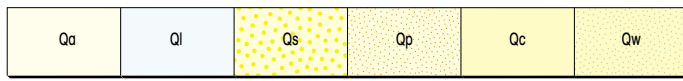


PHANEROZOIC

CAINOZOIC

QUATERNARY

PERMIAN



- Qa Alluvium — sand and gravel in drainage channels, and sand, partly reworked by wind action, on floodplains
- Ql Playa and claypan deposits — clay and silt; saline and gypsiferous in part
- Qs Eolian deposit — sand; includes self dunes and intervening sandy valleys
- Qp Lag and eolian deposits — laterite pebbles and eolian sand; chiefly overlies sulfidic shale
- Qc Colluvium — locally derived sand and gravel; in scree and outwash-fan deposits
- Qw Colluvium and alluvium — silt, sand, and gravel on low slopes and sheetwash areas; numerous small claypans

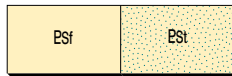


- Czag Colluvium and alluvium — gravel and boulder beds; dissected by present-day drainage
- Czc Colluvium — variably cemented outwash talus, dissected by present-day drainage
- Czcg Colluvial and eluvial pebbly sand, silt, and clay overlying PATERSON FORMATION; partly consolidated
- Czl Laterite — ferruginous duricrust on tops of hills; remnants of Tertiary peneplain
- Czk Calcrete — massive, nodular, and cavernous sandy limestone
- Czz Silcrete — siliceous caprock with angular quartz grains
- Czcc Silicified sandstone caprock with thin veneer of colluvium; restricted to tops of hills
- Czcg Leached and variably silicified granitic orthogneiss; alteration product of ERga

Pa PATERSON FORMATION: sandstone, claystone, conglomerate, and boulder beds; tillite and fluvio-glacial deposits



- d Dolerite dyke
- q Quartz vein
- fb Fault breccia and silicified rock adjacent to faults
- go Gossan, or zone of gossanous rock
- b Barite vein, locally associated with hematite



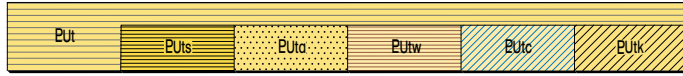
- ESf **McFADDEN FORMATION:** sandstone, quartz wacke; minor conglomerate and siltstone
- ESr **TCHUKARDINE FORMATION:** sandstone, quartz wacke; minor conglomerate, siltstone, and shale



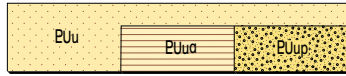
- ESb **BOONDAWARI FORMATION:** sandstone, siltstone, and shale; minor conglomerate and diamictite
- ESbh Shale and mudstone; wavy lamination and fine-scale cross-bedding; local diamictite
- ESbm Diamictite; mudstone containing striated and rounded pebbles and boulders; glaciogene deposit



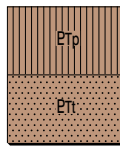
MUNDADJINI FORMATION: sandstone; minor siltstone, conglomerate, and shale



- EUt **WATERS FORMATION:** shale, carbonate rocks, and upward-fining sandstone-siltstone-shale rhythmic units (section only)
- EUts Shale, reddish brown to grey; minor sandstone, carbonate, and sulfidic beds
- EUta Sandstone and siltstone, cross-bedded
- EUtw Upward-fining sandstone-siltstone-shale rhythmic units
- EUtc Carbonate rock, grey to cream and finely laminated; locally stromatolitic
- EUtk Shale and carbonate rock intercalated



- EUu **GUNANYA SANDSTONE:** coarse- to medium-grained arkosic sandstone; local beds of conglomerate and grit; abundant cross-bedding
- EUua Interbedded sandstone and siltstone
- EUup Conglomerate



- ETp **PUNGKULI FORMATION:** shale, reddish brown to grey; minor sandstone, carbonate, and sulfidic rocks
- ETt **TALIWANYA FORMATION:** arkose to arkosic sandstone, medium- to coarse-grained



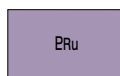
- ETb **BROADHURST FORMATION:** shale, turbiditic sedimentary rock, sandstone, and carbonate rock
- ETbs Shale; commonly sulfidic and graphitic
- ETbk Shale interbedded with carbonate rock; commonly sulfidic
- ETbq Interbedded fine- to medium-bedded sandstone, siltstone; minor shale



- ETc **COOLBRO SANDSTONE:** massive and thickly bedded sandstone; minor siltstone, shale, and carbonate units; basal conglomerate in some sections
- ETcs Shale or pelitic schist
- ETcd Sandstone, siltstone, and shale interbedded
- ETcp Conglomerate; polymictic clasts generally well rounded and matrix-supported



- ERgp Pegmatite; variably foliated, locally gneissic
- ERgm Leucocratic, muscovite-rich orthogneiss derived from fine- to medium-grained granitoid
- ERga Orthogneiss derived from porphyritic biotite granite to monzogranite; generally contains augen of K-feldspar
- ERgg Lithologically layered orthogneiss derived from fine- to medium-grained granite or monzogranite; alternating biotite- and feldspar-rich layers; lenticular inclusions of (metamorphosed) mafic, ultramafic, and sedimentary rocks
- ERgb Banded garnetiferous granodioritic orthogneiss
- ERge Even-grained granitic to monzogranitic orthogneiss
- ERgd Biotite granodioritic orthogneiss



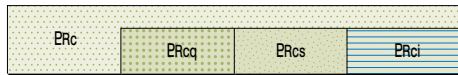
Metamorphosed ultramafic rock; chiefly serpentinite



- ERa Ortho-amphibolite; metamorphosed gabbro and dolerite
- ERaa Extensively altered ortho-amphibolite; includes calc-silicate gneiss replacing gabbroic protolith



- POYNTON FORMATION**
- ERoq Quartzite, commonly micaceous, with thin intercalations of quartz-muscovite schist
- ERos Psammitic gneiss; mainly quartz-feldspar-muscovite gneiss (metamorphosed sandstone, siltstone, and greywacke) with minor semi-pelitic schist
- ERom Psammitic gneiss interlayered with quartzite and quartz-muscovite schist
- ERot Biotite-plagioclase-quartz schist; protolith probably silty shale



- ERc **BUTLER CREEK FORMATION:** banded paragneiss containing layers of quartz-feldspar(-biotite) gneiss, quartz-biotite schist, micaceous quartzite, quartz-muscovite schist, and amphibole-chlorite schist; rare metamorphosed banded iron-formation
- ERcq Muscovitic quartzite; thinly bedded
- ERcs Micaceous psammitic gneiss, muscovite-quartz-plagioclase schist, minor muscovitic quartzite, and rare metamorphosed banded iron-formation
- ERci Banded quartz-magnetite rock; metamorphosed banded iron-formation



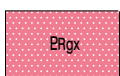
- ERy **YANDAGOOGEE FORMATION:** dominantly pelitic to semi-pelitic assemblage of quartz-muscovite schist, hematitic biotite schist, and minor intercalations of muscovitic quartzite; locally important muscovitic psammitic gneiss, graphitic schist, chert, and metamorphosed banded iron-formation
- ERyi Metamorphosed banded iron-formation and pyritic graphite schist
- ERyq Muscovitic quartzite; minor quartz-muscovite schist
- ERys Psammitic quartz-feldspar-muscovite gneiss, quartz-muscovite schist, and minor quartzite
- ERya Psammitic muscovite-feldspar-quartz gneiss
- ERyp **Cassandra Member:** iron-rich pelitic assemblage of ferruginous quartz-feldspar-biotite schist, andalusite(staurolite)-graphite-garnet-quartz-biotite schist, and pyritic graphitic schist intercalated with chert
- ERypi Metamorphosed banded iron-formation



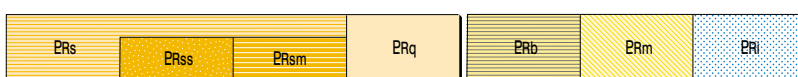
- ERf **FINGOON QUARTZITE:** dominantly massive or layered quartzite, includes local quartz-muscovite schist and psammitic gneiss
- ERfq Muscovitic quartzite with subordinate intercalations of quartz-muscovite schist
- ERfm Quartz-muscovite schist; subordinate layers of muscovitic quartzite and psammitic gneiss
- ERfs Psammitic quartz-feldspar-muscovite gneiss; minor quartz-muscovite schist and quartzite



- ERw **LARRY FORMATION:** intercalated banded quartz-feldspar-mica gneiss, quartz-mica schist, and quartzite; psammitic gneiss locally developed near top of formation
- ERwa Psammitic gneiss and muscovitic quartzite



Lithologically layered orthogneiss derived from fine- to medium-grained granite or monzogranite; alternating biotite- and feldspar-rich layers; lenticular inclusions of mafic, ultramafic, and metasedimentary rocks



- ERs Psammitic gneiss; includes fine-grained quartz-feldspar-muscovite gneiss, quartz-muscovite schist, and quartzite layers
- ERss Psammitic gneiss; rare units of pelitic schist
- ERsm Muscovite-rich psammitic gneiss; minor quartzite and quartz-muscovite schist
- ERq Quartzite
- ERb Banded paragneiss containing quartz-feldspar (-biotite) gneiss, quartz-biotite schist, micaceous quartzite, quartz-muscovite schist, and amphibolite-chlorite schist; rare metamorphosed banded iron-formation
- ERm Muscovite schist; metamorphosed argillaceous sedimentary rock
- ERi Metamorphosed banded iron-formation and chert; includes silicified pyritic graphite schist

c. 1800 — 1760 Ma

PROTEROZOIC

Yeneena Supergroup

Throssell Group

Savory Group

Tarcunyah Group

Ruddell Complex (stratigraphic succession incompletely determined)

Stratigraphic succession

Unassigned units of various ages

Metamorphosed at greenschist facies

Metamorphosed at amphibolite facies

SNOWY BASIN

CANNING BASIN

PATERSON OROGEN

c. 1960 Ma