REFERENCE

PHANEROZOIC

CAINOZOIC

QUATERNARY

Qa | Qci | Qcs | Qcb | Qb

- Qa Alluvium — unconsolidated silt, sand, and gravel
- Qci Tidal flat and mangrove swamp deposit — silty clay, black organic clay; minor salt and beach ridge deposits
- Qcs Supratidal mudflat deposit — clay, silt, sand; minor salt
- Qcb Beach ridge deposit — quartzose sand, shelly in places
- Qb Black soil — clay and silt

Czs | Czc | Czd

- Czs Colluvium and alluvium — partly consolidated silt, sand, and gravel
- Czc Colluvium — partly consolidated scree and valley-fill deposits; cobble and boulder conglomerate
- Czd Colluvium and ferruginous duricrust — partly consolidated sand and gravel; usually developed on CPg

TERTIARY

Tp — **PENDER BAY CONGLOMERATE:** dark-grey boulder to pebble conglomerate

MESOZOIC

CRETACEOUS

Km — **MELLIGO SANDSTONE:** white to pale-grey, medium- to coarse-grained, silicified quartz sandstone; local large-scale cross-bedding

LATE JURASSIC TO EARLY CRETACEOUS

JKw — **JOWLAENGA FORMATION:** fine- to medium-grained silty sandstone; poorly sorted, commonly ferruginous

PALAEOZOIC

LATE CARBONIFEROUS TO EARLY PERMIAN

Grant Group: CPg — Undivided: massive aqueoglacial, unsorted silty sandstone, conglomeratic sandstone, conglomerate, siltstone, and shale

LATE DEVONIAN TO EARLY CARBONIFEROUS

FAMENNIAN—TOURNAISIAN

Fairfield Group: DCf — Undivided: silty limestone and calcarenite; calcareous shale and siltstone

DCl — **LILLYBOOROORA CONGLOMERATE:** boulder and cobble conglomerate

LATE DEVONIAN

FAMENNIAN

Reef Complex:

- Dl — **NULLARA LIMESTONE:** back-reef to reef-flat subfacies; bedded limestone and dolomite
- Dw — **WINDJANA LIMESTONE:** reef-margin subfacies; massive limestone
- Dn — **NAPIER FORMATION:** reefal-slope to fore-reef subfacies; bedded limestone, in part dolomitic

CANNING BASIN

PROTEROZOIC

q | d

- q Quartz vein
- d Dolerite dyke

c. 1800 Ma

Ꝑdh | Ꝑpw

- Ꝑdh **HART DOLERITE:** dark-grey dolerite
- Ꝑpw **WOTJULUM PORPHYRY:** grey quartz-feldspar porphyry

c. 1800 – 1840 Ma

Kimberley Group:

- Ꝑky — **YAMPI FORMATION:** pink-brown arkose and feldspathic sandstone; minor siltstone, hematitic quartz sandstone, glauconitic sandstone
- Ꝑkp — **PENTECOST SANDSTONE:** white, well-sorted quartz sandstone; grey siltstone
- Ꝑke — **ELGEE SILTSTONE:** red-brown and grey siltstone and minor phyllite; thin sandstone interbeds; boulder to pebble conglomerate
- Ꝑkw — **WARTON SANDSTONE:** white, well-sorted quartz sandstone and feldspathic sandstone; siltstone interbeds
- Ꝑkc — **CARSON VOLCANICS:** basaltic lava, tuff, agglomerate; quartz sandstone, feldspathic sandstone, laminated siltstone, and mudstone
- Ꝑkcs — Feldspathic sandstone
- Ꝑko — **KING LEOPOLD SANDSTONE:** white to pale-brown, coarse-grained, well-sorted quartz sandstone

Speewah Group:

- Ꝑs — Undivided: pale purple-grey to buff quartz sandstone; micaceous in places, minor phyllite; pebble to cobble conglomerate

KIMBERLEY BASIN

p — Muscovite pegmatite dyke

Ꝑgm | Ꝑgl | Ꝑgc | Ꝑgb | Ꝑgsb | Ꝑgn | Ꝑgq | Ꝑgt | Ꝑgdp

c. 1840 Ma

- Ꝑgm **MONDOOMA GRANITE:** foliated, quartz-phyric biotite micromonzogranite; minor syenogranite and granodiorite
- Ꝑgl **LENNARD GRANITE:** foliated, coarse porphyritic biotite monzogranite; minor syenogranite, granodiorite and non-porphyritic varieties
- Ꝑgc **CONE HILL GRANITE:** foliated, coarse porphyritic biotite monzogranite
- Ꝑgb **CASCADE BAY MONZOGRANITE:** foliated, coarse porphyritic biotite-muscovite monzogranite
- Ꝑgsb **SECURE BAY MONZOGRANITE:** foliated, medium- to-fine-grained biotite monzogranite; sparsely porphyritic
- Ꝑgn **NELLIE TONALITE:** foliated hornblende–biotite tonalite and granodiorite
- Ꝑgq **SQUARE TOP MICROGRANITE:** metamorphosed altered quartz-phyric microgranite; quartz-kyanite-chloritoid rock
- Ꝑgt **TARRAJI MICROGRANITE:** foliated, porphyritic biotite micromonzogranite
- Ꝑgdp **MOUNT DISASTER PORPHYRY:** foliated, coarse porphyritic biotite micromonzogranite

c. 1850 Ma

Ꝑw — **WHITEWATER VOLCANICS:** foliated rhyodacite lava, tuff, and minor volcaniclastic sedimentary rocks; commonly crystal-rich

c. 1880 Ma

Ꝑdr — **RUINS DOLERITE:** medium- to fine-grained metadolerite, and minor coarsely porphyritic varieties

Ꝑm | Ꝑma | Ꝑmh

c. 1900 Ma

- Ꝑm **MARBOO FORMATION:** predominantly low-grade, thin turbiditic metasandstone and quartz-chlorite-muscovite(-biotite-chloritoid) phyllite
- Ꝑma Medium-grade quartz-muscovite-biotite(-chlorite) metapsammite and quartz-muscovite-biotite(-chlorite-andalusite-staurolite-garnet-chloritoid) pelitic schist
- Ꝑmh Hornfels: quartz-feldspar-muscovite-biotite-garnet metapsammite interlayered with quartz-K-feldspar-muscovite-biotite-sillimanite(-andalusite)-cordierite metapelite

HOOPER COMPLEX