

STRATIFIED AND INTRUSIVE ROCKS

GEOLOGICAL SYMBOLS

Stratified Rocks

Tertiary and Quaternary

- Qs** unconsolidated fluvial and glacial sediments
- Qv** Stikine volcanic suite: olivine+plagioclase-phyric basaltic lavas, tephra, and scoria deposits

Jurassic

**BOWSER LAKE GROUP** *biostratigraphic limits: post-Middle Bajocian*  
*known biostratigraphic range: Middle Bajocian to Kimmeridgian*

- JrB** undifferentiated sedimentary rocks
- JrB1** chert pebble to cobble conglomerate, interstratified sandstone
- JrB2** fine- to coarse-grained sandstone, minor interstratified conglomerate or mudstone
- JrB3** thinly-bedded mudstone and siltstone

**HAZELTON GROUP** *biostratigraphic limits: post-Rhaetian, pre-Middle Bajocian*  
*known biostratigraphic range: Hettangian-Sinemurian to Middle Bajocian*

- JrH** sedimentary and volcanic rocks, undifferentiated

**Salmon River Formation** *biostratigraphic limits: post-Upper Aalenian, pre-Middle Bajocian*  
*known biostratigraphic range: Bajocian*

- JrH5** bimodal volcanic rocks and interstratified sedimentary rocks

Troy Ridge Member

- JrH5S** intercalated sedimentary rocks
- JrH5Sa** thinly-bedded carbonaceous mudstone, turbiditic mudstone to siltstone, locally chert

Eskay Rhyolite Member

- JrH5R** rhyolite lavas, autoclastic breccias

Bruce Glacier Member

- JrH5F** felsic volcanic rocks, undifferentiated
- JrH5Fa** massive, aphyric flow-banded lavas, minor flow breccia
- JrH5Fb** ash, lapilli tuff, non-welded to densely-welded; aphyric to quartz+k-feldspar-phyric
- JrH5Fc** volcanic breccia, monolithic to slightly heterolithic
- JrH5Fd** epiclastic breccia to subangular volcanic conglomerate

**Betty Creek Formation** *biostratigraphic limits: post-Hettangian/Sinemurian, pre-Middle Bajocian*  
*known biostratigraphic range: Upper Pliensbachian to Upper Aalenian*

Treaty Ridge Member

- JrH4** undifferentiated sedimentary rocks
- JrH4b** volcanic sandstone, conglomerate, local bioclastic sandy limestone intervals
- JrH4c** turbiditic mudstone to siltstone
- JrH4d** thinly-bedded to massive limestone

Brucejack Lake Member

- JrH3** undifferentiated felsic volcanic and epiclastic rocks
- JrH3a** fine-grained crystal tuff, epiclastic conglomerate, well-bedded
- JrH3b** flow-banded dacite to rhyolite lavas
- JrH3c** lapilli tuff, variably welded

**Jack Formation** *biostratigraphic limits: post-Rhaetian, pre-Upper Pliensbachian*  
*known biostratigraphic range: Hettangian/Sinemurian Boundary*

Basal sedimentary unit

- JrH1** undifferentiated sedimentary rocks
- JrH1a** clast-supported granitoid pebble to boulder conglomerate

Triassic

**STUHINI GROUP** *biostratigraphic limits: post-Permian, pre-Hettangian/Sinemurian*  
*known biostratigraphic range: Carnian-Rhaetian*

- TrS** volcanic and sedimentary rocks, undifferentiated
- TrSv** undifferentiated volcanic rocks
- TrSm** undifferentiated basaltic volcanic lavas, tuffs and volcanic breccia
- TrSm1** basaltic clinopyroxene+plagioclase-phyric lapilli to block tuff
- TrSi** undifferentiated andesitic volcanic lavas, tuffs and volcanic breccia
- TrS1** andesitic clinopyroxene/hornblende+plagioclase-phyric block tuff, volcanic breccia
- TrS2** heterolithic conglomerate, mainly andesitic clinopyroxene/hornblende+plagioclase-phyric clasts

Sedimentary rocks

- TrSs** undifferentiated sandstone, mudstone, conglomerate, limestone
- TrSs1** thinly- to medium-bedded argillite, siltstone turbidites; interstratified sandstone and wacke
- TrSs2** pale green thinly-bedded siliceous siltstone, mudstone
- TrSs3** thinly- to medium-bedded feldspathic fine-grained sandstone/wacke; interstratified siltstone to mudstone
- TrSs4** medium- to thickly-bedded coarse-grained feldspathic sandstone and tuffaceous heterolithic conglomerate
- TrSs5** massive dark green sandstone/wacke
- TrSs6** limestone
- TrSs7** green andesitic boulder conglomerate
- TrSs8** orange weathering, medium to coarse fossiliferous wacke
- TrSs9** chert pebble conglomerate

John Peaks Member

- JrH5M** mafic volcanic rocks
- JrH5Ma** massive andesitic to basaltic lavas; plagioclase+/-clinopyroxene-phyric
- JrH5Mb** pillow lavas, broken pillow breccia, interbedded mudstone
- JrH5Mc** volcanic breccia, hyaloclastite, interbedded mudstone

Unuk River Member

- JrH2** undifferentiated andesitic volcanic and epiclastic rocks
- JrH2b** epiclastic rocks: red to green coarse-grained sandstone to conglomerate; medium- to thickly-bedded, cross stratification common
- JrH2c** andesitic volcanic breccia/block tuff; hornblende+plagioclase-phyric clasts, some interstratified epiclastic rocks

Metamorphic Equivalents of Stuhini Group Rocks

- TrSmm** mafic schist or gneiss (hornblende, plagioclase; relic clinopyroxene cores)
- TrSim** amphibole schist or gneiss
- TrSsm** phyllite to phyllitic schist
- TrSs1m** phyllitic metasandstone, phyllite
- TrSs3m** phyllite, siliceous phyllite
- TrSs6m** white to grey coarsely crystalline marble
- TrSs8m** phyllitic fossiliferous metasandstone

Permian

**STIKINE ASSEMBLAGE** *biostratigraphic limits: pre-Upper Triassic*  
*known biostratigraphic range: Devonian-Permian*

- Pc** white crinoidal limestone

Lower Permian and Older

- Pvt** felsic tuff, breccia, minor lavas
- Pp** phyllite, siliceous siltstone, minor chert
- Pvp** foliated plagioclase porphyry, phyllitic and tuffaceous siltstone and wacke
- Plb** limestone clast breccia with medium-grained wacke matrix

Intrusive Rocks

Tertiary

COAST PLUTONIC SUITE

- TC** biotite+hornblende granite, minor quartz diorite; associated dykes
- TL** Lee Brant stock: hornblende-biotite quartz monzonite

Uncertain

- TjRn** Nickel Mountain olivine gabbro and related stocks

Jurassic

TEXAS CREEK PLUTONIC SUITE

- JrL** Lehto Pluton: k-feldspar+porphyritic monzodiorite; monzonite and quartz diorite
- JrLb** k-feldspar megacrystic porphyry phase
- JrLc** equigranular phase
- JrMe** Melville pluton: hornblende+biotite diorite to quartz diorite
- JrJ** John Peaks Pluton hornblende diorite
- JrDi** unnamed dioritic plutons and stocks
- JrP** k-feldspar+plagioclase+hornblende porphyry (includes Eskay porphyry)
- JrMi** Mitchell/Sulphurets suite: granite, monzonite, quartz monzonite, monzodiorite
- JrI** Inel porphyry
- JrR** Red Bluff porphyry
- JrIR** Iskut River stock: k-feldspar megacrystic monzodiorite
- JrQd** quartz diorite, unnamed
- JrF** felsic dykes and stocks, unnamed
- JrHd** Harrymel Ridge diorite
- JrK** Brucejack Lake k-feldspar megacrystic porphyry
- JrQm** quartz monzonite, unnamed

Triassic

STIKINE PLUTONIC SUITE

- TrDi** diorite, locally agmatitic texture
- TrB** Bronson stock diorite
- TrSy** k-feldspar megacrystic syenite

Structure symbols

- Bedding, facing determined
  - inclined
  - vertical
  - overturned
- Bedding, facing unknown
  - inclined
  - vertical
- Slaty cleavage/schistosity, phase I
  - inclined
  - vertical
- Slaty cleavage/schistosity, phase II
  - inclined
  - vertical
- Gneissic layering
  - inclined
  - vertical
- Crenulation fabric
  - crenulation lineation
  - crenulation cleavage, inclined
  - crenulation cleavage, vertical
- Mesoscopic fold
  - fold axis
  - axial surface, inclined
  - axial surface, vertical
  - kink band axis
  - kink band boundary, inclined
- Fault plane
  - Fault plane
  - Slip-sense lineation
  - Flow - banding, inclined
  - Eutaxitic foliation, inclined
  - Quartz +/- carbonate extension veins
  - Mineral orientation lineation
  - Intersection lineation
- Megascopic fold axial surface trace
  - antiform, upright
  - synform, upright
  - synform, overturned
- Stratigraphic or intrusive contacts
  - defined
  - approximate
  - inferred
- Faults
  - Type**
    - defined
    - approximate
    - inferred
  - Motion**
    - reverse motion, teeth on upper plate
    - normal motion, D = downthrown side
    - strike-slip motion
  - Change in level of stratigraphic detail
  - Limit of mapping



Geoscience BC Report 2013-05

Iskut River Area Geology

Geological Legend

Compiled by Peter D. Lewis

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Suggested Reference:  
Lewis, P. D. (2013): Iskut River Area Geology, Geological Legend; Geoscience BC Report 2013-05.