

MAP 1713A  
LEGEND  
SHEET 2 OF 2

## TERRANE MAP OF THE CANADIAN CORDILLERA

Compiled by J.O. Wheeler, A.J. Brookfield, H. Gabriele,  
J.W.H. Monger, H.W. Tipper and G.J. Woodsworth

Drafting by the Geological Survey of Canada

Digital colour separation film plots were produced by the Survey,  
Mapping and Remote Sensing Sector using a Scitex scanner/plotter

### MIOGEOCLINE CRATON

**NA** Middle Proterozoic to Carboniferous passive and offshelf continental margin sediments, Devonian to Carboniferous clastic wedges, Pennsylvania to Jurassic passive continental margin prism, and Permian clastics.  
mPCM Cap Mountain, uPm Mackenzie, mPM Muskeg, mPm Purcell-Wenatchee, uPm Windermere, uPm Ropell, Pm Tintina, PmT Kootenay, PmG Gog, PmC Hyland, mCr rasaconite, CDR Rocky Mountains, DMB Bea River, DME Earr, DM Imperial, DCR Rundle, CM Mattson, CL Lismore, CPD Outer detrital clastics, PPI Isbell, PJ Jungle Creek, TJS Spray River, JK Parsons plutonic rocks: MPgH Hellaring Creek, MPdM Moyie, LPdP Deserter, LPdM Macdonald, LPdR Rockie, LPdT Thundercloud, Sy Bearpaw Ridge

**TERRANES:** geological record except for displaced continental margin differs from that of Ancestral North America

### NORTH AMERICAN BASEMENT?

**MO** Craton-related metasedimentary rocks overlying basement paragneiss and orthogneiss of Early Proterozoic age  
iPm Monashee Complex  
plutonic rocks: EPmV Monashee, LPyC Mt. Copeland  
Monashee - inferred

**MO?** iPmV Vaseux Greiss

### DISPLACED CONTINENTAL MARGIN

**AA** Arctic Alaska  
Upper Proterozoic and lower Paleozoic mioecological sedimentary, volcanic and granitic rocks unconformably overlain by Lower Carboniferous to Triassic continental margin sediments and displaced along the Kallag Fault  
uPm Nenupuk, PChA Hyland, CDRA Rocky Mountains, DMIA Imperial, CMEA Endicott Grp., Mattson Assemblage, CL Lismore, PPS Saderholm, JKPA Parsons plutonic rocks: DMgA Ammerman, DMgF Fitter, DMgC Old Crow, DMgH Scheffler, DMgE Sedgewick

**CA** Cassiar  
Upper Proterozoic to Upper Triassic passive continental margin sediments displaced along the Tintina and Northern Rocky Mountain Trench transcurrent faults  
uPWC Windermere, PCgC Gog, CDRC Rocky Mountains, DCRC Rundle, DMEC pluto. rocks: EPnT Tocheka

### SUBTERRANE

**CAC** Cariboo  
Upper Proterozoic to Upper Triassic displaced offshelf passive continental margin sediments without characteristic platform Upper Silurian (?) to Upper Devonian carbonate and sandstone  
uPWC Windermere, PCgC Gog, CDRC Rocky Mountains, DCRC Rundle, DMEC pluto. rocks: EPnT Tocheka

### Hanging Wall

**NS** Metamorphosed Proterozoic to lower Paleozoic (?) passive continental margin assemblage and partly metamorphosed carbonaceous and siliceous offshelf sediments  
PG Nisling, CDN Nasina

### PC

Continental margin sediments comprising Upper Proterozoic clastics overlain by Paleozoic carbonates and clastics intruded by Devonian synclastics, and bounded by the Yukon and Kallag faults  
PChP Hyland, CDPR Rocky Mountains, CLP Lismore, CPD Outer detrital clastics, PJ Jungle Creek, TJS Spray River, JK Parsons  
plutonic rocks: DMgD Dave Land

**KO** PERICORONIC: no record of significant displacement but rocks differ in stratigraphic or structural characteristics from the ancient continental margin  
Kootenay

Metamorphosed, unfaulited, metamorphosed and poorly dated Proterozoic to Triassic silicic clastic sediments, subordinate volcanics, and limestone, locally intruded by Ordovician, Devonian and Mississippian plutons. Some of the deformed lowest Paleozoic rocks appear to be stratigraphically related to ancestral North America while others, less deformed rocks do not  
EPmE Eagle Bay, DMgF Milford plutonic rocks: Osn Little Shuswap Lake, DMgMF Mt. Fowler, DMgC Clachacutuan

### BUCHESTRANES

**KO?** Kootenay - inferred  
Proterozoic continental margin sediments and basement greenschists separated from North American strata by the Purcell and Esplanade thrust faults  
LPm Malton, uPm Windermere plutonic rocks: EPm Malton, LPgH Hugh Allan, Dye Ice River Barkerville

**KOg** Proterozoic and Paleozoic strata which are thrust bounded with may be a facies equivalent of the Cariboo Subterrane  
PPe Eagle Bay plutonic rocks: DMgQ Quesnel Lake

### Nislin

Metamorphosed and intensely cataclastic sedimentary, volcanic and intrusive rocks of Late Proterozoic, Paleozoic and possibly early Mesozoic ages  
PTNk Nislin plutonic rocks: DMgS Simpson Range Suite, EPgSC Sulphur Creek

### PG

Pelly Gneiss  
Muscovite-biotite granite and leucogranite augen gneiss and biotite quartz monzonite orthogneiss of S-type affinity; in part fault bounded. Pelly Gneiss is in fault contact with Neustin Subterrane and in an unknown relationship with the Nisling Terrane. It may be replaced with the Neustin Subterrane if correlated by age with the Simpson Range Suite although Pelly Gneiss is compositionally different  
DMgM Mink Creek Suite

### ACCREDITED TERRANES:

**INTERMONTANE SUPERETERRANE:** terranes amalgamated by latest Triassic time and accreted to Ancestral North America in the Jurassic

**SM** Slide Mountain  
Oceanic marginal basin and oceanic sediments of Devonian to Late Triassic age, which are thrust to Cenozoic in southern B.C. Includes arc shales, argillites, sandstones, conglomerates, metafelses, basalt, alpine-type ultramafic rocks, carbonate rocks and local occurrences of blueschist and eclogite. In northern B.C. Permian felsilites are not found in coeval, co-latitudinal cratonal rocks suggesting terrane movement from the south  
DTS Slide Mountain plutonic rocks: DTd oceanic ultramafics, DTd, EPt, EPg and EMg in Sylvester

### Dosey

Carbonaceous marginal basin chert and clastics with similar lithology to Slide Mountain Terrane but lacking ultramafics, containing less volcanics and including important conglomeratic units. The terrane may represent a facies of either Quesnelia or Slide Mountain Terrane  
CD Dorsey

### QN

Quesnelia  
Middle and lower Jurassic arc volcanics, volcanoclastics and conigmatic intrusive rocks, series of trondhjemite, trondhjemite-clastic, trachytic and felsic felsilites differ from those in coeval, co-latitudinal cratonal rocks

### DY

TJN Nicola, JHA Hall plutonic rocks: LTgP Polaris Suite, EJgG Guichon Suite, EJyC Copper Mountain Suite, EJgB Black Lake Suite

### QN?

Early post-amalgamation plutons in Slide Mountain and Dorsey terranes may be roots of Quesnelia

### SUBTERRANES:

Harper Ranch Upper Devonian to Triassic arc clastics, volcanics and carbonate DTh Harper Ranch

### QNt

Okanagan Ordovician to Triassic oceanic volcanics and sediments OTs Shoemaker, CPA Anarchist

### CC

Cariboo Middle to Lower Jurassic oceanic volcanics and sediments. Upper Triassic island-arc volcanics and local accretionary prism melange. Included are radiolarian chert, argillite and basalt, shallow water carbonate and alpine-type ultramafics. The terrane is bounded on the east by the Teslin and Pinchi faults. Permian fusilidines and corals faunas of Tethyan affinity are not found in coeval, co-latitudinal cratonal rocks suggesting an exotic origin  
MTC Cache Creek, Tku Kutcho plutonic rocks: DTd oceanic ultramafics

### ST

Stikinia Devonian to Permian arc volcanics and platform carbonates form the basement to Stikinia. They are overlain by Triassic and Lower Jurassic arc volcanics, volcanoclastics, chert and arc-derived clastics which are intruded by conagmatic plutonic rocks. Permian arc and Tethyan faunas differ from co-latitudinal cratonal rocks indicating terrane displacement

### DPA

Astikia, TS Stuhini, TL Lewes River, JH Hazelton, JT Takwahoni plutonic rocks: LTgP Polaris Suite, LTgS Stikine Suite, TJgK Klatsassin Suite, EJgB Black Lake Suite, EJyC Copper Mountain Suite, EJg unnamed plutons in Coast Mountains, EJg Long Lake Suite, EJgT Topley Suite, MJgT Three Sisters Suite, Windy-McKinley

### WM

Mixed assemblage of Devonian to lower Mesozoic oceanic rocks and undated clastics like those of the Jurassic-Cretaceous Gambier Assemblage  
DKWR White River

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### TERRANES OF THE COAST BELT

**TU** Taku  
Varably metamorphosed upper Paleozoic and Triassic basalt, local acid volcanics, carbonaceous arc and Permian calc-alkaline metasediments. Jurassic to Cenozoic metamorphosed sediments and volcanics are similar to those of the Stikine (Gravina) Assemblage. The stratigraphic base of the terrane is unknown and relationships with other terranes are obscured by intrusions and metamorphism, except where separated by the Sunund Fault from the Nisling Terrane to the east  
PKT Taku

**CD** Cadwallader  
Upper Triassic, arc-stand-arc clastics and volcanics (regarded in part by some workers as Silurian) overlying Jurassic arc clastics and volcanics, and Jura-Cretaceous easterly derived continental margin clastic wedge of shale and siltstone in Tyughton Trough

**TC** Cadwallader, JL Ladner, JK Relay Mountain

**Mt** Methow  
Upper Triassic basalts overlain by Lower Jurassic arc clastics and volcanics, and Jurassic and Cretaceous easterly derived clastic wedges shed from Quesnelia

**JK** JK Relay Mountain, KS Skeena

**BR** Bridge River  
Accessory prism and oceanic crust of Permian to Middle Jurassic age disrupted and variously metamorphosed nodularian chert, argillite, basalt, alpine-type ultramafics and minor carbonate and dolomite

**PB** PBJ Yellow Aster  
Harrison

**HA** Harrison  
Jurassic island-arc volcanics and clastics. Carbonate clasts in Toarcian conglomerate contain Permian fossils similar to those in the Chilliwack Terrane

**JH** Harrison Lake

**CH** Chilliwack  
Devonian to Permian arc volcanics and clastics overlain by Upper Triassic to Lower Jurassic clastic Permian fusilid fauna resembles those in Quesnelia and Silurian. The Pbj Yellow Aster may in part be basement to the Chilliwack Terrane

**DP** DpC Chilcotin, TjC Cultus

**SH** Shuswap  
Upper Triassic and Lower Jurassic oceanic crust and sediments metamorphosed to greenish and bluish facies and Jurassic near-arc oceanic marginal basin crust and sediments

**TJS** TJS Spray River  
TSE Settler, JS Shuskan

**IS** ISL Spray River  
Harrison

**AA** Alaska eretic  
Roches sédimentaires, volcaniques et graniques mioécologiques du Protérozoïque supérieure-Paléozoïque inférieur, recouvertes en discordance par des dépôts de marge continentale du Carbonifère-Trias et déplacées le long de la faille de Katag uPm Malton, Osd Descon, ODD Donjek, Odk Kaskawulsh, Ota Alexander, DC Cedar Cove, DK Karchen, Dpc Cannery, Cl lyouken, Ph Halleck, Pp Pybus, Pta Alexander, Th Hyd

**PG** PG Wale, OsD Descon, ODD Donjek, Odk Kaskawulsh, Ota Alexander, DC Cedar Cove, DK Karchen, Dpc Cannery, Cl lyouken, Ph Halleck, Pp Pybus, Pta Alexander, Th Hyd

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