

LEGEND

**SOUTHWEST OF TINTINA FAULT**

**MID-CRETACEOUS**

**Kg** resistant, grey weathering, locally foliated, biotite ± hornblende diorite, granodiorite, and granite

Between St. Cyr and Tintina Faults

**TERTIARY**

**Tv** Tv, undivided; Tv1, small stocks and necks of white weathering, flow-banded, rhyolitic, quartz-sandstone porphyry; Tv2, laminated rhyolitic ash-flow tuffs and flows; Tv3, dark grey weathering, locally amygdaloidal, dark grey-green basalt necks and flows; Tv4, massive quartz-feldspar porphyry

**Ts** recessive, thick bedded to massive, pebble to boulder chert-quartz conglomerate, chert sandstone and thin bedded, dark brown siltstone and shale

**CARBONIFEROUS**

**Csl** recessive, dark grey weathering, thin bedded, interlaminated, buff-yellow siltstone and brown argillite, strongly bioturbated

**MISSISSIPPIAN**

**Mff** resistant, rusty-orange weathering, thin bedded, apple green and dark grey chert and cherty tuff

**DEVONIAN AND MISSISSIPPIAN**

**Dms** recessive, black weathering with rusty streaks, thin bedded, black siliceous slate and minor interbedded, chert wacke and chert-granule grit

**DMcs1** buff-orange weathering phyllite, calcareous phyllite and phyllitic, platy limestone; minor buff weathering dolomitic siltstone, black very finely crystalline limestone, black pyrite slate, and fine grained quartz arenite; DMcs1, blue-grey weathering, calcareous, medium grained quartz arenite

**uDeg** resistant, grey-orange weathering, massive, limestone conglomerate (not shown on stratigraphic cross-section; relations to other map units uncertain)

**ORDOVICIAN TO DEVONIAN**

**ODsl** moderately resistant, black weathering, siliceous, graphitic, black siliceous and pyrite slate

**CAMBRO-ORDOVICIAN**

**uCOc** buff, orange and orange-brown weathering, thinly interlaminated calcareous shale and silty limestone

Southwest of St. Cyr Fault

**UPPER DEVONIAN AND? MISSISSIPPIAN**

**Dms** recessive, black weathering with rusty streaks, thin bedded, black siliceous slate and minor interbedded chert wacke and chert-granule grit

**SILURIAN AND DEVONIAN**

**ASKIN GROUP (Sddq, Sst)**

**Sddq** resistant, medium grey to buff weathering, medium to thick bedded dolomite, sandy dolomite and quartz arenite

**Sst** tan weathering, thin bedded, dolomitic, platy siltstone

**CAMBRO-ORDOVICIAN**

**KECHIKA GROUP (OSs, uCOs1)**

**OSs** black weathering, thin bedded, black graptolitic shale (only preserved locally)

**uCOs1** grey-orange weathering, finely interlaminated, calcareous phyllite and grey limestone; abundant quartz-carbonate veins and pods

**PRECAMBRIAN AND LOWER CAMBRIAN**

**PCp** dark brown weathering, non-calcareous, dark blue-grey slate, siltstone and minor limestone; metamorphosed equivalents near Glenyon batholith are biotite-muscovite-quartz schist and minor marble; PCp1, buff-orange to light grey weathering, thin bedded, argillaceous limestone and calcareous phyllite

Limit of outcrop  
Geological boundary (defined, approximate, assumed, extrapolated beneath overburden where exposure warrants)  
Bedding (horizontal, inclined, vertical, overturned, tops unknown)  
Wrinkle lineation, axis of small scale fold (inclined, horizontal)  
Fault, steeply dipping (defined, approximate, assumed, extrapolated beneath overburden; barb on downthrow side)  
Fault, thrust (defined, approximate, assumed, extrapolated beneath overburden, overturned; teeth on upper plate)  
Fault, transcurrent (defined, approximate, assumed, extrapolated beneath overburden; arrows indicate slip)  
Anticline (defined, approximate, assumed, extrapolated beneath overburden)  
Syncline (defined, approximate, assumed, extrapolated beneath overburden)  
Anticline, syncline (overturned)  
Mineral occurrence (showing, work target)  
Fossil locality  
Outcrop not present, map unit inferred (italic map unit symbols)

NOTES

- contacts are extrapolated, where exposure warrants, on basis of assumed simple structure
- mineral occurrence numbers follow convention in Yukon Exploration 1987, Exploration and Geological Services Division, Dept. Indian and Northern Affairs, Yukon
- Jones Lake, Mt. Christie, Prevost, Portrait Lake, Steel, Gull Lake, Narchilla and Yusezyu formations and Hyland Group are new lithologic names approved and accepted for publication by the Geological Survey (Gordey, in press).

LEGEND FOR OPEN FILES 2249, 2250, 2251

**NORTHEAST OF TINTINA FAULT**

**TERTIARY**

**Tv** Tv, undivided; Tv1, small stocks and necks of white weathering, flow-banded, rhyolitic, quartz-sandstone porphyry; Tv2, laminated rhyolitic ash-flow tuffs and flows; Tv3, dark grey weathering, locally amygdaloidal, dark grey-green basalt necks and flows; Tv4, massive quartz-feldspar porphyry

**Ts** recessive, thick bedded to massive, pebble to boulder chert-quartz conglomerate, chert sandstone and thin bedded, dark brown siltstone and shale

**MID-CRETACEOUS**

**Kst** South Fork Volcanics: dark brown weathering, locally columnar jointed, massive, densely welded, biotite-quartz-hornblende-feldspar crystal tuff

**Ks** Selwyn Plutonic Suite: grey weathering, resistant, medium to coarse grained, locally megacrystic (K-spar), biotite ± hornblende ± muscovite granite, quartz monzonite and granodiorite; Ks1, plutons without hornblende; Ks2, plutons with hornblende; Ks3, porphyritic biotite ± hornblende granite characterized by large smokey grey quartz phenocrysts and locally K-feldspar phenocrysts; Ks4, fine grained, mafic free, granite with disseminated pyrite

**PENNSYLVANIAN AND PERMIAN**

**CPa** Anvil Allochthonous Assemblage: CPav, resistant, dark weathering dark grey-green basalt, tuff, and breccia; CPat, thin bedded, grey-green, Jasper-red and apple-green chert and siliceous tuff, and minor quartz-chert sandstone and shale; CPal, light grey weathering, massive, finely crystalline, dark grey limestone; CPaub, recessive, green weathering serpentinite

**CARBONIFEROUS TO TRIASSIC**

**CXn** Nisutlin Allochthonous Assemblage: CXnm, grey weathering, muscovitic, quartz blastomylonite; recessive, muscovitic quartzite and quartz-muscovite-biotite; glaucophane schist with local pods of eclogite; CXncg, resistant, massive, poorly sorted, conglomerate with pebble to cobble size clasts of basalt, chert, mylonite, and limestone

**ALLOCHTHONOUS ASSEMBLAGES**

**ALLOCHTHONOUS** ENPLACED IN JURA-CRETACEOUS

**AUTOCHTHON**

**TRIASSIC**

**Tj** Jones Lake Formation: brown weathering, medium to thick bedded, calcareous siltstone, sandstone and shale, ripple cross-laminated; massive light grey weathering, finely crystalline, dark grey limestone

**PERMIAN**

**Pc** Mount Christie Formation: resistant, orange to buff weathering, thin to medium bedded, light grey-green to black chert

**DEVONO-MISSISSIPPIAN**

**EARN GROUP (Mc, Ms, Dmp, Dp, Dme)**

**Dme** undivided Mc, Dmp, minor Dp

**Ms** recessive, dark brown weathering, thin to medium bedded, calcareous, dark grey to brown siltstone, sandstone and shale; thin to thick interbeds of finely crystalline, dark grey limestone; local light grey weathering, thick bedded to massive, dark grey, biohermal limestone

**Mc** Crystal Peak Formation: resistant, dark grey weathering, massive chert-pebble conglomerate and chert quartz sandstone; minor brown weathering, dark blue-grey shale

**Dmp** Prevost Formation: recessive, brown weathering, thin bedded, laminated, dark blue-grey to black slate and thin to thickly interbedded fine- to medium-grained chert-quartz arenite and wacke, and chert-pebble conglomerate; Dmp1, resistant, coarse grained quartz sandstone

**Portrait Lake Formation:** black, gun-blue or silvery white weathering, thin bedded, siliceous, black siltstone, slate and chert; minor quartz arenite

**SILURIAN AND DEVONIAN**

**Dc** Dc1, massive, medium grained quartz arenite; Dc2, light grey weathering, massive to thick bedded, finely crystalline limestone and dolomite, locally cherty

**Ssp** tan weathering, thin bedded, dolomitic, platy siltstone

**ORDOVICIAN AND SILURIAN**

**ROAD RIVER GROUP (Ss, OSd)**

**OSr** undivided Duo Lake and Steel formations (may include infolds of COr and Dp)

**Ss** Steel Formation: orange weathering, thin bedded, burrowed, dolomitic, grey-green mudstone, siltstone and chert; thin bedded black chert; rare black graptolitic shale

**OSd** Duo Lake Formation: resistant, grey weathering, thin to medium bedded, light grey to black chert; recessive, gunsted weathering, black graptolitic shale

**CAMBRO-ORDOVICIAN**

**COv** resistant, dark weathering, massive, locally pillowed, dark grey-green basalt, tuff and breccia

**COl** resistant, dark grey weathering, massive to laminated, blocky, white to light grey quartzose siltstone and chert and rare black slate; strikingly laminated, very fine grained tuffaceous siltstone and chert; minor grey phyllitic limestone, calcareous phyllite, and greenstone

**COr** Rabbittkettle Formation: grey-buff weathering, laminated to thin bedded, locally nodular, shaly limestone to calcareous phyllite (includes tuffaceous phyllite and greenstone on south flank of Anvil Batholith)

**LOWER CAMBRIAN**

**CG** Gull Lake Formation: recessive, brown weathering, non-calcareous, dark grey to black slate and siltstone; metamorphosed equivalents near Anvil and Orchard batholiths include quartz-muscovite-biotite schist (garnet, sillimanite, staurolite, andalusite) and minor marble

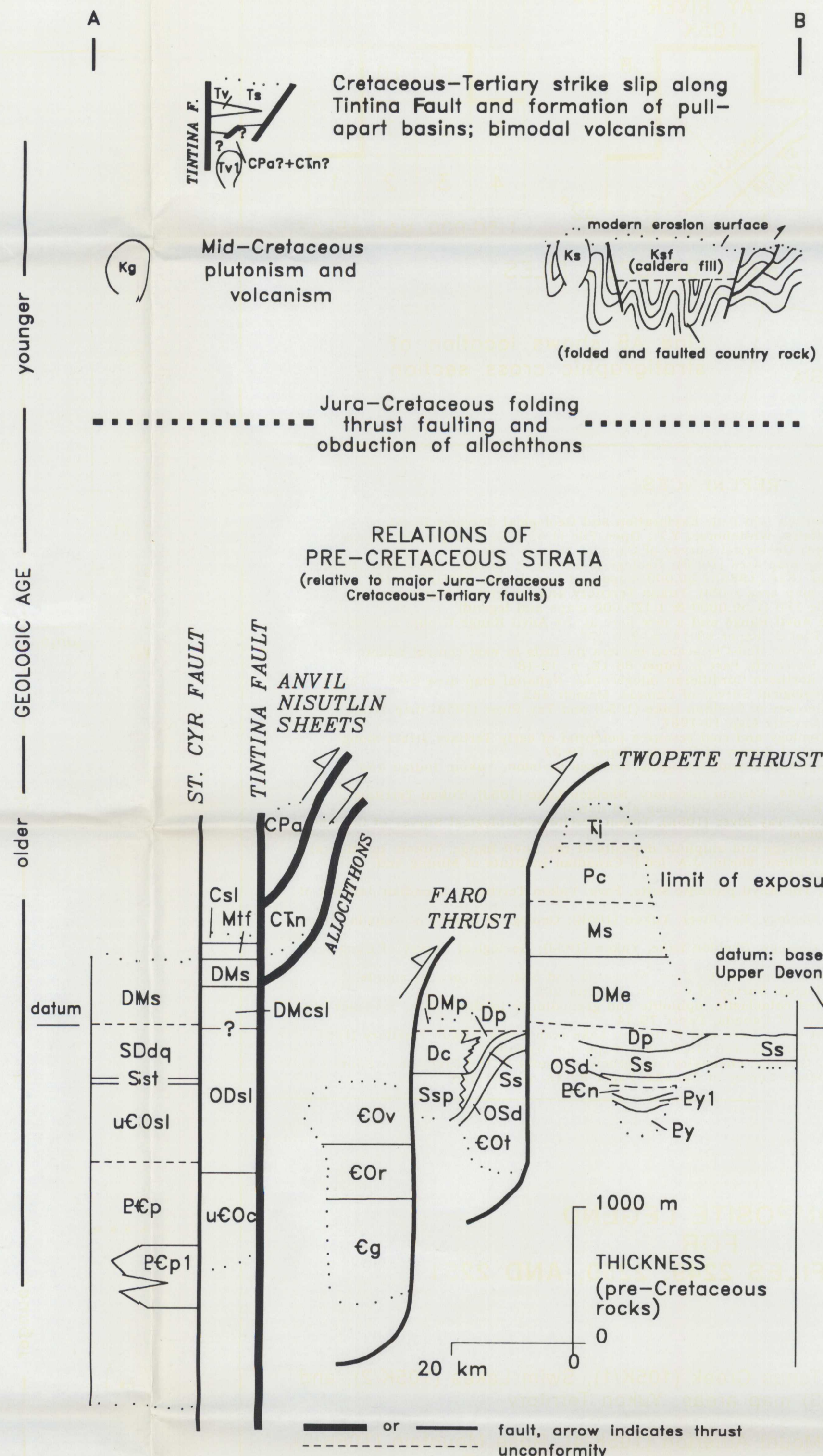
**PRECAMBRIAN AND LOWER CAMBRIAN**

**HYLAND GROUP (PCn, Py)**

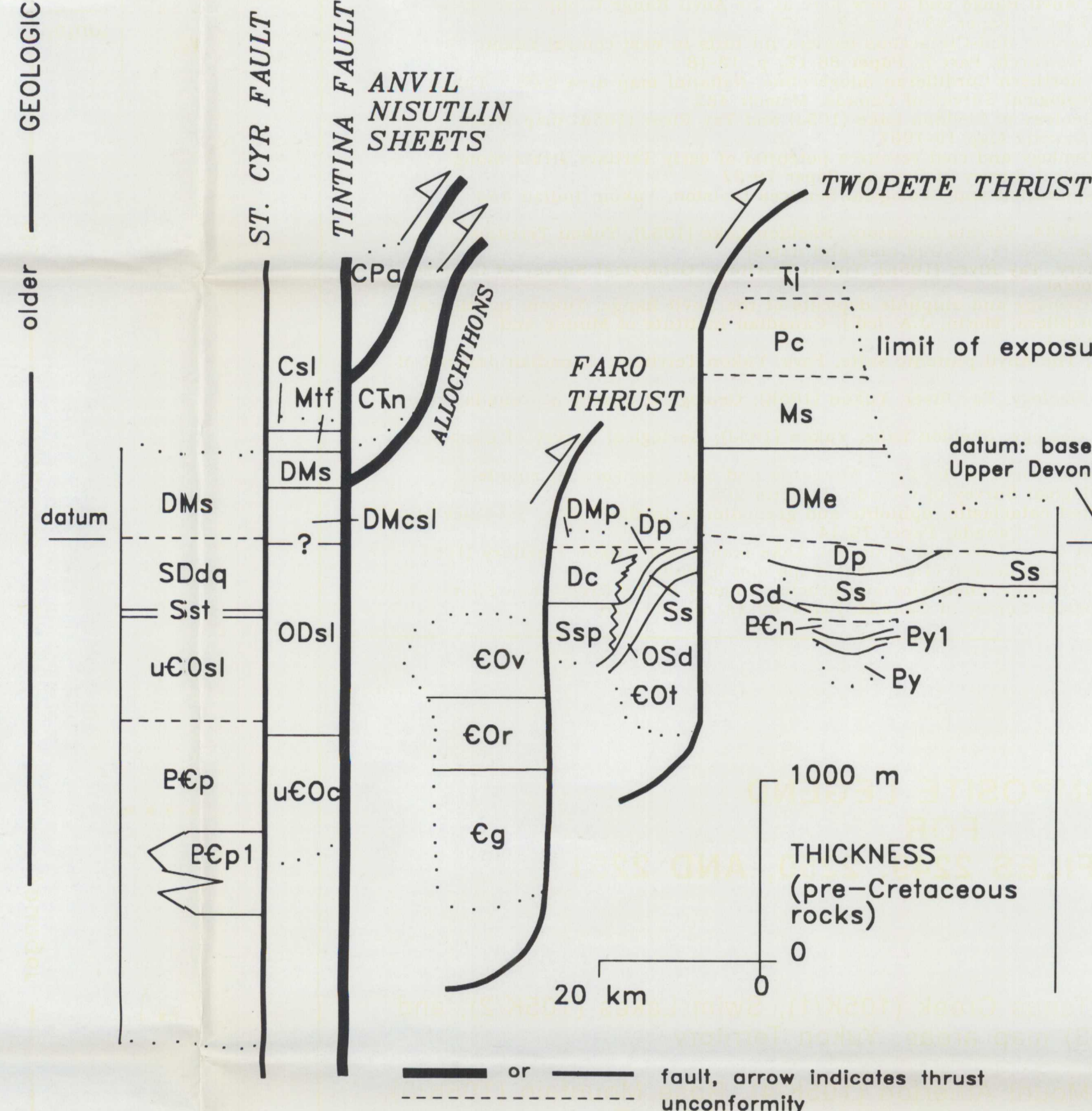
**PCn** Narchilla Formation: recessive, maroon weathering, interbedded maroon and apple-green slate; grey-brown weathering, medium to thick bedded quartz sandstone and quartz-pebble conglomerate

**Py** Yusezyu Formation: grey brown weathering, thin to thick bedded, interbedded, quartz sandstone, local quartz pebble conglomerate, and grey-green to dark grey slate; Py1, grey-white weathering, finely crystalline, dark grey limestone

STRATIGRAPHIC RELATIONS AND GEOLOGIC HISTORY



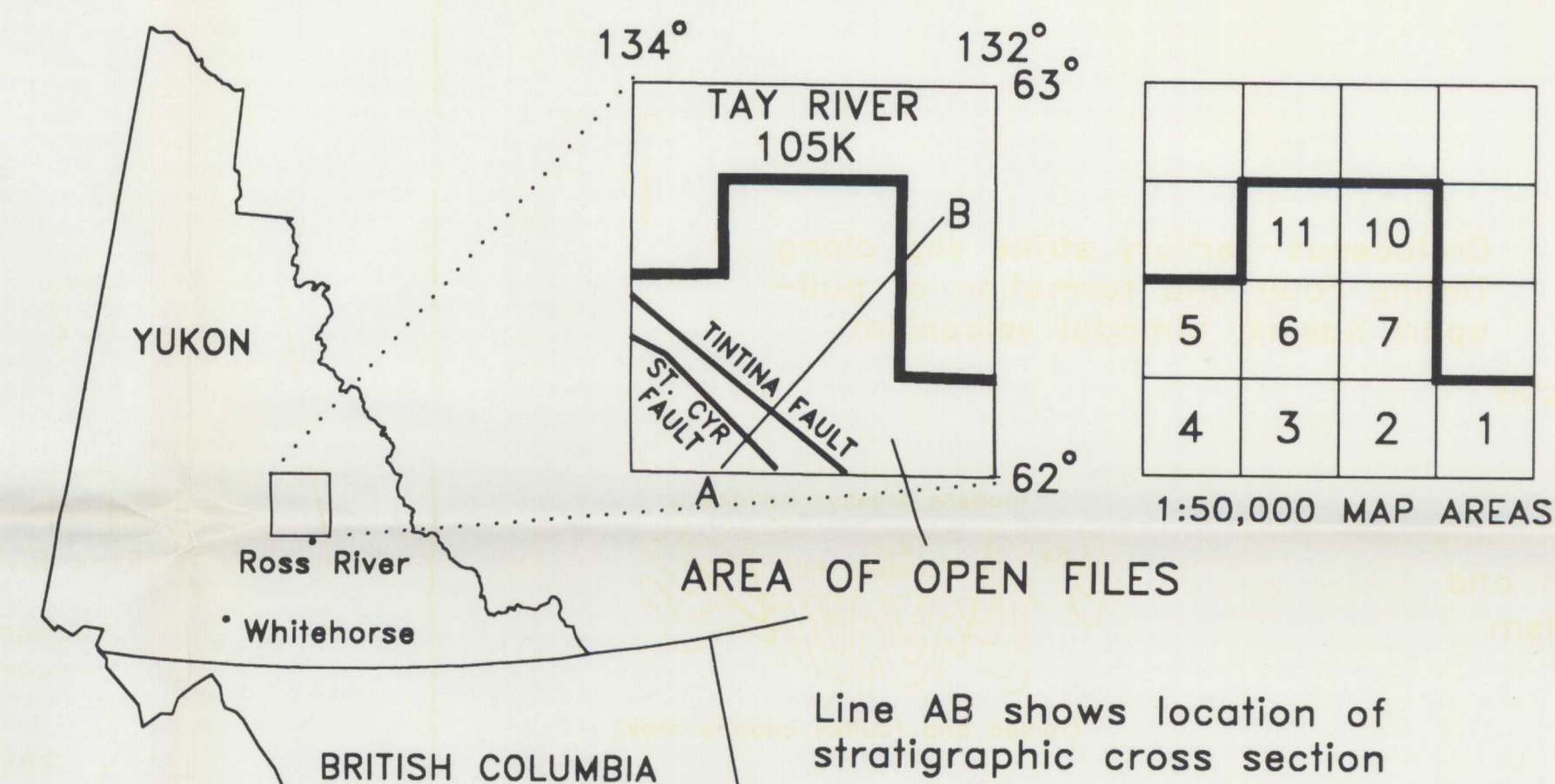
RELATIONS OF PRE-CRETACEOUS STRATA (relative to major Jura-Cretaceous and Cretaceous-Tertiary faults)



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LOCATION



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COMPOSITE LEGEND FOR GSC OPEN FILES 2249, 2250, AND 2251

- Open File 2249: Geology of Tenas Creek (105K/1), Swim Lakes (105K/2), and Faro (105K/3) map areas, Yukon Territory
- Open File 2250: Geology of Mount Atherton (105K/4), Rose Mountain (105K/5), and Mount Mye (105K/6) map areas, Yukon Territory
- Open File 2251: Geology of Blind Creek (105K/7), Teddy Creek (105K/10), and Barwell Lake (105K/11) map areas, Yukon Territory

by S.P. Gordey  
June, 1990

(Nine 1:50,000 scale maps for the Tay River area (105K); information on these maps locally differs from and supercedes that on the preliminary 1:250,000 scale map of the Tay River area (Gordey and Irwin, 1987))