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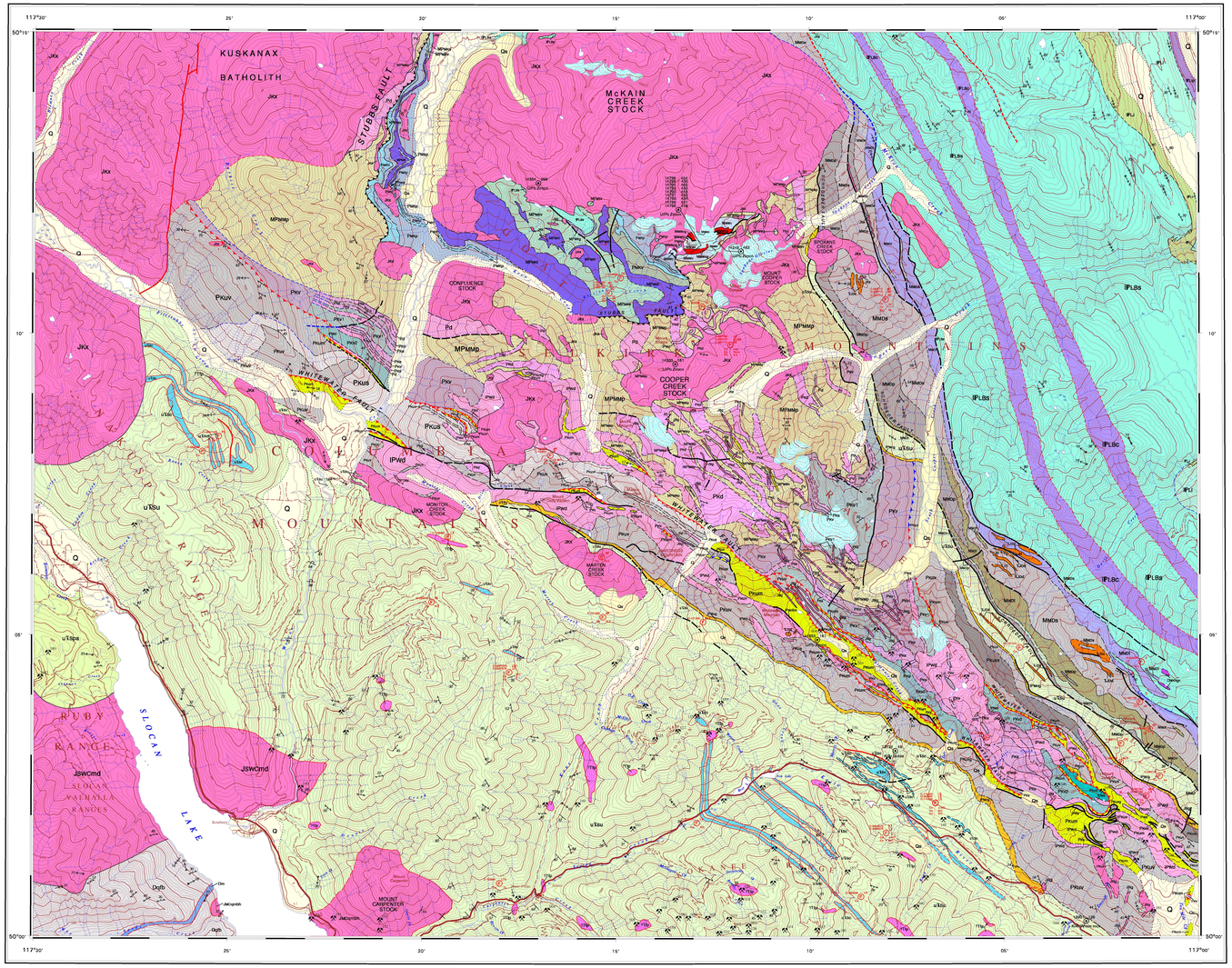
Canadian Geochronology Knowledgebase: http://gdcmrcan.gc.ca/geochron/index_e.php

MINERAL OCCURRENCE INDEX

MINFILE NO	NAME	COMMODITY*
082KSW001	FERRY NO. 2 (L.3668)	AG,PB,ZN
082KSW002	MOLLY HUGHES (L.2106)	AG,PB,ZN,AU,CU
082KSW003	CAPELLO (L.4527)	AG,PB,ZN,AU
082KSW004	MONITOR (L.1916)	PB,ZN,AG,AU,CD
082KSW005	OCEAN (L.1723)	AG,PB,CU
082KSW006	PAYNE (L.499)	AG,PB,ZN,CU
082KSW007	ST. KEVERNE (L.2642)	AG,PB,ZN,CU
082KSW008	WASHINGTON (L.541)	AG,PB,CD,ZN,AU,CU
082KSW009	GREAT WESTERN (L.545)	AG,AU,PB,ZN
082KSW010	GALENA (L.593)	ZN,PB,AG
082KSW011	ANTOINE	AG,PB,ZN,CD,CU,AU
082KSW012	SILVER BELL NO. 2 (L.2092)	AG,PB,ZN
082KSW013	RIO (L.2093)	PB,AG,ZN,AU,CU
082KSW014	CORRIGAN	AG,PB,ZN,CU
082KSW015	JACKSON	ZN,AG,PB,CD,AU,CU
082KSW016	TEANS (L.4889)	PB,ZN,AG,CD
082KSW017	DARDENELLES (L.453)	AG,PB,ZN,AU,CU
082KSW018	RAMBLER (L.1246)	AG,PB,ZN,CD,AU,CU,SB,
082KSW019	SOHO (L.3175)	AG,PB,ZN,CU
082KSW020	BON TON (L.636)	AG,PB,CU
082KSW021	PICORIA (L.3318)	AG,PB
082KSW022	GRINGO (L.6813)	PB
082KSW023	LUCKY JIM	ZN,AG,PB,CD,AU,SN
082KSW024	NIL DESPERANDUM (L.2806)	AG,PB,ZN,CU
082KSW025	MCALLISTER	AG,AU,PB,ZN,CU
082KSW026	JO-JO (L.1839)	AG,PB,ZN,AU,CU
082KSW027	MINER BOY (L.4915)	AG,PB,CU
082KSW028	SILVER CLIMAX (L.3829)	AG,PB,AU,ZN
082KSW029	HILLSIDE	AG,CU
082KSW030	WELLINGTON (L.553)	AG,PB,ZN,AU,CU
082KSW031	CHANDLESTON (L.2091)	ZN,AG,PB,AU,CD,CU
082KSW032	GOLD QUARTZ	AG,AU,PB,ZN,CU
082KSW033	WHITEHAVEN (L.1170)	AG,ZN,PB,AU,CD,CU
082KSW034	METLAKAHTLA (L.3334)	ZN,PB
082KSW035	DOHERTY (L.1202)	ZN,PB,AU,AG,CD
082KSW036	OHIO	CU,AG,AU,PB
082KSW037	HIGHLAND SURPRISE	AU,AG,PB,ZN,CU
082KSW038	EUREKA (L.5552)	AG,PB,AU,ZN
082KSW039	VERA	PB,AU,AG,ZN
082KSW040	LINCOLN (L.1413)	AG,PB
082KSW041	CALEDONIA	AG,PB,ZN,AU,CD
082KSW042	LUCKY BOY	AG,PB,ZN,CD
082KSW043	CONTACT (L.14943)	MN,AG,PB,ZN
082KSW044	KOOTENAY BELLE (L.13475)	AG,PB
082KSW045	EMERALD HILL (L.1426)	AG,PB,ZN,CU
082KSW046	BEAVER (L.2504)	AG,PB,CU
082KSW047	HECLA (L.13276)	PB,AG
082KSW048	VOYAGEUR (L.3585)	AG,PB,ZN,CU,AU
082KSW049	ALPS-ALTURAS	SB
082KSW055	PANAMA (L.3152)	AG,CU,PB,ZN,AU
082KSW058	REVENUE (L.2892)	ZN,AG,PB,CU
082KSW059	ISLE	AG,PB,ZN,SB,AU,CU
082KSW062	VICTIM MO, WOLFRAMITE #1	MO
082KSW063	WILSON CREEK MO	MO,ZN,PB
082KSW064	SB 78	NI,CU
082KSW065	RED FOX (L.2413)	AG,PB,ZN,CU
082KSW066	EK 78910	AG,PB,CU
082KSW068	SB 9	CU,PB,AG
082KSW069	TOM	CU
082KSW071	JESSE	AG,PB,ZN,CU
082KSW074	STARLITE	TR,HS
082KSW075	SUNLITE	TR,HS
082KSW076	GARNET CUBA	AU,CU
082KSW077	WILD SWAN (L.2510)	AU,CU
082KSW078	MORFLOWER (L.4458)	ZN,PB,AG,CU
082KSW079	PERTH (L.8794)	CU,ZN,PB,AG,AU
082KSW082	BLACK GROUSE	AG,PB,ZN,AU,CU
082KSW083	SLOCAN BOY (L.626)	PB,AG,ZN
082KSW085	SURE THING (L.4891)	PB,AG
082KSW100	KAT	AG,PB,ZN
082KSW101	JK	NI,CU,PB,ZN
082KSW104	NEVERMORE	AG,PB,ZN,CU,AU
082KSW111	COPPER CLIFF	AG,AU,CU,ZN,PB
082KSW115	LONDON HILL	AG,CU
082KSW116	EMPRESS	AG,AU,PB,CU,ZN
082KSW130	DOLLY VARDEN (L.4101)	AG,AU,CU,SB
082KSW134	RIBBON	MO,AG,PB,CU
082KSW135	MILTON (L.2159)	AG,PB,ZN,CU
082KSW136	MAGGIE BROWN	PB
082KSW137	HORSESHOE (L.3634)	AG,PB
082KSW138	RUBY SILVER (L.515)	AG,PB
082KSW139	TOM3	AB,CH
082KSW140	SUNSET (L.970)	AG,PB,ZN,CU
082KSW141	SNUFFY	AG,PB
082KSW142	IRON DUKE (L.3190)	PB,AG
082KSW144	VIRGINIA (L.3337)	TC,AB
082KSW145	MOTHER LODE (L.15421)	AG,PB,ZN
082KSW146	IBEX (L.1428)	AG,PB,CU,AU
082KSW147	MONTE CHRISTO (L.4468)	AG,PB,ZN
082KSW148	BOLLINGER	AU,CU,PB
082KSW150	CUBA	AU,AG
082KSW151	BOB FR.	AG,AU,CU
082KSW152	SWEET GRASS (L.8329)	AG,AU,CU
082KSW153	LOST ATLANTIS	AG,PB,ZN
082KSW154	NEWPORT (L.4521)	AG,PB,ZN
082KSW155	EAGLE	AG,CU,ZN
082KSW156	BEST (L.401)	AG,PB,ZN,CU,SB
082KSW157	NEW JACKSON	AG,CU
082KSW158	SILVER REEF (L.3996)	AG,PB
082KSW159	ZEPHYR	ZN,PB,AG
082KSW160	MEGUNA	AG,PB,CU,ZN
082KSW162	GOLD QUARTZ RIDGE	AU,AG,CU
082KSW163	GOLD QUARTZ B ZONE	AU,AG,CU,PB
082KSW166	TOWNSEB FRACTION	AG,PB,ZN
082KSW168	HILL 60	AG,PB,ZN,CU
082KSW173	EMPIRE (L.1477)	AG,PB,ZN,AU
082KSW174	OLYMPUS EAST	PB,ZN,AG
082KSW175	OLYMPUS WEST	AG,PB,ZN,CU
082KSW176	LEMAC	AG,PB,ZN
082KSW189	VICTIM SILVER	AG,PB,ZN
082KSW190	ROSEBERY GALENA-SPHALERITE	AG,PB,ZN
082KSW191	LEMAK NORTH SPHALERITE	AG,PB,ZN
082KSW192	FITZSTUBBS CREEK GOLD	AU,PB
082KSW193	KANE CREEK	AU,AG,PB,ZN,CU
082KSW199	KANE 4	AG,PB,ZN,AU,CU

*Abbreviations for commodities: AB - asbestos; AG - silver; AU - gold; CD - cadium; CH - chrysotile; CU - copper; HS - hot spring; M,N - manganese; MO - molybdenum; NI - nickel; PB - lead; SB - antimony; SN - tin; TC - talc; TR - travertine; ZN - zinc

Source: British Columbia Ministry of Energy and Mines, MINFILE database available at: http://www.em.gov.bc.ca/Mining/Geolsurv/Minfile/



OPEN FILE 6187

GEOLOGY

ROSEBERY

BRITISH COLUMBIA

Scale 1:50 000/Echelle 1/50 000

Kilometres 1 0 1 2 3 4 Kilomètres

Universal Transverse Mercator Projection
North American Datum 1983
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Projection transverse universelle de Mercator
Système de référence géodésique nord américain, 1983
© Sa Majesté la Reine du chef du Canada 2009

Compilers: R.I. Thompson and P. Dhesi

Geology by: D.W. Klepacki, 1982-84

Geological compilation by R.I. Thompson, 2002

Co-ordinated by R.I. Thompson through the auspices of the Targeted Geoscience Initiative 3 (TGI-3)

Digital cartography by P. Dhesi, Geological Survey of Canada, Pacific Division

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

Digital base map from data compiled by Geomatics Canada, modified by the Geological Survey of Canada - Pacific Division

Mean magnetic declination 2009, 16°58'E, increasing 13' annually.

Elevations in metres above mean sea level
Contour interval 40 metres

Universal Transverse Mercator Grid
North American Datum 1983
Zone 11

82 K/5 OF 6185	82 K/6 OF 6184	82 K/7 OF 6183
82 K/4 OF 6186	82 K/3 OF 6187	82 K/2 OF 6188
82 J/13	82 J/14	82 J/15

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE

LEGEND

Cenozoic
QUATERNARY

- **Q** — *Unconsolidated sediments; glacial deposits, colluvium and alluvium; few if any outcrops; probable subcrop unit within parentheses*
- **Qs** — *Slide*
- **??fp** — *Feldspar porphyry dikes, sills and plugs*
- **Tl** — *Lamprophyre dykes: Biotite lamprophyre with grey or green apatite (headwaters of Kane Creek); augite lamprophyre (west of Wilson Creek)*

Mesozoic
JURASSIC
MIDDLE JURASSIC

- **Jbg** — *BLUE RIDGE SILLS: Pink to white felsitic; light grey leucocratic feldspar porphyry; fine-to medium-grained biotite hornblende leucogranite*
- **DMkhgn** — *Kaslo River intrusives (~173 Ma): Hornblende quartz-monzonite; weakly foliated to gneissic*
- **Jkx** — *Kuskanax intrusives suite (173 - 181 Ma): Medium-grained augite-biotite leucogranite and leucoquartz monzonite with hornblende, biotite or rare feldspar megacrysts or muscovite*
- **JMCqmbh** — *Mount Carpenter Stock: Biotite-hornblende quartz monzonite*
- **JSWCmd** — *SNOWSLIDE AND WRAGGE CREEK STOCKS: Epidote-biotite quartz monzonite, quartz diorite, and granodiorite*

UPPER TRIASSIC TO MIDDLE JURASSIC

- **TJDd** — *Davis Ridge dioits: Light green, coarse grained pyroxene-plagioclase porphyry dykes, sills and plugs; locally well foliated*

LOWER JURASSIC
UPPER SINEMURIAN
ROSSLAND GROUP

- **LJhb** — *Augite meta-basalt and meta-andesite flows and tuff (unit 12B of Hyndman)*

TRIASSIC
UPPER TRIASSIC
SLOCAN GROUP

- **u'lSu** — *SLOCAN FORMATION: Dark grey argillite; biotite-schist, dark grey calcareous argillite, dark grey quartz phyrllite; light- to medium-grey meta-siltstone; minor volcanic breccia, sandstone and agglomerate*
- **u'lSpa** — *Argillite, shale to siltstone, tuff*
- **u'lSc** — *Slocan Carbonaceous Limestone: Black, fine-crystalline limestone, calcareous siltstone with shale interbeds*

Paleozoic
PERMIAN
UPPER PERMIAN

- **IPlwg** — *Marten Conglomerate: Pebble to cobble conglomerate with grey and green matrix containing clasts of greenstone, diorite, limestone, and occasional serpentinite; matrix is locally calcareous and/or pyritic; local interbeds of limestone (unit 19 of Read along Spyglass Fault; unit 12cg of Read and Wheeler)*
- **IPlwd** — *Whitewater Diorite: Medium-to-coarse-grained, mainly equigranular hornblende diorite; locally intensely sheared and foliated along ductile shear zones*
- **IPlwdBx** — *Porphyroclastic intrusive breccia*
- **Pkd** — *Kane Creek Diorite: Light grey to greenish-grey hornblende diorite and metadiorite, locally foliated and altered to chlorite and saussurite; feeder intrusives for Kaslo Group*
- **Pd** — *Undifferentiated Diorite: Medium grained, equigranular hornblende diorite, locally foliated; may be either Pkd or Pwd.*

Rocks in the hanging wall of the Whitewater Fault
PERMIAN AND (?) OLDER
KASLO GROUP

- **Pkuv** — *Upper Plate Volcanic Member: Tholeiitic, pyroxene-plagioclase porphyry pillow lava; greenstone; breccia; massive tuffaceous rocks; rare volcanic conglomerate (unit 13, or 13a and 13d of Read)*
- **Pkuvv** — *Grey-matrix greenstone breccia*
- **Pkuvf** — *Pink felsite tuff*
- **Pkus** — *Upper Plate Sedimentary Member: Green to white bedded cherty tuff, brown to grey wacke and volcanic conglomerate with clasts of volcanic rock, diorite, and serpentinite (unit 20a, 20b of Read 1973)*
- **Pkuvg** — *Volcanic conglomerate*

LOWER PERMIAN OR OLDER

- **Pkum** — *Ultramafic Member: Serpentinite, talc schist, talc-chlorite schist; locally intensely brecciated and/or foliated*

Rocks in the footwall of the Whitewater Fault
PERMIAN AND (?) OLDER
LOWER PERMIAN and (?)older
KASLO GROUP

- **Pkv2** — *Upper Volcanic Member: Tholeiitic pyroxene-plagioclase prophyry greenstone; pillow lava; pillow breccia; minor limestone*
- **Pks** — *Sedimentary Member: Green and white cherty tuff; grey and purplish-grey siliceous argillite and phyllite; rare greywacke and volcanic conglomerate; interlayered with volcanic members PKv2, Pkv1, Pkv*
- **Pkv1** — *Lower Volcanic Member: Tholeiitic pyroxene-plagioclase porphyry greenstone; pillow lava breccia; tuffaceous greenstone*
- **Pkv** — *Undivided Volcanic Rocks: Tholeiitic greenstone, pillow lava, flows, and associated intrusives; breccia; pyroxene-plagioclase porphyry; volcaniclastic rocks*

Rocks in the hanging wall of the Stubbs Thrust Fault
MISSISSIPPIAN to PERMIAN (? and younger)
UPPER MISSISSIPPIAN TO LOWER PERMIAN
MILFORD GROUP - Mt Hardy Assemblage

- **MPMkv** — *Volcanic Member: Tholeiitic greenstone; pyroxene-plagioclase flows, sills and pillow lava*
- **MPMkp** — *Siliceous Argillite Member: Bedded grey siliceous argillite and chert, massive grey siliceous argillite, white siliceous argillite where bleached by intrusives; bedded grey calc-schist; chert pebble conglomerate*

Rocks West of the Schroeder Fault
MISSISSIPPIAN AND PENNSYLVANIAN
UPPER MISSISSIPPIAN TO LOWER PENNSYLVANIAN
MILFORD GROUP (Keen Creek Assemblage)

- **PMkp** — *Siliceous Wacke Member: dark-grey wacke and argillite; quartz-plagioclase mica schist; laminated green and white tuffaceous sandstone; greenstone, pillow lava; volcanics predominate in eastern and argillite in western exposures*
- **PMkl** — *Upper Limestone Member: Light grey limestone and white marble; interbedded with PMkp*
- **PMk2** — *Uppermost limestone*
- **PMkv** — *Upper Volcanic Member: Tholeiitic pyroxene-plagioclase porphyry pillow lava; massive greenstone; grades westward into PMKp*

Rocks east of the Schroeder Fault
MISSISSIPPIAN
UPPER MISSISSIPPIAN
MILFORD GROUP (Dava Assemblage)

- **MMDv** — *Greenstone Member: Tholeiitic greenstone, greenstone breccia green phyllite, pyroxene-plagioclase porphyry, volcanic conglomerate, pillow breccia*
- **MMKH** — *Cherty Tuff Member: Finely laminated green, white and purple cherty tuff, locally argillaceous*
- **MMCp** — *Siliceous Argillite Member: Bedded black, grey and white siliceous argillite and phyllite; subordinate limestone and cherty tuff*
- **MMCs** — *Sandstone and Phyllite Member: Mainly grey phyllite or slate interbedded with pink to brown feldspathic sandstone; minor calcareous; grades into map unit MMcp*
- **MMCl** — *Limestone Member: Mainly grey or blue-grey limestone; well-bedded, flaggy, locally with argillaceous partings and basal black carbonaceous argillite and white quartz pebble conglomerate (unit 14 of Read east of Spyglass Fault).*

MISSISSIPPIAN
UPPER MISSISSIPPIAN AND (?)OLDER

- **MMMc** — *Carbonate Member: Mostly massive, locally bedded grey limestone; cream dolostone; medium- to coarse-grained white marble (unit 14 of Read west of the Spyglass Fault).*
- **MMMcg** — *Cooper Conglomerate: Boulder to pebble, matrix-supported with clasts of pebble conglomerate, grit, gneiss, diorite, volcanic rock, and quartz monzonite (unit 19 of Read 1973)*
- **MMMs** — *Tuffaceous Sandstone Member: Tan and light grey tuffaceous sandstone, bedded, plagioclase-rich*
- **MMMcp** — *Calcareous Argillite Member: Medium to dark grey argillaceous limestone; grey argillite; amphibole-rich marble*

MISSISSIPPIAN AND PENNSYLVANIAN
UPPER MISSISSIPPIAN TO LOWER PENNSYLVANIAN

- **MPMkl** — *Banded Limestone Member: Bedded, light and dark grey limestone with local grey argillaceous interbeds*
- **MPMkv** — *Lower Volcanic Member: Tholeiitic pyroxene-plagioclase porphyry pillow lava; massive greenstone*
- **MPMks** — *Basal Clastic Member: Bedded plagioclase granule sandstone or argillite; locally contains clasts of quartz and feldspar; local basal conglomerate and metasandstone*
- **MPMkg** — *Basal conglomerate*

DEVONIAN AND CARBONIFEROUS

- **Dqfb** — *Silver Creek Schist: Quartz-feldspar-muscovite-biotite schist with or without garnet, staurolite and sillimanite; black carbonaceous schist; dark-grey to tan micaceous quartzite, minor felsic to grey marble; amphibolitic schist; minor amphibolite (map units Pskm and Pskd of Read, 1976)*
- **Des** — *Silver Creek Marble: Medium to coarse crystalline, white to dark-grey marble (map unit Pscb of Read, 1976)*

SYMBOLS

- *Foliation (1st generation): inclined, horizontal, vertical*
- *Foliation (2nd generation): inclined, horizontal, vertical*
- *Bedding: inclined, horizontal, vertical, overturned*
- *Fold hinge: crenulation lineation*
- *Fold hinge: axis plane (unknown generation) s-verging, z-verging*
- *Fossil locality* — database no. / period / fossil stage
- *Geochronology sample (http://gdcmrcan.gc.ca/geochron/index_e.php)* — database no. / age / isotopic sys. / mineral / dated rock no.
- *Mineral Occurrence*
- *Geological boundary (taken from Fyles, 1964; Warren, 1997; Klepacki, 1983): defined, approximate, assumed*
- *Geological boundary (taken from 1:250 000 compilation by Read and Wheeler, 1976): defined, approximate, assumed*
- *Geological boundary (interpreted by compiler): defined, approximate, assumed*
- *Geological boundary: arbitrary*
- *Quaternary limit*
- *Slide*
- *Fault, contraction (teeth indicate upthrust side): defined, approximate, assumed*
- *Fault, contraction (teeth indicate upthrust side); Permian age (Whitewater Fault): defined, approximate, assumed*
- *Fault, contraction (teeth indicate upthrust side); interpreted by compiler: defined, approximate, assumed*
- *Fault, extension (solid circles on downthrown side); defined, approximate, assumed*
- *Fault, unclassified: defined, approximate, assumed*
- *Fault, unclassified (taken from 1:250 000 compilation by Read and Wheeler, 1976): defined, approximate, assumed*
- *Fault, unclassified, (interpreted by compiler):*

CAMSIRIAN TO ?LOWER ORDOVICIAN
LARDEAU GROUP
BROADVIEW FORMATION

- **IPLbc** — *Limestone member: Limestone, grey phyllitic limestone and grey phyllite*
- **IPLbs** — *Grit member: Grey and green phyllitic grit and phyllite*
- **IPU** — *INDEX FORMATION: Grey and light green phyllite; minor phyllitic limestone and quartz grit (unit 3 of Fyles, 1964)*
- **IPLlp** — *Grey schist: Fine-grained grey mica schist and garnet mica schist (units 3a and 3b of Fyles, 1964)*

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