PHANEROZOIC

CENOZOIC

C | Cfg | Cf | Cg | Cgpg

W | Wfl | Wf | Wg | Wq

A | Aa | AacI | Ac | Ack | Af | Ap | Av

Ld | S

Colluvial units

C	Colluvium derived from different rock types; includes gravel, sand, and silt
Cfg	Colluvial footslope deposits containing quartzofeldspathic gravel, sand, and silt commonly derived from granite and associated weathering products
Cf	Ferruginous gravel and reworked ferruginous duricrust
Cg	Colluvial quartzofeldspathic gravel, sand, and silt, commonly derived from granitic rock and associated weathering products
Cgpg	Quartzofeldspathic gravel, sand, and silt commonly derived from granitic rocks, their metamorphosed equivalents, and associated weathering products

Sheetwash units

W	Clay, silt, and sand in extensive fans; local ferruginous gravel
Wfl	Clay, silt, and sand on sheetflood fan; local ferruginous gravel
Wf	Clay, silt, and sand with abundant ferruginous grit
Wg	Clay, silt, and sand sheetwash deposits, commonly derived from granitic rock
Wq	Clay, silt, and sand sheetwash deposits with abundant quartz-vein debris

Alluvial units

A	Clay, silt, sand, and gravel in channels and on floodplains
Aa	Clay, silt, sand, and gravel on alluvial plains
AacI	Clay and heterogeneous sediments on alluvial plains, including a sparse lag of quartz sand with some quartz and ferruginous saprolite gravel
Ac	Clay, silt, sand, and gravel in fluvial channels
Ack	Calcrete and carbonate-cemented alluvium in fluvial channels
Af	Clay, silt, and sand on floodplains
Ap	Clay and silt in claypans
Av	Alluvial fan deposits; includes gravel, sand and silt

Lacustrine unit

Ld	Sand, silt, and gypsum in dunes adjacent to and within playa lakes

Sandplain unit

S	Residual and eolian sand with minor silt and clay; low vegetated dunes locally common

$R_lck_lp_g$ | R_rf | R_rgp_g | R_rz | R_rzp_g | R_sgp_g | Rd | Rk

Residual or relict units

$R_lck_lp_g$	Kaolinized granite
R_rf	Ferruginous duricrust, massive to rubbly; includes iron-cemented reworked products
R_rgp_g	Undivided ferruginous and quartzofeldspathic duricrust over deeply weathered granite; minor kaolinized rock; includes mottled and leached zones of weathering profile
R_rz	Silcrete
R_rzp_g	Silcrete commonly derived from granite
R_sgp_g	Quartzofeldspathic sand and minor silcrete over granite; sparse granite outcrop; includes mottled and leached zones of weathering profile
Rd	Undivided residual or relict material; mainly ferruginous and siliceous duricrust; minor calcrete and kaolinized rock
Rk	Residual calcrete and nodular carbonate deposits; includes reworked carbonate products

PROTEROZOIC

Ꝑod — Dolerite dyke, sill, or plug; fine- to medium-grained dolerite and gabbro

Mamda Moorn Suite

ꝐMMug-od — MUGGAMURRA DOLERITE: dolerite and gabbro dykes

Mamda Moorn Large Igneous Province

Windplain Group

ꝐYWj-s — JUDERINA FORMATION: quartz sandstone; local sandstone, shale, siltstone, chert breccia, and conglomerate

Yerrida Basin

Bald Rock Supersuite

Walganna Suite

2650–2600 Ma

ABRGgm — Monzogranite, locally rich in muscovite and biotite; predominantly with equigranular texture and locally K-feldspar phyric; includes deeply weathered rock

Jungar Suite

AJUmgms | AJUgm | AJUcl-mgms | AJUcl-mgss

2655 Ma[1]

AJUmgms	Foliated biotite metamonzogranite; minor metagranodiorite, metasyenogranite, and metapegmatite; fine to coarse grained; locally gneissic
AJUgm	Monzogranite; locally K-feldspar megacrystic; metamorphosed
AJUcl-mgms	CHUNDERLOO MONZOGRANITE: biotite metamonzogranite; commonly with abundant K-feldspar phenocrysts/porphyroclasts; well foliated to mylonitic; may include amphibolite lenses
AJUcl-mgss	Strongly foliated metagranitic rock; locally mylonitic or gneissic

Tuckanarra Suite

2697–2657 Ma

ATUmg | ATUmgms

c. 2681 Ma

ATUmg	Metamonzogranite to metagranodiorite; commonly foliated
ATUmgms	Biotite metamonzogranite; strongly foliated

AmgmsY | AgmY | AgnY

AmgmsY	Foliated biotite metamonzogranite; minor metagranodiorite, metasyenogranite, and metapegmatite; fine to coarse grained; locally gneissic
AgmY	Monzogranite; common biotite and rare local hornblende; minor granodiorite and syenogranite; fine to coarse grained; equigranular to porphyritic; massive to weakly foliated; metamorphosed
AgnY	Granitic rock, undivided; metamorphosed; includes deeply weathered rock

AmwaYYO | AmwasYYO | AmoaYYO | Axmbs-cxYYO | AmbbsYYO | Axmus-mtqYYO | AmusYYO

AcxYYO | Axb-ogYYO | AbbYYO | AuYYO | AukYYO

2735–2686 Ma

AmwaYYO	Amphibolite derived from mafic volcanic and intrusive rocks; locally schistose; may include metamorphosed banded iron-formation
AmwasYYO	Strongly foliated amphibolite and amphibolite schist; fine to medium grained; commonly lineated
AmoaYYO	Amphibolite; medium to coarse grained, derived from dolerite and gabbro
Axmbs-cxYYO	Mafic schist derived from volcanic rock interleaved with chert, banded iron-formation, and quartzite; locally preserved relict pyroxene-spinifex texture; metamorphosed
AmbbsYYO	Fine-grained schist derived from basalt; includes amphibole–chlorite assemblages; local metagabbro and ultramafic schist
Axmus-mtqYYO	Ultramafic schist interleaved with quartzite
AmusYYO	Ultramafic schist; includes talc–tremolite–chlorite schist, and minor serpentinite and mafic schist
AcxYYO	Banded iron-formation, jaspilite, chert, and shale with associated mafic rock; metamorphosed
Axb-ogYYO	Mafic volcanic rock with minor gabbro; metamorphosed
AbbYYO	Basalt, metamorphosed; includes some amphibolite and amphibolitic schist derived from tholeiitic basalt; may contain some metamorphosed high-Mg basalt, and minor mafic intrusive and volcaniclastic sedimentary rocks
AuYYO	Ultramafic volcanic rock, undivided; metamorphosed
AukYYO	Komatiite with relict olivine-spinifex texture; metamorphosed

Austin Downs Supersuite

Big Bell Suite

ASDBmg | ASDBmgg | ASDBmgmn | ASDBmgms

ASDBmg	Metagranite; commonly foliated; includes granodiorite to monzogranite
ASDBmgg	Metagranodiorite; locally schlieric and gneissic; locally strongly sheared
ASDBmgmn	Muscovite metamonzogranite; foliated
ASDBmgms	Medium-grained metamonzogranite, locally porphyritic; schistose to gneissic

ARCHEAN

Murchison Supergroup

Polelle Group

2760–2735 Ma

APOg-xf-s | APOgw-fa

c. 2755 Ma

GREENSLEEVES FORMATION

APOg-xf-s	Felsic volcaniclastic and volcanic rocks interleaved with sedimentary rocks; metamorphosed
APOgw-fa	**Woolgra Andesite Member:** volcaniclastic andesite; metamorphosed

APOm-mfs | APOm-mu | APOm-sn | APOm-b | APOm-bbo | APOm-bko | APOm-bs

APOms-b | APOmb-bs | APOml-b

2800–2780 Ma

MEEKATHARRA FORMATION

APOm-mfs	Felsic schist
APOm-mu	Metamorphosed ultramafic rock; local peridotite with relict olivine and/or pyroxene cumulate textures
APOm-sn	Sedimentary rock, undivided; metamorphosed
APOm-b	Mafic volcanic rock dominant; metamorphosed
APOm-bbo	Pillowed basalt; local hyaloclastite; fractured to foliated; weakly metamorphosed
APOm-bko	Pillowed komatiitic basalt; local fine pyroxene-spinifex texture; weakly metamorphosed
APOm-bs	Pyroxene spinifex-textured basalt and minor basalt; locally variolitic; interlayered with thin sills of granophyric to coarse-grained leucogabbro; metamorphosed
APOms-b	**Stockyard Basalt Member:** basalt and komatiitic basalt, minor felsic tuff; metamorphosed
APOmb-bs	**Bassetts Volcanic Member:** pyroxene spinifex-textured basalt with boninitic affinity; metamorphosed and locally schistose
APOml-b	**Lordy Basalt Member:** mafic volcanic rock, dominantly komatiitic basalt; massive to weakly foliated; locally pillowed and/or vesicular; metamorphosed

Norie Group

ANOy-xf-cib | ANOy-md | ANOy-mfa | ANOy-cib | ANOy-cx | ANOy-fn

ANOy-xf-cib	YALOGINDA FORMATION: felsic volcaniclastic rocks and banded iron-formation; local quartzite and felsic schist; widely intruded by layered gabbroic to peridotitic sills; metamorphosed
ANOy-md	Metasiliciclastic rocks
ANOy-mfa	Metamorphosed andesitic and dacitic volcanic and volcaniclastic rocks; local basaltic horizons
ANOy-cib	Banded iron-formation and ferruginous banded chert; metamorphosed
ANOy-cx	Banded iron-formation, jaspilite, chert, and shale with associated mafic rock; metamorphosed
ANOy-fn	Felsic volcanic and volcaniclastic rock, undivided; metamorphosed; typically deeply weathered and kaolinized

2825–2800 Ma

ANOs-mbas | ANOs-mbms | ANOs-bbo | ANOs-bs

ANOsq-b

SINGLETON FORMATION

ANOs-mbas	Fine-grained, mafic amphibolite schist
ANOs-mbms	Metakomatiitic basalt; schistose; pyroxene-spinifex texture locally preserved
ANOs-bbo	Pillowed basalt; metamorphosed
ANOs-bs	Pyroxene spinifex-textured basalt; metamorphosed
ANOsq-b	**Quinns Basalt Member:** mafic volcanic rock; massive to weakly foliated; metamorphosed

Anmean Supersuite

AANmgta | AANo

AANmgta	Amphibole-rich metatonalite; locally sheared
AANo	Mafic intrusive rock; predominantly gabbro with minor leucogabbro and dolerite; metamorphosed

Culculli Suite

2785–2733 Ma

AANCmg — Metatonalite, metagranodiorite, and metatrondhjemite; typically hornblende bearing, and with common mafic clots

Warriedar Suite

AANW-xax-og | AANWod

AANW-xax-og	Basal pyroxenite to pyroxene peridotite, typically showing cumulate textures; gabbro–leucogabbro in central to upper parts, locally layered and with doleritic or granophyric top contacts; metamorphosed
AANWod	Dolerite; metamorphosed

2801–2792 Ma

Meeline Suite

LADY ALMA IGNEOUS COMPLEX

AANla-xony-am | AANla-am | AANla-od | AANla-og | AANla-ogl | AANla-ax | AANla-maps

c. 2813 Ma

AANla-xony-am	Layered gabbro and anorthosite, with magnetitite and pyroxenite layers, and thick ultramafic cumulates; metamorphosed
AANla-am	Magnetitite; fine to coarse grained; metamorphosed
AANla-od	Fine- to medium-grained dolerite; minor basalt, gabbro or ultramafic schist; metamorphosed
AANla-og	Gabbro; medium to coarse grained; local leucogabbro; metamorphosed
AANla-ogl	Leucogabbro to gabbroic anorthosite; medium to coarse grained; metamorphosed
AANla-ax	Pyroxenite; fine to medium grained; massive to weakly foliated; metamorphosed
AANla-maps	Peridotitic schist; serpentine–chlorite–actinolite

Youanmi Terrane

YILGARN CRATON