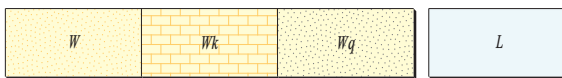


PHANEROZOIC

CAINOZOIC

Unassigned

QUATERNARY

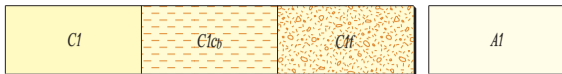


Sheetwash units

- W* Sandy and clayey distal sheetwash and slope deposits, no clearly defined drainage
- Wk* Distal sheetwash with calcrete cutans and carbonate cement
- Wq* Predominantly quartz-rich silt, sand, and gravel, derived from quartz veins and quartz-rich rock

Lacustrine unit

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



Colluvial units, third generation

- C1* Quartz and rock fragments in an unconsolidated silt and sand matrix; includes ferruginous deposits
- C1cb* Swelling clay (gilgai) and rock fragments, mostly developed over dolerite
- C1f* Unconsolidated ferruginous rubble and scree

Alluvial unit, third generation

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



Colluvial unit, second generation

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

Alluvial unit, second generation

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

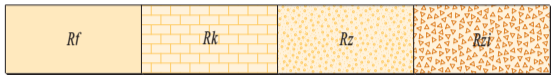


Colluvial unit, first generation

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

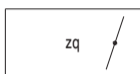
Alluvial unit, first generation

- A3* Weakly cemented and compacted silt, sand, and gravel; deeply dissected by present-day drainage



Residual or relict units

- Rf* Ferruginous deposits, including lateritic, ferruginous, and manganiferous duricrust
- Rk* Calcrete, developed in and adjacent to alluvial channels; locally silicified; dissected by major present-day drainage lines
- Rz* Silcrete and brecciated siliceous caprock
- Rzi* Ferruginous silcrete and brecciated siliceous caprock



Quartz veins, of various ages



Dolerite dykes, sills, and small intrusions, of various ages; one suite dated at c. 755 Ma¹; includes minor quartz diorite, tonalite, and biotite monzogranite

Edmundian Orogeny (c. 1070–755 Ma²)



Dolerite and gabbro sills intruded into Edmund Group; oldest suite (Eod1) dated at c. 1465 Ma^{3,4}, and youngest suite (Eod2) dated at c. 1070 Ma^{3,4}

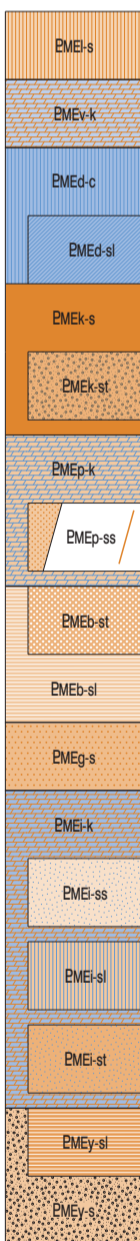
MESOPROTEROZOIC

PALAEOPROTEROZOIC – MESOPROTEROZOIC

PROTEROZOIC

Bongemall Supergroup

Edmund Group



- ULLAWARRA FORMATION:** siltstone, fine-grained sandstone, dolostone, and chert; intruded by numerous dolerite sills (Eod_{1,2})
- DEVIL CREEK FORMATION:** laminated dolostone and dolomitic siltstone; local thick-bedded dolorudite
- DISCOVERY FORMATION:** massive or laminated chert, silicified mudstone, and siltstone; local silicified sandstone and conglomerate
- Siltstone
- KIANGI CREEK FORMATION:** siltstone, mudstone, and thin to very thick bedded quartz sandstone; minor dolostone and conglomerate
- Medium to very thick bedded quartz sandstone and siltstone
- CHEYNE SPRINGS FORMATION:** dololutte, dolarenite, dolorudite, mudstone, siltstone, and minor sandstone
- Thin- to thick-bedded sandstone and siltstone; minor dolostone
- Medium- to thick-bedded sandstone and siltstone; locally sulfidic
- BLUE BILLY FORMATION:** siltstone and mudstone; minor thin- to thick-bedded sandstone; locally sulfidic
- GOORAGOORA FORMATION:** fine- to coarse-grained sandstone and siltstone; minor conglomerate, dolostone, and dolomitic siltstone
- IRREGULLY FORMATION:** stromatolitic and non-stromatolitic dolostone, dolomitic siltstone, quartz sandstone, and conglomerate
- Sandstone and siltstone; minor dolostone
- Siltstone, sandstone, and dolostone
- Sandstone, conglomerate, siltstone, and dolostone
- Siltstone and sandstone
- YILGATHERRA FORMATION:** sandstone, siltstone, conglomerate, and dolostone

c. 1620 Ma⁵

Mangaroon Orogeny (1680–1620 Ma)

c. 1685–1620 Ma⁶

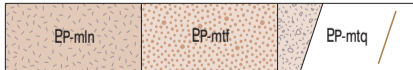
Durlacher Supersuite



- EU-ggp* Grey, massive, medium-grained, porphyritic biotite granodiorite
- EU-gmp* Cream, massive, medium-grained, porphyritic biotite(-muscovite) monzogranite
- EU-gmv* Cream, medium-grained muscovite-biotite granodiorite and monzogranite; equigranular or weakly porphyritic
- EU-gmvt* Cream, medium-grained muscovite-tourmaline(-biotite) monzogranite; locally garnet bearing
- EU-gpt* Tourmaline-muscovite pegmatite and fine-grained, leucocratic tourmaline-muscovite monzogranite
- EU-di-grpv* **DINGO CREEK GRANITE:** porphyritic biotite-muscovite granite; fine to medium grained with thin, tabular K-feldspar phenocrysts defining a trachytic texture (Section only)
- EU-pi-gmg* **PIMBYANA GRANITE:** massive, medium-grained, megacrystic and porphyritic biotite(-muscovite) monzogranite; tabular megacrysts of K-feldspar up to 7-cm long
- EU-og* Massive metagabbro with xenocrysts of quartz and K-feldspar

c. 1680 Ma⁷

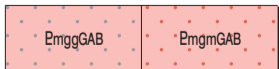
Pooranoo Metamorphics



- EP-min* Pelitic gneiss and granofels composed of biotite-muscovite-quartz-plagioclase-sillimanite; also includes minor migmatitic pelitic gneiss
- EP-mtf* Metamorphosed feldspathic sandstone and psammitic schist; includes interbedded pelite, quartzite, and metamorphosed granule conglomerate
- EP-mtq* Metamorphosed cobble and pebble conglomerate, quartz sandstone, and pebbly quartz sandstone

Capricorn Orogeny (1830–1780 Ma⁸)

c. 1806–1794 Ma⁸



- EmggGAB* Foliated and gneissic granodiorite and tonalite; weakly pegmatite banded
- EmgmGAB* Pale grey, foliated and gneissic monzogranite



- EmIsGAB* Pelitic to psammitic schist; includes muscovite-quartz-andalusite-garnet-plagioclase-biotite schist
- EmiGAB* Metamorphosed banded and granular iron formation
- EmkqGAB* Calc-silicate gneiss and schist
- EmwaGAB* Amphibolite and hornblende schist

Mangaroon Zone

Boora Boora Zone

EDMUND BASIN

GASCOYNE COMPLEX