

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. Thus they are fundamental components of Cordilleran geology that reflect its evolution and allow comparison of the tectonic behaviour of various regions during specific intervals of time.

An assemblage may comprise one or more formations from a single region or from several separate regions. Most assemblages are named for an important constituent or group, although a few are named after the region in which the assemblage is best developed. Very few are not yet named. The age assigned to each assemblage reflects the age range of its components. Each assemblage is identified by its tectonic or depositional setting, the latter illustrated by descriptions of its principal lithologies, facies variations, source areas and other criteria.

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.

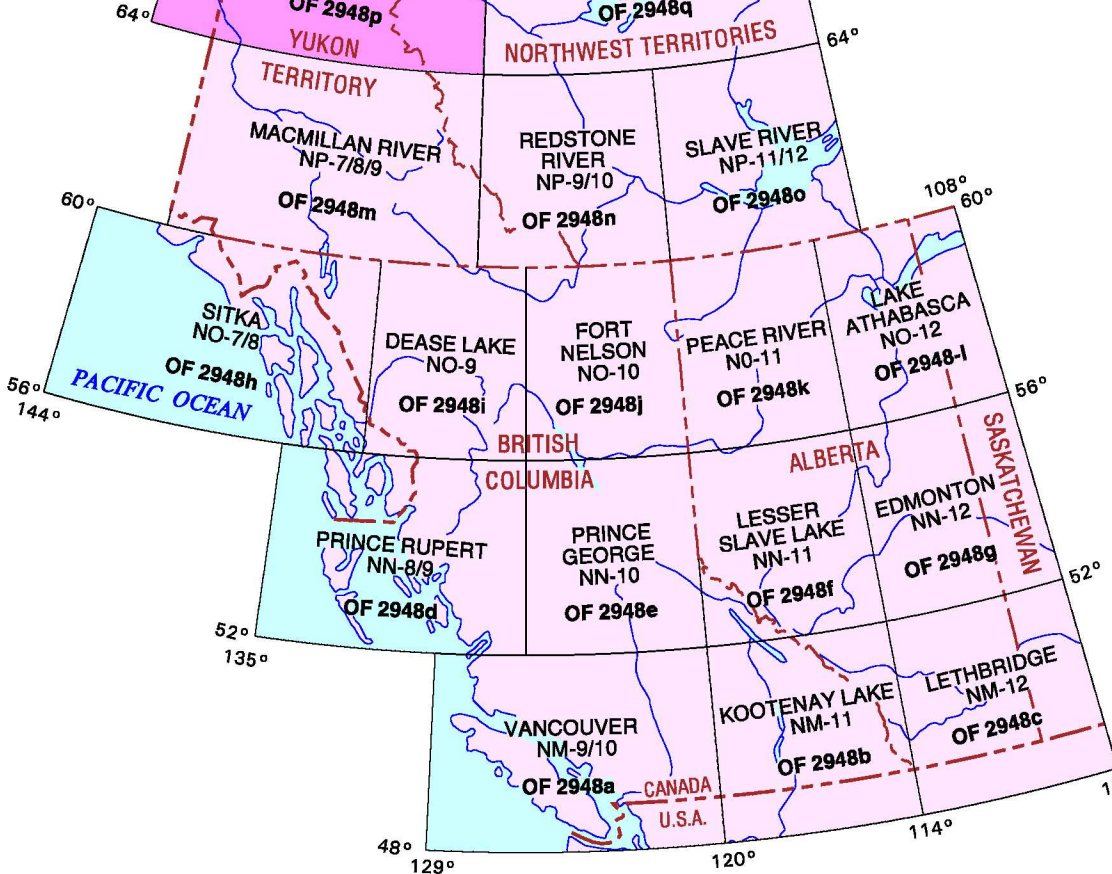
SOURCES OF INFORMATION

Geological information contained in the GIS map library and the 1:1 000 000 scale folio series is derived directly from John Wheeler's Tectonic Assemblage Map of the Canadian Cordillera (Wheeler and McFely, 1991, Map 1712A), and is subject to all Copyright laws for distribution in either digital or hardcopy form. This map is a revision of the Geological Survey of Canada Map 1024A by Topor, Woodsworth, and Gabels, published in 1981. It is a compilation of published maps, theses, and unpublished information from officers of the Geological Survey of Canada from J.D. Abbott, G.W. Lower, and J.A. Mohr of the Geology Section, Department of Indian and Northern Affairs, Whitehorse, Yukon; from D.A. Brew, J.H. Dyer, C. Duxon-Bacon, H.L. Foster, J.E. Harrison, W.J. Naliberg, S. Plafker, and R.W. Taylor of the U.S. Geological Survey; and from R.L. Armstrong, M.T. Brandon, R.D. Brown, D.S. Cowen, P. Ermer, J. Filippone, R.M. Friedman, J.T. Fyfe, J.M. Hamilton, C.J.R. Hart, R.A. Haggard, C.J. Hickson, P.M. Hobbs, G.A. Hone, D.L. Jones, A. Jung, W.C. Mackwell, R.W. Murray, J.K. Murchison, J.K. Murchison, J.S. Oliver, P.A. Price, P.B. Reed, T.A. Richards, M.E. Rumore, C.M. Rubin, P.S. Simony, A. Sutherland-Brown, R.S. Tobler, P. van der Heyden, and W.L. White. Geological cartography for the original version of this map was by M. Sigdon, Geoscience Information Division.

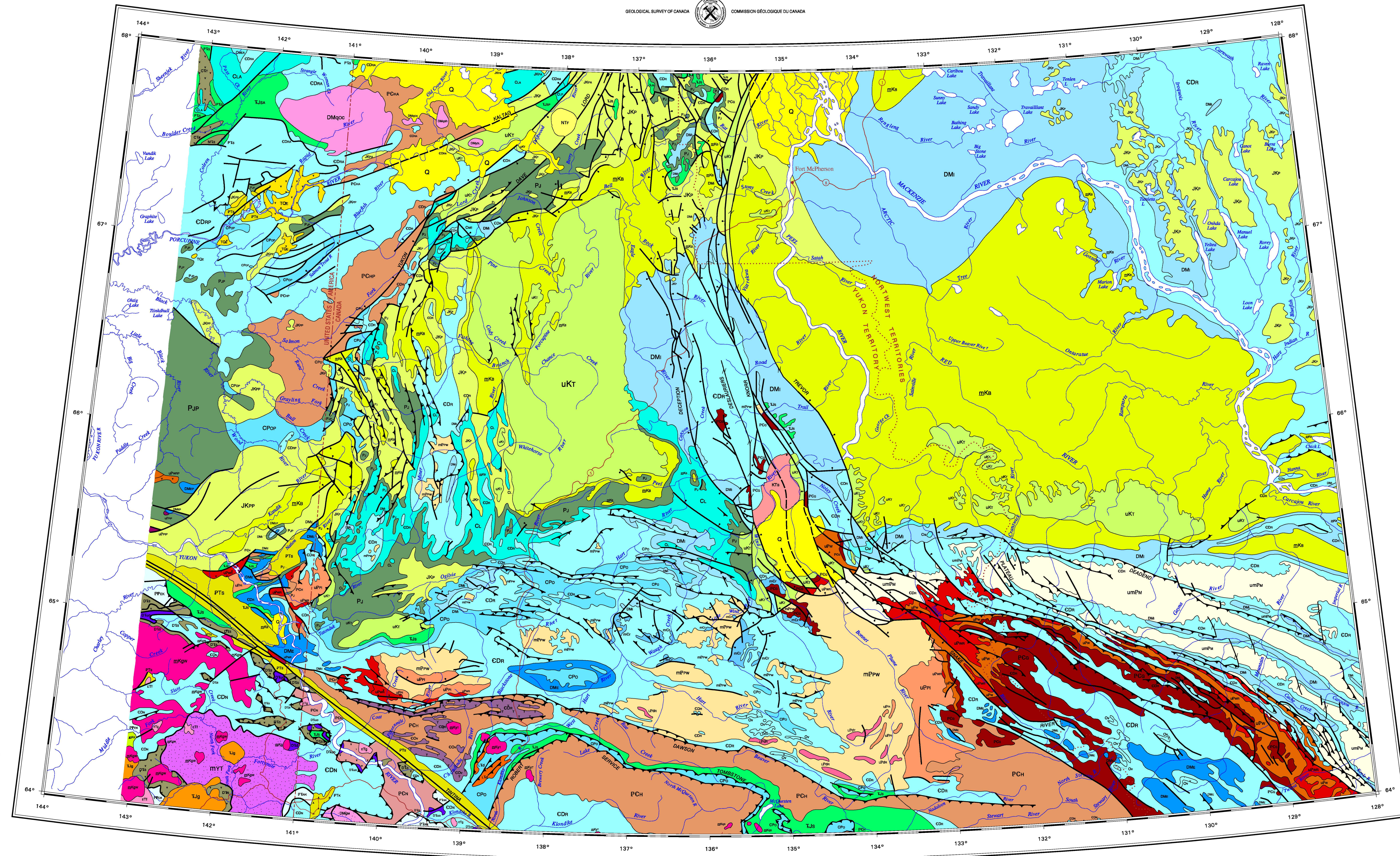
GIS MAP LIBRARY

The Cordilleran GIS Map Library was initiated in March, 1993 as a collaborative research and development project by the Pacific Division and the Geoscience Information Division (GID) of the Earth Science Sector (ESS). The goal is to develop an integrated 1:1 000 000 scale digital geospatial database for the Canadian Cordillera that can be used for research and teaching by the Geological Survey of Canada (GSC) and elsewhere. This map is part of a new series of 1:1 000 000 scale tectonic assemblage maps for the Canadian Cordillera based on the Wheeler and McFely (1991) Tectonic Assemblage Map 1712A. It is one of 19 digital data sets derived from the Cordilleran GIS Map Library (CORDIM Open File 2948).

CORDILLERAN TECTONIC ASSEMBLAGE MAP LIBRARY



TECTONIC ASSEMBLAGES OF THE PEEL RIVER MAP AREA 1:1 000 000 GSC OPEN FILE 2948p



TECTONIC ASSEMBLAGES

- QUATERNARY: Q - Uncovered Quaternary alluvium and colluvium.
TERTIARY AND QUATERNARY: TOe - Eocene; TOv - Eocene; TOc - Eocene.
NEOGENE: NTf - Fraser alluvial sediments.
PALEOGENE: PTK - Paleogene; Pts - Paleogene.
UPPER CRETACEOUS - OLIGOCENE: KTB - Kootenai; KTBa - Kootenai.
UPPER CRETACEOUS: UKT - Upper Cretaceous.
MID-CRETACEOUS: mKs - Mid-Cretaceous.
UPPER JURASSIC - LOWER CRETACEOUS: JKp - Upper Jurassic.
TRIASSIC - JURASSIC: TJs - Triassic; TJs - Triassic.
PERMIAN - TRIASSIC: Pts - Permian; Pts - Permian.
PERMIAN: PJ - Permian.
CARBONIFEROUS - JURASSIC: CPT - Carboniferous; CPT - Carboniferous.
DEVONIAN - TRIASSIC: Dts - Devonian; Dts - Devonian.
CARBONIFEROUS - PERMIAN: CPO - Carboniferous.
CARBONIFEROUS: Cc - Carboniferous.
DEVONIAN - MISSISSIPPIAN: DMi - Devonian; DMi - Devonian.
DEVONIAN - TRIASSIC: DMb - Devonian; DMb - Devonian.

UPPER PROTEROZOIC - PALEOZOIC

- UPPER PROTEROZOIC - PALEOZOIC: PPFex - Upper Proterozoic; PPFex - Upper Proterozoic.
UPPER PROTEROZOIC - TRIASSIC: PTK - Upper Proterozoic; PTK - Upper Proterozoic.
CAMBRIAN - DEVONIAN: CDR - Cambrian; CDR - Cambrian.
UPPER PROTEROZOIC - LOWER CAMBRIAN: PCh - Upper Proterozoic; PCh - Upper Proterozoic.
UPPER PROTEROZOIC: UPu - Upper Proterozoic; UPu - Upper Proterozoic.
MIDDLE AND UPPER PROTEROZOIC: UmP - Middle and Upper Proterozoic; UmP - Middle and Upper Proterozoic.
MIDDLE PROTEROZOIC: mPw - Middle Proterozoic; mPw - Middle Proterozoic.
PLUTONIC AND ULTRAMAFIC ROCKS: Pl - Plutonic; Pl - Plutonic.
EARLY TRIASSIC: ET - Early Triassic; ET - Early Triassic.
MID-CRETACEOUS (87 - 130 Ma): mKs - Mid-Cretaceous; mKs - Mid-Cretaceous.
LATE TRIASSIC - EARLY JURASSIC: TJ - Late Triassic; TJ - Late Triassic.
LATE TRIASSIC (234 - 254 Ma): LT - Late Triassic; LT - Late Triassic.
DEVONIAN - TRIASSIC: DT - Devonian; DT - Devonian.

DEVONIAN - MISSISSIPPIAN

DM - Devonian; DM - Devonian.

LATE PROTEROZOIC

LP - Late Proterozoic; LP - Late Proterozoic.

VOLCANIC ROCKS

Ca - Calc-alkaline volcanic rocks; Ca - Calc-alkaline volcanic rocks.

R - Rhyolitic volcanic rocks; R - Rhyolitic volcanic rocks.

A - Alkaline volcanic rocks; A - Alkaline volcanic rocks.

METAMORPHIC ROCKS (protolith uncertain)

m - Metamorphic rocks; m - Metamorphic rocks.

SYMBOLS

- Geological contact (dashed); Geological contact (dashed).
Trust fault (thin on upper plate); Trust fault (thin on upper plate).
Extension fault (bold circle indicates downthrow side); Extension fault (bold circle indicates downthrow side).
Right lateral transected fault; Right lateral transected fault.
Fault of unknown displacement; Fault of unknown displacement.
Submerged faults and those buried by younger strata; Submerged faults and those buried by younger strata.