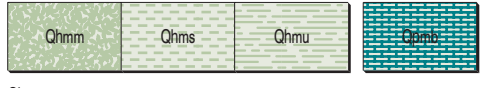


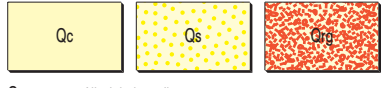
PHANEROZOIC

CAINOZOIC

QUATERNARY



Qhmm Marine mud and silt; intertidal with mangroves; Holocene  
 Qhms Shelly sand in coastal dunes and old beach deposits; Holocene  
 Qhmu Silt and mud in supratidal to intertidal flats and lagoons; Holocene  
 Qpmb Coastal limestone; lime-cemented shelly marine and dune sand, and beach conglomerate; Pleistocene



Qaa Alluvial clay, silt, sand, and gravel in rivers and creeks  
 Qac Claypans dominantly on alluvial floodplains  
 Qao Alluvial overbank deposits; sand, silt, and clay on floodplains adjacent to, and including, main drainage channels  
 Qaac Alluvial sand, silt, and clay; mixed floodplain deposits characterized by numerous small claypans  
 Qab Alluvial sand, silt, and clay deposits on floodplains with gilgai surface in areas of expansive clay  
 Qas Alluvial and eolian coastal sand deposits  
 Qw Low-gradient sheetwash deposits – silt, sand, and gravel on distal fans; no defined drainage  
 Qwg Sheetwash sand and quartz pebbles overlying and derived from granitic rock  
 Qc Colluvium – sand, silt, and gravel on outwash fans; scree and talus; proximal mass-wasting deposits  
 Qs Eolian sand – red sand in sheets and longitudinal dunes  
 Qrg Residual quartzofeldspathic sand with quartz and rock fragments; overlying and derived from granitic rock



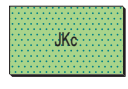
Czag Alluvial gravel; consolidated; unrelated to, and dissected by, present-day drainage  
 Czc Colluvium – clay, silt, and sand; consolidated and dissected  
 Czcf Colluvial ferruginous deposits; recemented, broken, ferruginous duricrust rubble, ironstone pebbles, clay, silt, and sand; consolidated and dissected  
 Czcg Colluvial clay, silt, sand, and gravel derived from granitoid rock; variably consolidated and dissected  
 Czrf Residual ferruginous duricrust; includes massive, pisolitic, and nodular laterite

MESOZOIC

JURASSIC–CRETACEOUS



Mzs Weathered sedimentary rocks; palynomorphs present (subsurface only)



JKc **CALLAWA FORMATION:** very fine to coarse grained sandstone, ferruginous towards base; siltstone and conglomerate interbeds; plant and trace fossils; mainly fluvial deposits



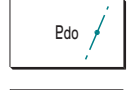
Jr **JARLEMAI SILTSTONE:** mudstone and minor sandstone lenses; shallow marine deposit (subsurface only)



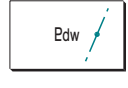
Jl **WALLAL SANDSTONE:** fine- to very coarse-grained sandstone and conglomerate; continental to marginal marine deposits (subsurface only)

PROTEROZOIC

c. 755 Ma<sup>1</sup>



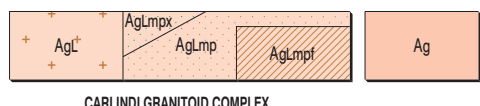
Edo **Round Hummock dyke swarm;** dolerite dyke; interpreted from aeromagnetic data where dashed



Edw **Mundine Well dyke swarm;** dolerite dyke with locally abundant granitic xenoliths and potassic alteration of wallrocks; local syenite; interpreted from aeromagnetic data where dashed



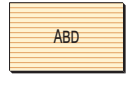
d Dolerite dykes, various ages; interpreted from aeromagnetic data where dashed  
 q Quartz vein



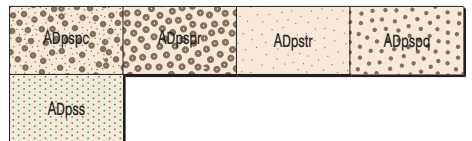
**CARLINDI GRANITOID COMPLEX**  
 AgL Unassigned fine-grained granitic rocks; schistose to strongly foliated; metamorphosed (subsurface only)  
 AgLmp Porphyritic and seriate monzogranite and syenogranite; massive to foliated; pink-grey  
 AgLmpx Porphyritic and seriate monzogranite and syenogranite with abundant greenstone xenoliths  
 AgLmpf Strongly foliated monzogranite and syenogranite; locally pegmatite banded  
 Ag Unassigned granitic rock (subsurface only)



Abs Actinolite-chlorite schist after mafic rock



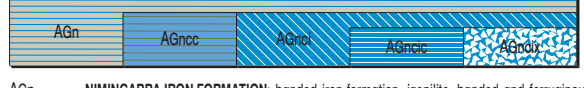
ABD Greenstone of similar age to **Bookingarra** and **De Grey Groups** (Section and subsurface only)



**PARADISE PLAINS FORMATION**  
 ADpspc Dominantly coarse-grained, poorly sorted subarkose and pebbly subarkose with beds of locally abundant, clast supported black chert- and quartz-pebble conglomerate; locally trough cross-bedded; metamorphosed  
 ADpspr Interbedded subarkose and polymictic conglomerate; metamorphosed  
 ADpstr Coarse-grained, poorly sorted subarkose; locally trough cross-bedded; metamorphosed  
 ADpspq Dominantly coarse-grained, poorly sorted subarkose with local beds of matrix-supported quartz-pebble conglomerate; locally trough cross-bedded; metamorphosed  
 ADpss Medium- to coarse-grained, poorly sorted sandstone and lesser siltstone; mafic volcanic detritus, including accretionary lapilli; turbidite and debris-flow deposits; metamorphosed

ARCHAEAN

Pilbara Supergroup  
 Bookingarra and De Grey Groups Unassigned  
 De Grey Group  
 Gorge Creek Group  
 Unassigned



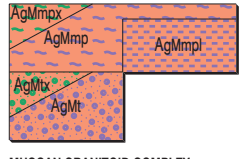
**NIMINGARRA IRON FORMATION:** banded iron-formation, jaspilite, banded and ferruginous chert, and black carbonaceous shale; metamorphosed  
 AGncc Chert; laminated white and grey chert, weakly banded to massive white chert, and dark-grey chert after carbonaceous shale; local ferruginous chert and jaspilite; metamorphosed  
 AGnci Banded iron-formation, jaspilite, banded and ferruginous chert, and black carbonaceous shale; metamorphosed  
 AGncic Ferruginous chert, jaspilite, and ironstone; lesser banded iron-formation, and black carbonaceous shale; metamorphosed  
 AGncix Tectonically brecciated ferruginous chert, jaspilite, ironstone, banded iron-formation, and shale; metamorphosed



**CORBOY FORMATION:** undivided clastic sedimentary rocks; metamorphosed (Section only)  
 AGcgs Sandstone and siltstone with rare pebble-conglomerate interbeds; metamorphosed  
 AGcst Sandstone, with pebble conglomerate interbeds; local siltstone and shale; metamorphosed  
 AGcsw Poorly bedded wacke and lithic arenite; local coarse-grained sandstone, shale, and siltstone; metamorphosed



Asw Wacke; medium to coarse grained, poorly sorted, poorly graded; turbidite or debris-flow origin; metamorphosed  
 Aou Mafic or ultramafic dykes; metamorphosed  
 Aur Tremolite-chlorite schist after intrusive ultramafic rock



**MUCCAN GRANITOID COMPLEX**  
 AgMmp Porphyritic and seriate monzogranite and syenogranite; massive to foliated; pink-grey  
 AgMmpx Porphyritic and seriate monzogranite and syenogranite with abundant greenstone xenoliths  
 AgMmpl Leucocratic monzogranite and syenogranite with abundant schlieric tonalite inclusions  
 AgMt Massive to strongly foliated tonalite; locally massive and hornblende-porphyritic or schlieric  
 AgMtx Massive to strongly foliated tonalite with abundant greenstone xenoliths

c. 3315 Ma<sup>2</sup>

c. 3420 Ma<sup>2</sup>

Pilbara Supergroup  
 Unassigned  
 Warrawoona Group Unassigned



Aosg Plagioclase-actinolite-epidote-chlorite schist after gabbro; with abundant monzogranite dykes



AW(b) Metabasalt, undivided; locally variolitic and/or pillowed  
 AW(bs) Basalt and komatiitic basalt, schistose

NORTHERN CARNARVON BASIN

WESTERN AUSTRALIAN SUPERBASIN

East Pilbara Granite-Greenstone Terrane

Mullina Basin

PILBARA CRATON

East Pilbara Granite-Greenstone Terrane