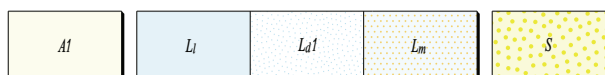


PHANEROZOIC

CAINOZOIC



Colluvial units

- C* Clay, silt, and sand on slopes or irregular landforms
- Cf* Colluvium containing common to abundant ferruginous granules, nodules, and peloids; commonly polished
- Cgpg* Quartzfeldspathic silt and sand, typically over granitoids
- Ck* Colluvium containing common calcrete nodules
- Cq* Colluvium containing abundant vein-quartz clasts

Sheetwash units

- W* Clay, silt, and sand on low-gradient slopes
- Wf* Sheetwash containing common to abundant ferruginous granules, nodules, and peloids; commonly polished

Alluvial unit

- Al* Clay, silt, sand, and gravel in active channels and on floodplains

Lacustrine units

- Li* Variably interbedded evaporites (carbonates, gypsum, and halite), clay, and sand, in playa lakes
- Li1* Active dune systems adjacent to playa lakes; locally gypsiferous; nonvegetated or poorly vegetated
- Lm* Mixed dune, evaporite, and alluvial deposits

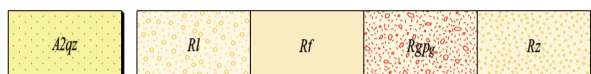
Sandplain unit

- S* Yellow sand, and minor silt and clay; local dunes



Lacustrine units

- La2* Stabilized dunes adjacent to playa lakes; commonly vegetated
- Lk* Calcrete, within and in the vicinity of modern playa systems



Alluvial unit

- A2qz* Medium- to coarse-grained sandstone; detrital quartz grains cemented by ferruginous chalcedony and rarely iron oxides; bedding and grading locally present

Relict units

- Ri* Laterite, includes saprolite, mottled zones, and duricrust
- Rf* Ferruginous duricrust, commonly as low hills or breakaways
- Rgpg* Clay, quartz sand, saprolite fragments, and deeply weathered granitic subcrop, representing regolith deflation over granitoid
- Rz* Silcrete, commonly as low hills or breakaways; variably ferruginous

PALAEOGENE

EOCENE

Eudynia Group



- CzE* Undivided; includes conglomerate, gravel, sandstone, siltstone, and mudstone with spongolitic and calcareous varieties; commonly deeply weathered and silicified
- CzEh* **HAMPTON SANDSTONE:** poorly sorted sandstone, typically quartz rich; includes subordinate gravel, conglomerate, and siltstone
- CzEi* Limestone, massive to fossiliferous; contains gastropod, brachiopod, and bivalve fossils

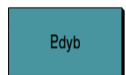
PROTEROZOIC

PALAEOPROTEROZOIC

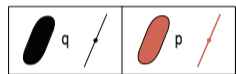
c. 2420 Ma'



- Edy* Dolerite, gabbro, gabbronorite, and norite dykes; interpreted from aeromagnetic data where dashed



- Edyb* **BINNERINGIE DYKE:** dolerite, gabbro, gabbronorite, and norite



- q* Quartz vein
- p* Pegmatite dyke or pod



- Alf* Felsic schist
- Aly* Phyllonite with cataclasite and mylonite, exposed in major fault zones; typically carbonaceous



- Ag* Granitoid rock
- Agdq* Quartz monzodiorite, porphyritic; zoned plagioclase phenocrysts
- Agg* Granodiorite to leucogranodiorite
- Agkk* **KIAKI MONZOGNANITE:** leucomonzogranite, typically deeply weathered; intrudes and hornfelses **MOUNT BELCHES FORMATION**
- Agm* Monzogranite to leucomonzogranite
- Agmq* Quartz-rich monzogranite
- Agp* Porphyritic dykes and sills, granitic to granodioritic in composition
- Agpsi* Porphyritic dykes and sills, granitic to granodioritic in composition, interleaved with quartz-chlorite schist (*Asbi*) that is rarely exposed
- Agy* Syenogranite and leucosyenogranite; locally porphyritic



- As* Metasedimentary rock, undivided
- Asbi* Banded felsic to mafic schist, typically chloritic, with interlayered quartz-mica schist
- Ash* Shale, typically carbonaceous; metamorphosed
- Asq* Quartz-rich metasedimentary rock, deeply weathered; graded bedding observed locally
- Ac* Chert; metamorphosed
- Aci* Banded iron-formation; metamorphosed



- Asb* **MOUNT BELCHES FORMATION:** undivided; varying proportions of wacke and mudstone, typically biotitic; rare banded iron-formation and pebbly sandstone beds; rare metasomatized variants; deeply weathered variants are abundant; metamorphosed
- Asbm* Mudstone, metamorphosed to biotite-quartz-feldspar(-chlorite-muscovite-staurolite-andalusite-sillimanite-garnet) pelite; platy minerals locally define bedding-parallel foliation
- Asbn* **Santa Claus Member:** iron formation unit comprising wacke, mudstone, and ferruginous mudstone; common Bouma sequences with magnetite concentrated in the pelitic portion; cherty iron-formation horizons; metamorphosed
- Asbw* Wacke, metamorphosed to quartz-feldspar-biotite(-chlorite) psammite; cross-bedding, channels, and parallel lamination locally common; tops of units may be biotitic after mudstone; includes subordinate graded wacke-mudstone (*Asbwm*) and mudstone (*Asbm*) units
- Asbwm* Graded wacke-mudstone units, metamorphosed to interbanded quartz-feldspar-biotite psammite and biotite-quartz-feldspar(-chlorite-muscovite-staurolite-andalusite-sillimanite-garnet) pelite; wacke-mudstone pairs typically define bedding and exhibit common sedimentary structures including grading, parallel lamination, cross-lamination, and load structures; soft sediment deformation features exposed locally include loads, flames, and slumps
- Asba* Metasomatized wacke and mudstone, including para-amphibolite, amphibole-bearing quartzite, biotitic psammite, and chlorite-bearing quartzite; evident as selvages around laminated quartz veins, adjacent to faults, or as irregular masses without obvious macro-controls
- Asbh* Hornfelsed wacke and mudstone; varieties include biotite, hornblende, clinopyroxene, or sillimanite hornfels; primary compositional layering is preserved



- Af* Felsic rock of volcanogenic origin, undivided; typically foliated and deeply weathered; metamorphosed
- Afdp* Porphyritic dacite to rhyodacite, volcanic or subvolcanic; metamorphosed
- Afi* Andesite to dacitic volcanic rock; typically foliated and deeply weathered; metamorphosed
- Afs* Felsic schist of volcanogenic origin; sheared volcanoclastic rock with subordinate rhyolite; metamorphosed



- Aog* Gabbro; local relict cumulate textures; metamorphosed



- AaMMo* Gabbro; relict cumulate texture; metamorphosed
- AaOHo* Gabbro; relict cumulate texture; metamorphosed
- AaSEo* Gabbro with subordinate pyroxenite; metamorphosed
- AaSEx* Pyroxenite, gradational contact with overlying gabbro; metamorphosed
- AaSEp* Peridotite, commonly altered to a talc-carbonate assemblage; cumulate texture; metamorphosed



- Ab* Fine to medium-grained mafic rock, undivided; metamorphosed
- Aba* Amphibolite
- Abf* Foliated or cleaved, fine- to medium-grained mafic rock; metamorphosed; bedding-foliation intersection lineation common
- Abm* Komatiitic (high-Mg) basalt; local pillows; metamorphosed
- Abv* Basalt; local pillows, amygdalae, and interbeds of sedimentary rock; metamorphosed
- Abve* Epidotized basalt



- Au* Ultramafic rock, undivided; local relict cumulate texture; metamorphosed
- Auk* Komatiite; metamorphosed (subsurface only)
- Aup* Peridotite, commonly altered to a talc-carbonate assemblage; local relict cumulate texture; metamorphosed
- Aus* Serpentinite, commonly strongly foliated; relict cumulate texture in weakly foliated units
- Aux* Pyroxenite; local relict cumulate texture; metamorphosed

?2705 Ma

YILGARN CRATON