

# LEGEND

CENOZOIC

- QUATERNARY**
- PLEISTOCENE AND RECENT
- Q<sub>d</sub>** drift-covered area; till, alluvium, colluvium
- TERTIARY**
- EOCENE(?)
- E<sub>m</sub>** **McGREGOR INTRUSIONS**  
syenite; monzonite; shonkinite; related lamprophyre dykes and sills

MESOZOIC

- CRETACEOUS AND JURASSIC**
- BAYONNE GRANITIC SUITE (**K<sub>Bmc</sub>** to **J<sub>Bw</sub>**)
- K<sub>Bmc</sub>** **MIDGE CREEK STOCK**  
biotite-muscovite-epidote leucogranodiorite
- K<sub>Bhc</sub>** **HEATHER CREEK PLUTON**  
biotite-muscovite leucogranodiorite; pegmatite
- K<sub>Bdp</sub>** **DREWRY POINT INTRUSION**  
leucocratic biotite-epidote granodiorite, tonalite and quartz monzodiorite; garnet-bearing aplite and pegmatite
- K<sub>Bsm</sub>** **STEEPLE MOUNTAIN INTRUSION**  
leucocratic biotite-muscovite granodiorite, monzogranite and tonalite, commonly foliated; aplite and pegmatite; inclusions of country rocks  
**K<sub>Bsmg</sub>**-biotite-muscovite leucotonalite gneiss
- K<sub>Bsc</sub>** **SHAW CREEK INTRUSION**  
biotite leucogranodiorite with local potash feldspar megacrysts; garnet-bearing aplite and pegmatite
- J<sub>Bw</sub>** **WALL STOCK**  
biotite-hornblende-epidote granodiorite
- CRETACEOUS(?) OR JURASSIC(?)**
- NELSON GRANITIC SUITE (**J<sub>Nb</sub>** to **J<sub>Ngd</sub>**)
- J<sub>Nb</sub>** **BALDY PLUTON**  
foliated, leucocratic biotite granodiorite and tonalite with common potash feldspar megacrysts; many inclusions of country rocks
- J<sub>Np</sub>** **PROCTER PLUTON**  
foliated hornblende leucogranodiorite and biotite-epidote leucomonzogranite
- J<sub>Ngd</sub>** **NELSON BATHOLITH**  
foliated hornblende-biotite leucogranodiorite with potash feldspar megacrysts; minor biotite-hornblende diorite

PALEOZOIC

- SOUTH AND EAST OF SEEMAN CREEK FAULT**
- CAMBRIAN**
- MIDDLE CAMBRIAN
- €<sub>N</sub>** **NELWAY FORMATION**  
limestone, calcareous argillite, phyllite, slate
- LOWER CAMBRIAN
- €<sub>L</sub>** **LAIB FORMATION**  
mica schist, phyllite, argillite, micaceous quartzite; minor limestone  
**€<sub>L1</sub>** - Reeves limestone
- €<sub>R</sub>** **RENO FORMATION**  
massive quartzite, argillaceous quartzite, siliceous argillite, phyllite, mica schist
- LOWER CAMBRIAN AND HADRYNIAN(?)
- €<sub>QR</sub>** **QUARTZITE RANGE FORMATION**  
quartzite; minor argillaceous quartzite and schist  
**€<sub>QRm</sub>** - micaceous quartzite
- €<sub>OR2</sub>** cross-bedded orthoquartzite and micaceous quartzite; minor siltstone, argillite and phyllite
- €<sub>OR1</sub>** massive to cross-bedded orthoquartzite; minor phyllite
- €<sub>TS</sub>** **THREE SISTERS FORMATION**  
interbedded quartzite and micaceous quartzite; chlorite-muscovite schist; minor conglomerate and feldspathic quartzite  
**€<sub>TS2</sub>** - conglomerate
- €<sub>TS3</sub>** cross-bedded quartzite; grit interbeds
- €<sub>TS2</sub>** polymict conglomerate
- €<sub>TS1</sub>** interbedded quartzite-feldspathic grit and quartzite; quartz-pebble conglomerate; minor phyllite

PROTEROZOIC

- HADRYNIAN**
- WINDERMERE SUPERGROUP (**H<sub>M3</sub>** to **H<sub>T</sub>**)
- H<sub>M</sub>** **MONK FORMATION**  
pelitic schist; minor quartzite
- H<sub>M3</sub>** phyllite, graphitic phyllite, quartzite, grit; minor quartz-pebble conglomerate
- H<sub>M2</sub>** laminated limestone and marble
- H<sub>M1</sub>** phyllite, graphitic phyllite; minor quartzite
- H<sub>IV</sub>** **IRENE VOLCANIC FORMATION**  
massive to schistose greenstone and amphibolite; mafic tuff; minor pelite and marble
- H<sub>T</sub>** **TOBY FORMATION**  
polymict conglomerate
- HELIKIAN**
- PURCELL SUPERGROUP (**H<sub>LF2b</sub>** - **H<sub>LF2a</sub>**)
- LA FRANCE CREEK GROUP**
- H<sub>LF2b</sub>** pelite, quartzite, dolomite marble; minor calc-silicate  
**H<sub>LFa</sub>** - orthoquartzite
- H<sub>LF2a</sub>** thinly interbedded psammite and semipelite; minor pelite

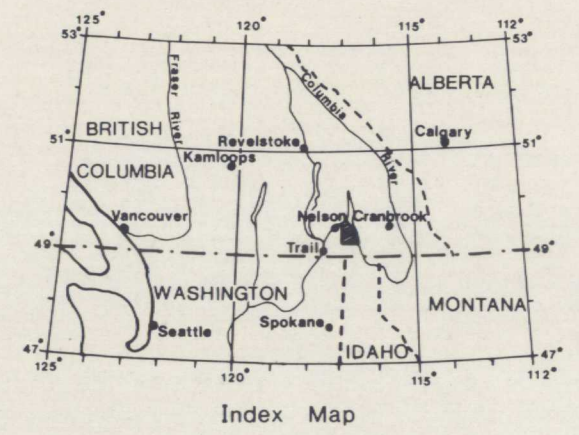
**NORTH AND WEST OF SEEMAN CREEK FAULT**

- TRIASSIC**
- UPPER TRIASSIC
- SLOCAN GROUP**
- T<sub>s</sub>** calcite marble, dolomite, calc-silicate, pelitic schist; minor quartzite  
meta-arkose, metagreywacke, breccia, amphibolite; minor marble
- PERMIAN AND (?) OLDER**
- LOWER PERMIAN AND (?) OLDER
- KASLO GROUP**
- P<sub>K</sub>** schistose to tuffaceous greenstone and amphibolite, cherty tuff; minor quartzite
- MISSISSIPPIAN TO PERMIAN**
- UPPER MISSISSIPPIAN TO LOWER PERMIAN
- MILFORD GROUP (MP<sub>M3</sub> to MP<sub>M1</sub>)**
- MP<sub>M</sub>** phyllite, schist, laminated limestone and marble; metachert, layered to schistose greenstone and amphibolite; minor quartz-pebble conglomerate, siliceous phyllite and quartzite
- MP<sub>M3</sub>** laminated and thinly banded metachert and tuffaceous greenstone; quartzite
- MP<sub>M2</sub>** greenstone and amphibolite
- MP<sub>M1</sub>** phyllite, laminated limestone; minor quartzite
- CAMBRIAN TO DEVONIAN**
- LARDEAU GROUP (P<sub>I2</sub> - P<sub>I1</sub>)**
- P<sub>I</sub>** **INDEX FORMATION**  
quartz-muscovite-biotite + garnet schist; amphibolite; calc-silicate schist and gneiss; pure and micaceous quartzites; calcite marble, dolomite, calcareous schist; quartz-biotite-feldspar gneiss
- P<sub>I2</sub>** interbedded quartzite and amphibolite; quartz-feldspar and calc-silicate gneisses; minor quartz-muscovite-biotite schist and marble
- P<sub>I1</sub>** amphibolite; hornblende-biotite schist and gneiss; minor quartz-muscovite-biotite schist
- CAMBRIAN**
- LOWER CAMBRIAN
- €<sub>B</sub>** **BADSHOT FORMATION**  
pure calcite marble, dolomite marble, calc-silicate
- €<sub>M</sub>** **MOHICAN FORMATION**  
quartz-mica schist; pure, feldspathic and micaceous quartzites; marble, calc-silicate, amphibolite
- HAMIL GROUP (€<sub>H2</sub> - €<sub>H1</sub>)**
- €<sub>H2</sub>** pelitic and semi-pelitic schists; interbedded pure, micaceous and feldspathic quartzites; amphibolite  
**€<sub>H2a</sub>** - calc-silicate, marble
- €<sub>H1</sub>** pure and micaceous quartzites; minor schist  
**€<sub>H1a</sub>** - calcite and dolomite marble

**HADRYNIAN**

- WINDERMERE SUPERGROUP (**H<sub>M</sub>** to **H<sub>T</sub>**)
- H<sub>M</sub>** **MONK FORMATION**  
pelitic schist; minor quartzite, micaceous quartzite, grit and marble
- H<sub>IV</sub>** **IRENE VOLCANIC FORMATION**  
amphibolite; minor schist, carbonate and dolomite marble
- H<sub>T</sub>** **TOBY FORMATION**  
interbedded micaceous quartzite and quartzite; conglomerate; calc-silicate schist and gneiss

GEOLOGICAL SURVEY OF CANADA  
COMMISSION GÉOLOGIQUE DU CANADA  
DEPARTMENT OF ENERGY, MINES AND RESOURCES  
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES



Geology by Alain D. Leclair 1981-83. Includes areas west of 117°00', mapped by McAllister (1951) and Little (1960).

Topographic base-map produced by the Surveys and Mapping Branch; Department of Energy, Mines and Resources 1980-81.

In the National Topographic System this area comprises parts of 82 F/6, 82 F/7, 82 F/10 and 82 F/11.

Mean magnetic declination is 20°24' easterly in 1980, decreasing 9.6' annually.

## SYMBOLS

- Geological boundary
- defined, approximate, assumed
  - gradational and inferred (in granitoid rocks)
- Fault: defined, approximate, assumed
- Bedding
- facing known: inclined, vertical, overturned
  - facing unknown: inclined, vertical
- Foliation<sup>1</sup> (cleavage, schistosity, gneissosity): inclined, vertical
- Foliation (in granitoid rocks): inclined, vertical, dip unknown
- Lineation
- mineral and intersection lineations
  - microfold axis
- Minor fold<sup>1,2</sup> (axial plane and fold axis)
- vergence determined (e.g. westerly)
  - vergence undetermined
  - no vergence (intrafolial folds)
- Fracture, joint: inclined, vertical, dip unknown
- Overturned fold (trace of axial surface)
- anticline: defined, approximate
  - syncline: defined, approximate
  - antiform: defined, approximate
  - synform: defined, approximate
- Radiometric age determination locality
- U-Pb, zircon
  - K-Ar, hornblende
- Location of vertical structure section

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<sup>1</sup> Number of ticks indicates relative generation  
<sup>2</sup> Vergence is the direction of shear implied by the asymmetry of the fold