Energy, Mines and Resources Canada
Geological Survey of Canada

Énergie, Mines et Ressources Canada
Commission géologique du Canada

LEGEND

This legend is common to maps 1635A, 1636A, 1637A, 1638A, coloured legend blocks indicate map units that appear on this map

OVERLAP ASSEMBLAGES

TERTIARY

- **Tl** — *Lamprophyre*

JURASSIC AND CRETACEOUS

- **JKLR** — *LITTLE RIVER STOCK: granodiorite and quartz monzonite*

PERMIAN OR YOUNGER

- **Pp** — *Quartz porphyry rhyolite*

QUESNEL TERRANE

TRIASSIC AND JURASSIC
NORIAN AND (?) YOUNGER
QUESNEL RIVER GROUP ($_{u}T\grave{a}_{1}$-TJb)

- **TJb** — *Augite porphyry basalt breccia, minor flows, tuff and tuffaceous argillite; local andesitic basalt*
- **TJa** — *Basaltic tuff and breccia, generally fine grained; argillite, flows, chert*

UPPER TRIASSIC
KARNIAN AND (?) NORIAN

- **$_{u}T\grave{a}_{1}$** — *Phyllite, argillite, slaty argillite, quartzite, schist, minor greenstone (subgreenschist to amphibolite (kyanite) facies of metamorphism); $_{u}T\grave{a}_{1}g$, conglomerate*
- **$_{u}T\grave{a}_{3}$** — *Undivided $_{u}T\grave{a}_{1}$ and greenstone, augite-porphyry breccia, tuff breccia, tuff; possible dykes and sills (subgreenschist and greenschist facies of metamorphism)*

SLIDE MOUNTAIN TERRANE

UPPER PALEOZOIC
MISSISSIPPIAN TO PERMIAN
SLIDE MOUNTAIN GROUP (PMub-$_{u}$PA)

- **$_{u}$PA** — *ANTLER FORMATION: pillow basalt, breccia, diorite, chert, greywacke, (minor limestone?); $_{u}$PAu , serpentinite; $_{u}$PAs , chert, minor basalt and diorite*
- **$_{u}$Pc** — *CROOKED AMPHIBOLITE: undifferentiated; $_{u}$PCu , serpentinite and sheared ultramafic rock; $_{u}$PCt , talcose altered ultramafic rock; $_{u}$PCa , amphibolite*

PALEOZOIC OR MESOZOIC

- **PMub** — *Serpentinite and peridotite (as mapped by Campbell, 1978)*

BARKERVILLE TERRANE

LOWER PERMIAN

- **PS** — *Sugar limestone: grey crinoidal limestone, minor grey chert*

UPPER PALEOZOIC?
SNOWSHOE GROUP (PS-$_{u}$PIM)

- **$_{u}$PIM** — *ISLAND MOUNTAIN AMPHIBOLITE: amphibolite, minor siliceous mylonite*
- **$_{u}$PSc** — *Orange weathering fuchsite-bearing ankeritic carbonate*
- **$_{u}$PHM** — *Hardscrabble Mountain succession: black siltite and phyllite, grey micaceous quartzite, limestone, minor metatuff?; $_{u}$PHMs greywacke, muddy conglomerate*

PALEOZOIC?

- **PB** — *Braico succession: marble*
- **Pi** — *Foliated diorite and augite porphyry basalt, gabbroic rocks; includes undifferentiated diabase, diorite*

PALEOZOIC
QUESNEL LAKE GNEISS

- **PQL** — *Light grey potassium feldspar porphyritic granitic orthogneiss*

PALEOZOIC
SNOWSHOE GROUP (HR-PE)

- **PE** — *Eaglesnest succession: olive and grey micaceous quartzite and phyllite*
- **PD** — *Downey succession: olive and grey micaceous quartzite and phyllite, and undifferentiated rocks; PDa , amphibolite, includes some marble, quartzite and schist; PDc , marble, includes some phyllite, schist, quartzite and amphibolite; PDp , phyllite, schist, metatuff, includes some marble, quartzite and amphibolite; PDv , metatuff, metadiorite, includes some marble, phyllite, schist and amphibolite; (metamorphism ranges from chlorite to kyanite grade)*
- **PA** — *Agnes succession: quartzite clast conglomerate, quartzite, minor limy conglomerate*
- **PGP** — *Goose Peak succession: quartzite, minor conglomerate*
- **PHR** — *Harveys Ridge succession: dark grey and grey micaceous quartzite, black quartzite and interbedded dark grey phyllite, schist, siltite, and minor micritic limestone and undifferentiated rocks; PHRc , limestone and limestone conglomerate; PHRs , purple grey very micaceous quartzite and black phyllite; PHRv , grey slate and green metatuff, in part calcareous*

HADRYNIAN OR PALEOZOIC

- **HPT** — *Tom succession: olive grey micaceous quartzite, phyllite and schist*

HADRYNIAN?

- **HKE** — *Keithley succession: grey and olive, fine micaceous quartzite and phyllite, minor marble; HKEm , marble, phyllite; HKEp , grey and green phyllite, minor olive quartzite; HKEq , white to dark grey quartzite*
- **HKK** — *Kee Khan marble: marble, calcareous sandstone, micaceous quartzite, green and grey phyllite, in part calcareous*
- **HT** — *Tregillus succession: grey and olive-grey micaceous quartzite, phyllite and schist; undifferentiated HTg , conglomerate*
- **HR** — *Ramos succession: olive and olive grey micaceous quartzite, and phyllite, light brown and grey sandstone and undifferentiated rocks; HRs , phyllite, schist, quartzite, calc-silicate rocks, may be partly equivalent to HKE ; HRc , limestone, calcareous quartzite; HRp , black siltite, phyllite and slate, may be partly equivalent to PHR ; HRq , olive and grey slate and micaceous quartzite, may be part of HKE*
- **HPS** — *Snowshoe Group undifferentiated: HR to PE , mainly PHR to PE*

CARIBOO TERRANE

PERMIAN AND/OR TRIASSIC

- **PTs** — *Olive and grey greywacke and slate*

PENNSYLVANIAN

- **Pc** — *Grey fusulinid and pelletoidal limestone*

MIDDLE PENNSYLVANIAN

- **PAA** — *ALEX ALLAN FORMATION: black micritic limestone, grey and black shale*

ORDOVICIAN TO MISSISSIPPIAN
MISSISSIPPIAN OR YOUNGER
BLACK STUART GROUP (SDBs-Mas)

- **MBS** — *Sandstone unit: olive grey micaceous and white quartzite, black and pink chert*

LOWER MISSISSIPPIAN

- **MG** — *GREENBERRY FORMATION: crinoidal limestone, chert, dolostone*

UPPER DEVONIAN AND LOWER MISSISSIPPIAN

- **DMG** — *GUYET FORMATION: muddy and sandy conglomerate and breccia, granule quartzite and slate*

MIDDLE AND/OR UPPER DEVONIAN

- **DW** — *WAVERLY FORMATION: schistose, calcareous, basaltic tuff, and volcaniclastics, pillow basalt, minor siltite*

UPPER ORDOVICIAN AND DEVONIAN TO MISSISSIPPIAN OR YOUNGER

- **OMBS** — *Black pelite unit: black slate, argillite and cherty argillite, black limestone, dolostone and silicified limestone (in part amphiporal)*

UPPER SILURIAN AND LOWER DEVONIAN

- **SDBS** — *Chert-carbonate unit: light to dark grey chert breccia, grey limestone matrix, dolostone granule to pebble breccia, limestone matrix, chert-quartz-dolostone conglomerate to breccia*

CAMBRIAN TO (?) DEVONIAN

- **ЄDBS** — *Black Stuart formation (as used by Campbell, 1978)*

HADRYNIAN AND CAMBRIAN
LOWER TO (?) UPPER CAMBRIAN
CARIBOO GROUP (HЄ-ЄDC)

- **ЄDC** — *DOME CREEK FORMATION: dark shale and limy shale*

LOWER CAMBRIAN

- **ЄM** — *MURAL FORMATION: grey limestone, minor shale and argillite*

HADRYNIAN AND/OR CAMBRIAN

- **HЄM** — *MIDAS FORMATION: dark siltstone and quartzite, minor shale and argillite*
- **HЄYP** — *YANKS PEAK FORMATION: grey and white, minor pink and green quartzite, minor siltstone and argillite*
- **HЄU** — *MIDAS, YANKS PEAK AND YANKEE BELLE FORMATIONS: undivided*

HADRYNIAN (WINDERMERE)

- **HYB** — *YANKEE BELLE FORMATION: green and grey thin bedded argillite, shale, minor quartzite and limestone; local phyllite and schist*
- **HC** — *CUNNINGHAM FORMATION: grey limestone, minor shale, argillite and dolostone*
- **HI** — *ISAAC FORMATION: dark phyllite, calcareous phyllite, slate, argillite, and minor limestone and micaceous quartzite*
- **HЄCU** — *Cariboo Group undifferentiated:*

HADRYNIAN
KAZA GROUP

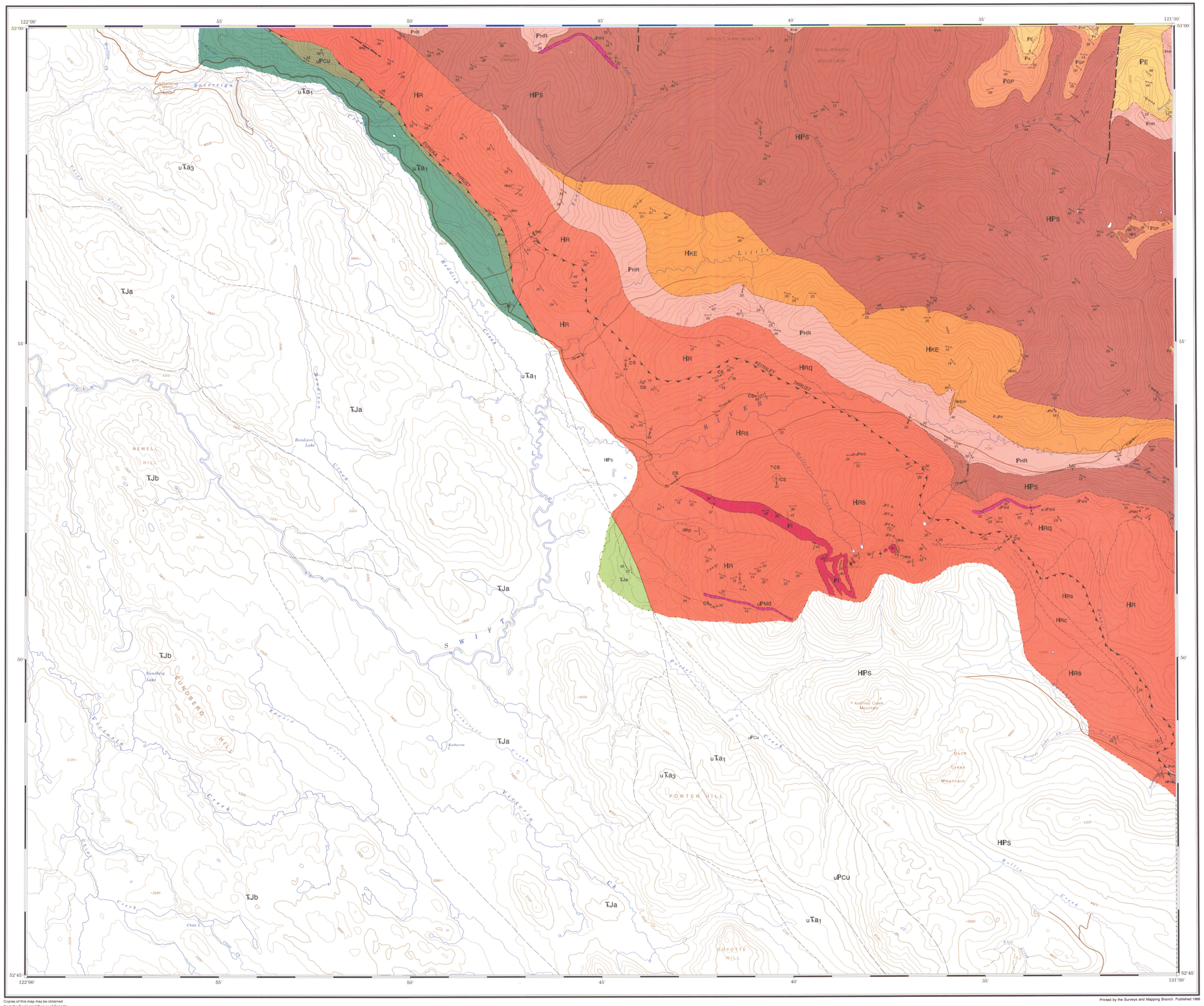
- **HK** — *Greywacke, argillite, phyllite, schist, minor pebble conglomerate*

IGNEOUS ROCKS OF UNKNOWN TERRANE AFFINITY

MISSISSIPPIAN OR YOUNGER

- **$_{u}$PMd** — *Diabase, diorite*

Calc-silicate rocks (isolated outcrops) . . . . . CS ×
Geological boundary (defined, approximate, assumed)
Bedding, tops known (inclined, overturned)
Bedding, tops unknown (inclined, vertical)
Bedding parallel to cleavage (inclined, overturned)
Cleavage, first generation (horizontal, inclined, vertical)
Cleavage, second generation (inclined, vertical)
Fault (defined, approximate, assumed) solid circle indicates downthrow side
Thrust fault (defined, approximate or assumed) hanging wall teeth
Anticline (upright, overturned) arrow indicates plunge
Syncline (upright, overturned) arrow indicates plunge
Antiform
Minor fold axes (first generation, horizontal, second generation, horizontal) 10 15
Pebble long axis, average trend and plunge
Fan axis
Fossil locality . . . . . F
Garnet isograd (half moon on higher grade side)
Border of detailed geology as mapped by Struik, reconnaissance geology beyond the border is from the McBride map area (Campbell, Mountjoy and Young, 1973) and the Quesnel Lake map area (Campbell, 1978)



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INDEX MAP

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1973: Geology of McBride map area, British Columbia; Geological Survey of Canada, Paper 72-35

Recommended citation:
Struik, L.C.
1988: Geology, Swift River, Cariboo Land District, British Columbia; Geological Survey of Canada, Map 1637A, scale 1:50 000

Canada

Geology by L.C. Struik, 1977–1982

Geological cartography by D.G. Brown, Geological Survey of Canada

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base map at the same scale published by the Surveys and Mapping Branch in 1976. Roads were revised by the Geological Survey of Canada for this edition

MAP 1637A

GEOLOGY

SWIFT RIVER

CARIBOO LAND DISTRICT

BRITISH COLUMBIA

Scale 1:50 000 - Échelle 1/50 000

Kilometres 1 — 0 1 2 3 4 — Kilomètres

Universal Transverse Mercator Projection
Projection transverse universelle de Mercator

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Approximate magnetic declination 1986, 23°01' East, decreasing 14.8 annually.

Elevations in feet above mean sea level

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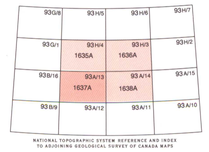

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SWIFT RIVER
CARIBOO LAND DISTRICT
BRITISH COLUMBIA

1637A

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