



Legend

- 2017 Study Areas
- Northern Limit of Phanerozoic

Mineral Deposits

- Base metals
- Ni-Cu+/-Co+/-PGE

PALEOPROTEROZOIC SEDIMENTARY, VOLCANIC AND HYPABYSSAL INTRUSIVE ROCKS

- MISSI GROUP**
 - M1 Conglomerate and derived gneiss
 - a) Polymictic conglomerate, sandstone
- BURNTWOOD GROUP**
 - B1 Graphitic greywacke, derived gneisses and migmatites
 - a) Greywacke, siltstone, mudstone
 - b) Garnet-biotite gneiss ± sillimanite or andalusite, local staurolite, biotite gneiss
- ROCKS OF UNCERTAIN AGE**
 - W6 Tectonite, phyllonite, mylonite
 - a) Mafic tectonite, phyllonite, mylonite
 - b) Mafic tectonite with mafic-felsic intrusive sheets
 - c) Mafic phyllonite ± carbonate, cataclasite
 - W5 Intrusive and supracrustal gneiss
 - W2 Greywacke, derived gneisses and migmatites

- INTRUSIVE ROCKS**
 - P11 Tectonite, mylonite
 - a) Felsic tectonite, mylonite
 - P9 Granite to granodiorite
 - b) Granite to granodiorite
 - c) Xenoliths-rich phase
 - P8 Leucocratic granodiorite to tonalite
 - P7 Granodiorite to tonalite
 - a) Granodiorite
 - b) Granodiorite to tonalite
 - c) Xenoliths-rich phase
 - e) Foliated and gneissic granodiorite to tonalite
 - P6 Tonalite to quartz diorite
 - a) Tonalite
 - b) Quartz diorite
 - d) Tonalite to quartz diorite
 - e) Xenoliths-rich phase
 - f) Foliated to gneissic tonalite to quartz diorite
 - P5 Quartz diorite to diorite, granodiorite
 - a) Quartz diorite to granodiorite
 - b) Quartz diorite to diorite
 - P4 Monzodiorite to quartz monzonite
 - P3 Compositionally layered gabbro
 - a) Gabbro, gabbro
 - b) Ferrogabbro
 - c) Quartz ferrodiorite, ferrotonalite, leucotonalite
 - P2 Gabbro, diorite, quartz diorite and derived amphibolite
 - a) Gabbro, diorite
 - b) Melagabbro
 - d) Quartz diorite and gabbro
 - e) Diorite to quartz diorite
 - f) Diabase, diabase dyke complex

VOLCANIC, INTRUSIVE AND SEDIMENTARY ROCKS

- JUVENILE ARC**
 - J15 Undivided juvenile arc rocks
 - J13 Hypabyssal intrusions
 - c) Rhyolite, dacite; quartz porphyry, feldspar porphyry, quartz-feldspar porphyry
 - J12 Tonalite to granodiorite, granite
 - c) Tonalite, quartz diorite
 - J9 Volcaniclastic rocks, calcisilicate rocks
 - a) Volcanic conglomerate
 - b) Greywacke, siltstone, mudstone
 - J7 Felsic volcaniclastic rocks
 - a) Felsic tuff, lapilli tuff, breccia, heterolithic breccia
 - J6 Intermediate volcaniclastic rocks
 - a) Intermediate tuff, lapilli tuff, breccia
 - J5 Mafic volcaniclastic rocks
 - b) Pillow fragment breccia
 - c) Heterolithic breccia, dominantly mafic fragments
 - J4 Rhyolite to dacite (flows, flow breccia)
 - a) Rhyolite to dacite flows, flow breccia
 - J3 Andesite (pillowed and massive flows)
 - a) Andesite; derived fine grained garnetiferous amphibolite
 - J2 Arc-rift basalt (pillowed and massive flows; related sill)
 - b) Basalt, synvolcanic dykes and sills
 - J1 Basalt, basaltic andesite (pillowed and massive flows)
 - a) Tholeiitic basalt, basaltic andesite; gabbro; derived amphibolite
 - d) Basalt, basaltic andesite (geochemical affinity unknown); derived amphibolite

OCEAN FLOOR

- F6 Synvolcanic mafic-ultramafic complexes
 - a) Gabbro, gabbro pegmatite; leucogabbro; wispy-layered gabbro
 - c) Layered gabbro, leucogabbro, anorthosite
 - d) Layered pyroxenite, peridotite, subordinate gabbro
- F1 N-type basalts
 - b) Claw Bay pillowed and massive basalt, diabase, derived tectonite
 - e) Northeast Reed pillowed and massive basalt
 - g) Basalt, diabase; derived amphibolite

UNKNOWN GEOCHEMICAL AFFINITY

- U1 Mafic volcanic, minor volcaniclastic and intrusive rocks
 - b) Mafic gneiss

