LEGEND

QUESNEL LAKE (93-A) MAP-AREA

CENOZOIC

QUATERNARY

RECENT

Rv — Olivine basalt blocky flows; **Rvc** related cinder cones; ultrabasic nodules common

PLEISTOCENE AND RECENT

Qal — Glacial deposits, till, gravel, sand, silt: alluvium: few scattered unmapped outcrops

Qv — Olivine basalt flows and breccia; **Qvc** , related volcanic cones including basalt flows, breccia and cinder: ultrabasic nodules common

TERTIARY AND QUATERNARY

PLIOCENE AND/OR PLEISTOCENE

TQvc — Olivine basalt volcanic cones; flows and cinder: **TQvb**, basaltic breccia, minor flows: ultrabasic nodules common

TERTIARY

MIOCENE AND PLIOCENE

uTva — Plateau basalt; olivine basalt, feldspar porphyry basalt, minor breccia, conglomerate and sandstone: **uTvb** , areas underlain by plateau basalt, few scattered unmapped outcrops: **uTvp** , coarse feldspar porphyry, may be older intrusions

uTs — Shale, sandstone (mainly Miocene)

EOCENE AND (?) OLIGOCENE

KAMLOOPS GROUP (**lmTv** and **lmTs**)

lmTv — Basaltic, andesitic, and dacitic breccia and flows, minor shale, sandstone and conglomerate: may include small areas of younger volcanics. **lmTvs** ; areas of few scattered unmapped outcrops of **lmTv** and **lmTs** undivided

lmTs — Shale, sandstone, tuff, conglomerate

QUESNEL and OMINECA BELTS

PINCHI BELT

CRETACEOUS AND (?) TERTIARY

KTs — Conglomerate, sandstone, shale

JURASSIC

LOWER AND (?) MIDDLE JURASSIC

PLEINSBACHIAN TO (?) BAJOCIAN

lmJs — Conglomerate (local granite clasts), greywacke, shale

QUESNEL BELT

CRETACEOUS AND (?) TERTIARY

KTs — Conglomerate, sandstone, shale

JURASSIC AND CRETACEOUS

JKg — Granodiorite, quartz monzonite, quartz diorite

JKns — Nepheline syenite, syenite

QUESNEL RIVER GROUP (**uRa** to **lmJs**)

JURASSIC

LOWER AND (?) MIDDLE JURASSIC

PLIENSBACHIAN TO (?) BAJOCIAN

lmJs — Conglomerate (local granitic clasts), greywacke, shale

TRIASSIC AND JURASSIC

UPPER TRIASSIC AND LOWER JURASSIC

TRJi — Syenite, monzonite, diorite; sub-volcanic intrusive phases, probably mainly lower Jurassic

NORIAN TO SINEMURIAN

TRJd — Purple or maroon, minor grey and green basaltic and felsitic breccia, minor flows, tuff, sandstone and limestone. **TRJda** ; purple and maroon basalt with analcite phenocrysts

NORIAN AND (?) HETTANGIAN

TRJc — Green and purple conglomerate and sandstone

NORIAN AND (?) YOUNGER

TRJb — Augite porphyry basalt breccia, minor flows, tuff and tuffaceous argillite; local andesitic basalt

TRJa — Basaltic tuff and breccia, generally fine - grained; argillite, flows, chert

TRIASSIC

UPPER TRIASSIC

KARNIAN AND (?) NORIAN

uTb — Basaltic and andesitic flows and breccia, minor argillite and limestone

uRa1 — Phyllite, argillite, slaty argillite, quartzite, schist, minor greenstone (sub-greenschist to amphibolite (kyanite) facies of metamorphism)

uRa2 — Greenstone, augite-porphyry breccia, tuff breccia, tuff; possible dykes and sills (greenschist facies of metamorphism)

uRa3 — Undivided **uRa1**, and **uRa2** not separable at scale of mapping: may include dykes and sills and passes gradationally upward to **TRja** (sub-greenschist and greenschist facies of metamorphism)

OMINECA BELT

JURASSIC (?), CRETACEOUS AND/OR TERTIARY

KTg — Muscovite - biotite granite and quartz monzonite

JURASSIC AND (?) CRETACEOUS

JKg — Granodiorite, quartz monzonite, quartz diorite, minor diorite

PALEOZOIC OR MESOZOIC

PMub — Serpentinite, peridotite; may be pre **PPAb**

REDFERN COMPLEX (**PMRub**, **PMRga** and **PMRa**) (may be equivalent to **PMub** and **PPAb**)

PMRa — Amphibolite

PMRga — Gabbro, norite

PMRub — Serpentinite, pyroxenite, peridotite

PALEOZOIC

CACHE CREEK GROUP (**PPub** to **Ps**)

PERMIAN AND (?) OLDER

Ps — Grey limestone, minor greenstone chert and argillite

PENNSYLVANIAN AND/OR PERMIAN

PPsv — Argillite, chert, greenstone; minor limestone and serpentinite

PPub — Serpentinite

PENNSYLVANIAN, (?) PERMIAN AND (?) YOUNGER

SLIDE MOUNTAIN GROUP (**PPAa** and **DMG**)

PPAa — ANTLER FORMATION: pillow basalt, breccia, chert greywacke, minor limestone. **PPAb**, amphibolite; probably equivalent to **PPAa**

DEVONIAN AND MISSISSIPPIAN

DMG — GUYET FORMATION: conglomerate, greywacke, minor basalt: **DMGG**, GREENBERRY MEMBER, grey limestone

CAMBRIAN TO (?) DEVONIAN

€DBC — BLACK STUART FORMATION: argillite, slate, dark platy limestone, greywacke: **CDBSb**, basal carbonate, breccia, chert, sandy limestone

CAMBRIAN

LOWER TO (?) UPPER CAMBRIAN

CARIBOO GROUP (**HI** to **l€DC**)

l€DC — DOME CREEK FORMATION: dark shale and limy shale

LOWER CAMBRIAN

l€MU — MURAL FORMATION: grey limestone, minor shale and argillite: **l€MUa** , may include minor older and younger units

HADRYNIAN AND/OR CAMBRIAN

€MI — MIDAS FORMATION: not equivalent to **HPM**: dark siltstone and quartzite, minor shale and argillite

€YP — YANKS PEAK FORMATION: grey and white, minor pink and green quartzite, minor siltstone and argillite: **€Y** , undivided **€YP** and **HYB**

€CM — Undivided MURAL (**l€MU**) and CUNNINGHAM FORMATIONS (**Hc**)

HADRYNIAN (WINDERMERE)

HYB — YANKEE BELLE FORMATION: green and grey thin bedded argillite, shale, minor quartzite and limestone; local phyllite and schist: **€Y** , undivided **€YP** and **HYB**

HL — CUNNINGHAM FORMATION: grey limestone, minor shale and argillite

HI — ISAAC FORMATION: dark phyllite, slate, argillite and minor limestone

KAZA GROUP

HK — Greywacke, argillite, phyllite, schist, minor pebble conglomerate: **HKC** , carbonate

ARCHEAN (?) TO PALEOZOIC

APgn — QUESNEL LAKE GNEISS: quartz - feldspar augen gneiss, granodiorite gneiss, local lime - silicate gneiss

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HPS — SNOWSHOE FORMATION: may be equivalent to BLACK STUART and GUYET FORMATIONS and (?) younger units; may include or be equivalent to KAZA GROUP: quartzite, meta - greywacke, phyllite, schist, minor limestone

HPM — "MIDAS FORMATION"; not equivalent to **€MI** : may be equivalent to BLACK STUART or to ISSAC FORMATION: chert, phyllite, argillite, limestone minor siltstone

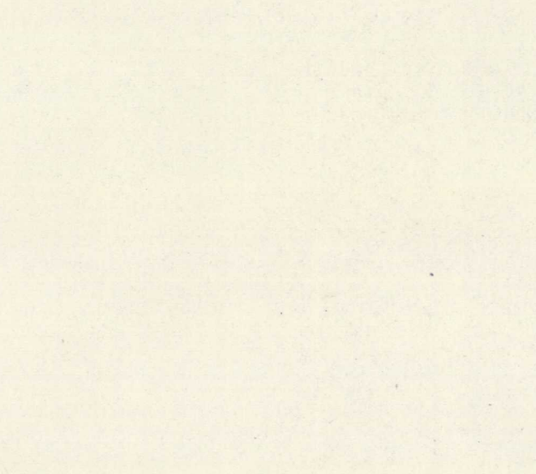
HPSM — SNOWSHOE FORMATION: may include **HPM** undivided: phyllite, schist and gneiss in amphiboiite facies of metamorphism. **HPSMc**; marble (shown in solid black where thin): **HPSMg** ; gneissose granitiod layers of uncertain origin

HPKC — KAZA and CARIBOO GROUPS undivided. Highly deformed amphibolite facies metamorphic rocks; may include some younger units: **HPKCc**, Kaza or Cariboo Group undivided

PPgn — SHUSWAP METAMORPHIC COMPLEX. Upper amphibolite (sillimanite) facies metamorphism: gneiss, schist, marble, pegmatite, unseparated granitoid and granitoid gneiss phases. Includes KAZA and CARIBOO GROUPS, and the SNOWSHOE FORMATION, and possibly younger rocks: probably includes older rocks of uncertain equivalence . **PPm** marble, shown solid black where thin)

TRJg — TAKOMKANE BATHOLITH: granodiorite, quartz monzonite, quartz diorite

TRJsd — Syenodiorite, syenite, diorite



Glacier

Geological contact (defined, approximate or assumed, covered)

Contact of Shuswap Metamorphic Complex (coincides with sillimanite isograd)

Fault (defined, approximate or assumed, covered by water)

Bedding (horizontal, inclined, vertical, overturned; tops not indicated)

Foliation: cleavage, schistosity, gneissose layering (inclined, vertical)

Anticlinal axis (fold upright, overturned)

Synclinal axis (fold upright, overturned)

Antiformal axis

Fossil locality

Mine

Geology by R.B.Campbell, 1959-1963, 1969

Compiled by R.B.Campbell from published and unpublished sources, 1978

O.F. 574

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