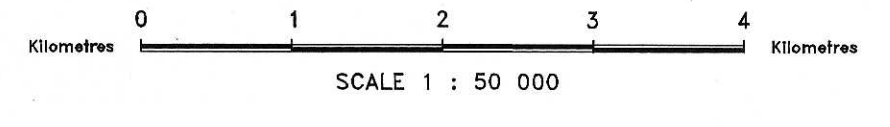


Geological Survey Branch
GEOSCIENCE MAP 1993-3

GEOLOGY OF THE SCUD RIVER AREA, NORTHWESTERN B.C.

NTS 104G/5
 By D.A. Brown and M.H. Gunning



STRATIFIED ROCKS

QUATERNARY

Qal Alluvium, glacial till, unconsolidated glaciofluvial deposits

UPPER TRIASSIC

STUHNH GROUP

uTSv Volcanic rocks; undifferentiated

UPPER TRIASSIC (OR OLDER ?)

uTsmv Possibly metamorphosed Stuhini Group equivalents; foliated to massive metavolcanic rocks; biotite schist (bl sch); chert (chert); chlorite schist (ch sch); siliceous rock (sl. rx.)

PALEOZOIC -- STIKINE ASSEMBLAGE

LOWER TO UPPER PERMIAN

IPSc Grey to light grey and black calcarenites with minor chert layers and nodules, locally bioclastic, minor argillite (a); maroon and green plagioclase crystal lithic tuff, mudstone (mt)

IPSa Pyrite & pyrrhotite-bearing argillite and siltstone

UPPER CARBONIFEROUS TO LOWER PERMIAN

uCS1 Bedded to laminated siltstone, calcareous siltstone, varicoloured chert, buff calcareous siltstone; dolomite layers

UPPER CARBONIFEROUS (?)

uCS2 Foliated to massive siltstone, conglomerate, andesite, crystal lithic lapilli tuff (possibly Stuhini Group)

UPPER CARBONIFEROUS

uCSa Foliated argillite, siltstone, calcareous siltstone, conglomerate; recrystallized limestone (lst)

uCSv

Foliated, chloritic, pyroxene-plagioclase phytic, andesite flows and/or sills, crystal tuff, lithic lapilli tuff; recrystallized limestone (lst)

INTRUSIVE ROCKS

TERTIARY AND OLDER DIKES

Andesite (A); basalt (B); felsite (F); dark green, pyroxene-phyric olivine basalt (M); rhyolite (R); syenite (S)

Eocene -- HYDER SUITE

Egn Well-sorted, medium to coarse-grained (hornblende) biotite granite; locally K-feldspar megacrystic (<3%; gn); equigranular, medium-grained hornblende-biotite granodiorite (gd); K-feldspar megacrystic granodiorite (gdk); felsite (f)

MIDDLE JURASSIC -- THREE SISTERS SUITE

uJgn Pink, medium-grained hornblende biotite granite; minor quartz monzonite (qm); quartz monzonite (mq)

LATE EARLY JURASSIC -- CONE MOUNTAIN SUITE

LEJgd Equigranular, medium-grained (biotite) hornblende granodiorite; quartz monzonite

EARLY JURASSIC (?) -- DIORITE SUITE

EJd Heterogeneous, medium to coarse-grained quartz diorite, hornblende diorite, hornblende and pyroxenite

LATE TRIASSIC TO EARLY JURASSIC -- COPPER MOUNTAIN SUITE

TJcpx Medium-grained magnetite biotite clinopyroxenite

TJsa Medium-grained, biotite clinopyroxene potassium-feldspar syenite, equigranular to potassium-feldspar megacrystic

TJqm Medium-grained, potassium feldspar-megacrystic hornblende quartz monzonite
 d = diorite qd = quartz diorite
 gd = granodiorite qm = quartz monzonite
 md = monzoniorite qmd = quartz monzoniorite
 ion = tonalite

Geological boundary

defined _____
 approximate _____

High-angle fault, surface trace, trend and plunge of slickensides indicated by arrow; solid circle on downthrown side
 defined _____
 approximate _____
 assumed _____

Contractional fault-surface trace; teeth in direction of dip
 defined _____
 approximate _____
 assumed _____

Cross-section line
 Bedding: tops unknown, g=gentle, m=moderate, s=steep _____
 Bedding: tops unknown, inclined, parallel to foliation, vertical _____
 Bedding: tops observed, inclined, overturned _____
 Foliation: inclined, vertical, m=mylonitic _____
 Dike: inclined, vertical; composition indicated by abbreviation _____
 Vein: inclined, vertical (q=quartz) _____

Joint: inclined, vertical _____
 Antiformal axis _____
 Symformal axis _____
 Overturned synclinal axis _____
 Axial plane of minor fold: inclined, vertical _____
 Fold axis of minor fold (arrow indicates plunge); crenulation fold axis: _____
 m, s, and z asymmetry _____
 Glacial striae (undetermined direction of movement) _____
 Dike swarm _____
 Fossil location; age determined (with GSC number) _____
 macrofossil; conodonts; fusulinids; radiolaria _____
 Fossil location; age indeterminate, macrofossil, barren conodont sample _____
 Field station with no structural measurement _____
 Landslide scar _____
 Diamond drill hole _____
 Trench _____
 MINFILE mineral occurrence with number (104G...) _____
 Isotopic age locality (U/Pb; Rb/Sr; _____
 K/Ar, h=hornblende, b=biotite, w=whole rock) _____
 Limonitic-altered zone (shown as grey tone) _____
 Stone cairns of archaeological interest _____

ACKNOWLEDGMENTS

Field assistance and additional geology by M. McDonough and D. Carmichael (1988)
 Macrofossil and microfossil identifications by E.W. Barber, M.J. Orchard,
 T.P. Fouton, Lin Rui, A.R. Sweet, H.W. Tipper and E.T. Toster of the Geological Survey
 of Canada. Radiometric age determinations by M.L. Biever, W.C. McClelland, J. Horakal.

