

GEOLOGICAL SURVEY BRANCH
OPEN FILE 2000-4
**GEOLOGY OF
SOUTHEASTERN DORSEY TERRANE**
1040/7,8,9,10

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Kim Wahl (1996-99) and compilation from Gabrielle, 1969
Contributions from Charlie Roots, Mitch Mihalyuk, Martin deKeizer, 1999
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Geological data: R. Froese, JBC Geoscientific Laboratory
Digital base map compiled by the Province of British Columbia, Ministry of Environment Land and Parks, modified
by the Geological Survey of Canada
TRIM 37,38,39,47,48,49,57,58,59,67,68,69
Scale 1:50 000

Universal Transverse Mercator Projection
North American Datum 1983
Magnetic declination 1997: 20° 05' E, decreasing 15.4 annually
NE corner of the map
Elevations in metres above sea level
LEGEND

POST-ACCRETIONARY UNITS

QUATERNARY
Qal Outwash, alluvial deposits
Qb Tuya Basalt: columnar basalt flows, under cones and tuffs
LATE CRETACEOUS (circa 75 Ma)
Lkg Gravel
EARLY CRETACEOUS (circa 110 Ma)
EKg Granite, granodiorite, quartz monzonite, diorite

PRE-ACCRETIONARY UNITS

DORSEY TERRANE
EJl Early Jurassic (circa 187 Ma)
SIMPSON PEAK BATHOLITH and smaller intrusions: granodiorite, monzonite, diorite, gabbro

Stratified Units Southwest of Parallel Creek

KLINKIT ASSEMBLAGE (UPPER DORSEY TERRANE)

UPPER PALEOZOIC
LIMESTONE MARBLE LUFF-CHERT UNIT
uPtl Limestone, chert, marble, quartzite, minor mafic, ribbon-bedded chert
uPl Limestone, in part replaced by coarse grained white quartz, minor mafic, ribbon-bedded chert
uPl Dark green, highly metamorphosed chert to lignite
uPch Ribbon-bedded chert: grey, green, white, some highly manganese, some gneiss

SWIFT RIVER ASSEMBLAGE (UPPER DORSEY TERRANE)

PALEOZOIC
PHYLLITE METASANDSTONE UNIT
Ps Phyllite, metasandstone unit, undivided, green and grey phyllite, argillite, quartzite, limestone, metabasite, diorite
Ps-gn Phyllite, metasandstone unit, predominantly green phyllite, argillite, quartzite, limestone, metabasite, diorite
Ps-gy Phyllite, metasandstone unit, predominantly grey phyllite, argillite, metabasite, quartzite
Small dioritic intrusions
P Small dioritic intrusions
P Meta-tuffaceous schist
P Limestone
PALEOZOIC
DAWK PHYLITE-QUARTZITE-MARBLE UNIT
Pdq Dark grey phyllite, silty phyllite, white quartzite, minor gneiss
Pma White to light grey marble
Pq Quartzite

Stratified Units Northeast of Parallel Creek

SWIFT RIVER ASSEMBLAGE (UPPER DORSEY TERRANE)

PALEOZOIC
NECHERT METAFUL-PHYLLITE UNIT
Pdp Ribbon-bedded chert, light green siliceous metabasite, dark grey to green phyllite, chert-bedded metabasite, limestone, quartzite, metabasite
Pbx Dark grey chert and argillite chert breccia, angular clasts
P Limestone

DORSEY ASSEMBLAGE

LOWER PALEOZOIC MISSISSIPPIAN-LATE TRIASSIC
METASANDSTONE AMPHIBOLITE UNIT AND INTRUSIONS
LTI Limestone
LTgd Granodiorite
LTgm Quartz monzonite
LTgb Gabbro and diorite
MISSISSIPPIAN
EMs Highly foliated to gneissic tonalite to diorite and muscovite granite intrusions
PALEOZOIC (POST-DEVONIAN)
QUARTZITE-PLUTONIC UNIT
uPq Grey, white, green micaceous phyllite, quartzite and minor gneiss, metabasite
LOWER PALEOZOIC (PRE-MISSISSIPPIAN)
IPamu Metasedimentary amphibolite unit, Upper part: meta-argillite, meta-chert, limestone, quartz-muscovite schist and chert (garnet) schistosity
IPam Metasedimentary amphibolite unit, Lower part: amphibolite and garnet amphibolite, meta-argillite, quartzite, limestone, quartz-muscovite schist
IPamia Metasedimentary amphibolite unit, Lower part: amphibolite and garnet amphibolite

RAM CREEK ASSEMBLAGE

MISSISSIPPIAN (and older? younger?)
ORIENTED INTRUSIVE UNIT
Mm Greenstone intrusive unit undivided: greenstone, chlorite actinolite phyllite, hornblende, quartzite, quartz schist (felsic meta tuff, tonalite, diorite, gabbro)
Mgs Quartz-muscovite, quartz-schist, schist, quartz and phlogopite microphenocrysts
Mls Marble
Mch Light coloured ribbon chert
EMdi Diorite to gabbro intrusions, unfoliated through protomylonitic
EMl Medium to coarse grained tonalite

CASSIAR TERRANE

DEVONIAN-MISSISSIPPIAN
EARN GROUP
DME Siliceous black argillite, metabasite, porphyritic, minor basaltic chert and marble
DMex Baritic chert exhalite
DMema Marble
ORDOVICIAN-SILURIAN
ROAD RIVER GROUP
OSR Siliceous calcareous black argillite and slate
UPPER PROTEROZOIC TO CAMBRIAN
uPca Silty meta-argillite, slate (commonly with andalusite and/or cordierite), quartzite, marble, calc-silicate
uPcl Marble, calc-silicate
uPcq Quartzite

SYMBOLS

Bedding, top unknown: inclined, vertical
Cleavage foliation, inclined (1st, 2nd, 3rd phase)
Shear zone, inclined
Axial plane, inclined (1st, 2nd, 3rd phase)
Fold axis, vertical (1st, 2nd, 3rd phase)
Fold axis, horizontal (1st, 2nd, 3rd phase)
Fold axis, vertical (1st, 2nd, 3rd phase)
Lineation (1st, 2nd, 3rd phase)
Elongation lineation (1st, 2nd phase)
Geological contact: defined, approximate, assumed
Geological contact: assumed (extrapolated under Quaternary cover)
Quaternary unit
Outcrop
Axial trace of fold: antiform, synform
Axial trace of overturned synform, antiform
Thrust fault: defined, approximate, assumed
Strike slip fault: approximate, assumed
Normal fault: defined, approximate, assumed
Fault: assumed
Fault boundary
Unit of geological mapping
Topographic contour (20m interval)
Elev
LUPs from data, age in Ma

