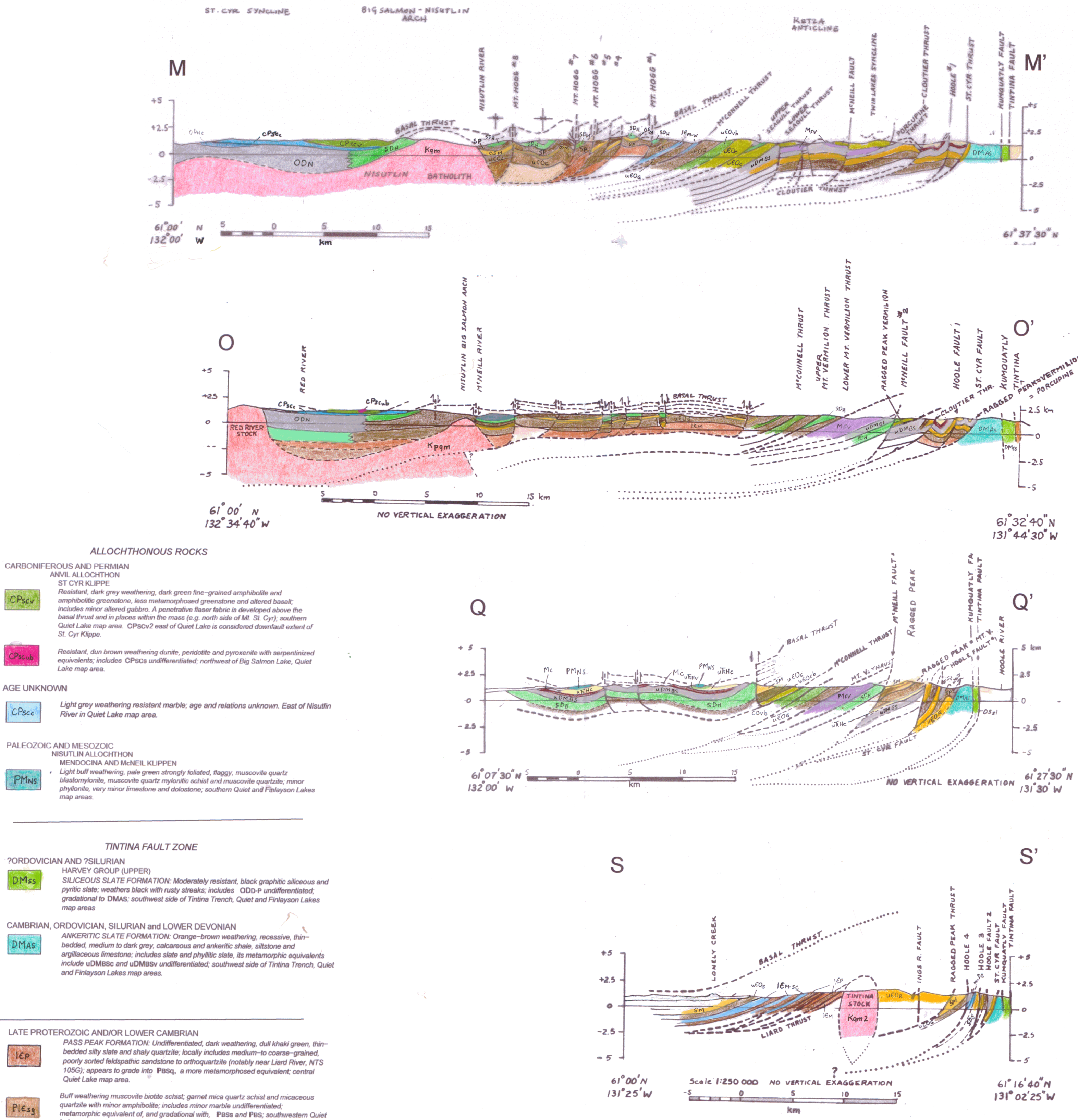




Sheet 10 of 13: CROSS-SECTIONS - 2. Southwest of Tintina trench (Nisutlin Lake area)

- locations of sections are shown on Sheet 1 (Geology, Quiet Lake) and Sheet 2 (Geology, Finlayson Lake)
- coloured version of author's hand-drawn copy
- section N was not completed; see Sheet 3 for sections P and R

- MID-CRETACEOUS**
- Kqm, 2** QUIET LAKE and NISUTLIN BATHOLITHS: Moderately resistant, light grey and blocky weathering, biotite quartz monzonite; medium- to coarse-grained equigranular; locally porphyritic with tabular light pink K-feldspar phenocrysts; generally lacks fabric; boundaries with **PBSs** are poorly constrained; lacks small xenoliths but includes large screens of metamorphic rocks.
- Kpqm** BIG SALMON BATHOLITH: Moderately resistant, blocky, light grey weathering, homogeneous porphyritic (pinkish K-feldspar) medium-grained biotite quartz monzonite; locally exhibits a strong inherited fabric; boundaries with **PBSs** are poorly constrained; lacks small xenoliths but includes large screens of metamorphic rocks.
- UPPER TRIASSIC AND ?JURASSIC**
- uLH** HOOLE FORMATION: Dark grey and buff weathering, recessive, thin-bedded bioclastic limestone with interbedded sandy or silty limestone, calcareous siltstone and shale, commonly finely cross-laminated; includes **PS** undifferentiated; between
- MISSISSIPPIAN**
- SEAGULL GROUP**
- CHERTY TUFF FORMATION:** Rusty orange weathering, resistant, apple green and dark grey, thin-bedded chert and 'cherty tuff', may include minor **MfVb** undifferentiated; between Porcupine Syncline and Tintina Trench, Quiet and Finlayson Lakes map areas.
- FELSIC VOLCANIC FORMATION:** Heterogeneous, rusty, black, white and orange weathering lapilli and sand sized tuff, volcanic breccia and flow rocks ranging from trachyte to andesite; black argillaceous slate and siliceous pale grey and pale green 'cherty tuff' locally abundant; minor finely crystalline buff limestone; locally includes abundant trachyte dykes; locally highly pyritic; weakly sericitized and commonly foliated so that primary textures are masked; includes maroon and green intermediate tuffs and flows (**MfVb**), may include **MfV-1** undifferentiated; between Seagull Creek, Quiet Lake map area and upper Hoole River, Finlayson Lake map area.
- UPPER DEVONIAN and MISSISSIPPIAN**
- uDMbS** BLACK SLATE FORMATION: Black and blue black, recessive weathering, with rusty streaks, thin-bedded black siliceous slate with minor interbedded chert-grain greywacke and chert granule grit; includes lenses of **MFV** undifferentiated; may include **MC** undifferentiated; includes interbedded dark grey barite undifferentiated; northwestern Quiet Lake map area and southwestern Finlayson Lake map area.
- uDMbSc2** Dark grey weathering, medium-bedded chert-granule grit, greywacke and chert-pebble conglomerate with interbedded black slate; occurs as lenses in **uDMbS**.
- ASKIM GROUP**
- MIDDLE TO UPPER DEVONIAN**
- uLda** GREY LIMESTONE FORMATION: Resistant, blue grey weathering, medium grey, medium- to thin-bedded, field bioclastic limestone; locally in eastern Quiet Lake map area and western Finlayson Lake map area.
- UPPER SILURIAN TO DEVONIAN**
- SDH** HOGG FORMATION: Resistant, medium grey to buff weathering, medium- to thick-bedded orthoquartzite, dolomitic sandstone and sandy dolostone; gradational to **SDHq** and **SDHd** undifferentiated; east central Quiet Lake map area and southwest Finlayson Lake map area.
- SDHq** Silvery white and light grey weathering, medium- to thick-bedded, light buff, medium-grained, mature orthoquartzite commonly with dolomite cement, minor interbedded sandy dolomite; laterally gradational to **ODN** and **Resistant, thick-bedded to massive, brilliant red to orange weathering, coarsely sugary red dolostone; minor sandy dolostone; dolomitized equivalent of SDHd.**
- SDHr**
- SDb** BARITE MOUNTAIN FORMATION: Resistant, medium grey to buff and light orange weathering, medium-bedded dolomitized laminated mudstone to spongy dolostone and dolomitized calcarenite with minor silty and sandy dolostone; vugs, birdseye and fenestral cavities are common as are bioturbation burrows, mottling and mudcracks; gradational to **SDH** and **SDP**; includes **SDbd** and **SDbq** undifferentiated; southwest and northeast of Porcupine Syncline, Quiet and Finlayson Lakes map areas.
- SP** PLATY SILTSTONE FORMATION: Tan, medium grey, and locally deep maroon weathering; light grey to buff, thin-bedded to platy dolomitic siltstone, dolomitic very fine-grained sandstone and minor silty dolomite; gradational to **ODN**; eastern Quiet Lake map area and western Finlayson Lake map area.
- ODH** NASINA FORMATION: Recessive, dark grey to black 'sooty', limy or dolomitic, thin-bedded to platy graphitic siltstone and fine-grained impure quartzite with interbedded graphitic silty shale; gradational to **SP**, **SDHq** and **ODN**; metamorphosed equivalents include graphitic metaquartzite and muscovite graphite quartz schist; southwestern Quiet Lake map area.
- KECHIKA GROUP**
- ORDOVICIAN and SILURIAN**
- OSM** MAGUNDY FORMATION: Recessive, black, locally calcareous, fissile graphitic slate; includes thin sills, flows and dykes of dark green, basalt undifferentiated; includes **SDV** undifferentiated; rarely includes lenses or large blocks of algal laminated dolomite; includes white orthoquartzite beds high in the upper Hoole River; grades upward into **SP** and laterally into **uCOG** and **uCOB**; southwest of Tintina Trench, Quiet Lake map area.
- uCOc** CLOUTIER FORMATION: Medium grey, recessive weathering, lustrous, dark grey chlorite muscovite quartz phyllite with a good cleavage or foliation across bedding; includes abundant lenses of greenstone (**uCOcV**) undifferentiated, which represents metamorphosed lenses of **uCOcV** and **uCOcB**; grades laterally to **uCOG** and **uCOB**; near Ketzia River and Cloutier Creek, Quiet and Finlayson Lakes map areas.
- uCOv** Olive green, sandy and fine-grained buff and buffaceous slate, commonly strongly foliated and metamorphosed to green schist facies; equivalents include chlorite phyllite and chlorite amphibolite; abundant but only locally differentiated in **uCOG**.
- uCOa** GROUNDHOG FORMATION: Medium grey, recessive weathering, lustrous, medium grey chlorite muscovite quartz phyllite and silty phyllite, locally calcareous; locally includes lenses, sills and flows of olive to dark green basalt and basaltic tuff **uCOcV**; may include **OSM** undifferentiated; grades laterally to **uCOG** and **uCOB**; differs from **uCOB** in having less volcanics; near Groundhog and Seagull Creeks, Quiet Lake map area and McNeil Lake, Finlayson Lake map area.
- UPPER CAMBRIAN and ORDOVICIAN**
- uCOa** RAM FORMATION: Orange to orange-brown weathering, recessive, medium grey, thinly interlaminated calcareous shale and silty limestone or calcareous siltstone; proportion of carbonate to clastic material varies; includes silty and phyllitic equivalents; distinctive red weathering quartz ankerite 'sweats' are common; locally includes undifferentiated olive green tuff in layers a few metres thick; laterally gradational to **uCOG**; Quiet and Finlayson Lakes map areas, southwest of Tintina Trench.
- uCOs** GRAY CREEK FORMATION: Recessive weathering quartz biotite and quartz chlorite schist, and chlorite amphibolite; includes muscovite graphite metaquartzite like **ODH** undifferentiated; presumed equivalent of **uCOG**; Gray Creek, Quiet Lake map area.
- LOWER CAMBRIAN and OLDER**
- KETZA GROUP**
- uCM** MCCONNELL FORMATION: Recessive weathering, grey; thin-bedded calcareous argillite, limestone and calcareous siltstone; locally includes calcareous biotite schist and thinly banded quartz tremolite diopside skarn, the metamorphic equivalent; near Ketzia River, Quiet Lake map area.
- uCM-sc** WHITE CREEK MEMBER: Resistant, thick-bedded to massive, medium grey to blue grey limestone and argillaceous limestone; includes archeocyathid buildups, undifferentiated; generally occurs in the upper half of **uCM**; Ketzia River and White Creek, Quiet Lake map area.
- LATE PROTEROZOIC AND/OR LOWER CAMBRIAN**
- uCP** PASS PEAK FORMATION: Undifferentiated, dark weathering, dull khaki green, thin-bedded silty slate and shaly quartzite; locally includes medium- to coarse-grained, poorly sorted feldspathic sandstone to orthoquartzite (notably near Liard River, NTS 1055); appears to grade into **PBSq**, a more metamorphosed equivalent; central Quiet Lake map area.
- uPESq** Buff weathering muscovite biotite schist; garnet mica quartz schist and micaceous quartzite with minor amphibolite; includes minor marble undifferentiated; metamorphic equivalent of, and gradational with, **PBSs** and **PBS**; southwestern Quiet Lake map area.



Notes:
 These sections contain transpression faults (with some motion not in the plane-of-section). Some depicted structures, although geometrically unlikely, are included to illustrate interpretations in the accompanying report (Tempelman-Kluit, 2012; Structural Geology chapter).

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Sheet 10 of 13: Cross-sections - 2. Southwest of Tintina trench (Nisutlin Lake area)

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