



This map represents a preliminary compilation of the Kootenay River map-sheet on a scale of 1:1,000,000. The final compilation may result in some different definition of map-units with greater detail and different emphasis. Many interpretations presented herein may be significantly altered in the final compilation.

Information on sedimentary and volcanic rocks was compiled under the direction of A.V. Okulitch. The information on the plutonic rocks was compiled by G.J. Woodsworth. R.A. Price, Queens University, R.G. Yates, J.E. Harrison, and K.E. Fox, U.S. Geological Survey, and G.B. Leech, Geological Survey of Canada provided extensive assistance.

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EXPLANATION

THRUST FAULTS (defined, approximate) [Symbol]
NORMAL FAULTS [Symbol]
FAULTS (mainly normal) [Symbol]
GEOLOGICAL CONTACTS [Symbol]

COMPILED BY
A.V. Okulitch and G.J. Woodsworth

SOURCE OF INFORMATION
Published and unpublished maps and reports of Geological Survey of Canada, United States Geological Survey, and B.C. Dept. of Mines and Petroleum Resources.

LEGEND

SEDIMENTARY, METAMORPHIC & VOLCANIC ROCKS

- QUATERNARY AND RECENT**
Q Glacial deposits, recent alluvium
- TERTIARY**
MIOCENE
mpTv Basalt, plateau lava, minor sediments. COLUMBIA R. Lavas
- Eocene-Oligocene**
eoTv Basalt, andesite, volcanoclastic and flow rocks, minor sediments. KAMLOOPS and PHOENIX Groups; SANPOIL Volcanics, KLONDIKE Mtn. and O'BRIEN Cr. Fms.
- PALEOCENE**
eTs Sandstone, conglomerate, tuff. KAMLOOPS Group; KISHENEWN, KETTLE R., and SOPHIE Mtn. Fms.
- CRETACEOUS**
UPPER CRETACEOUS
pTp Sandstone, shale. PORCUPINE HILLS and PASKAPOO Fms.
uKs Sandstone, shale. ALBERTA Group; EDMONTON, BRAZEAU, BELLY R., WILLOW Cr., ST. MARY R., BEARPAK, MILK R., KOOTENAI, etc. Fms.
- LOWER CRETACEOUS**
IKs Sandstone, shale, coal, conglomerate, volcanic breccia. BLAIRMORE Group; CROWSNEST Fms.
- JURASSIC-CRETACEOUS**
JKs Sandstone, siltstone, mudstone, coal, conglomerate. KOOTENAY and NIKANASSIS Fms.
- JURASSIC**
JF Shale, siltstone, sandstone, limestone. FERRIE Group (includes HALL Fm. in the Nelson map-area).
- TRIASSIC-JURASSIC**
Rjv Greenstone, tuff, augite, sediments. NICOLA and ROSSLAND Groups; ELISE and ARCHIBALD Fms.
RJs Shale, argillite, limestone, conglomerate, schist, sandstone. NICOLA, SLOGAN, ROSSLAND and MYR Groups; SICAMOUS and ARCHIBALD Fms.
- PERMIAN-TRIASSIC**
PRv Greenstone, basalt, andesite, lava, tuff, breccia, serpentinite. KASLO Group; TSALKOM Fm.
- CARBONIFEROUS-PERMIAN**
PPT Argillite, quartzite, greenstone, limestone, conglomerate. THOMPSON Assemblage (including CACHE CREEK (eastern facies), CHAPPERON, KOBAY and ANARCHIST Groups; Mt. ROBERTS Fm.)
PPcc Limestone, greenstone, chert, argillite. CACHE CREEK Group (western type) facies.
Ms Slate, argillite, chert schist, limestone, conglomerate. MILFORD Group; FLAGSTAFF Mtn. Sequence.
- DEVONIAN-MISSISSIPPIAN**
DMs Greenstone, pillow lava, limestone, shale. SLIDE Mtn. Group; FENNEL and GUYET Fms.
- DEVONIAN TO TRIASSIC**
DRs TRIASSIC shale, sandstone, limestone. SPRAY R. Group. PENNSYLVANIAN-DEVIAN sandstone, shale, chert. ROCKY Mtn. Group. MISSISSIPPIAN limestone, shale. RUBLE Group; BARKER, EXHIBIT, ETHERINGTON, Mt. HEAD, LIVINGSTON, HANNAN, etc. Fms. UPPER DEVONIAN limestone, sandstone, shale. FAIRBIRD Group; PALLISER, and ALEXO Fms.
- CAMBRIAN-DEVONIAN (pelitic facies)**
EDp DEVONIAN limestone, shale. STARBUCK, Mt. FORSTER, HARROGATE and CEDARED Fms.
OROVICIAN-SILURIAN limestone. BEAVERFOOT Fm.
OROVICIAN sandstone, shale. Mt. WILSON and SLENDELE Fms.
UPPER CAMBRIAN-OROVICIAN limestone, shale. MCKAY Group.
UPPER CAMBRIAN shale, limestone. CANYON Cr., OTTERTAIL, JUBILEE and CHANCELLOR Fms.
- CAMBRIAN-SILURIAN (carbonate facies)**
EOc OROVICIAN-SILURIAN limestone. BEAVERFOOT Fm.
OROVICIAN limestone, shale. Mt. WILSON and SLENDELE Fms.
OUTRAM and SURVEY Pk. Fms.
UPPER CAMBRIAN limestone, shale. LYNX Group.
MIDDLE CAMBRIAN limestone, shale. ARCTOMYS, PINA, ELDON, CATHEDRAL, STEPHEN, Mt. WHYTE Fms.
- LOWER PALEOZOIC**
IPs Argillite, limestone, schist, phyllite, greenstone. LARDEAU Group; BROADVIEW, EAGLE BAY, NELSON, METALINE and ACTIVE Fms.; LEDBETTER Slate, GRASS Mtn. Sequence.
- LOWER CAMBRIAN**
ICs Quartzite, limestone, phyllite, argillite. HUNNILL and GOG Group; ENGER, BASHOIT, MONTICAN, DONALD, RENO, LARA, QUARTZITE RANGE Fms.; MATILEN Phyllite, EMERALD and REEVES Limestone Members.

- PALEOZOIC (and older?)**
Pns Orthogneiss, foliated and massive granitic rocks, paragneiss, schist, minor amphibolite and marble. OKANAGAN Metamorphic and Plutonic Complex.
Pgn Orthogneiss. OKANAGAN Metamorphic and Plutonic Complex.
PPns Paragneiss, schist, amphibolite, marble, orthogneiss, pegmatite. SHUSWAP Metamorphic Complex.
PPgn Gneissic granitoid rocks, layered gneiss. Core zones of Thor-Odin and Frenchman's Cap Domes, Shuswap Metamorphic Complex.
- PROTEROZOIC (WINDERMERE)**
Hs Sandstone, conglomerate, limestone, grit, minor volcanic rocks. MIETTE and HORSETIEFF Cr. Groups; TOBY, SHEEDROP, and MONK Fms.; IRENE and LEOLA Volcanics; Silver Creek and Chase Fms. near Shuswap Lake
- HELIXIAN (BELT-PURCELL)**
Hs Quartzite, dolomite, conglomerate, sandstone, shale. BELT-PURCELL Supergroup and related; PRIEST R. Group.
Hns Paragneiss, schist. BELT-PURCELL Supergroup.
Hsu Quartzite, argillite, dolomite, limestone, siltstone. MISSOULA Group; Mt. NELSON, DITCH Cr., GATWAY, PHILLIPS and ROOSVILLE Fms.
Hsm Limestone, argillite, quartzite, andesite breccia, tuff. STEVEN, KITCHENER, WALLACE, HELENA, SHEPPARD Fms.; PURCELL Lava.
Hsl Quartzite, argillite, siltstone. RAVALLI Group; CRESTON, ALDRIDGE, FORT STEELE, PRITCHARD, WATERTON, APPEKUNY, ALTYN, GRINNELL and WERNER Pk. Fms.

- PLUTONIC ROCKS**
- CRETACEOUS AND/OR TERTIARY**
LATE CRETACEOUS AND/OR EARLY TERTIARY
Ktm CORRELL INTRUSIONS: monzonite, monzodiorite; lesser syenite, diorite, granodiorite, quartz monzonite.
Ktdg Predominantly granodiorite, quartz diorite; lesser diorite, monzonite, quartz monzonite, gneiss, migmatite.
Ktgm Quartz monzonite, granite, alkasite; lesser granodiorite, quartz diorite, gneiss, migmatite.
- CRETACEOUS EARLY AND/OR MID-CRETACEOUS**
EKgm Quartz monzonite, granite; lesser granodiorite, quartz diorite.
EKgd Granodiorite, quartz diorite; lesser quartz monzonite.
- JURASSIC MIDDLE AND/OR LATE JURASSIC**
Jgm Quartz monzonite, lesser granodiorite.
Js KUSKANAW BATHOLITH: syenite, leuco-monzonite, leuco-quartz monzonite.
Jg Granodiorite, quartz diorite, lesser quartz monzonite.
- PALEOZOIC LATE PALEOZOIC (mainly)**
Pab Ultramafic rocks; peridotite, serpentinite.
MIDDLE AND/OR LATE PALEOZOIC (?)
PIr ICE RIVER COMPLEX: syenite, ijolite, jacupirangite, gneiss.
Pgd ADAMANT PLUTON: granodiorite, quartz monzonite.
Pmz ADAMANT PLUTON: monzonite, monzodiorite.
Pgn Granodiorite, quartz monzonite, quartz diorite, gneiss, migmatite.
- DEVONIAN**
Dg Gneissic granitic rocks. Mt. FOWLER Batholith, CLACHNACUADINN Gneiss.
- PROTEROZOIC**
PDg HELLGRARING STOCK: granodiorite.
MPgd THOR-ODIN Orthogneiss

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