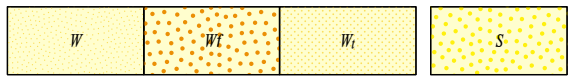
PHANEROZOIC

CENOZOIC

QUATERNARY

Unassigned



Sheetwash units

W	Sandy and clayey distal sheetwash and slope deposits, no clearly defined drainage
Wf	Low gradient sheet deposits of ferruginous sand, silt, and gravel
Wt	Silt and sand; surface is characterized by shallow depressions aligned perpendicular to the slope; supports banded mosaic vegetation (tiger bush)

Sandplain unit

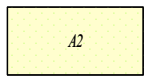
S	Quartz sand of mixed origin; includes residual and eolian sands

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

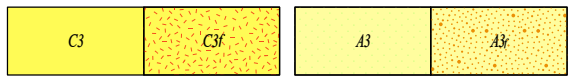
Alluvial units, third generation

A1	Silt, sand, and gravel in active drainage channels and floodplains; includes ferruginous deposits
A1k	Carbonate-rich silt, sand, and gravel in active drainage channels and floodplains



Alluvial unit, second generation

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

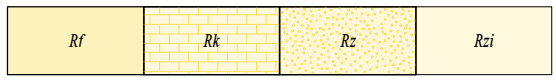


Colluvial units, first generation

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

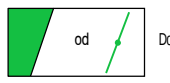
Alluvial units, first generation

A3	Weakly cemented and compacted silt, sand, gravel; deeply dissected by present-day drainage lines
A3r	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
Rz	Silcrete and brecciated siliceous caprock
Rzi	Ferruginous silcrete and brecciated siliceous caprock



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

PROTEROZOIC

PALEOPROTEROZOIC–MESOPROTEROZOIC

MESOPROTEROZOIC

Mulka Tectonic Event (*c.* 570 Ma)

Edmundian Orogeny (1030–955 Ma[1])

c. 1070 Ma

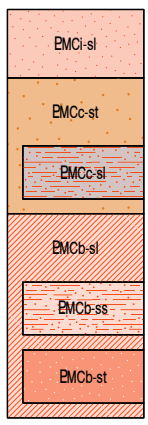
Warakurna Supersuite

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

WARAKURNA LARGE IGNEOUS PROVINCE

Bangemall Supergroup

Collier Group



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

PMCc-st: CALYIE FORMATION: quartz sandstone, siltstone, mudstone, conglomerate, and dolostone

PMCc-sl: Siltstone and sandstone

PMCb-sl: BACKDOOR FORMATION: silstone, mudstone, sandstone, minor dolostone, chert, and conglomerate

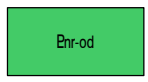
PMCb-ss: Thin- to thick-bedded sandstone and siltstone

PMCb-st: Thin- to thick-bedded sandstone and minor siltstone

COLLIER BASIN

Mutherbukin Tectonic Event (1280–1250 Ma)

c. 1465 Ma



NARIMBUNNA DOLERITE: dolerite and gabbro sills intruded into Edmund Group

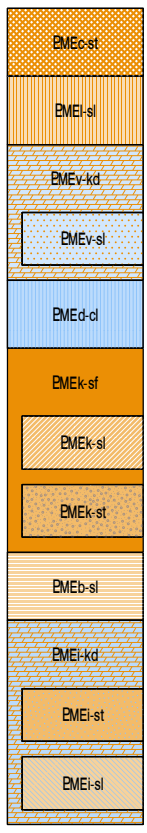
PALEOPROTEROZOIC

Bangemall Supergroup

Edmund Group

c. 1465 Ma

< 1620 Ma



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

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

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

PMEv-sl: Siltstone, dolomitic siltstone, and dolostone

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

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

PMEk-sl: Siltstone; minor fine-grained sandstone

PMEk-st: Medium- to very thick-bedded quartz sandstone and siltstone

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

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

PMEi-st: Sandstone, conglomerate, siltstone, and dolostone

PMEi-sl: Siltstone, sandstone, and dolostone

EDMUND BASIN

Mangaroon Orogeny (1680–1620 Ma[2])

Bresnahan Group

Pebble- to boulder-conglomerate, pebbly sandstone, sandstone, siltstone, and mudstone

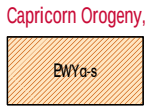
BRESNAHAN BASIN

Capricorn Orogeny, Ashburton Fold Belt D_{1a} and D_{2a} (1805–1785 Ma[3])

PALEOPROTEROZOIC

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)

ASHBURTON BASIN