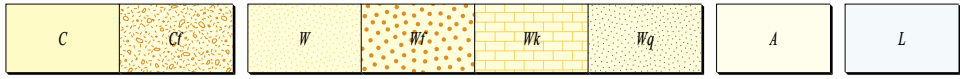


PHANEROZOIC

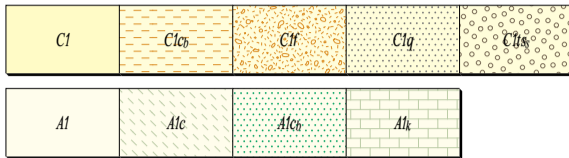
CAINOZOIC

Unassigned

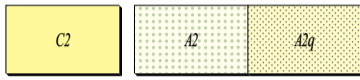


Colluvial units (generation unassigned)
C Quartz and rock fragments in a silt and sand matrix; includes ferruginous deposits
Cf Ferruginous rubble and scree
Sheetwash units (generation unassigned)
W Sandy and clayey distal sheetwash and slope deposits; no clearly defined drainage
Wf Predominantly iron-rich sheetwash and slope deposit; derived from relict ferruginous deposits
Wk Distal sheetwash with planar calcrete cutans and carbonate cement
Wq Predominantly quartz-rich sheetwash and slope deposits; derived from quartz veins and quartz-rich rock
Alluvial unit (generation unassigned)
A Silt, sand, and gravel in drainage channels and adjacent to floodplains; includes ferruginous detritus
Lacustrine unit (generation unassigned)
L Unconsolidated, fine-grained deposits in claypans, perennial lakes, and swamps; low-lying areas with internal drainage; typically thickly vegetated

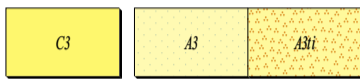
QUATERNARY



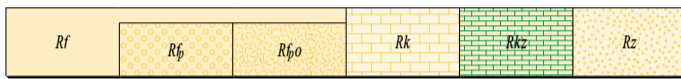
Colluvial units (third generation)
C1 Quartz and rock fragments in an unconsolidated silt and sand matrix; includes ferruginous detritus
C1cb Swelling clay (gilgai) and rock fragments typically developed over dolerite
C1f Unconsolidated ferruginous rubble and scree
C1q Quartz fragments in an unconsolidated silt and sand matrix; derived from quartz veins and quartzose rock
C1ts Sandstone fragments in a silt and sand matrix; derived from sandstone
Alluvial units (third generation)
A1 Unconsolidated silt, sand, and gravel in active drainage channels and floodplains; includes ferruginous deposits
A1c Clayey alluvium developed on alluvial flats
A1cb Swelling clay (gilgai) developed on alluvial flats
A1k Silt, sand, and gravel as stream-bank deposits marginal to active channels; incised by modern drainage



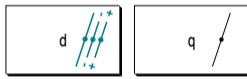
Colluvial units (second generation)
C2 Quartz and rock fragments in a partly-consolidated, silt and sand matrix
Alluvial units (second generation)
A2 Partly consolidated silt, sand, and gravel; partly dissected by present-day drainage
A2q Alluvium with abundant vein-quartz clasts



Colluvial units (first generation)
C3 Quartz and rock fragments in a weakly cemented and compacted silt and sand matrix; deeply dissected valley-fill deposits
Alluvial units (first generation)
A3 Weakly cemented and compacted silt, sand, and gravel; deeply dissected by present-day drainage
A3ti Sand and gravel with ferruginous cement; deeply dissected by present-day drainage



Residual or relict units
Rf Ferruginous deposits, including lateritic, ferruginous, and manganese duricrust
Rfp Pisolitic laterite
Rfo Pisolitic limonite with fossil wood fragments; incised by present-day drainage; possibly equivalent to **ROBE PISOLITE**
Rk Calcrete, developed in and adjacent to alluvial channels; carbonate and vuggy opaline silica; dissected by major present-day drainage lines
Rkz Silicified calcrete, developed in and adjacent to alluvial channels; vuggy opaline silica and minor carbonate; dissected by major present-day drainage lines
Rz Silcrete and brecciated siliceous caprock



d Dolerite dykes, sills, and small intrusions, of various ages; one set dated c.755 Ma¹
q Quartz veins, of various ages

Edmundian Orogeny (c. 1070–755 Ma)

c.1070 Ma^{2,3}



Ed₂ Dolerite and gabbro intruded into **Edmund and Collier Groups**



EMCI **ILGARARI FORMATION:** siltstone, mudstone, and fine-grained sandstone



EMCc **CALYIE FORMATION:** quartz sandstone, siltstone, mudstone, conglomerate, and dolostone



EMCb **BACKDOOR FORMATION:** siltstone, mudstone, thin- to thick-bedded sandstone, and minor chert and dolostone



EMCbst Thin- to thick-bedded sandstone and siltstone



EMCbkd Thin- to thick-bedded dololite and siltstone



Ed_{1,2} Dolerite and gabbro intruded into **Edmund Group**; oldest suite dated at c.1465 Ma^{2,3}, and youngest suite dated at c.1070 Ma^{2,3}

c.1465 Ma^{2,3}



EMEc **COODARDOO FORMATION:** thin- to very thick-bedded, lithic, quartz sandstone; minor siltstone and mudstone



EMEkd Coarse-grained dolarenite, thick-bedded dolorudite, and laminated dololite



EMElc **Curran Member:** siltstone and fine- to medium-grained sandstone; locally intruded by dolerite sills; has gradational contacts with underlying **ULLAWARRA FORMATION** and overlying **COODARDOO FORMATION**



EMEI **ULLAWARRA FORMATION:** siltstone, fine-grained sandstone, dolostone, and minor chert; intruded by dolerite sills (**Ed_{1,2}**)



EMEvcoz Silicified, pyritic, chert breccia



EMEv **DEVIL CREEK FORMATION:** laminated dolostone and dolomitic siltstone; local thick-bedded dolorudite



EMEd **DISCOVERY FORMATION:** massive or laminated chert, and carbonaceous mudstone and siltstone; locally sulphidic



EMEdsl Siltstone



EMEm **MUNTARRA FORMATION:** thin- to thick-bedded dolostone and stromatolitic dolostone; and sandstone and siltstone



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



EMEkkd Dolostone, siltstone, and sandstone



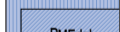
EMEksl Siltstone and minor fine-grained sandstone



EMEkst Medium- to thick-bedded sandstone and siltstone



EMEp **CHEYNE SPRINGS FORMATION:** dololite, dolarenite, dolorudite, mudstone, siltstone, and minor sandstone



EMEb **BLUE BILLY FORMATION:** siltstone and mudstone; minor thin- to thick-bedded sandstone; locally sulfidic



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



EMEist Sandstone and siltstone



EMEy **YILGATHERRA FORMATION:** sandstone, conglomerate, siltstone, and dolostone

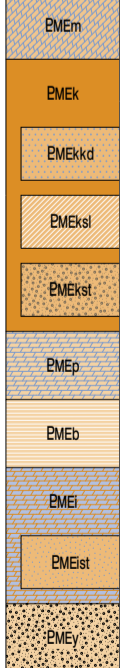
c.1620 Ma⁴

PROTEROZOIC

PALAEOPROTEROZOIC – MESOPROTEROZOIC

Bangemall Supergroup

Edmund Group



COLLIER BASIN

EDMUND BASIN

c.1804 Ma⁵

Capricorn Group

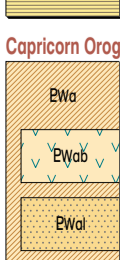


PRb **BYWASH FORMATION:** thin- to very thick-bedded, medium- to very coarse-grained sandstone, dolomitic sandstone, dolostone, dololite, dolorudite, and felsic volcanic rock

BLAIR BASIN

c.1806 Ma⁶

Wyloo Group



Capricorn Orogeny D_{2a}, D_{3a} (<1786 Ma⁷)

Capricorn Orogeny D_{1a} (c.1805 Ma)

PWa **ASHBURTON FORMATION:** low-grade metamorphosed siltstone, thin- to very thick-bedded lithic quartz sandstone, pebble- to cobble conglomerate, and felsic volcanic rock

PWab Basaltic pillow lava and pillow breccia; spinifex textured

PWal Quartz-muscovite-biotite-cordierite-andalusite schist and quartz-muscovite-biotite-stauroilite schist; **ASHBURTON FORMATION** metamorphosed at amphibolite facies

ASHBURTON BASIN