PHANEROZOIC — CAINOZOIC — QUATERNARY

C1 | C1f | C1fr | W1 | W1gpg | A1 | A1c | A1dcb | A1f | A1i

Colluvial units

C1	Colluvial sand, silt, and gravel in outwash fans; scree and talus; proximal mass-wasting deposits; unconsolidated
C1f	Ferruginous colluvium; unconsolidated silt, sand, and rock debris; proximal mass-wasting deposits
C1fr	Ferruginous colluvium; unconsolidated silt, sand, and rock debris; proximal mass-wasting of ferruginous duricrust

Low-gradient slope units

W1	Silt, sand, and pebbles in distal sheetwash fans; no defined drainage
W1gpg	Quartzofeldspathic sand and quartz pebbles in sheetwash fans; derived from mass-wasting of granitic rocks

Alluvial units

A1	Alluvial sand, clay, silt, and gravel in active drainage areas
A1c	Sand, silt, and gravel in active drainage channels; includes clay, silt, and sand in poorly defined drainage courses on floodplains
A1dcb	Alluvial clay and silt in drainage depressions subject to flooding; poorly defined drainage channels and local claypans; gilgai surface; generally vegetated
A1f	Floodplain deposits; sand, silt, clay, and gravel adjacent to main drainage channels
A1i	Mixed floodplain deposits; sand, silt, and clay adjacent to main drainage channels; numerous small claypans

C2 | C2f | A2

Colluvial units

C2	Partly consolidated colluvial sand, silt, and gravel in proximal outwash fans; scree and talus; dissected by present-day drainage
C2f	Ferruginous colluvium; consolidated sand, silt, clay, and rock fragments in proximal outwash fans and scree; dissected by present-day drainage

Alluvial unit

A2	Consolidated alluvial sand, silt, and gravel; dissected by present-day drainage

R2cbvb | R2gpg | R2itcc | R2k

Residual or relict units

R2cbvb	Residual and sheetwash clay and silt containing fragments of basalt; expansive clay with gilgai surface; overlies basalt on areas of plateau; locally dissected by present-day drainage
R2gpg	Variably consolidated eluvial and colluvial sand, gravel, and silt overlying, and derived from granitic rocks; variably consolidated; dissected by present-day drainage
R2itcc	Residual chert breccia over dolomite and limestone; dissected by present-day drainage
R2k	Residual calcrete; massive, nodular, and cavernous limestone; variably silicified; dissected by present-day drainage

PALEOGENE to NEOGENE

Nml-kt — **MILLSTREAM FORMATION:** dolomite, calcareous dolomite, and calcrete; minor clay and basal conglomerate; local residual silcrete and chert breccia

R3f — **Residual or relict unit**
Ferruginous duricrust and ferruginous colluvium; locally includes ferruginous alluvium; consolidated to partly consolidated; related to Hamersley Surface; dissected by present-day drainage

ENrb-cip — **ROBE PISOLITE:** pisolitic limonite, goethite, and hematite deposits; developed along palaeodrainage lines; dissected by present-day drainage

PROTEROZOIC — NEOPROTEROZOIC

c. 755 Ma [1]

ꝑRH-od | ꝑMW-od

ꝑRH-od	**Round Hummock Dolerite Suite:** dolerite dyke; fine to medium grained
ꝑMW-od	**Mundine Well Dolerite Suite:** dolerite dyke with locally abundant granitic xenoliths and potassic alteration of wallrocks; local syenite; interpreted from aeromagnetic data where dashed

ARCHEAN — HAMERSLEY BASIN

Hamersley Group

AHAr-xsk-c — **MOUNT McRAE SHALE:** shale, dolomitic shale, chert, and minor banded iron-formation

2561–2541 Ma [2 3] — AHAd-kd — **WITTENOOM FORMATION:** thinly bedded dolomite, black chert, shale, and sandstone

c. 2597 Ma [2] — AHAm-cib — **MARRA MAMBA IRON FORMATION:** banded iron-formation; minor chert, mudstone, and siltstone

Mount Bruce Supergroup — Fortescue Group

2690–2629 Ma [4 5] — AFOj-sh — **JEERINAH FORMATION**
Shale and minor siltstone

AFOj-xcl-kd — Shale, chert, and dolomite; decimetre- to metre-scale bedding; includes uncommon, small domical stromatolites in dolomite

AFOj-sf — Shale, fine-grained sandstone, siltstone, and black chert

AFOj-cc — Blue-grey and black chert

2718–2713 Ma [6 7] — AFOm-bb — **MADDINA FORMATION**
Basalt; massive, fine grained, vesicular, and doleritic; thick flows and/or sills, to thin flows; local very coarse gas cavities filled with quartz

c. 2713 Ma [7] — AFOmk-bntt — **Kuruna Member:** basaltic to andesitic volcaniclastic rocks (common accretionary lapilli), sandstone, siltstone, shale, and local stromatolitic limestone

AFOm-bntt — Basaltic to andesitic volcaniclastic sandstone, siltstone, and shale

c. 2719–2715 Ma [4 6 7] — AFOt-bntt — **TUMBIANA FORMATION**
Basaltic to andesitic volcaniclastic siltstone and sandstone; well bedded, with local cross-bedding and accretionary lapilli; common welded matrix; local stromatolites; local shale and quartz sandstone
Meentheena Member: lenticular units of stromatolitic, dark-grey siliceous limestone or dolomite within laterally variable sequences of volcaniclastic sandstone and siltstone (accretionary lapilli), calcareous sandstone, shale, and basalt; local quartz sandstone and conglomerate

AFOtm-kts

2727–2721 Ma [7] — AFOti-bntt — **Mingah Member:** basaltic to andesitic volcaniclastic sandstone and siltstone (common accretionary lapilli), and local quartz sandstone, shale, and thin lenticular stromatolitic carbonate units; locally thick basalt flows

AFOti-sh — Shale and siltstone

AFO-od — Dolerite dyke or sill

2766–2752 Ma [4 7] — AFOhb-frl — **HARDEY FORMATION, Bamboo Creek Member**
Fine-grained rhyolitic volcaniclastic siltstone

c. 2772 Ma [8] — ABL-od — **Black Range Dolerite Suite:** dolerite dyke; local gabbro; locally metamorphosed

Unassigned — AFO-sp | AFO-sr

AFO-sp	Conglomerate and sandstone; thickly bedded
AFO-sr	Pebbly sandstone and coarse-grained sandstone; minor pebble conglomerate; thickly-bedded

PILBARA CRATON — East Pilbara Granite-Greenstone Terrane

AzqPEP — Quartz vein

Cutinduna Supersuite

c. 2908 Ma [9] — ACUbs-gmp — **BAMBOO SPRINGS MONZOGRANITE:** biotite monzogranite; K-feldspar porphyritic; coarse grained; magmatic foliation

Sisters Supersuite

AST-gmlm | ASTta-xgp-gr | AST-gl | ASTmu-gme | ASTcn-gmm

AST-gmlm	Medium- to coarse-grained, leucocratic monzogranite; weakly metamorphosed
ASTta-xgp-gr	**TAMBOURAH MONZOGRANITE:** pegmatite and coarse-grained syenogranite in fine- to medium-grained, weakly foliated, biotite granodiorite
AST-gl	Heterogeneous, biotite leucogranite; fine to coarse grained, and weakly foliated; commonly schlieric
ASTmu-gme	**MULGANDINNAH MONZOGRANITE:** fine- to medium-grained biotite monzogranite; weakly foliated
ASTcn-gmm	**COONDINA MONZOGRANITE:** medium-grained, weakly porphyritic biotite monzogranite

c. 2926 Ma [9]
c. 2928 Ma [6]

Pilbara Supergroup — Unassigned

API-map | API-mats | API-mucs | API-mutk | API-xmus-mbs

API-map	Serpentinized metaperidotite and serpentine–chlorite schist
API-mats	Strongly sheared serpentine schist
API-mucs	Chlorite–tremolite schist
API-mutk	Talc–carbonate and talc–chlorite–carbonate schist
API-xmus-mbs	Metamorphosed, interlayered ultramafic and mafic lavas with thin quartzite and chert units; schistose

Gorge Creek Group

AGCi-ci — **PINCUNAH HILL FORMATION**
Banded iron-formation; red and black layered; thinly to moderately bedded; weakly metamorphosed

Cleland Supersuite

ACEka-mggb — **KAVIR GRANODIORITE:** metamorphosed, biotite granodiorite and minor pegmatitic granite; fine to medium grained; metamorphic foliation

Pilbara Supergroup — Unassigned

API-stq | API-cc | API-mfs | API-mwa | API-xmwa-g | API-bb | API-xmus-g

API-stq	Quartz sandstone; white, medium grained, and locally bedded; metamorphosed
API-cc	Blue-grey and white-banded chert; recrystallized
API-mfs	Quartz–sericite schist; fine grained; derived from felsic volcanic rocks
API-mwa	Medium-grained amphibolite and amphibolite schist
API-xmwa-g	Amphibolite intruded by granite veins (50%)
API-bb	Basalt; metamorphosed
API-xmus-g	Ultramafic and minor mafic schist intruded by granite veins

Kelly Group

AKEe-mba | AKEe-mwcs | AKEe-bb | AKEe-bk | AKEe-cc

3350–3335 Ma [6 9]

EURO BASALT

AKEe-mba	Medium-grained amphibolite and amphibolite schist; derived from basaltic volcanic rocks
AKEe-mwcs	Strongly sheared chlorite schist
AKEe-bb	Basalt, generally pillowed; minor massive dolerite, gabbro, and komatiitic basalt; metamorphosed
AKEe-bk	Komatiitic basalt, generally pillowed; metamorphosed
AKEe-cc	Chert; generally white, grey, and blue-black layered; locally massive blue-grey; weakly metamorphosed

Tambina Supersuite

3435–3425 Ma [10 11] — ATA-mgg — Equigranular, leucocratic granodiorite; generally medium grained; predominantly foliated

Pilbara Supergroup — Warrawoona Group — Salgash Subgroup

AWAp-mfs | AWAp-stq

3458–3427 Ma [6 12–14]

PANORAMA FORMATION

AWAp-mfs	Quartz–sericite schist, derived from felsic volcanic rocks
AWAp-stq	Quartz-rich sandstone; metamorphosed

Callina Supersuite

ACL-mgtn | ACL-jmgtn-mwa

c. 3470 Ma [15]

ACL-mgtn	Heterogeneous, migmatitic, tonalitic–granodioritic orthogneiss
ACL-jmgtn-mwa	Migmatitic–tonalitic orthogneiss, with abundant inclusions of amphibolite