

PHANEROZOIC

CENOZOIC

QUATERNARY



Colluvial unit, age undivided or unassigned

Cf Ferruginous rubble and scree

Sheetwash units, age undivided or unassigned

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 Ferruginous 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

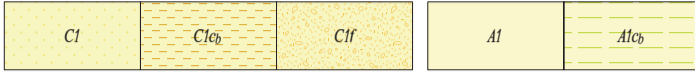
Alluvial units, age undivided or unassigned

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

Sandplain unit, age undivided or unassigned

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



Colluvial units, unconsolidated

C1 Quartz and rock fragments in an unconsolidated silt and sand matrix; includes ferruginous deposits

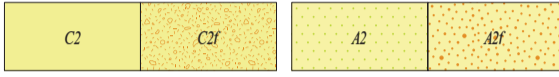
C1cb Swelling clay (gilgai) and rock fragments, mostly developed over dolerite

C1f Unconsolidated ferruginous rubble and scree

Alluvial units, unconsolidated

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

A1cb Swelling clay (gilgai) developed on alluvial flats



Colluvial units, weakly consolidated

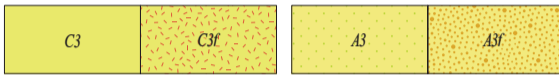
C2 Quartz and rock fragments in a partly consolidated silt and sand matrix

C2f Partly consolidated ferruginous rubble and scree

Alluvial units, weakly consolidated

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

A2f Partly consolidated silt, sand, and minor gravel in older floodplain deposits; partly dissected



Colluvial units, consolidated

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, consolidated

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



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

Mulka Tectonic Event (c. 570 Ma)



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

Edmundian Orogeny (1026–954 Ma¹)



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

1084–1067 Ma

Warakurna Supersuite

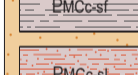
Collier Group



ILGARARI FORMATION: siltstone and fine-grained sandstone; minor chert and limestone



CALYIE FORMATION: quartz sandstone and subordinate siltstone; minor conglomerate



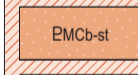
Siltstone and thin- to thick-bedded quartz sandstone



Siltstone and minor sandstone



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



Thin- to thick-bedded sandstone and siltstone



Thin- to thick-bedded sandstone and minor siltstone



Thin- to thick-bedded dololulite, dolarenite, dolorudite, dolomitic siltstone, siltstone, and sandstone

WARAKURNA
LARGE IGNEOUS PROVINCE

COLLIER BASIN

MESOPROTEROZOIC

Mutherbukin Tectonic Event (1321–1171 Ma)



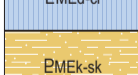
ULLAWARRA FORMATION: siltstone; subordinate fine-grained sandstone, dolostone, chert, and felsic volcaniclastic rock; intruded by numerous dolerite sills



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



Siltstone, dolomitic siltstone, and dolostone



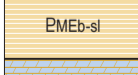
DISCOVERY FORMATION: massive or laminated chert, silicified mudstone, and siltstone; local silicified sandstone and conglomerate



KIANGI CREEK FORMATION: siltstone, fine- to very coarse-grained sandstone, and dolostone; minor conglomerate, chert, and felsic volcanic rock (section only)



Siltstone; minor fine-grained sandstone, dolostone, and chert



Medium- to very thick-bedded quartz sandstone and siltstone



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



IRREGULLY FORMATION: stromatolitic and non-stromatolitic dolostone, siltstone, quartz sandstone, and conglomerate (section only)

<1171 Ma

Bangemall Supergroup

Edmund Group

EDMUND BASIN

PROTEROZOIC

PALEOPROTEROZOIC

Mangaroon Orogeny (1682–1619 Ma²)



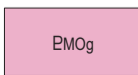
Sandstone, pebbly sandstone, pebble- to boulder-conglomerate, and siltstone (section only)

1786–1610 Ma

Bresnahan Group

BRESNAHAN
BASIN

Capricorn Orogeny (1817–1772 Ma³)

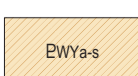


Granite and minor gabbro, and metamorphosed equivalents (section only)

1817–1773 Ma

Moorarie Supersuite

GASCOYNE
PROVINCE



ASHBURTON FORMATION: mudstone, siltstone and thin- to very thick-bedded lithic-quartz sandstone; minor pebble- to cobble-conglomerate, felsic to mafic volcanic rock, banded iron-formation, and dolostone; lower greenschist facies (section only)

2008–1786 Ma

Wyloo Group

ASHBURTON
BASIN