

PHANEROZOIC

CENOZOIC

Unassigned

QUATERNARY



Sheetwash units
W Sandy and clayey distal sheetwash and slope deposits; no clearly defined drainage
Wf Predominantly iron rich sand and silt, derived from relict ferruginous deposits
Wk Distal sheetwash with calcareous cutans and carbonate cement
Wl Sheetwash deposits of silt and sand characterized by banded mosaic vegetation (tiger bush); banding is normal to slope
Wq Predominantly quartz-rich silt, sand, and gravel derived from quartz veins and quartz-rich rock

Alluvial unit
Ad Unconsolidated, fine-grained deposits in alluvial drainage depressions, claypans, perennial lakes, and swamps; low-lying areas with internal drainage; typically thickly vegetated

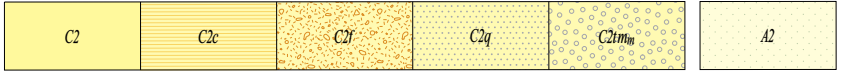
Lacustrine unit
L Unconsolidated, fine-grained deposits in claypans, perennial lakes, and swamps; low-lying areas with internal drainage; typically thickly vegetated

Sandplain unit
S Quartz sand of mixed origin; includes residual and eolian sands



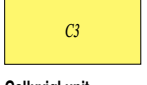
Colluvial units
C1 Quartz and rock fragments in an unconsolidated silt and sand matrix; includes ferruginous deposits
C1c Clay, quartz sand, and deeply weathered rock fragments; reworked saprolite and saprock
C1f Unconsolidated ferruginous rubble and scree
C1q Unconsolidated quartz fragments in a silt and sand matrix, derived from quartz veins and quartzose rocks
C1z Unconsolidated rubble and scree of silcrete and brecciated siliceous caprock

Alluvial units
A1 Unconsolidated silt, sand, and gravel in active drainage channels and floodplains; includes ferruginous deposits
A1c Unconsolidated silt, sand, and gravel in stream channels
A1f Unconsolidated silt, sand, and minor gravel in floodplains adjacent to present-day drainage



Colluvial units
C2 Quartz and rock fragments in a partly consolidated silt and sand matrix
C2c Deeply weathered rock fragments in a partly consolidated clay and sand matrix; reworked saprolite and saprock
C2f Partly consolidated ferruginous rubble and scree
C2q Quartz fragments in a partly consolidated silt and sand matrix, derived from quartz veins and quartzose rocks
C2mm Metamorphosed quartz sandstone fragments in a partly consolidated silt and sand matrix, derived from metamorphosed quartz sandstone

Alluvial unit
A2 Partly consolidated silt, sand, and gravel; partly dissected by present-day drainage

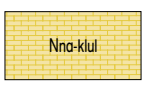


Colluvial unit
C3 Quartz and rock fragments in a weakly cemented and compacted silt and sand matrix; deeply dissected valley-fill deposits



Residual or relict units
Rf Ferruginous deposits, including lateritic, ferruginous, and manganiferous duricrust
Rk Calcrete, developed in and adjacent to alluvial channels; carbonate and vuggy opaline silica; dissected by major present-day drainage
Rl Saprolite and saprock of uncertain protolith
Rz Silcrete and brecciated siliceous caprock

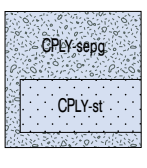
NEOGENE



NADARRA FORMATION: silty micritic limestone; includes minor calcrete; muddy, commonly silicified; lacustrine

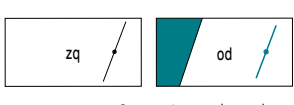
CARBONIFEROUS -PERMIAN

Lyons Group



CPLY-sepg Undivided; diamictite, sandstone and siltstone (locally calcareous), shale, and boulder beds and lags; glaciogenic; includes **HARRIS SANDSTONE** (at base) and **CARRANDIBY FORMATION** (at top)

CPLY-st Fine- to coarse-grained sandstone; minor interbedded siltstone and conglomerate



zq Quartz vein or pod; massive, crystalline, or brecciated; age uncertain
od Dolerite dykes, sills, or plugs; fine- to medium-grained dolerite; age uncertain

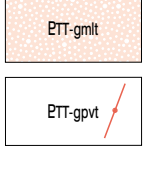
NEOPROTEROZOIC

Murdine Well Dolerite Suite



Mulka Tectonic Event (c.570 Ma)
EMW-od Dolerite dykes, sills, and small intrusions with locally abundant xenoliths and potassic alteration of wallrocks; includes minor quartz diorite, syenite, tonalite, and biotite monzogranite

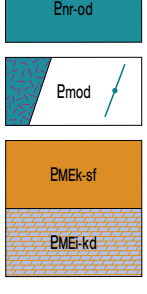
Thirty Three Supersuite



Edmundian Orogeny (1030-950 Ma²)
ETT-gmt Leucocratic, medium-grained, muscovite-tourmaline(-biotite) monzogranite; equigranular to porphyritic
ETT-gpvt Muscovite-tourmaline pegmatite; some rare-element bearing

PALEO-MESOPROTEROZOIC

Bongmall Supergroup
Edmund Group



NARIMBUNNA DOLERITE: dolerite and gabbro sills intruded into **Edmund Group**

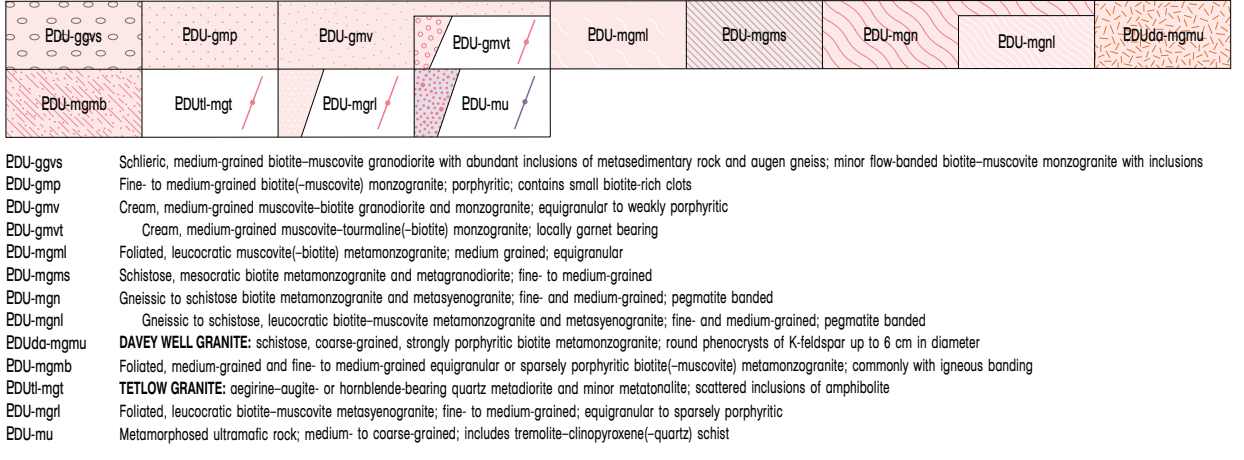
Emod Metadolerite and dolerite of various ages; typically ophitic to sub-ophitic textured; locally with garnet coronas around pyroxene; interpreted from aeromagnetic data where dashed

KIANGI CREEK FORMATION: siltstone, mudstone, and thin- to very thick-bedded quartz sandstone; minor dolostone and conglomerate

IRREGULLY FORMATION: stromatolitic and non-stromatolitic dolostone, dolomitic siltstone, quartz sandstone, and conglomerate

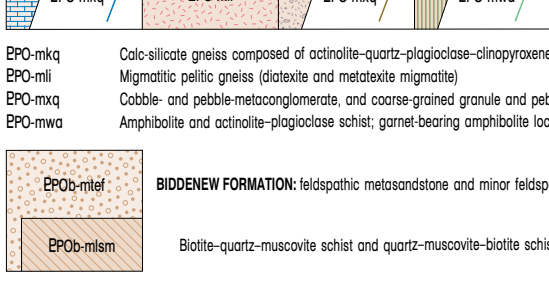
PROTEROZOIC

Durlacher Supersuite



EDU-ggvs Schlieric, medium-grained biotite-muscovite granodiorite with abundant inclusions of metasedimentary rock and augen gneiss; minor flow-banded biotite-muscovite monzogranite with inclusions
EDU-gmp Fine- to medium-grained biotite(-muscovite) monzogranite; porphyritic; contains small biotite-rich clots
EDU-gmv Cream, medium-grained muscovite-biotite granodiorite and monzogranite; equigranular to weakly porphyritic
EDU-gmvt Cream, medium-grained muscovite-tourmaline(-biotite) monzogranite; locally garnet bearing
EDU-mgml Foliated, leucocratic muscovite(-biotite) metamonzogranite; medium grained; equigranular
EDU-mgms Schistose, mesocratic biotite metamonzogranite and metagranodiorite; fine- to medium-grained
EDU-mgn Gneissic to schistose biotite metamonzogranite and metasyenogranite; fine- and medium-grained; pegmatite banded
EDU-mgnl Gneissic to schistose, leucocratic biotite-muscovite metamonzogranite and metasyenogranite; fine- and medium-grained; pegmatite banded
EDUda-mgmu **DAVEY WELL GRANITE:** schistose, coarse-grained, strongly porphyritic biotite metamonzogranite; round phenocrysts of K-feldspar up to 6 cm in diameter
EDU-mgmb Foliated, medium-grained and fine- to medium-grained equigranular or sparsely porphyritic biotite(-muscovite) metamonzogranite; commonly with igneous banding
EDUll-mgt **TETLOW GRANITE:** aegirine-augite- or hornblende-bearing quartz metadiorite and minor metatonalite; scattered inclusions of amphibolite
EDU-mgrl Foliated, leucocratic biotite-muscovite metasyenogranite; fine- to medium-grained; equigranular to sparsely porphyritic
EDU-mu Metamorphosed ultramafic rock; medium- to coarse-grained; includes tremolite-clinopyroxene-quartz schist

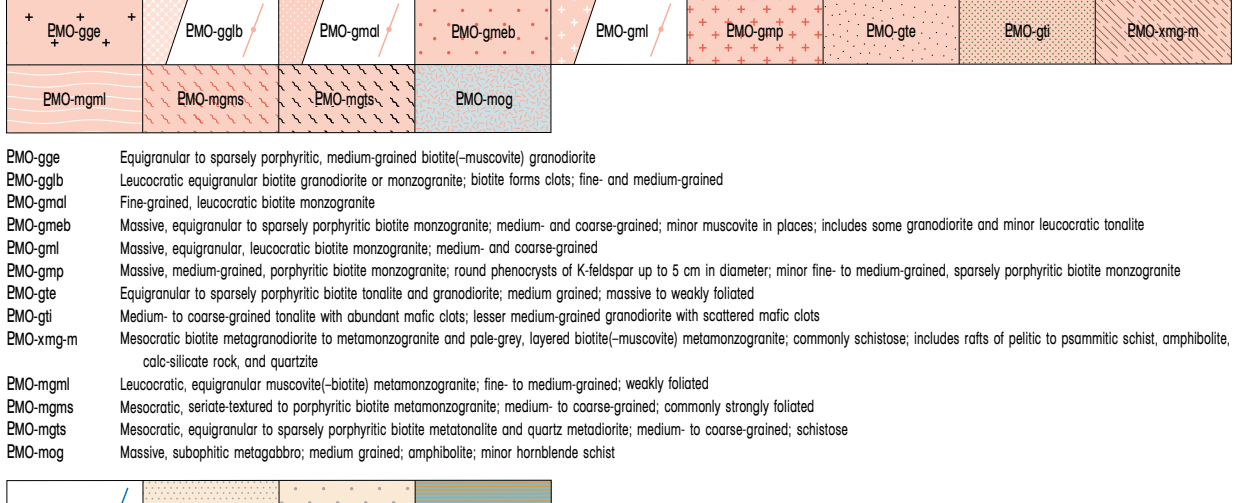
Pooranoo Metamorphics
Mount James Subgroup



BIDDENEW FORMATION: feldspathic metasediment and minor feldspathic pebbly metasediment; medium- to coarse-grained; locally ripple marked and cross-bedded

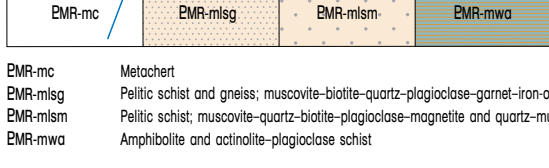
EPOb-mism Biotite-quartz-muscovite schist and quartz-muscovite-biotite schist

Moorarie Supersuite



Capricorn Orogeny (1830-1780 Ma)
EMO-gge Equigranular to sparsely porphyritic, medium-grained biotite(-muscovite) granodiorite
EMO-gglb Leucocratic equigranular biotite granodiorite or monzogranite; biotite forms clots; fine- and medium-grained
EMO-gml Fine-grained, leucocratic biotite monzogranite
EMO-gmeb Massive, equigranular to sparsely porphyritic biotite monzogranite; medium- and coarse-grained; minor muscovite in places; includes some granodiorite and minor leucocratic tonalite
EMO-gml Massive, equigranular, leucocratic biotite monzogranite; medium- and coarse-grained
EMO-gmp Massive, medium-grained, porphyritic biotite monzogranite; round phenocrysts of K-feldspar up to 5 cm in diameter; minor fine- to medium-grained, sparsely porphyritic biotite monzogranite
EMO-gte Equigranular to sparsely porphyritic biotite tonalite and granodiorite; medium grained; massive to weakly foliated
EMO-gtl Medium- to coarse-grained tonalite with abundant mafic clots; lesser medium-grained granodiorite with scattered mafic clots
EMO-xmg-m Mesocratic biotite metagranodiorite to metamonzogranite and pale-grey, layered biotite(-muscovite) metamonzogranite; commonly schistose; includes rafts of pelitic to psammitic schist, amphibolite, calc-silicate rock, and quartzite
EMO-mgml Leucocratic, equigranular muscovite(-biotite) metamonzogranite; fine- to medium-grained; weakly foliated
EMO-mgms Mesocratic, seriate-textured to porphyritic biotite metamonzogranite; medium- to coarse-grained; commonly strongly foliated
EMO-mgts Mesocratic, equigranular to sparsely porphyritic biotite metatonalite and quartz metadiorite; medium- to coarse-grained; schistose
EMO-mog Massive, subophitic metagabbro; medium grained; amphibolite; minor hornblende schist

Morrissey Metamorphics



EMR-mc Metachert
EMR-misg Pelitic schist and gneiss; muscovite-biotite-quartz-plagioclase-garnet-iron-oxide and staurolite-muscovite-biotite-quartz(-garnet) rock
EMR-mism Pelitic schist; muscovite-quartz-biotite-plagioclase-magnetite and quartz-muscovite-biotite-plagioclase schist
EMR-mwa Amphibolite and actinolite-plagioclase schist

SOUTHERN CARMARION BASIN

EDMUND BASIN

GASCOYNE COMPLEX