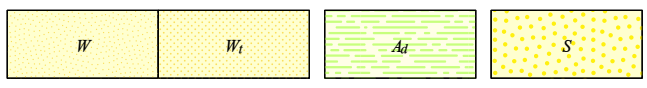
PHANEROZOIC

CENOZOIC

QUATERNARY

Unassigned



Sheetwash units

W Sandy and clayey distal sheetwash and slope deposits, no clearly defined drainage

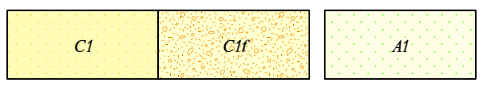
Wt Silt and sand; surface is characterized by shallow depressions aligned perpendicular to the slope; supports banded mosaic vegetation (tiger bush)

Alluvial unit

Ad Unconsolidated, fine-grained deposits in alluvial drainage depressions, claypans, perennial lakes, and swamps; low-lying areas with internal drainage; typically thickly vegetated

Sandplain unit

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



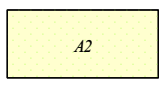
Colluvial units, second generation

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

C1f Unconsolidated ferruginous rubble and scree

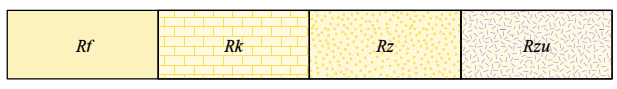
Alluvial unit, second generation

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



Alluvial unit, first generation

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



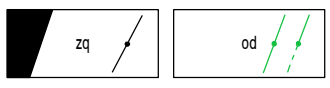
Residual or relict units

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

Rz Silcrete and brecciated siliceous caprock

Rzu Silica caprock over ultramafic rock



zq Quartz vein or pod; massive, crystalline, or brecciated; age uncertain

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

Mulka Tectonic Event (*c.* 570 Ma)

Edmundian Orogeny (1030–950 Ma[1])

c. 1070 Ma — PWKku-od — KULKATHARRA DOLERITE: dolerite and gabbro sills intruded into Edmund Group and Collier Group

PALEOPROTEROZOIC–MESOPROTEROZOIC

Bangemall Supergroup

Collier Group — COLLIER BASIN

- PMCc-st — CALYIE FORMATION: quartz sandstone, siltstone, mudstone, conglomerate, and dolostone
- PMCb-sl — BACKDOOR FORMATION: siltstone, mudstone, and thin- to thick-bedded sandstone; minor chert and dolostone
- PMCb-st — Thin- to thick-bedded sandstone and siltstone

c. 1465 Ma — Pnr-od — NARIMBUNNA DOLERITE: dolerite and gabbro sills intruded into Edmund Group

Edmund Group — EDMUND BASIN

c. 1460 Ma

- PMEl-fn — Felsic volcaniclastic sandstone and breccia
- PMEln-ss — Nanular Member: thin- to thick-bedded sandstone and siltstone
- PMEl-sl — ULLAWARRA FORMATION: siltstone; subordinate fine-grained sandstone, dolostone, and chert; locally intruded by numerous dolerite sills (not on map)
- PMEv-kd — DEVIL CREEK FORMATION: laminated dolostone and dolomitic siltstone; local thick-bedded dolorudite
- 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 (not on map)
- PMEk-cl — Chert and siltstone
- PMEk-sli — Ferruginous siltstone; minor fine-grained sandstone; commonly manganiferous
- PMEk-sl — Siltstone; minor fine-grained sandstone
- PMEi-kd — IRREGULLY FORMATION: stromatolitic and non-stromatolitic dolostone, dolomitic siltstone, quartz sandstone, and conglomerate
- PMEi-st — Sandstone, conglomerate, siltstone, and dolostone

c. 1620 Ma

- PMEy-st — YILGATHERRA FORMATION: sandstone; subordinate siltstone, conglomerate, and dolostone

Mangaroon Orogeny (1680–1620 Ma)

- Pgn-CAP — Granitic dyke; includes muscovite-bearing leucogranite and pegmatite

PROTEROZOIC

c. 1620 Ma — Durlacher Supersuite

- PDUdh-gmp — DISCRETION GRANITE: medium-grained, porphyritic biotite monzogranite; tabular phenocrysts of K-feldspar

GASCOYNE PROVINCE

Capricorn Orogeny (1815–1770 Ma)

c. 1800 Ma — Moorarie Supersuite

- PMO-g — Undivided; granite and minor gabbro and metamorphosed equivalents (Interpreted bedrock geology only)

Glenburgh Orogeny (2005–1950 Ma)

PALEOPROTEROZOIC

Padbury Group — PADBURY BASIN

<c. 2000 Ma

- PPAr-shi — ROBINSON RANGE FORMATION: ferruginous shale, siltstone, banded iron-formation, and chert
- PPAr-cib — Banded iron-formation
- PPAw-scq — WILTHORPE FORMATION: pebble to boulder conglomerate; clasts include vein quartz, minor chert, quartz wacke, and granitoid; quartz wacke and finely bedded siltstone; locally chloritic; graded beds
- PPAw-cc — Chert
- PPAw-sl — Siltstone; finely bedded
- PPAl-ssq — LABOUCHERE FORMATION: quartz wacke and siltstone with local quartz pebble conglomerate beds. Includes zones of quartz schist, quartz–muscovite schist, and minor biotite–muscovite schist, locally with choritoid, staurolite, and/or andalusite
- PPAl-cib — Banded iron-formation and ferruginous chert
- PPAl-saq — Quartz arenite; minor interleaved quartz wacke and siltstone
- PPAl-cc — Chert

Bryah Group — BRYAH BASIN

<c. 2015 Ma

- PBYh-sf — HORSESHOE FORMATION: ferruginous, chloritic shale, and quartz–feldspar wacke; partly manganiferous and calcareous; includes iron formation and chert
- PBYh-ci — Iron formation, quartz–magnetite(–stilpnomelane); white chert lenses
- PBYh-cc — Chert
- PBYr-ss — RAVELSTONE FORMATION: lithic wacke and siltstone; chloritic fragments; graded beds (coeval and interbedded with NARRACOOTA FORMATION)
- PBYr-st — Lithic quartz–feldspar sandstone; interbedded minor siltstone; thinly bedded; chloritic matrix
- PBYn-bb — NARRACOOTA FORMATION: basalt and mafic–ultramafic schist; locally pillowed and plagioclase-phyric; interbedded with volcaniclastic and sedimentary rock (coeval and interbedded with RAVELSTONE FORMATION)
- PBYn-od — Dolerite; in sills and dykes
- PBYn-mu — Ultramafic and mafic schist; talc–chlorite–quartz(–carbonate) schist and actinolite–chlorite schist
- PBYn-ccj — Jasperoidal chert
- PBYn-sl — Grey to black siltstone; local biotite–chlorite slate; as interflow layers within basaltic rocks

ARCHEAN–PROTEROZOIC

ARCHEAN–PALEOPROTEROZOIC

YILGARN CRATON

- Ade-gmb — DESPAIR GRANITE: biotite granite, foliated to locally massive; includes lenses of biotite schist, quartzite, banded iron-formation, amphibolite, and quartzite
- AmtqYNA — Foliated quartzite; minor quartz–diopside gneiss
- AmibYNA — Metamorphosed banded iron-formation; quartz–magnetite(–hematite) rocks; grunerite abundant locally
- AmwaYNA — Amphibolite; fine- to medium-grained hornblende–plagioclase rock, and medium-grained porphyritic hornblende–plagioclase rock; locally includes metagabbro and metaleucogabbro
- AmwaxYNA — Amphibolite gneiss; fine- to medium-grained, hornblende–plagioclase–clinopyroxene rock; granoblastic texture
- AmatYNA — Fine- to medium-grained serpentine–talc–magnetite–calcite(–tremolite–titanite) rock after peridotite

3300–1810 Ma

- AEmgnlYNAY — Leucocratic granitic gneiss; derived from 3300–2660 Ma biotite granite and granitic gneiss, intruded by sheets and veins of coarse-grained granite and pegmatite (PMO-mgmp); all deformed and metamorphosed at c. 1810 Ma