Energy, Mines and

Énergie, Mines et

LEGEND This legend is common to maps 1635A, 1636A, 1637A, 1638A,

coloured legend blocks indicate map units that appear on this map

OVERLAP ASSEMBLAGES

JURASSIC AND CRETACEOUS JKLR LITTLE RIVER STOCK: granodiorite and quartz monzonite

PERMIAN OR YOUNGER

QUESNEL TERRANE

Quartz porphyry rhyolite

TRIASSIC AND JURASSIC NORIAN AND (?) YOUNGER

QUESNEL RIVER GROUP (uTa1-TJb) Augite porphyry basalt breccia, minor flows, tuff and tuffaceous argillite; local andesitic basalt

Basaltic tuff and breccia, generally fine grained; argillite, TJa | Basaitic tuli ai

UPPER TRIASSIC KARNIAN AND (?) NORIAN

Phyllite, argillite, slaty argillite, quartzite, schist, minor greenstone subgreenschist to amphibolite (kyanite) facies of metamorphism);

Undivided uTa₁ 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)

ANTLER FORMATION: pillow basalt, breccia, diorite, chert, greywacke, (minor limestone?); uPAu, serpentinite; uPAs, chert, minor basalt and diorite

and sheared ultramafic rock; uPct, talcose altered ultramafic rock; uPca, amphibolite PALEOZOIC OR MESOZOIC

CROOKED AMPHIBOLITE: undifferentiated; uPcu, serpentinite

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

LOWER PERMIAN

Sugar limestone: grey crinoidal limestone, minor grey chert

BARKERVILLE TERRANE

UPPER PALEOZOIC? SNOWSHOE GROUP (PB-uPIM)

ISLAND MOUNTAIN AMPHIBOLITE: amphibolite, minor siliceous

uPSC Orange weathering fuchsite-bearing ankeritic carbonate

Hardscrabble Mountain succession: black siltite and phyllite, grey uPHM micaceous quartzite, limestone, minor metatuff?; uPHMs, greywacke, muddy conglomerate

PALEOZOIC? PB Bralco succession: marble

Foliated diorite and augite porphyry basalt, gabbroic rocks;

includes undifferentiated diabase, diorite

QUESNEL LAKE GNEISS PQL Light grey potassium feldspar porphyritic granitic orthogneiss

PALEOZOIC

SNOWSHOE GROUP (HR-PE) Eaglesnest succession: olive and grey micaceous quartzite and

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

Agnes succession: quartzite clast conglomerate, quartzite, minor limy conglomerate

Goose Peak succession: quartzite, minor conglomerate

m succession: olive grey micaceous quartzite, phyllite and

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

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

Kee Khan marble: marble, calcareous sandstone, micaceous quartzite, green and grey phyllite, in part calcareous

regillus succession: grey and olive-grey micaceous quartzite, phyllite and schist; undifferentiated HTg, conglomerate

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

nowshoe Group undifferentiated: HR to PE, mainly PHR to PE

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 Colombia; Geological Survey of Canada,
Paper .72-35

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

CARIBOO TERRANE

122°00′

PERMIAN AND/OR TRIASSIC PTs Olive and grey greywacke and slate

PENNSYLVANIAN Pc Grey fusulinid and pelletoidal limestone

MIDDLE PENNSYLVANIAN

ALEX ALLAN FORMATION: black micritic limestone, grey and black shale

ORDOVICIAN TO MISSISSIPPIAN MISSISSIPPIAN OR YOUNGER

BLACK STUART GROUP (SDBS-MBS)

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

YOUNGER

LOWER MISSISSIPPIAN GREENBERRY FORMATION: crinoidal limestone, chert, dolostone

UPPER DEVONIAN AND LOWER MISSISSIPPIAN GUYET FORMATION: muddy and sandy conglomerate and

breccia, granule quartzite and slate MIDDLE AND/OR UPPER DEVONIAN

WAVERLY FORMATION: schistose, calcareous, basaltic tuff, and volcaniclastics, pillow basalt, minor siltite UPPER ORDOVICIAN AND DEVONIAN TO MISSISSIPPIAN OR

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

UPPER SILURIAN AND LOWER DEVONIAN Chert-carbonate unit: light to dark grey chert breccia, grey SDBS 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-CDc) €DC DOME CREEK FORMATION: dark shale and limy shale

LOWER CAMBRIAN

ICM MURAL FORMATION: grey limestone, minor shale and argillite

HADRYNIAN AND/OR CAMBRIAN MIDAS FORMATION: dark siltstone and quartzite, minor shale

YANKS PEAK FORMATION: grey and white, minor pink and green quartzite, minor siltstone and argillite

MIDAS, YANKS PEAK AND YANKEE BELLE FORMATIONS: H€u undivided

HADRYNIAN (WINDERMERE) YANKEE BELLE FORMATION: green and grey thin bedded

argillite, shale, minor quartzite and limestone; local phyllite and UNNINGHAM FORMATION: grey limestone, minor shale, argillite

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

Calc-sillicate rocks (isolated outcrops) . . . Geological boundary (defined, approximate, assumed) ... / 9 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.

Minor fold axes (first generation, horizontal, second generation, horizontal) . . 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) . .

> 100 West Pender Street, Vancouver, B.C. V6B 1R8 INDEX MAP

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

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

MAP 1635A **GEOLOGY**

WELLS CARIBOO LAND DISTRICT BRITISH COLUMBIA

Scale 1:50 000 - Échelle 1/50 000 Universal Transverse Mercator Projection Projection transverse universelle de Mercator © Crown Copyrights reserved © Droits de la Couronne réservés

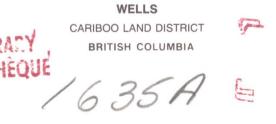
Energy, Mines and Resources, Ottawa, Ontario K1A 0E9 Approximate magnetic declination 1986, 23°11' East, decreasing 15.0 annually

Elevations in feet above mean sea level

JUNE 6 1938 GEOLOGICAL SURVEY

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