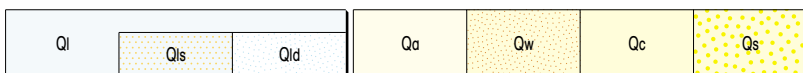


PHANEROZOIC

CAINOZOIC

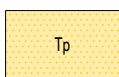
QUATERNARY



- Ql Alluvium — unconsolidated clay, silt, sand, grit, and pebbles in playa lakes; saline, gypsiferous, and/or calcareous
- Qls Mixed playa and dune terrain; saline in part; alluvial or eolian
- Qld Gypsiferous eolian sand in lunette dunes around playa lakes
- Qa Alluvium — unconsolidated silt, sand, and gravel; associated with drainage lines
- Qw Alluvium and colluvium — unconsolidated silt and sand; in sheetwash and on piedmont plains of rock or consolidated colluvium (Czc); may be overlain by banks of windblown sand
- Qc Colluvium — unconsolidated silt, sand, gravel, and rubble; including scree and talus slopes; overlies rock or consolidated colluvium (Czc)
- Qs Eolian and residual sand



- Czk Calcrete in drainage channels
- Czc Colluvium and alluvium — consolidated and semi-consolidated silt, sand, and gravel
- Czs Eolian and residual sand; semi-consolidated
- Czl Laterite and associated ferruginous deposits
- Czz Silcrete and silicified bedrock; includes weathered rock comprising quartz and clay minerals
- Czu Opaline silica, jasperoidal chalcedony; silica caprock over ultramafic rock



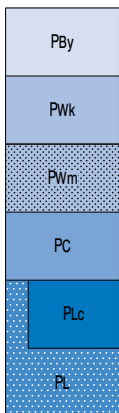
PINDILYA FORMATION: sandstone and conglomerate; minor siltstone; mostly silicified

PALAEZOIC

EARLY PERMIAN

SAKMARIAN

Wooramel Group
Byro Group
ARTINSKIAN
SAKMARIAN

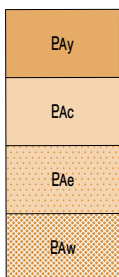


- PBy COYRIE FORMATION:** bioturbated siltstone and fine-grained sandstone
- Pwk KEOGH FORMATION:** siltstone and sandstone; minor claystone and carbonaceous shale
- Pwm MOOGOOLOO SANDSTONE:** quartzose or feldspathic sandstone and siltstone; minor claystone and carbonaceous shale (possibly includes Ballyhanna Sandstone Member and CALLYTHARRA FORMATION)
- PC CALLYTHARRA FORMATION:** interbedded fossiliferous siltstone and limestone (Section A–B only)
- PLc CARRANDIBBY FORMATION:** micaceous claystone, siltstone, shale and sandstone
- PL Lyons Group:** immature sandstone, siltstone, shale and tillite; numerous glacial erratics; lower part of group may be of Late Carboniferous age

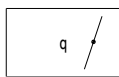
CARNARVON BASIN

PROTEROZOIC

Badgeradda Group



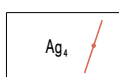
- PAy YARRAWOLYA FORMATION:** siltstone and silty sandstone
- PAc COOMBERARIE FORMATION:** silty sandstone
- PAe ERRABIDY FORMATION:** feldspathic sandstone; minor pebble conglomerate lenses
- PAw WOODRARRUNG FORMATION:** thin-bedded feldspathic and quartzose sandstone



Quartz vein

Dolerite dyke

c. 2610 Ma



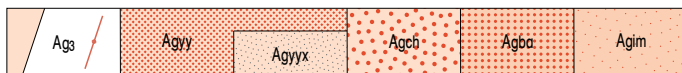
Granite dyke; fine, even-grained; late to post-D₃, M₃



- Ad Metadolerite or amphibolite schist; dyke remnant
- Adu Metaperidotite, metapyroxenite, or ultramafic schist; dyke remnant

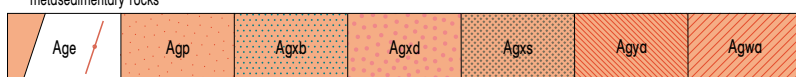
Granite; post-D₂ to syn-D₃, M₃ (c. 2640–2620 Ma); containing discontinuous layers and lenses of amphibolite and metasedimentary rocks

c. 2640–2620 Ma



- Ags Granite; coarse, even-grained to porphyritic; amphibolite facies M₃ metamorphism
- Agyy **YARRA YARRA GRANITE:** coarse, even-grained leucocratic monzogranite; granulite facies M₃ metamorphism
- Agyx Yarra Yarra Granite with abundant inclusions of quartzite (Asq) and banded iron-formation (Asi)
- Agch **CHURLA GRANITE:** coarse, even-grained, leucocratic monzogranite; granulite facies M₃ metamorphism, and sheets of c. 2640 Ma granite, containing zircon xenocrysts with ages of c. 4183, 3260, 2950 and 2735 Ma
- Agba **BALLA GRANITE:** coarse, porphyritic to even-grained monzogranite with inclusions of Eurada Gneiss (Aner); amphibolite facies M₃ metamorphism
- Agim **IMPEY GRANITE:** heterogeneous, coarse, porphyritic to even-grained monzogranite; amphibolite facies M₃ metamorphism

c. 2735–2685 Ma



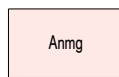
- Granite; syn-D₁, M₁ and post-D₁ to syn-D₂, M₂ (c. 2680 Ma);** containing discontinuous layers and lenses of amphibolite and metasedimentary rocks
- Age Granite, coarse, even-grained; either prograde or retrograde amphibolite facies M₃ metamorphism
- Agp Granite, coarse, porphyritic; either prograde or retrograde amphibolite facies M₃ metamorphism
- Agxb Granite, even-grained to porphyritic with abundant inclusions of amphibolite and ultramafic rock
- Agxd Granite, even-grained to porphyritic with inclusions of Dugel Gneiss (Andg), Eurada Gneiss (Aner) and Meeberrie Gneiss (Anme)
- Agxs Granite, even-grained to porphyritic with abundant inclusions of quartzite (Asq), pelite (Asp), amphibolite (Ab) and ultramafic rocks (Au)
- Agya **YALLALONG GRANITE:** coarse, even-grained, leucocratic monzogranite; granulite facies M₃ metamorphism at c. 2640 Ma
- Agwa **WANDARRIE GRANITE:** coarse, even-grained, leucocratic monzogranite

c. 3050–2750 Ma



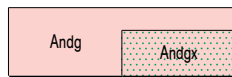
- Asi Banded iron-formation; quartz-magnetite rock, granoblastic to schistose
- Asp Pelite; granoblastic quartz-cordierite rock to mica schist
- Asq Quartzite, metaconglomerate, metasandstone, and silicic schist and mylonite
- Asqm Quartz-mica schist, micaceous-quartzite
- Ab Amphibolite and metagabbro; massive to schistose, relict sub-ophitic texture
- Au Ultramafic schist; derived from serpentinized peridotite and pyroxenite
- Aua Actinolite-chlorite schist

c. 3000 Ma



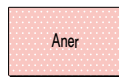
MILGA GNEISS: granodioritic gneiss; containing zircon xenocrysts with ages of c. 3500 and 3315 Ma

c. 3400–3300 Ma



- Andg **DUGEL GNEISS:** monzogranitic and syenogranitic gneiss
- Andgx Dugel Gneiss with abundant inclusions of amphibolite and metagabbro (Ab)

c. 3490–3480 & 3440 Ma



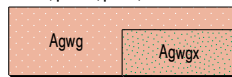
EURADA GNEISS: monzogranitic to tonalitic gneiss, with inclusions of Meeberrie Gneiss (Anme), veins of Dugel Gneiss (Andg), and sheets of c. 2750 Ma granite

c. 3730–3600 Ma



- Anme **MEEBERRIE GNEISS:** monzogranitic to tonalitic gneiss, veined by Eurada Gneiss (Aner) and Dugel Gneiss (Andg)
- Anmex Meeberrie Gneiss with inclusions of c. 3730 Ma **MANFRED COMPLEX** (metamorphosed, layered anorthosite, leucogabbro, gabbro, and ultramafic rocks) and veins of Dugel Gneiss (Andg)

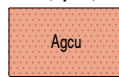
Granite; post-D₂, pre-D₃, M₃



c. 2666 Ma

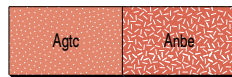
- Agwg **WEIRAGO GRANITE:** heterogeneous, porphyritic to even-grained monzogranite, containing zircon xenocrysts with ages of c. 2965 Ma; prograde amphibolite facies M₃ metamorphism
- Agwgx Weirago Granite with inclusions of amphibolite metagabbro, ultramafic schist, and metasedimentary rock

Granite; syn-D₂, M₂



CUNDARRA GRANITE: coarse, even-grained to porphyritic monzogranite; with amphibole, biotite or orthopyroxene clots in feldspathic haloes; retrograde amphibolite facies M₃ metamorphism

c. 2680 Ma



- Agtc **TCHING GRANITE:** heterogeneous monzogranite, with inclusions of Bearra Gneiss (Anbe), and zircon xenocrysts with ages of c. 2965 Ma; prograde amphibolite facies M₃ metamorphism
- Anbe **BEARRA GNEISS:** c. 3280 Ma dioritic gneiss and c. 2720–2690 Ma leucogranitic gneiss (?early phase of Tching Granite); containing zircon xenocrysts with ages of c. 4000, 3982 and 3945 Ma

Greenstones



Amphibolite and banded iron-formation (quartz-magnetite-pyroxene rock); granoblastic to schistose

Murchison Terrane

YILGARN CRATON