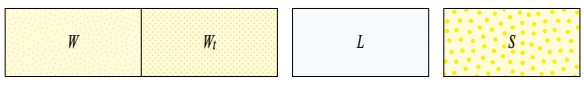
PHANEROZOIC

CENOZOIC

QUATERNARY

UNASSIGNED



Sheetwash units

W Sandy and clayey distal sheetwash and slope deposits; no clearly defined drainage

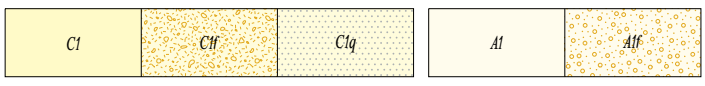
W_t Silt and sand. Surface is characterized by shallow depressions aligned perpendicular to the slope; supports banded mosaic vegetation ('tiger bush')

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

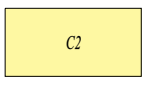
C1f Unconsolidated ferruginous rubble and scree

C1q Quartz fragments in an unconsolidated silt and sand matrix, derived from quartz veins and quartzose rocks

Alluvial units

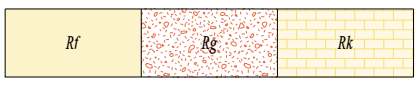
A1 Unconsolidated silt, sand, and gravel in active drainage channels and floodplains; includes ferruginous deposits

A1f Ferruginous silt, sand, and gravel



Colluvial unit

C2 Quartz and rock fragments in a partly consolidated silt and sand matrix

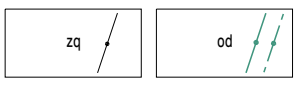


Residual or relict units

Rf Ferruginous deposits, including lateritic, ferruginous, and manganiferous duricrust

Rg Weathered quartzofeldspathic saprock with locally derived sand and sandy clays

Rk Calcrete, developed in and adjacent to alluvial channels; locally silicified; dissected by major present-day drainage lines



zq Quartz veins; various ages

od Dolerite dykes, sills, or plugs; fine- to medium-grained dolerite; age uncertain

Mulka Tectonic Event (*c.* 570 Ma)

Edmundian Orogeny (1030–950 Ma[1])

PALEOPROTEROZOIC–MESOPROTEROZOIC

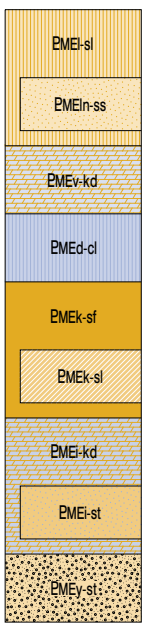
c. 1465 Ma

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

c. 1460 Ma

Bangemall Supergroup

Edmund Group



ULLAWARRA FORMATION: siltstone; subordinate fine-grained sandstone, dolostone, and chert; intruded by numerous dolerite sills (not on map)

Nanular Member: thin- to thick-bedded sandstone and siltstone

DEVIL CREEK FORMATION: laminated dolostone and dolomitic siltstone; local thick-bedded dolorudite (section only)

DISCOVERY FORMATION: massive or laminated chert, silicified mudstone, and siltstone; local silicified sandstone and conglomerate

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

Siltstone; minor fine-grained sandstone

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

Sandstone, conglomerate, siltstone, and dolostone

<1620 Ma

YILGATHERRA FORMATION: sandstone; subordinate siltstone, conglomerate, and dolostone (section only)

EDMUND BASIN

Mangaroon Orogeny (1680–1620 Ma)

PROTEROZOIC

Pooranoo Metamorphics

Mount James Subgroup

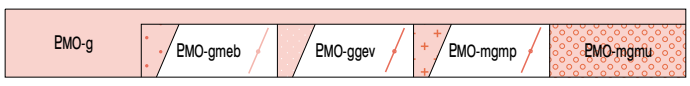
c. 1680 Ma

SPRING CAMP FORMATION: quartzite and quartz–muscovite schist; foliated; quartz metasandstone, feldspathic metasandstone, and quartz-lithic metasandstone; locally ripple marked and cross-bedded

Capricorn Orogeny (1815–1770 Ma)

1815–1770 Ma

Moorarie Supersuite



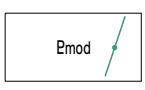
PMO-g Undivided; granite and minor gabbro and metamorphosed equivalents

PMO-gmeb Massive, equigranular to sparsely porphyritic biotite monzogranite; medium- and coarse-grained; minor muscovite in places; includes some granodiorite and minor leucocratic tonalite

PMO-ggev Leucocratic, equigranular biotite–muscovite granodiorite; fine to medium grained; massive to weakly foliated

PMO-mgmp Porphyritic to equigranular, medium- to very coarse-grained metagranite and pegmatite; leucocratic; massive to strongly foliated; locally gneissic

PMO-mgmu Strongly porphyritic, foliated biotite metamonzogranite with coarse, round or tabular phenocrysts of K-feldspar; abundant inclusions of biotite-rich mafic rock; locally comprises augen gneiss

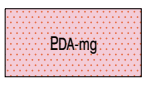


Metadolerite and dolerite of various ages; typically ophitic to subophitic textured; locally with garnet coronas around pyroxene

Glenburgh Orogeny (2005–1950 Ma)

2005–1970 Ma

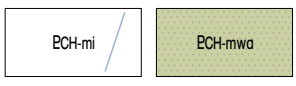
Dalgaringa Supersuite



Metagranite and granitic gneiss (section only)

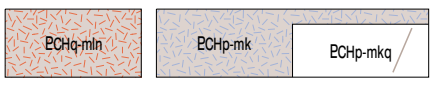
Camel Hills Metamorphics

Unassigned



PCH-mi Meta banded iron-formation; quartz–magnetite rock

PCH-mwa Amphibolite; fine grained, hornblende–plagioclase–quartz–epidote–titanite rock



< 1985 Ma

PCHq-mln **QUARTPOT PELITE:** biotite–plagioclase–quartz(-K–feldspar–garnet–sillimanite) gneiss and migmatitic pellitic gneiss intruded by c. 1970 Ma sheets and veins of coarse-grained biotite trondhjemite; locally variable amounts of foliated biotite monzogranite; minor amphibolite and calc-silicate

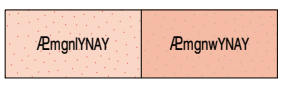
PCHp-mk **PETTER CALC-SILICATE:** Calc-silicate gneiss; coarse grained plagioclase–quartz–diopside–tremolite and diopside–plagioclase rocks, and fine grained quartz–plagioclase–garnet hornblende rock

PCHp-mkq Quartzite, quartz–diopside rock

GASCOYNE PROVINCE

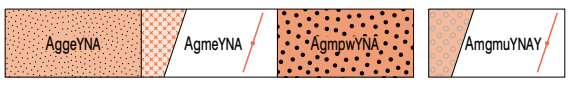
ARCHEAN–PROTEROZOIC

ARCHEAN



ÆmgnlYNAY Leucocratic granitic gneiss; quartz–plagioclase–microcline–biotite rock derived from 3300–2640 Ma biotite granite and granitic gneiss, and sheets and veins of coarse-grained metagranite and pegmatite (PMO-mgmp); all deformed and metamorphosed at 1810 Ma

ÆmgnwYNAY Mesocratic granitic gneiss; quartz–plagioclase–biotite(–hornblende–microcline) rock derived from 3350–2640 Ma biotite granite and granitic gneiss, and sheets and veins of coarse-grained metagranite and pegmatite (PMO-mgmp); all deformed and metamorphosed at 1810 Ma



AggeYNA Mesocratic, equigranular to weakly porphyritic biotite granodiorite; minor grey, weakly porphyritic, fine-grained tonalite

c. 2608 Ma AgmeYNA Equigranular, medium-grained, biotite monzogranite; locally quartz–sericite schist; massive to strongly foliated.

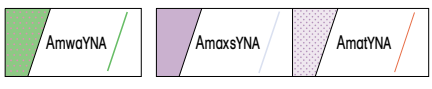
c. 2630 Ma AgmpwYNA Mesocratic, medium-grained, very strongly porphyritic biotite monzogranite; ranges from massive to gneissic

c. 2600 Ma AmgmuYNAY Foliated, porphyritic biotite metamonzogranite with coarse round phenocrysts of K-feldspar, locally comprises augen gneiss

AmkqYNA Calc-silicate gneiss; fine- to coarse-grained plagioclase–quartz–diopside–tremolite(–microcline) and diopside–tremolite–titanite rocks

AmtqYNA Foliated quartzite; minor quartz–diopside gneiss

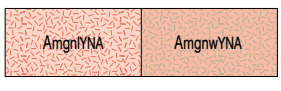
AmiYNA Meta banded iron-formation; grunerite–quartz–magnetite(–hematite) and quartz–magnetite(–hematite) rocks



AmwaYNA Amphibolite, fine- to medium-grained, aphyric hornblende–plagioclase rock and medium grained porphyritic hornblende–plagioclase rock; locally includes metagabbro and metaleucogabbro

AmaxsYNA Tremolite schist; after pyroxenite

AmatYNA Fine- to medium-grained serpentine–talc–magnetite–calcite(–tremolite–titanite) rock after peridotite



3300–2640 Ma AmgnlYNA Leucocratic granitic gneiss; quartz–plagioclase–microcline–biotite rock; derived from biotite monzogranite and syenogranite

3350–2640 Ma AmgnwYNA Mesocratic granitic gneiss; quartz–plagioclase–biotite(–hornblende–microcline) rock; derived from granodiorite and tonalite

YILGARN CRATON