



GEOLOGY OF SOUTHERN GRAHAM ISLAND

QUEEN CHARLOTTE ISLANDS, BRITISH COLUMBIA

LITHOLOGIC UNITS

SYMBOLS

- bedding (inclined, vertical, horizontal, overturned)
- foliation or cleavage (inclined, vertical)
- fold axial surface (inclined, vertical)
- fold axis
- stratigraphic or intrusive contact (defined, approximate, assumed)
- fault (defined, approximate, assumed)
- dip-slip fault (U-upthrown side, D-downthrown side)
- normal fault (solid circle indicates downthrown side)
- thrust fault (teeth indicate upthrust side)
- trace of axial surface (anticline, overturned anticline)
- trace of axial surface (syncline)
- fossil locality (reference number on accompanying map sheet)
- limit of mapping

QUATERNARY

recent alluvium; Pleistocene till

TERTIARY

SKONUN FORMATION: sandstone, conglomerate, shale

unnamed volcanic rocks and MASSEY FORMATION: dominantly aphyric, mafic to felsic flows and pyroclastic rocks; local epiclastic sedimentary rocks

KANO PLUTONIC SUITE: homogeneous, fine- to medium-grained, equigranular to seriate, quartz monzonite, quartz monzonite, and diorite

unnamed sedimentary rocks: black shale, sandstone, minor conglomerate, and coal

HONNA FORMATION: conglomerate and minor sandstone

"CRETACEOUS SHALE"

turbidite lithofacies: thin- to medium-bedded turbidite shale, siltstone, and sandstone

shale lithofacies: thin-bedded shale; minor sandstone

thickly bedded to massive sandstone and fossiliferous sandstone; minor conglomerate and shale

BURNABY ISLAND and SAN CHRISTOVAL PLUTONIC SUITES, undifferentiated: foliated quartz diorite and quartz monzonite; medium-grained equigranular quartz monzonite, quartz monzonite, and diorite

YAKOUN GROUP: thin-bedded to massive epiclastic shale, siltstone, sandstone, and conglomerate; volcanic flows; pyroclastic rocks; lahars

HONNA FORMATION: conglomerate and minor sandstone

Valanginian to Campanian

"CRETACEOUS SHALE"

turbidite lithofacies: thin- to medium-bedded turbidite shale, siltstone, and sandstone

shale lithofacies: thin-bedded shale; minor sandstone

thickly bedded to massive sandstone and fossiliferous sandstone; minor conglomerate and shale

JURASSIC

Middle to Late Jurassic

BURNABY ISLAND and SAN CHRISTOVAL PLUTONIC SUITES, undifferentiated: foliated quartz diorite and quartz monzonite; medium-grained equigranular quartz monzonite, quartz monzonite, and diorite

YAKOUN GROUP: thin-bedded to massive epiclastic shale, siltstone, sandstone, and conglomerate; volcanic flows; pyroclastic rocks; lahars

HONNA FORMATION: conglomerate and minor sandstone

MAUDE GROUP: fine- to coarse-grained fossiliferous, locally tuffaceous and oolitic sandstone with minor limestone; thin-bedded concretionary shale and siltstone with minor tuff and flaggy limestone beds

KUNGA GROUP

SANDLANDS FORMATION: thin- to medium-bedded argillite, siltstone, tuff, and sandstone; minor thickly-bedded sandstone

PERIL FORMATION: dark grey to black, thin- to medium-bedded limestone, argillite, and siltstone

KARMUTSEN FORMATION: mafic volcanic flows; flow breccia; pillowed flows; minor limestone

Upper Sinemurian to Lower Alenian

MAUDE GROUP: fine- to coarse-grained fossiliferous, locally tuffaceous and oolitic sandstone with minor limestone; thin-bedded concretionary shale and siltstone with minor tuff and flaggy limestone beds

UPPER TRIASSIC AND LOWER JURASSIC

Lower Norian to Sinemurian

KUNGA GROUP

Upper Norian to Sinemurian

SANDLANDS FORMATION: thin- to medium-bedded argillite, siltstone, tuff, and sandstone; minor thickly-bedded sandstone

Lower and Middle Norian

PERIL FORMATION: dark grey to black, thin- to medium-bedded limestone, argillite, and siltstone

UPPER TRIASSIC

Carnian

KARMUTSEN FORMATION: mafic volcanic flows; flow breccia; pillowed flows; minor limestone

