LEGEND

TESLIN SUTURE ZONE UNITS

DEVONO-MISSISSIPPIAN

DMt

Resistant, grey-green, massive to mylonitic medium grained metamorphosed tonalite to quartz-diorite; mafic minerals constitute 10-50% and are dominantly hornblende, chlorite and biotite. DMt1, includes abundant interbands of PDsq.

PROTEROZOIC TO MISSISSIPPIAN

PMgp

Recessive, fissile, rusty red to black, fine grained graphite-muscovite phyllite; locally the phyllite is pyritic or calcareous; minor quartz-muscovite-chlorite schist, quartzite and interlayered marble. PMgpc buff to grey recrystallized marble

PROTEROZOIC TO DEVONIAN

PDsq

Red-brown, grey-brown to silvery white to green weathering, protomylonitic to mylonitic quartz-muscovite±chlorite±epidote±feldspar±biotite±garnet±amphibole schist and muscovite-chlorite quartzite; schist locally includes carbonate minerals, pyrite, ilmenite, sphene and graphite; minor chlorite schist, chlorite-actinolite schist and marble: PDsq1, includes abundant interbands of DMt: PDsqm, relatively mafic schist containing more chlorite+biotite+actinolite than muscovite: PDsqc, buff to grey sucrosic-textured marble and calcareous schist; marble often contains quartz, tremolite, muscovite, chlorite, and rarely epidote and garnet; marble occurs as large relatively pure exposures and as interbands with schist and quartzite: PDsqp, graphitic-muscovite phyllite and schist and quartzite containing abundant interbands of graphitic phyllite. Rocks of this unit are interpreted to be part of the Nisutlin Allochthonous Assemblage (Tempelman-Kluit, 1984).

NORTH AMERICAN UNITS

PROTEROZOIC? AND/OR PALEOZOIC



Brownish grey to red, recrystallized biotite+muscovite+sillimanite quartzofeldspathic schist to gneiss and red-weathering to strongly gossaned biotite-pyrite quartzite to quartz-schist; these are cut by and include massive sills and dykes of biotite quartz-monzonite and felsic pegmatite: PPn1, brown to grey weathering recrystallized biotite+hornblende+muscovite quartzofeldspathic schist and gneiss (+sphene+sillimanite); cut by garnet-bearing leucocratic dykes. This unit may be correlative with unit Pn+ in the Quiet Lake map area (Tempelman-Kluit 1977)

OTHER UNITS

CRETACEOUS

Kqm

Resistant, blocky, light grey weathering, medium equant grained to rarely porphyritic biotite quartz-monzonite. Equivalent to Kqm of Tempelman-Kluit (1984).

TRIASSIC TO JURASSIC

ТJа

Thinly laminated, green to black to brown fine grained siliceous sandstone and siltstone, possibly tuffaceous in part.

..... Limit of outcrop or mapping

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Foliation (inclined) (schistosity and mylonitic foliation)

Mineral and/or stretching lineations

Crenulation and hand specimen-scale fold axes

-- Axial planar cleavage

NOTES

 Only the rock types that occur on this map sheet are shown on the legend above: for a complete legend, structural analysis, sources of information and aknowledgements see sheet 1.

Teslin Suture Zone units are part of the Yukon Tanana terrane and consist of rocks that show the development of penetrative ductile deformation fabrics. North American units are thought to be a metamorphosed and ductilely deformed part of the pre-Mesozoic North American margin. Other units cross-cut several terranes, lack a foliation, and intrude Teslin Suture Zone units.

Geology by R.A. Stevens 1990, 1991, 1992

