOGY BY G. BEAUDOIN

0 1 2 3 4 5 km

LEGEND

Lithostratigraphy

Eocene
- **Ei** Dykes of intermediate (andesitic) composition
- **Ef** Felsic dykes
- **El** Lamprophyric and gabbroic dykes

Paleocene-Eocene
- **PEg** Ladybird Granite — Leucocratic biotite quartz monzonite to granite

Pre-Paleocene-Eocene
- **qm** Quartz monzonite or hornblende-biotite quartz monzonite

Upper Cretaceous
- **uKm** Mulvey Gneiss — Melanocratic biotite-hornblende augen granodioritic gneiss, leucocratic granitoid dykes

Cretaceous
- **Kg** Syn-tectonic quartz monzonite and biotite-muscovite leucogranite

Middle Jurassic

Nelson Batholith
- **mJNf** Feldspar or quartz porphyry, felsic dykes
- **mJNd** Diorite, porphyric biotite diorite, and hornbendite dykes
- **mJNm** Quartz monzonite
- **mJNgb** Biotite granite to granodiorite
- **mJNghk** Hornblende potassium feldspar porphyric granite
- **mJNgk** Potassium feldspar porphyric granite

Upper Triassic-Middle Jurassic
- **TJd** Davis Ridge diorite — Pyroxene-plagioclase diorite porphyry
- **TJg** Hornblende-monzonite, quartz monzonite, granitic sills

Pre-Middle Jurassic
- **ms** Quartzofeldspathic and pelitic schist and gneiss, amphibolite, migmatite, calc-silicate rocks, and quartzite

Lower Jurassic
- **lJr** Rossland Group (undivided)
  - **lJrv** Metavolcanic rocks, augite porphyry, argillite
  - **lJrf** Feldspar porphyry
  - **lJrq** Quartz latite porphyry

Paleozoic-Triassic
- **P-Mn** Nemo Lakes Belt — Semi-pelitic and calcareous schists, amphibolite, and ultramafic rocks

Upper Triassic
- **Ts** Slocan Group (undivided)
  - **Tsp** Graywacke, siltstone, sandstone
  - **Tsc** Limestone
  - **Tst** Tuff

Lower Permian
- **Pmc** Marten Conglomerate — Polymictic conglomerate
- **Pwd** Whitewater Diorite — Hornblende diorite
- **Pk** Kaslo Group — Chlorite and hornblende schists and gneiss
- **Pkd** Kane Creek Diorite — Hornblende diorite

Mississippian-Lower Permian
- **Mm** Milford Group (undivided)

Fine grained grey schist, grey phyllite and argillite, limestone and quartzite
- **Mmm** McHardy Assemblage — Tholeiitic, pillow basalts, siliceous argillite, phyllite, conglomerate, limestone, metawacke, metasandstone, chert, quartz-plagioclase-carbonate-mica granulite
- **Mmd** Davis Assemblage — Tholeiitic basalts, cherty tuff, siliceous argillite, limestone, sandstone, phyllite

Middle Cambrian-Middle Devonian
- **lPa** Lardeau Group (undivided) — Micaceous quartzite and grit, grey phyllite, mica schist and silicate marble
- **lPb** Broadview Formation — Grey quartz mica phyllite, grit, quartzite, and quartz pebble conglomerate
- **lPj** Jowett Formation — Massive tholeiitic greenstone, pillow lavas, chloritic phyllite
- **lPi** Index Formation — Muscovite-biotite quartzofeldspathic schist and gneiss, calc-silicate gneiss
  - **lPi4** Biotite-quartz-feldspar(garnet) gneiss, minor amphibolite
  - **lPi3** Calc-silicate gneiss with amphibolite schist, marble, and grey phyllite
  - **lPi2** Hornblende gneiss, amphibolite
  - **lPi1** Biotite-muscovite schist and gneiss

Lower Cambrian
- **lCbm** Badshot-Mohican formations (undivided) — White and grey crystalline marble, calc-silicate gneiss, mica schist, quartzofeldspathic gneiss
  - **lCb** Badshot Formation — Calcite, marble, dolomite
  - **lCm** Mohican Formation — Calcareous schist quartzite marble
- **lCh** Hamill Group — Micaceous quartzite musco... biotite quartzofeldspathic ... feldspathic gneiss

Hadrynian

Windermere Supergroup
- **Hm** Monk Formation — Grey phyllite, black graphitic phyllite, quartzite
- **Hi** Irene Volcanic Formation — Massive to schistose greenstone, mafic tuff, phyllite
- **Ht** Toby Formation — Polymictic conglomerate, quartzite, and pelite

Helikian

Purcell Supergroup
- **Hd** Dutch Creek Formation — Black argillite and argillaceous grey siltstone, thinly interbedded dolostone

Symbols

- Lithological contact
- Fault or shear zone: a) Normal; b) Thrust
- Fold axis, anticlinal, overturned anticlinal

Note

This geological compilation map has been compiled from existing geological maps. Geological contacts were not verified in the field and lithostratigraphic units are those defined in the original geological maps. The reader should refer to the original work for detailed description of the units and structures. Geological ... used in this compilation are listed in the references.

Because the compilation is made from maps with variable degree of detail, all geological contacts are drawn in full line and one symbol is used for faults and shear zones. ... interpolations made by the author are drawn in broken lines.

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Schematic stratigraphic column