



LEGEND

Intrusive units

Post-accretionary plutons

- K pl** Captain Cove, West Porcher, Peninsula Point, Spiller Range, Kennedy and unroofed mafic plutons: granodiorite, minor tonalite and diorite. Overall homogeneous, coarse grained; marginal pagonites.
- K i** Diorite, gabbro, quartz diorite; heterogeneous, multi-phase.

Alexander terrane

- DM SP** Protonymorphic granodiorite, granite, tonalite, diorite. Some phases are small-plagioclase porphyritic.
- D i** Diorite, gabbro, basalt, tonalite; very heterogeneous, multi-phase.
- O t** Tonalite and trachyandesites, commonly with blue quartz eyes. Primary mafic minerals recrystallized in lower greenschist facies (epidote, chlorite, biotite).
- O tr** Trondhjemites, mostly coarse-grained, equigranular; uniform composition.
- O #** Border phase: tonalite, diorite in cross-cutting bodies; variably textured.

Metamorphic-intrusive complexes

Alexander terrane

- D s** Meta-andesite, basalt, tonalite, granodiorite, diorite intrusive complex.
- O tr** Mafic intrusive complex on southern Kennedy Island: metabasalt, metabasite.
- HC 70** Metadiorite, metabasalt, metagabbro, metatonalite complex; polydeformed and in amphibolite facies.

SYMBOLS

Contact (defined, approximate, assumed, transitional)

Fault (defined, approximate, assumed)

Strike-slip fault, arrows show sense of shear

Bedding: top unknown; known

First phase fabric (S1); second phase fabric (S2)

First phase lineation (L1); second phase lineation (L2)

First phase foliation (F1); second phase foliation (F2)

2009 field station location

Contour interval 100 metres

Universal Transverse Mercator projection - Zone 09

North American Datum (NAD) 83

1:50 000 scale map base produced from TRIM 1:20 000 topographic data supplied by the Province of BC

Reference: Nelson, J.L., Mahoney, B., Gehrels, G.E., van Staal, C. and Pistor, J.J., 2010, Geology and Mineral Potential of Porcher Island, northern Grenville Channel and vicinity, northwestern British Columbia, in Geological Fieldwork 2009, BC Ministry of Energy, Mines and Technical Resources Paper 2010-1, p. 34-42.

Note: Some unit ages on this map approximate those presented in the above article, as they are based on preliminary U-Pb data that were not available at time of publication (J.L. Mahoney, unpublished data 2010).

Questions on unit ages reflect remaining uncertainties.

All local unit names are informal.

Geology of most island areas is based on interpretation of SPOT satellite imagery and low-altitude flight observations.

Metallic mineral occurrences

- Gold-quartz vein
- Gold-quartz vein (post production): Porcher Island gold mine
- Iron formation (siderite, stromboloid, in Deacon Formation)
- Copper-iron skarn
- Porphyry Mo
- Porphyry Mo-Cu

Published U-Pb dates, also completed, unpublished mineral sample (MS)

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