

TECTONIC ASSEMBLAGES AND PLUTONIC SUITES (from Wheeler and McFely, 1991)

Tectonic assemblages represent distinctive successions of stratified rocks, mainly bounded by unconformities or faults, deposited in specific tectonic environments during particular intervals of time...

REFERENCES

- Armstrong, R.L. 1985. Mesozoic - early Cenozoic plutonism in the Canadian Cordillera - distribution in time and space; Geological Society of America, Abstracts and programs, 1985, v. 17, p. 338

- Wheeler, J.O. and McFely, P. 1991. Tectonic Assemblage Map of the Canadian Cordillera and adjacent parts of the United States of America; Geological Survey of Canada, Map 1712A, scale 1:2 000 000

SOURCES OF INFORMATION

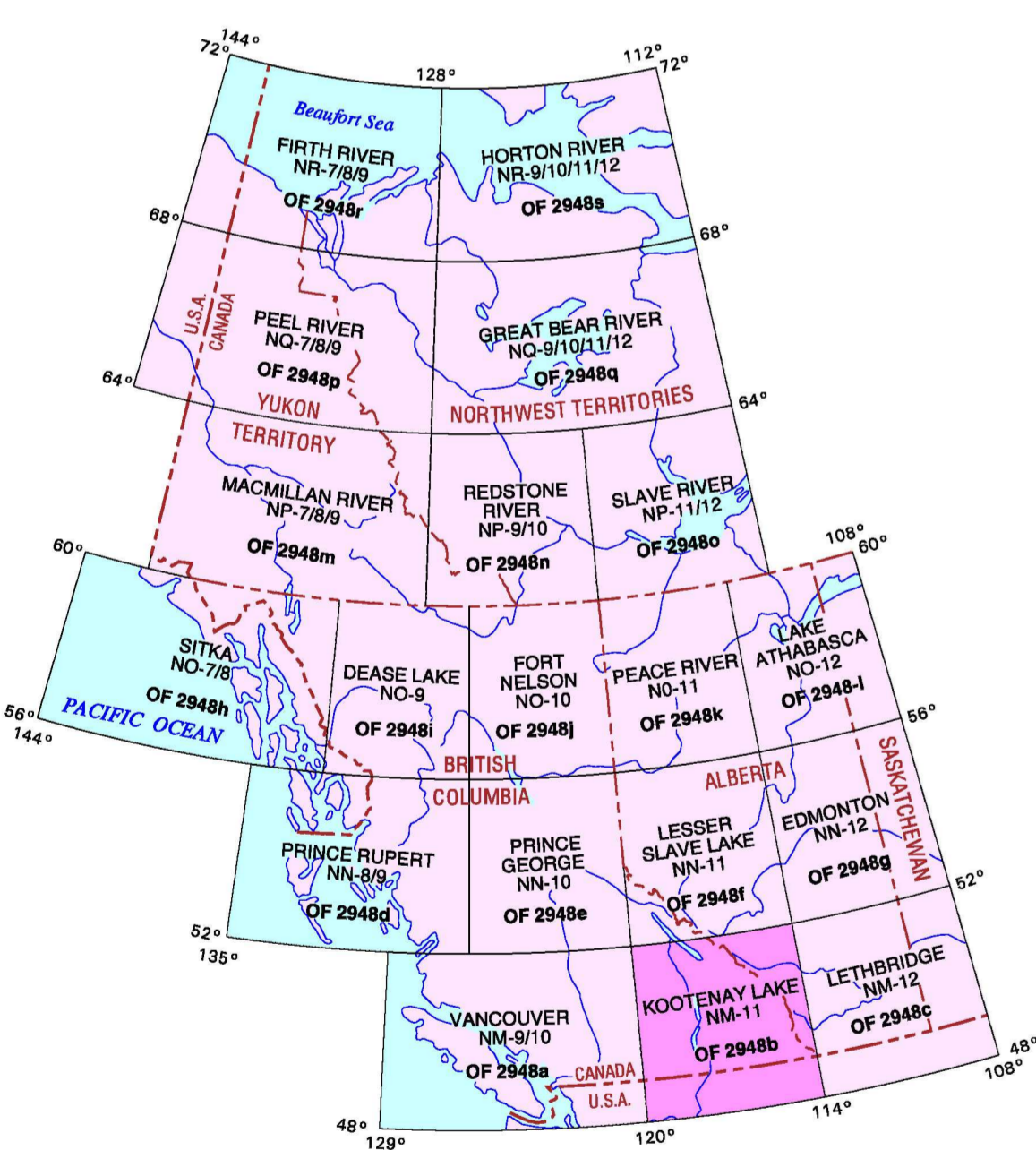
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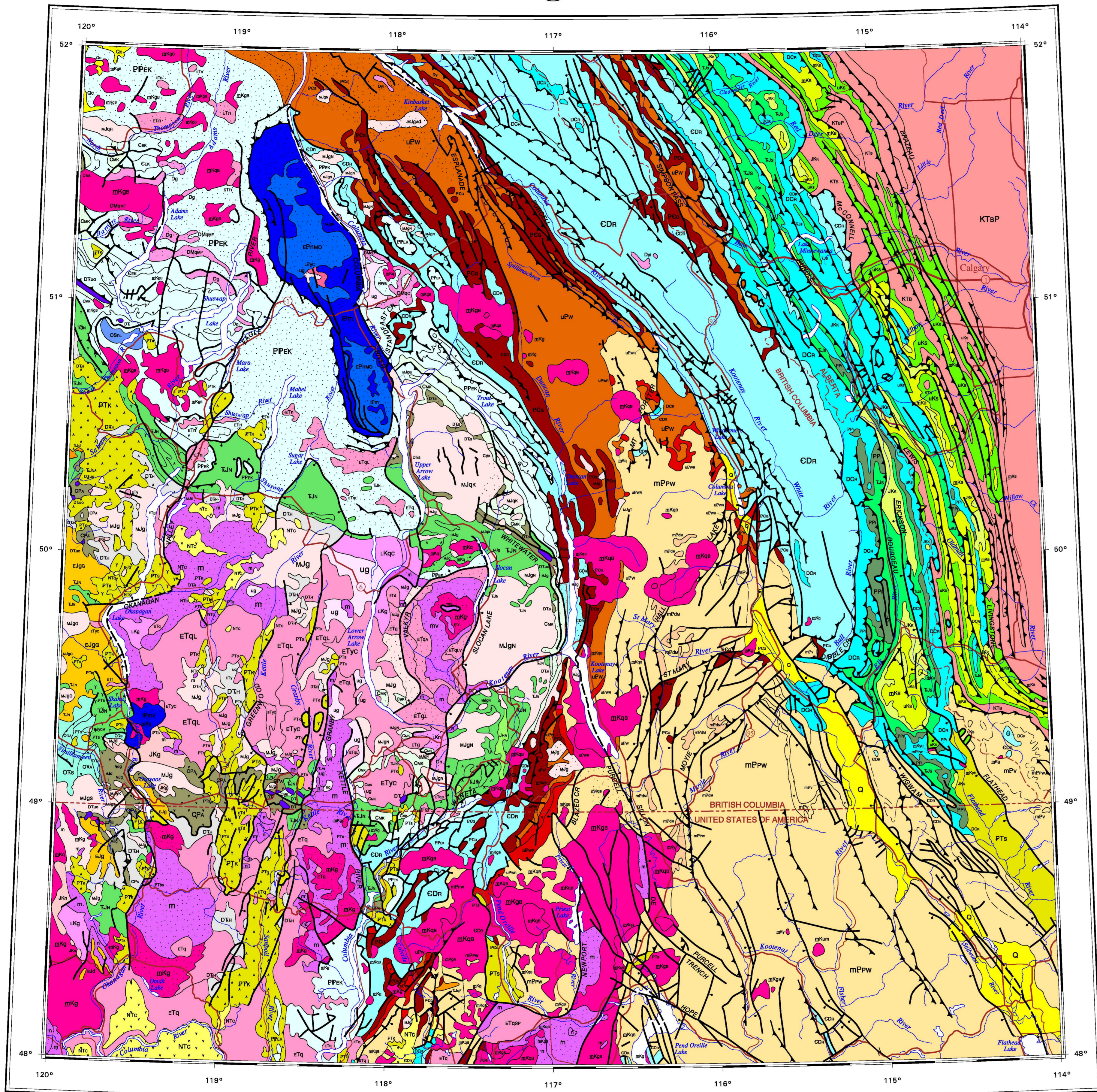
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CORDILLERAN TECTONIC ASSEMBLAGE MAP LIBRARY

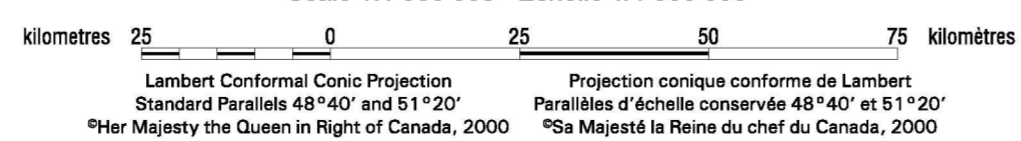


TECTONIC ASSEMBLAGES OF THE KOOTENAY LAKE MAP AREA GSC OPEN FILE 2948b



OPEN FILE 2948b TECTONIC ASSEMBLAGE MAP KOOTENAY LAKE BRITISH COLUMBIA - ALBERTA - U.S.A.

Scale 1:1 000 000 - Echelle 1/1 000 000



TECTONIC ASSEMBLAGES

- QUATERNARY: Q Undivided Quaternary alluvium and colluvium; Qc CLEARWATER: transensional back-arc volcanics; NEogene: NTC CHILCOTIN: back-arc volcanics; PALEOGENE: PTK KAMLOOPS: transensional arc volcanics; Pts SIFTON: nonmarine fault through clastics

- UPPER CRETACEOUS - OLIGOCENE: KTB BRAZEAU: foredeep clastic wedge; UPPER CRETACEOUS: UKs SMOKY: foredeep marine shales; MID-CRETACEOUS: MKs BLAIRMERE: foredeep clastic wedge

- UPPER JURASSIC - LOWER CRETACEOUS: JJK KOOTENAY: foredeep clastic wedge; LOWER AND MIDDLE JURASSIC: JHA HALL: Quaternary arc-derived clastics

- TRIASSIC - JURASSIC: TJS SPRAY RIVER: continental margin prism; UPPER TRIASSIC - LOWER JURASSIC: TJN WCOLA: arc volcanics in Quenesnel

- PENNSYLVANIAN - PERMIAN: PPI SHBEL: faulted passive continental margin sediments; DEVONIAN - TRIASSIC: DTh HARPER RANCH: arc clastic; DTs SLIDE MOUNTAIN: oceanic marginal basin volcanics

- CARBONIFEROUS - PERMIAN: CPA ANARCHIST: oceanic volcanics and sediments; CARBONIFEROUS: CMK MCFORD: marginal basin sediments and oceanic volcanics

- DEVONIAN - CARBONIFEROUS: DCh RUNDLE: continental shelf carbonate and shale; ORDOVICIAN - TRIASSIC: Ota UNDIVIDED: undivided granitoid, leucogranite, alkalic, quartz monzonite

- DEVONIAN: DTS SHOEMAKER: enigmatic assemblage of Paleozoic oceanic tuffs; CAMBRIAN - DEVONIAN: CDR ROCKY MOUNTAINS: passive continental margin sediments

LEGEND

- UPPER PROTEROZOIC - PALEOZOIC: PPEK EAGLE BAY: calcic and volcanics of peritectonic Kootenay Terrane; UPPER PROTEROZOIC - LOWER CAMBRIAN: PCL GOG: rift and passive continental margin sediments; UPPER PROTEROZOIC: UPW WINDERMERE: mainly clastic continental margin sediments; UPPER PROTEROZOIC: UPWa RAPITAN: all assemblage Rapitan

- MIDDLE PROTEROZOIC: MPPw PURCELL: WERNECKE: continental margin sediments; LOWER PROTEROZOIC: LPM Craton related gneiss and metasediments

- PLUTONIC AND ULTRAMAFIC ROCKS: ET EARLY TERTIARY (40 - 64 Ma); ETa-Ca: early to cal-alkalic; ETa-L: late to late-alkalic

- LATE CRETACEOUS (64 - 87 Ma): LK UNDIVIDED: undivided granitoid, leucogranite, alkalic, quartz monzonite; LKc CARIBOU CO: undivided granite, leucogranite, alkalic, quartz monzonite

- MID-CRETACEOUS (87 - 130 Ma): MK Bayona: Bayona discordant, biotite and biotite-muscovite leucogranite; MKc GABRIOLA: Gabriola discordant, biotite and biotite-muscovite leucogranite

- UNCERTAIN AGE: U ug: granodiorite, quartz diorite and quartz monzonite; Uq: undivided granite, leucogranite, alkalic, quartz monzonite

- LATE JURASSIC - EARLY CRETACEOUS (130 - 155 Ma): JK JKG: undivided granitoid, leucogranite, quartz monzonite; JKc UNDIVIDED: undivided granite, leucogranite, alkalic, quartz monzonite

- MIDDLE JURASSIC (155 - 187 Ma): MJ MJG: Nelson: grey porphyritic hornblende-biotite granite; MJc KULINAN: Kulinan: white discordant, agassizite, leucogranite and leucogranite

- EARLY JURASSIC (187 - 214 Ma): EJ EJG: Guelson: elongate, partly concordant, cal-alkalic, grey, green and pink hornblende-biotite granitoid

- LATE TRIASSIC - EARLY JURASSIC: TJ TJd: undivided diorite, monzonite, gabbro, diabase, amphibolite; TJc: (Flowey Trail) undivided granite, leucogranite, alkalic, quartz monzonite

- DEVONIAN - TRIASSIC: DT DTwo: oceanic ultramafic rocks; DM DMa: (M. Fowler) white to grey, foliated and lineated biotite leucogranite

DEVONIAN

- D Dy: (de Rivier) older mafic nepheline clinopyroxene rocks; Dc: cut by marginal nepheline syenite, central sodalite syenite, and younger carbonate

ORDOVICIAN - SILURIAN

- OS OSm: (Little Shuswap Lake) leucocratic biotite-muscovite granodiorite, granite and diorite gneiss

LATE PROTEROZOIC

- LP LPY: (Mt. Copeland) nepheline syenite

MIDDLE PROTEROZOIC

- mP mPm: Moyie: hornblende diorite and micropegmatite intruding Purcell Supergroup

EARLY PROTEROZOIC

- eP ePm: Monashee basement complex: augen gneiss, leucocratic gneiss and migmatitic paragneiss

VOLCANIC ROCKS

- Cal-alkalic volcanic rocks; Tholeiitic volcanic rocks; Alkaline volcanic rocks

METAMORPHIC ROCKS

- m: metamorphic rocks (undivided), (mv) paragneiss of Valhalla Complex; n: predominantly orthogneiss

SYMBOLS

- Geological contact (defined); Thrust fault (beeh on upper plate); Overturned thrust fault (beeh on upper plate, dip of fault overturned)

- Extension fault (solid circle indicates downthrow side); Right lateral transcurrent fault; Fault of unknown displacement

- Submerged faults and those buried by younger strata; Submerged normal fault (solid circle indicates downthrow side)



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