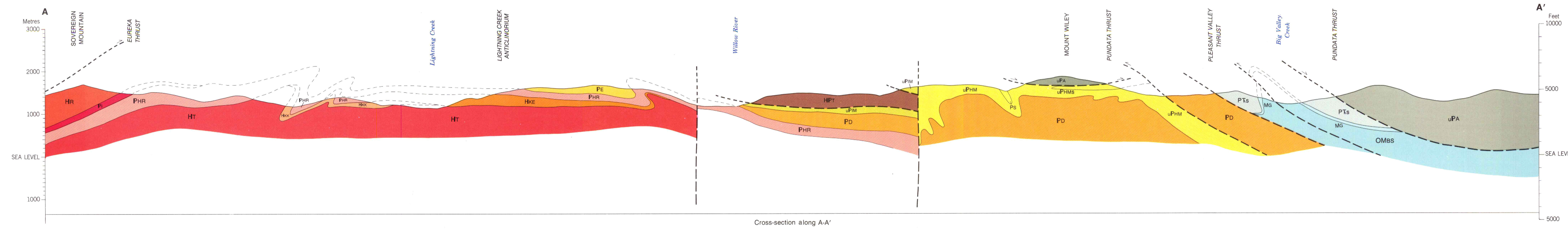
Energy, Mines and Resources Canada — Énergie, Mines et Ressources Canada
Geological Survey of Canada — Commission géologique du Canada



Cross-section along A-A′

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 (uTRa1-TRJb)

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*

UPPER TRIASSIC
KARNIAN AND (?) NORIAN

uTRa1	*Phyllite, argillite, slaty argillite, quartzite, schist, minor greenstone (subgreenschist to amphibolite (kyanite) facies of metamorphism); uTRa1g, conglomerate*
uTRa3	*Undivided uTRa1 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-uPA)

uPA	*ANTLER FORMATION: pillow basalt, breccia, diorite, chert, greywacke, (minor limestone?); uPAu, serpentinite; uPAs, chert, minor basalt and diorite*
uPc	*CROOKED AMPHIBOLITE: undifferentiated; uPcu, serpentinite and sheared ultramafic rock; uPct, talcose altered ultramafic rock; uPca, 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 (PB-uPIM)

uPIM	*ISLAND MOUNTAIN AMPHIBOLITE: amphibolite, minor siliceous mylonite*
uPSc	*Orange weathering fuchsite-bearing ankeritic carbonate*
uPHM	*Hardscrabble Mountain succession: black siltite and phyllite, grey micaceous quartzite, limestone, minor metatuff?; uPHMS, greywacke, muddy conglomerate*

PALEOZOIC?

PB	*Bralco 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

PTRs	*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-MBS)

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

€DBS	*Black Stuart formation (as used by Campbell, 1978)*

HADRYNIAN AND CAMBRIAN
LOWER TO (?) UPPER CAMBRIAN
CARIBOO GROUP (HI-€DC)

€DC	*DOME CREEK FORMATION: dark shale and limy shale*

LOWER CAMBRIAN

l€M	*MURAL FORMATION: grey limestone, minor shale and argillite*

HADRYNIAN AND/OR CAMBRIAN

H€M	*MIDAS FORMATION: dark siltstone and quartzite, minor shale and argillite*
H€YP	*YANKS PEAK FORMATION: grey and white, minor pink and green quartzite, minor siltstone and argillite*
H€u	*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*
H€Cu	*Cariboo Group undifferentiated:*

HADRYNIAN
KAZA GROUP

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

IGNEOUS ROCKS OF UNKNOWN TERRANE AFFINITY

MISSISSIPPIAN OR YOUNGER

uPMd	*Diabase, diorite*

Calc-sillicate 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
Garnet isograd (half moon on higher grade side)
Border of detailed geology as mapped by Struik, reconnaisance geology beyond the border is from the McBride map area (Campbell, Mountjoy and Young, 1973) and the Quesnel Lake map area (Campbell, 1978)

REFERENCES

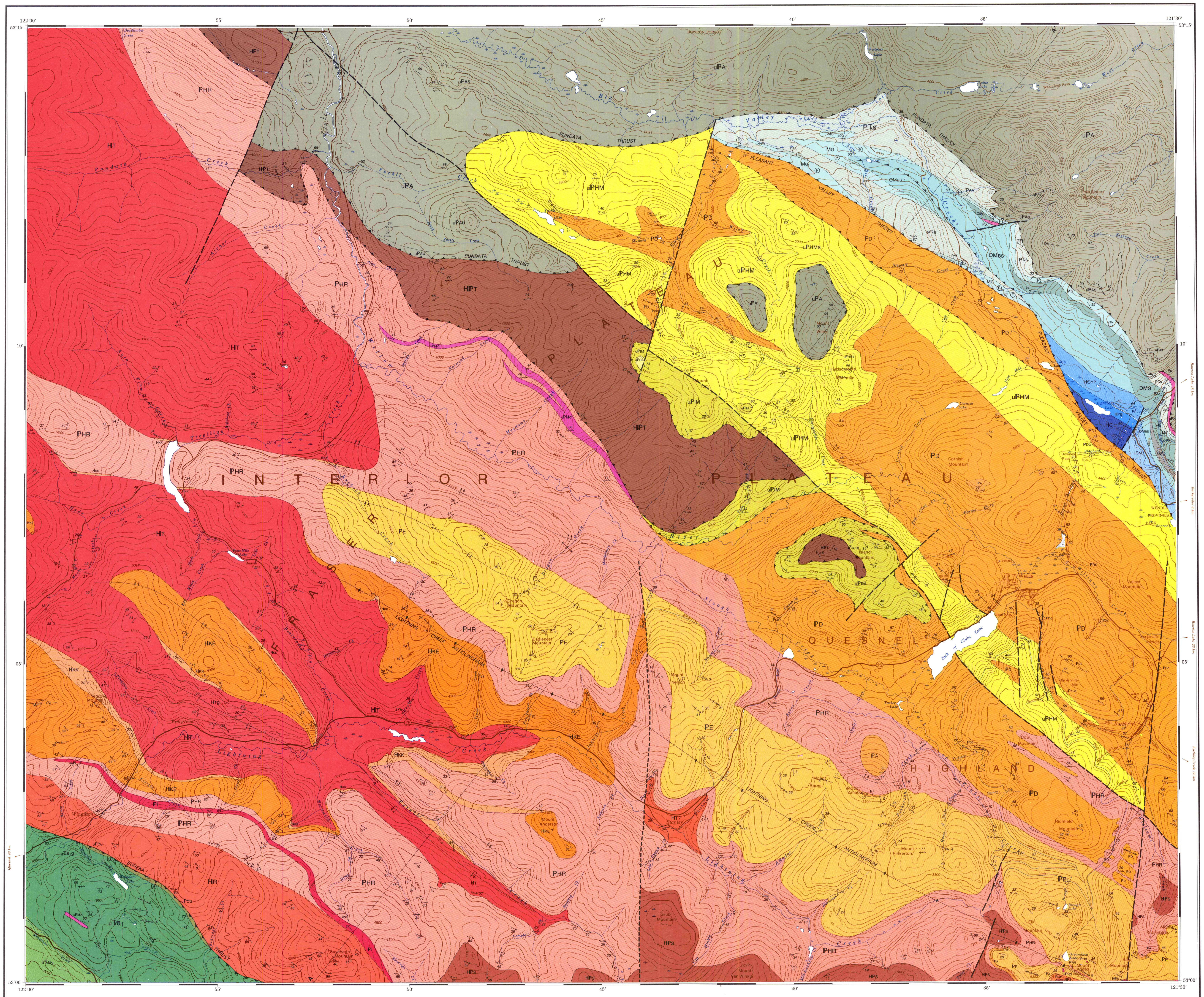
Campbell, R.B.
1978: Quesnel Lake (93A) map area; Geological Survey of Canada, Open File 574.

Campbell, R.B., Mountjoy, E.W., and Young, F.G.
1973: Geology of McBride map area, British Columbia; Geological Survey of Canada, Paper 72-35

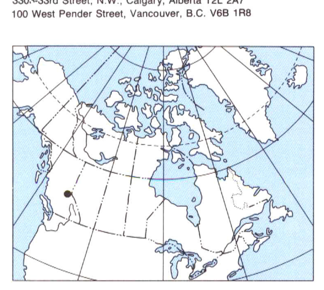
Recommended citation:
Struik, L.C.
1988: Geology, Wells, Cariboo Land District, British Columbia; Geological Survey of Canada, Map 1635A, scale 1:50 000

Canada

This map has been produced from a scanned version of the original map
Reproduction par numérisation d'une carte sur papier



Copies of this map may be obtained from the Geological Survey of Canada:
601 Booth Street, Ottawa, Ontario K1A 0E8
3303-33rd Street, N.W., Calgary, Alberta T2L 2A7
100 West Pender Street, Vancouver, B.C. V6B 1R8



INDEX MAP

MAP 1635A
GEOLOGY
WELLS
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
© Crown Copyrights reserved — © Droits de la Couronne réservés

Geology by L.C. Struik, 1977–1982

Geological cartography by R.Y. Potvin, Geological Survey of Canada

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

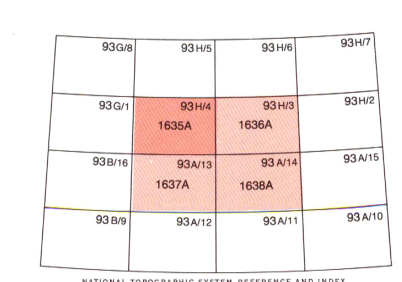
Base map at the same scale published by the Surveys and Mapping Branch in 1981. Roads were revised by the Geological Survey of Canada for this edition

Printed by the Surveys and Mapping Branch. Published 1988

Copies of the topographical editions covering this map area may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, Ontario K1A 0E9

Approximate magnetic declination 1986, 23°11′ East, decreasing 15.0 annually

Elevations in feet above mean sea level



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

WELLS
CARIBOO LAND DISTRICT
BRITISH COLUMBIA