

CENOZOIC

Unassigned

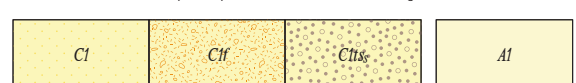


Colluvial units
C Quartz and rock fragments in a silt and sand matrix; includes ferruginous deposits
Cf Ferruginous rubble and scree

Sheetwash units
W Sandy and clayey distal sheetwash and slope deposits; no clearly defined drainage
Wf Silt and sand; surface characterized by shallow depressions aligned perpendicular to slope; supports banded mosaic vegetation ('tiger bush')
Wf Low-gradient deposits of ferruginous sand, silt, and gravel
Wk Distal sheetwash with calcrete cutans and carbonate cement

Alluvial units
A Clay, silt, sand, and gravel in channels and on floodplains
Ad Unconsolidated, fine-grained deposits in alluvial drainage depressions, claypans, ephemeral lakes, and swamps; low-lying areas with internal drainage; typically thickly vegetated
Av Fan-shaped deposits of unconsolidated, fine-grained sand to boulders in fine-grained matrix on steep hill slopes

QUATERNARY



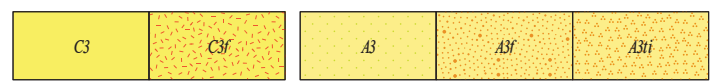
Colluvial units, third generation
C1 Quartz and rock fragments in an unconsolidated silt and sand matrix; includes ferruginous deposits
C1f Unconsolidated ferruginous rubble and scree
C1fs Sandstone fragments in a silt and sand matrix; derived from sandstone

Alluvial unit, third generation
A1 Silt, sand, and gravel in active drainage channels and floodplains; includes ferruginous deposits



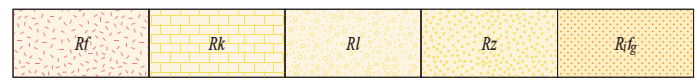
Colluvial units, second generation
C2 Quartz and rock fragments in a partly consolidated silt and sand matrix
C2f Partly consolidated ferruginous rubble and scree

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



Colluvial units, first generation
C3 Quartz and rock fragments in a weakly cemented and compacted silt and sand matrix; deeply dissected valley-fill deposits
C3f Ferruginous rubble and scree in a weakly cemented and compacted silt and sand matrix; partly dissected

Alluvial units, first generation
A3 Weakly cemented and compacted silt, sand, and gravel; deeply dissected by present-day drainage
A3f Weakly cemented silt, sand, and minor gravel in older floodplains adjacent to older 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 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
Rfg Hematite-limonite gossan



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

Mulka Tectonic Event (c. 570 Ma)

c. 755 Ma¹



Mundine Well Dolerite Suite: dolerite dykes, sills, and small intrusions with locally abundant xenoliths and potassic alteration of wallrocks; includes minor quartz diorite, syenite, tonalite, and biotite monzogranite

Edmundian Orogeny (1026–954 Ma²)

c. 1070 Ma



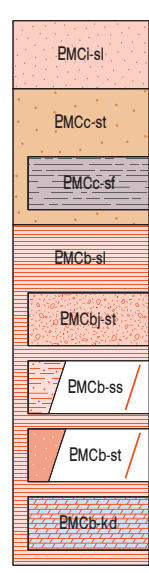
KULKATHARRA DOLERITE: dolerite and gabbro sills intruded into Edmund Group and Collier Group

NEOPROTEROZOIC

MESOPROTEROZOIC

Bangemall Supergroup

Collier Group



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

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

Siltstone, mudstone, and thin- to thick-bedded quartz sandstone

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

Jeeaila Sandstone Member: thin to very thick bedded sandstone and minor siltstone

Thin- to thick-bedded sandstone and siltstone

Thin- to thick-bedded sandstone and minor siltstone

Thin- to thick-bedded dololite, dolomitic siltstone, dolarenite, and siltstone

Mutherbukin Tectonic Event (1385–1771 Ma)

c. 1465 Ma

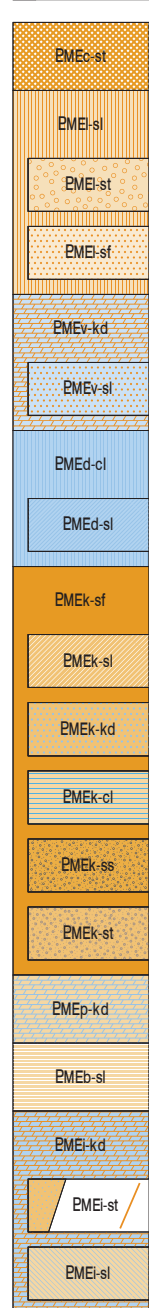


NARIMBUNNA DOLERITE: dolerite and gabbro sills intruded into Edmund Group

PALEOPROTEROZOIC–MESOPROTEROZOIC

Bangemall Supergroup

Edmund Group



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

ULLAWARRA FORMATION: siltstone; subordinate fine-grained sandstone, dolostone, and chert; intruded by numerous dolerite sills

Sandstone, conglomerate, siltstone, and dolostone

Siltstone and thin- to thick-bedded sandstone

DEVIL CREEK FORMATION: laminated dolostone and dolomitic siltstone; local thick-bedded dolerite

Siltstone, dolomitic siltstone, and dolostone

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

Siltstone; minor fine-grained sandstone

Dolostone, siltstone, and sandstone

Chert and siltstone

Sandstone and siltstone

Medium to very thick bedded quartz sandstone and siltstone

CHEYNE SPRINGS FORMATION: undivided; dololite, dolarenite, dolerite, mudstone, siltstone, and minor sandstone

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

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

Sandstone, conglomerate, siltstone, and dolostone

Thick-bedded quartz sandstone; minor siltstone

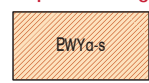
<1620 Ma

Mangaroon Orogeny (1677–1619 Ma³)

Capricorn Orogeny (1817–1772 Ma⁴)

c. 1806 Ma

Wyloo Group



ASHBURTON FORMATION: siltstone, thin to very thick bedded lithic quartz sandstone, pebble to cobble conglomerate, and felsic volcanic rock; lower greenschist facies (section only)

WARAKIRRA LARGE IGNEOUS PROVINCE

COLLIER BASIN

EDMUND BASIN

ASHBURTON BASIN