PHANEROZOIC — CAINOZOIC — QUATERNARY

Qaa Qao

Qaa Alluvial clay, silt, sand, and gravel in rivers, creeks, and on floodplains
Qao Overbank deposits; alluvial clay, silt, and sand on floodplains

Qw Qwf Qc Qcf

Qw Sheetwash deposits — clay, silt, sand, and pebbles in distal outwash fans; no defined drainage
Qwf Ferruginous sheetwash deposits; silt, sand, and ferruginous nodules in distal outwash fans; locally derived from erosion of Czrf
Qc Colluvium — unconsolidated silt, sand, and rock debris; scree and talus
Qcf Ferruginous colluvium; unconsolidated silt, sand, and rock debris; locally derived from erosion of Czrf and weathered **JEERINAH** and **MADDINA FORMATIONS**

Czc — Colluvium — partly consolidated deposits of silt, sand, and gravel; dissected

Czrf Czrk Czrz Czoc

Czrf Residual ferruginous duricrust; locally includes massive laterite and deeply weathered, ferruginous rock
Czrk Residual calcrete; massive, nodular, and cavernous limestone
Czrz Residual silcrete and siliceous duricrust; includes local secondary chert breccia
OAKOVER FORMATION
Czoc Lower unit; limestone and calcareous sandstone

PALEOZOIC — PERMIAN — CANNING BASIN

Pa — **PATERSON FORMATION:** sandstone, siltstone, and mudstone; diamictite; fluvioglacial deposits

PROTEROZOIC — PALEO-PROTEROZOIC — *c.* 1803 Ma[1] — Bridget Suite

ƵgBmh — Hornblende monzogranite; medium grained, undeformed; in small plutons

d q

d Dolerite and gabbro dykes; dashed where interpreted from aeromagnetic data; partly subsurface; various generations
q Quartz vein

ƵƵcb — **PINJIAN CHERT BRECCIA:** chert breccia, locally bedded; overlies **CARAWINE DOLOMITE**

ARCHEAN — Pilbara Supergroup — Mount Bruce Supergroup — Hamersley Group — HAMERSLEY BASIN

c. 2541 Ma[2]

AHc — **CARAWINE DOLOMITE:** grey-brown recrystallized dolomite with minor shale and chert

Ad — Fine- to coarse-grained dolerite; in dykes and sills; weakly metamorphosed

Fortescue Group

c. 2687 Ma[3]

AFj — **JEERINAH FORMATION:** thin-bedded chert, silicified shale, and mudstone; minor sandstone

AFmbi — **MADDINA FORMATION** Basaltic andesite and andesite; minor basalt

AFmcc — Chert; includes silicified siltstone

c. 2717 Ma[4]

AFm — Massive to amygdaloidal basalt, and basaltic andesite

AFmk — **Kuruna Member:** siltstone and tuffaceous siltstone with reworked accretionary lapilli

AFmbk — Komatiitic basalt

c. 2719 Ma[5]

AFt — **TUMBIANA FORMATION:** tuffaceous siltstone and sandstone; commonly with accretionary lapilli

AFkbi — **KYLENA FORMATION** Massive and amygdaloidal basaltic andesite; minor basalt and andesite; rare basaltic fragmental rock

AFkkl — Thin-bedded limestone and calcareous shale

AFkbk — Massive and amygdaloidal komatiitic and tholeiitic basalt; minor basaltic fragmental rock

AFh AFhb

c. 2755 Ma[6] Agd — Hornblende–quartz monzodiorite and diorite; small plugs and dykes

AFh **HARDEY FORMATION:** undivided, includes sandstone and siltstone; minor conglomerate
AFhb **Bamboo Creek Member:** quartz–feldspar porphyry; commonly columnar jointed, locally layered

c. 2765 Ma[3]

AFr AFrsc AFrsl AFrst

AFr **MOUNT ROE BASALT:** massive and amygdaloidal basalt
AFrsc Poorly sorted, polymictic pebble and cobble conglomerate; includes sandstone and local boulder conglomerate
AFrsl Siliceous siltstone, commonly ferruginous; includes minor sandstone and pebbly sandstone
AFrst Sandstone; contains local beds with accretionary lapilli

Agh — Hornblende–plagioclase-phyric felsic intrusive rock; variously foliated; metamorphosed

c. 2838 Ma[7] AgKbd — **KURRANA GRANITOID COMPLEX** — Kurrana Terrane
BONNEY DOWNS GRANITE: monzogranite, medium grained, sparsely porphyritic; locally muscovite bearing; strongly foliated along Coondamar Fault

2926–2905 Ma[8] — Pilbara Supergroup — De Grey Group — Mosquito Creek Basin — PILBARA CRATON

ADqs ADqsc ADqsl ADqss ADqst

MOSQUITO CREEK FORMATION
ADqs Thin- to medium-bedded sandstone, siltstone, and shale; commonly with graded bedding, rare cross-bedding; probable turbidite deposits; metamorphosed
ADqsc Pebble conglomerate, and minor cobble conglomerate and sandstone; locally channelized; metamorphosed
ADqsl Siliceous siltstone and shale; thin parallel bedding; includes minor fine-grained sandstone; metamorphosed
ADqss Sandstone, siltstone, and shale; upwards coarsening and upwards thickening, locally ripple marked and cross-bedded; metamorphosed
ADqst Sandstone; massive or cross-bedded; includes local siltstone; metamorphosed

ADnlb ADnlbn ADncc ADnsl ADnss ADnst ADnstb ADnstbc ADnfv ADnog ADnb ADnba ADnbk ADnu ADnup ADnur ADnux

COONDAMAR FORMATION
ADnlb Chlorite–actinolite schist, quartz–muscovite schist, and amphibolite; includes minor andalusite–muscovite schist and phyllite
ADnlbn Chlorite–actinolite schist, quartz–muscovite schist, and amphibolite locally interleaved with **GOLDEN EAGLE ORTHOGNEISS** (AgKge)
ADncc Layered chert; typically ferruginous; metamorphosed
ADnsl Metasiltstone; minor metasandstone; chlorite bearing; includes thin layers of amphibolite and tremolite–chlorite schist
ADnss Foliated sandstone and siltstone; typically chloritic; includes chlorite–actinolite schist and phyllite; metamorphosed
ADnst Sandstone; includes local siltstone; metamorphosed
ADnstb Basaltic-lithic sandstone and subordinate granulestone; metamorphosed
ADnstbc Basaltic-lithic sandstone, commonly with secondary carbonates; local zones of strong carbonate alteration; minor chert; metamorphosed
ADnfv Felsic volcaniclastic rock; partly silicified; includes local feldspar–quartz porphyry; metamorphosed
ADnog Metagabbro; includes minor metadiorite; locally foliated
ADnb Tholeiitic basalt; generally pillowed; minor massive komatiitic basalt; metamorphosed
ADnba Amphibolite and chlorite–actinolite schist
ADnbk Komatiitic basalt; minor tholeiitic basalt; massive and pillowed; metamorphosed
ADnu Metamorphosed ultramafic rock, undivided
ADnup Metaperidotite; typically serpentinized
ADnur Tremolite–chlorite schist; includes minor amphibolite
ADnux Metapyroxenite; commonly associated with metagabbro

c. 3178 Ma[9] AgKge — **KURRANA GRANITOID COMPLEX** — Kurrana Terrane
GOLDEN EAGLE ORTHOGNEISS: layered orthogneiss derived from monzogranite, granodiorite, tonalite, and pegmatite; alternating biotite- and feldspar-rich layers; includes layers and lenses of amphibolite and ultramafic schist

c. 3292 Ma[6] AgAm AgApf — East Pilbara Granite–Greenstone Terrane

YILGALONG GRANITOID COMPLEX
AgAm Biotite monzogranite and granodiorite; foliated; metamorphosed
AgApf Feldspar porphyry dyke; metamorphosed

Pilbara Supergroup — Warrawoona Group — Unassigned

AW(cc) AW(bk)

AW(cc) Grey chert and silicified rock of uncertain origin; metamorphosed
AW(bk) Komatiitic basalt, commonly pillowed; local pyroxene-spinifex texture and zones of carbonate alteration; includes some mafic schist; metamorphosed

AWwb AWwcc AWwssz AWwd

WYMAN FORMATION
AWwb Basalt; massive and pillowed; includes zones of silicified rock; metamorphosed
AWwcc Grey chert and silicified rock of uncertain origin; metamorphosed
AWwssz Siltstone, sandstone, and minor conglomerate, typically silicified; includes local chert and silicified rock of uncertain origin; metamorphosed
AWwd Gabbro and dolerite; metamorphosed

Kelly Subgroup

AWeb AWebk AWebkc AWebkz AWebs AWebx AWed AWeu AWeuk AWeup AWeux AWeccw AWesl AWefv

EURO BASALT
AWeb Basalt; generally pillowed; minor komatiitic basalt; metamorphosed
AWebk Komatiitic basalt, commonly pillowed; local pyroxene-spinifex texture and zones of carbonate alteration includes some mafic schist; metamorphosed
AWebkc Carbonate-altered komatiitic basalt; metamorphosed
AWebkz Silicified komatiitic basalt and associated quartz-vein breccia; metamorphosed
AWebs Mafic schist, slate, and strongly foliated, metamorphosed komatiitic basalt
AWebx Basaltic fragmental rock; metamorphosed
AWed Dolerite and gabbro; metamorphosed
AWeu Ultramafic rock, undivided; metamorphosed
AWeuk Metakomatiite, typically with relict olivine-spinifex texture
AWeup Metaperidotite; predominantly serpentinized; locally porphyritic
AWeux Metapyroxenite; locally coarse grained
AWeccw Grey-white layered chert; metamorphosed
AWesl Fine-grained clastic sedimentary rock, typically weathered; includes local grey chert; metamorphosed
AWefv Felsic volcaniclastic rock; strongly foliated; metamorphosed