PHANEROZOIC

CAINOZOIC

QUATERNARY

Qa Alluvium—unconsolidated silt, sand, and gravel
Qb Black soil—clay and silt

Czs Colluvium and alluvium—partly consolidated silt, sand, and gravel; adjacent to drainage; sand plain on laterite surface
Czc Colluvium—partly consolidated scree and valley-fill deposits
Czl Laterite—massive and pisolitic ferruginous duricrust; forms plateaus overlying weathered rock (Pg—granitoid, PA—Amherst Metamorphics, PT—Ticklara Metamorphics); steep breakaways commonly form at the margins

q Quartz veins, of various ages; youngest generation postdates Cambrian units

PALAEOZOIC

CAMBRIAN

Ca **ANTRIM PLATEAU VOLCANICS:** dark grey vesicular and amygdaloidal basalt; generally deeply weathered

Cl **LALLY CONGLOMERATE:** medium- to coarse-grained quartz sandstone, and cobble conglomerate

PROTEROZOIC

c. 670 Ma

Louisa Downs Group

Pll **LUBBOCK FORMATION:** grey, green, or purple siltstone and shale; interbedded with fine- and medium-grained quartz wacke

Plt **TEAN FORMATION:** feldspathic sandstone, quartz wacke, quartz sandstone, pebble conglomerate, siltstone, and shale; minor dolomite

Plm **McALLY SHALE:** black, grey, and green shale; minor siltstone and fine- to very fine-grained sandstone

Ply **YURABI FORMATION:** flaggy to blocky quartz sandstone and feldspathic sandstone; grey and purple siltstone, shale, dolomitic siltstone, and sandy dolomite

Ple **EGAN FORMATION:** tillite, arkose, dolomite, limestone, sandstone, siltstone, and shale

d Dolerite dyke
po Andesite to rhyolite porphyry dyke; coarse phenocrysts of K-feldspar, quartz, and plagioclase

c.1800 Ma

Pdh **HART DOLERITE:** dark grey dolerite

Kimberley Group

PENTECOST SANDSTONE:

PKpu Upper unit: medium- to coarse-grained quartz sandstone and pebbly quartz sandstone

PKpm Middle unit: white, fine- to coarse-grained quartz sandstone; purple, fine-grained sandstone, siltstone, and shale

PKpl Lower unit: quartz sandstone and siltstone

PKe **ELGEE SILTSTONE:** red-brown and grey siltstone and shale; minor quartz sandstone

PKet **Teronis Member:** stromatolitic dolomite, sandy dolomite, oolitic dolomite, shale, micaceous siltstone, and fine-grained sandstone

PKw **WARTON SANDSTONE:** white to purple, massive to blocky, quartz sandstone; minor feldspathic sandstone

PKc **CARSON VOLCANICS:** green to black basalt, amygdaloidal basalt, and basaltic volcaniclastic rocks; interbedded quartz sandstone, feldspathic sandstone, and laminated siltstone and mudstone

PKcs Pale yellow-brown, laminated to massive, quartz- and felspar-rich sandstone and siltstone

PKl **KING LEOPOLD SANDSTONE:** white to pale brown, medium- to coarse-grained quartz sandstone and pebbly quartz sandstone

Pl **MOOLA BULLA FORMATION:** lithic quartz sandstone and granule to pebble conglomerate; minor argillite

KIMBERLEY BASIN

c. 1820 Ma

Pgch **MOUNT CHRISTINE GRANITOID:** coarsely porphyritic to medium-grained biotite monzogranite
Pgdi **DILLINGER MONZOGRANITE:** medium- to fine-grained, locally porphyritic, leucocratic biotite monzogranite; minor syenogranite; abundant mafic inclusions adjacent to contacts with gabbro
Pggy **GRIMPY MONZOGRANITE:** weakly porphyritic, fine-grained biotite monzogranite
Pgst **LOADSTONE MONZOGRANITE:** weakly porphyritic biotite monzogranite and syenogranite; minor microgranodiorite
Pgx Granitoid rocks rich in inclusions of angular, rounded and flattened, mafic rock

Po Undivided porphyritic to even-grained, medium- to fine-grained gabbro, quartz gabbro, and tonalite; extensively veined by granitoid rocks locally
Poe **EMULL GABBRO:** medium- to fine-grained gabbro, quartz gabbro, and tonalite; extensively veined by the DILLINGER MONZOGRANITE, aplite, quartz-feldspar porphyry, and pegmatite

Pgan **ANGELO MICROGRANITE:** altered medium- to fine-grained granophyric microgranite; disseminated malachite locally present

c.1840 Ma

Pe **KOONGIE PARK FORMATION:** metamorphosed felsic volcanic and volcaniclastic rocks; minor chert, banded iron-formation, and carbonate
Pec Metamorphosed chert; banded, and locally iron-rich

p Veins and dykes: p—muscovite-rich pegmatite; g—medium- to fine-grained granitoid dyke; a—aplite dyke
g
a

LAMBOO COMPLEX

Amhurst Metamorphics

PAgn Inclusion-rich, biotite-hornblende granodiorite gneiss, and garnet-cordierite-andalusite-sillimanite-biotite monzogranite gneiss; inclusions of metasedimentary and mafic igneous rocks; metamorphosed, possible equivalent of NEVILLE GRANODIORITE
PAm Medium- to high-grade metasedimentary rocks, and granitoid rocks; quartz-muscovite-biotite-andalusite-garnet-cordierite-K-feldspar-plagioclase granofels and schist; metamorphosed equivalents of MARBOO FORMATION

c.1860 Ma

Pgfm **GNEWING GRANODIORITE:** coarsely porphyritic, biotite-hornblende granodiorite and tonalite; contains mafic inclusions
Pgnv **NEVILLE GRANODIORITE:** medium- to fine-grained biotite granodiorite and tonalite; minor monzogranite; metasedimentary rock inclusions are abundant adjacent to contacts with metasedimentary rock

Bow batholith

Pal **LAMBOO ULTRAMAFICS:** partly serpentinized ultramafic and mafic intrusive rocks

Ticklaara Metamorphics

PTs Metamorphosed interbedded psammite and pelite; minor metamorphosed felsic and mafic volcaniclastic rocks; includes carbonate locally
PTa Metamorphosed basaltic volcanic and volcaniclastic rocks; minor metadolerite sills, thin interbedded metapelite, and metamorphosed carbonate and chert lenses

Halls Creek Group

c.1860 Ma

PHo **OLYMPIO FORMATION:** very low- to low-grade, thin- to medium-bedded mudstone, siltstone, turbiditic quartz wacke, greywacke, and arkosic sandstone

PHoq Metamorphosed thick-bedded, turbiditic quartzitic sandstone, and minor pelite

>1880 Ma

Pm **MARBOO FORMATION:** low-grade, turbiditic metasandstone; quartz-chlorite-muscovite phyllite; narrow zones of medium- to high-grade quartz-muscovite-biotite-andalusite-cordierite hornfels occur adjacent to granitoid intrusions
Pms Medium-grade, quartz-muscovite-biotite-sillimanite-andalusite(-cordierite) schist (possibly after hornfels)
Pmn High-grade, migmatitic quartz-muscovite-biotite-sillimanite-andalusite-cordierite-K-feldspar-plagioclase granofels and gneiss