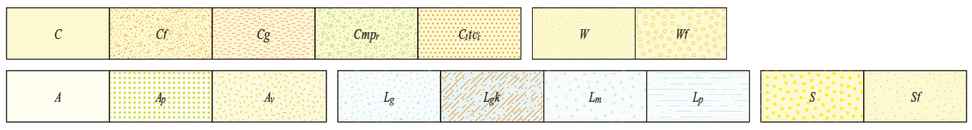
PHANEROZOIC

CENOZOIC



Colluvial units

C	Colluvium derived from different rock types; includes gravel, sand, and silt
Cf	Ferruginous gravel and reworked ferruginous duricrust
Cg	Quartzofeldspathic gravel, sand, and silt commonly derived from granitic rock and associated weathering products
Cmp_r	Lithic-rich colluvium dominated by mafic and ultramafic rock
C_1tc_i	Talus from banded iron-formation and chert; locally cemented

Sheetwash units

W	Clay, silt, and sand in extensive fans; local ferruginous gravel
Wf	Clay, silt, and sand with abundant ferruginous grit

Alluvial units

A	Clay, silt, sand, and gravel in channels and on floodplains
A_p	Clay and silt in claypans
A_v	Alluvial fan deposits; includes gravel, sand and silt

Lacustrine units

L_g	Silt, sand, and gravel in halophyte flats adjacent to playas
L_gk	Bedded carbonate, silt, and clay deposits in shallow lakes adjacent to streams and rivers
L_m	Mixed dunes, evaporite, and alluvial deposits; typically adjacent to playa lakes
L_p	Saline and gypsiferous evaporite deposits, clay, silt, and sand in playa lakes

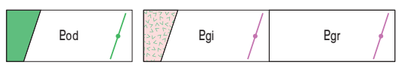
Sandplain units

S	Residual and eolian sand with minor silt and clay; low vegetated dunes locally common
Sf	Undulating sandplains and dunes; sand, silt and clay in variable proportions; derived in part from ferruginous material

Residual or relict units

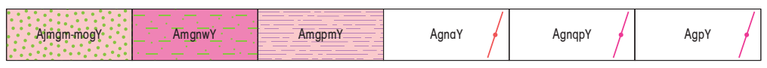
Rd	Undivided residual or relict material; mainly ferruginous and silicious duricrust; minor calcrete and kaolinitized rock
$R_1c_1p_g$	Kaolinized granite
R_1w	Deeply weathered rock; protolith undetermined
R_2gp_g	Undivided residual or relict material; mainly ferruginous and quartzofeldspathic duricrust over deeply weathered granite; minor kaolinized rock; includes mottled and leached zones of weathering profile
R_f	Ferruginous duricrust, massive to rubbly; includes iron-cemented reworked products
R_z	Silcrete

PROTEROZOIC



Ɛod	Dolerite dyke, sill, or plug; fine- to medium-grained dolerite and gabbro
Ɛgi	Diorite dyke with fine-grained margins; metamorphosed
Ɛgr	Syenogranite dyke with local orthoclase cumulate texture; metamorphosed

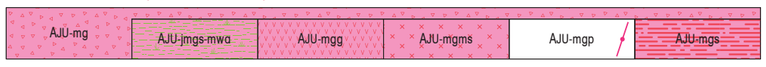
zd	Epidote vein, medium to coarse grained; locally quartz bearing
zq	Quartz vein or pod; massive, crystalline, or brecciated; age uncertain



Ajmgm-mogY	Metamonzogranite with muscovite-rich patches; contains abundant decimetre-sized rafts of amphibolitic metagabbro; locally highly schistose
AmgnwY	Medium-grained, mesocratic, foliated metamonzogranite and gneiss
AmgpmY	Muscovite-bearing pegmatitic metagranite; locally strongly sheared with a well developed muscovite fabric
AgnαY	Microgranite and fine-grained granitic rock; typically as sheets and dykes; locally schistose; metamorphosed; includes deeply weathered rock
AgnqpY	Quartz–feldspar porphyritic rock, as dykes; metamorphosed
AgpY	Pegmatite dyke; metamorphosed

Deformation event 2 (D_2: 2665–2640Ma)

Jungar Suite



2665–2640 Ma

AJU-mg	Biotite metagranite; dominantly metamonzogranite; minor metagranodiorite, metasyenogranite, and metapegmatite; fine to coarse grained; locally gneissic
AJU-jmgs-mwα	Granitic schist with abundant xenoliths of mafic amphibolite
AJU-mgg	Metagranodiorite, typically with sparsely distributed biotite schlieren (section only)
AJU-mgms	Foliated biotite metamonzogranite; minor metagranodiorite, metasyenogranite, and metapegmatite; fine to coarse grained; locally gneissic
AJU-mgp	Pegmatitic metagranite with locally abundant quartz–feldspar intergrowths and K-feldspar augen up to 50 mm
AJU-mgs	Foliated metagranite; locally schistose; may include amphibolite lenses; includes deeply weathered rock

Tuckanarra Suite

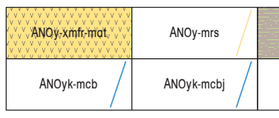
2690–2665 Ma

ATU-mg	Metamonzogranite to metagranodiorite; commonly foliated
ATUcu-mg	CUNDIMURRA MONZOGRANITE: metamonzogranite to metasyenogranite; locally undeformed with common magmatic foliation (not on map)
ATUcu-mgms	Schistose K-feldspar megacrystic biotite metamonzogranite; includes minor schlieric gneiss with well-developed K-feldspar augen, sheared quartz veins, and sheared pegmatitic rocks
ATUcu-mgmu	K-feldspar megacrystic biotite metamonzogranite; strongly foliated

c. 2668 Ma[1]

ATUcu-mgmy	Biotite metamonzogranite; mylonitic; commonly with pegmatite veins and other intrusive granitic phases

Deformation event 1 (D_1: 2710–2690 Ma)

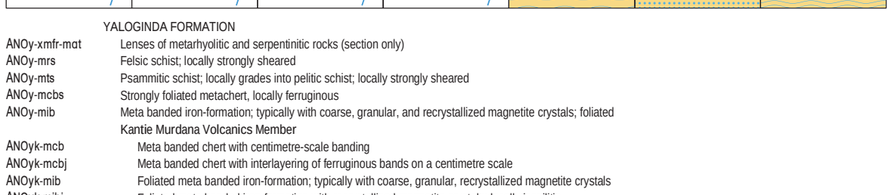


AmwαYMU	Amphibolite; may include meta banded iron-formation
AmogYMU	Metagabbro; typically chlorite- and/or amphibole-rich with local preservation of relict igneous texture; locally strongly sheared

2820–2800 Ma

Murchison Supergroup

Norie Group



YALOGINDA FORMATION

ANOy-xmfr-mat	Lenses of metarhyolitic and serpentinitic rocks (section only)
ANOy-mrs	Felsic schist; locally strongly sheared
ANOy-mts	Psammitic schist; locally grades into pelitic schist; locally strongly sheared
ANOy-mcbs	Strongly foliated metachert, locally ferruginous
ANOy-mib	Meta banded iron-formation; typically with coarse, granular, and recrystallized magnetite crystals; foliated

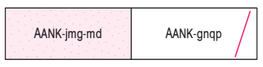
Kantie Murdana Volcanics Member

c. 2813 Ma

ANOyk-mcb	Meta banded chert with centimetre-scale banding
ANOyk-mcbj	Meta banded chert with interlayering of ferruginous bands on a centimetre scale
ANOyk-mib	Foliated meta banded iron-formation; typically with coarse, granular, recrystallized magnetite crystals
ANOyk-mibj	Foliated meta banded iron-formation with recrystallized magnetite crystals; locally jaspilitic
ANOyk-mfe	Recrystallized, equigranular felsic volcanic and sedimentary rocks with 1–5 mm grain size
ANOyk-frp	Quartz–feldspar porphyritic rock; weak to schistose foliation; metamorphosed
ANOyk-frt	Felsic tuff and tuffaceous rock; finely banded; fine to medium grained; rhyolite to dacite with quartz and feldspar phenocrysts; metamorphosed; variably foliated

ARCHEAN

Mount Kenneth Suite



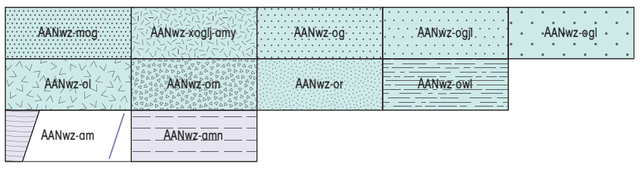
AANK-jmg-md	Metagranitic rock, locally sheared with abundant rafts and lenses of sheared quartzite, psammite, and pelite
AANK-gnqp	Quartz–feldspar porphyritic rock, as dykes; metamorphosed

AANwi-xmog-mg	Metagabbro and metaleucogabbro; grades into metagabbronorite; locally schistose and sheared, with abundant metagranite, aplite, and granophyre intrusive sheets predominantly parallel to foliation (section only)
AANwi-mog	Metagabbro with amphibole pseudomorphs after pyroxene; grades into metagabbronorite; locally sheared; locally magnetite-bearing (section only)
AANwi-og	Gabbro grading into leucogabbro and gabbronorite; locally with modal layering of pyroxene and plagioclase; metamorphosed

Corner Well Gabbro

Olivine orthopyroxenite interlayered with anorthosite; metamorphosed

AANwr-xogp-od	Roof zone: porphyritic gabbro with plagioclase phenocrysts and dolerite; metamorphosed
AANwr-od	Dolerite with locally developed spinifex texture; grades into gabbro; metamorphosed; includes deeply weathered rock
AANwr-og	Gabbro with locally developed spinifex texture; grades into dolerite; metamorphosed
AANwr-oglq	Quartz-bearing leucogabbro, typically with well developed, coarse spinifex texture; metamorphosed
AANwr-ogp	Porphyritic gabbro; plagioclase phenocrysts typically <20 mm in a 4–8 mm matrix of plagioclase, clinopyroxene, and minor oxides; metamorphosed



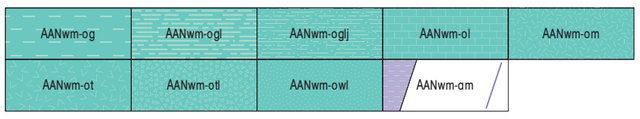
Upper zone

AANwz-mog	Metagabbro with amphibole pseudomorphs after pyroxene, grading into metagabbronorite; locally sheared; locally magnetite and/or ilmenite bearing
AANwz-xoglj-amy	Interlayered magnetite- and ilmenite-bearing leucogabbro and layered magnetitite units <0.5 m thick; metamorphosed
AANwz-og	Gabbro grading into magnetite- and/or ilmenite-bearing olivine gabbro, leucogabbro, and gabbronorite; metamorphosed
AANwz-ogjl	Leucogabbro, magnetite and/or ilmenite bearing; grades into magnetite- and/or ilmenite-bearing gabbro, anorthosite, and leucogabbronorite; metamorphosed
AANwz-ogl	Leucogabbro grading into anorthosite and magnetite- and/or ilmenite-bearing gabbro; locally abundant clinopyroxene oikocrysts up to 30 mm enclose euhedral cumulate plagioclase crystals; metamorphosed
AANwz-ol	Olivine gabbronorite grading into olivine gabbro and olivine leucogabbronorite; locally showing modal layering; minor cumulus magnetite and/or ilmenite and/or apatite; metamorphosed
AANwz-om	Gabbronorite with local modal layering of pyroxene and plagioclase; grades into leucogabbronorite and olivine leucogabbronorite; minor intercumulus magnetite and/or ilmenite; metamorphosed
AANwz-or	Olivine norite; locally grading into olivine gabbronorite and olivine leuconorite; typically magnetite and ilmenite bearing; metamorphosed
AANwz-owl	Leuconorite, locally magnetite and ilmenite bearing; grades into norite and leucogabbronorite with ophitic regions; metamorphosed
AANwz-am	Magnetitite layers <1 m thick in magnetite-rich gabbro; locally with undulating bases; magnetite encloses plagioclase chadacrysts; metamorphosed
AANwz-amn	Magnetitite in layers <1 m thick; magnetite grains commonly contain rounded, 5–10 mm serpentine inclusions after olivine; locally grading into olivine gabbro; metamorphosed

Annean Supersuite

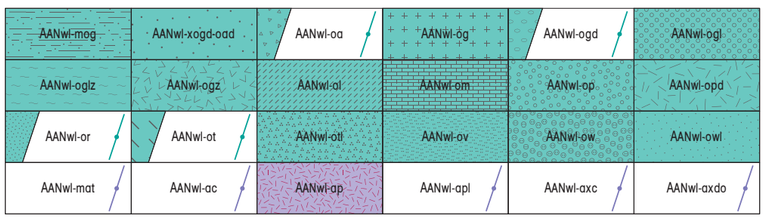
Meeline Suite

WINDIMURRA IGNEOUS COMPLEX



Middle zone

AANwm-og	Gabbro grading into magnetite-bearing gabbro, leucogabbro and gabbronorite; metamorphosed
AANwm-ogl	Leucogabbro grading into anorthosite and magnetite-bearing gabbro; locally abundant clinopyroxene oikocrysts up to 30 mm enclose euhedral plagioclase cumulate crystals; metamorphosed
AANwm-oglj	Magnetite-bearing leucogabbro grading into anorthosite and magnetite-bearing gabbro; locally abundant clinopyroxene oikocrysts up to 30 mm enclose euhedral plagioclase cumulate crystals; metamorphosed
AANwm-ol	Olivine gabbronorite grading into olivine gabbro and olivine leucogabbronorite; minor modal layering and locally magnetite-bearing; metamorphosed
AANwm-om	Gabbronorite, locally with modal layering of pyroxene and plagioclase grading into leucogabbronorite; minor intercumulus magnetite; metamorphosed
AANwm-ot	Troctolite; locally grading into olivine gabbronorite and leucotroctolite; metamorphosed
AANwm-otl	Leucotroctolite; locally grading into anorthosite and troctolite; metamorphosed
AANwm-owl	Leuconorite; locally grading into norite and leucogabbronorite with ophitic regions; metamorphosed
AANwm-am	Magnetitite layers <1 m thick with locally undulating basal contacts; magnetite crystals enclose plagioclase in magnetite-rich gabbro; metamorphosed



Lower zone

AANwl-mog	Metagabbro with amphibole pseudomorphs after pyroxene; grading into metagabbronorite; locally sheared (section only)
AANwl-xogd-oad	Pegmatitic gabbro containing rounded boulders of pegmatitic anorthosite up to 20 cm; locally PGE-sulfide bearing; metamorphosed
AANwl-oa	Anorthosite with weak plagioclase lamination and crystal size up to 8 mm; metamorphosed
AANwl-og	Gabbro grading into leucogabbro and gabbronorite; locally with modal layering of pyroxene and plagioclase; metamorphosed
AANwl-ogd	Very coarse grained gabbro, grading into coarse-grained leucogabbro and gabbronorite; locally with modal layering of pyroxene and plagioclase; metamorphosed
AANwl-ogl	Leucogabbro grading into anorthosite and gabbro; locally abundant clinopyroxene oikocrysts up to 30 mm enclose euhedral cumulate plagioclase crystals; metamorphosed
AANwl-oglz	Ophitic leucogabbro, typically with pyroxene oikocrysts <30 mm across enclosing euhedral plagioclase cumulate crystals <10 mm in size; metamorphosed
AANwl-ogz	Ophitic gabbro, typically with pyroxene oikocrysts <30 mm across enclosing euhedral plagioclase cumulate crystals <10 mm across; metamorphosed
AANwl-ol	Olivine gabbronorite grading into olivine gabbro and olivine leucogabbronorite; minor modal layering; metamorphosed
AANwl-om	Gabbronorite, typically with igneous layering and locally grading into leucogabbronorite; rare intercumulus magnetite; metamorphosed (section only)
AANwl-op	Melanocratic norite, locally with orthopyroxene cumulate crystals <20 mm in size; metamorphosed
AANwl-opd	Very coarse grained melanocratic norite, locally with orthopyroxene cumulate crystals >50 mm; metamorphosed
AANwl-or	Olivine norite; locally grading into olivine gabbronorite and olivine leuconorite; metamorphosed
AANwl-ot	Troctolite; locally grading into olivine gabbronorite and leucotroctolite; metamorphosed
AANwl-otl	Leucotroctolite; locally grading into anorthosite and troctolite; metamorphosed
AANwl-ov	Olivine melagabbronorite with cumulate euhedral olivine, grading into olivine gabbronorite; metamorphosed
AANwl-ow	Norite; locally grading into gabbronorite and leuconorite with very coarse grained patches; metamorphosed
AANwl-owl	Leuconorite; locally grading into norite and leucogabbronorite with ophitic patches; metamorphosed
AANwl-mat	Fine-grained serpentinite; strongly sheared, with local relict igneous texture
AANwl-ac	Chromitite; highly undulose layers grading into chromite-bearing norite; PGE-bearing sulfide grains up to 0.5 mm within chromitite seam; metamorphosed
AANwl-ap	Pyroxene peridotite; locally lherzolitic, harzburgitic and Cr-spinel bearing; locally strongly sheared; metamorphosed
AANwl-apl	Lherzolite; cumulate olivine typically pseudomorphed by serpentine; metamorphosed
AANwl-axc	Clinopyroxenite with laminated clinopyroxene cumulate crystals; metamorphosed
AANwl-axdo	Very coarse grained orthopyroxenite, typically pegmatitic; metamorphosed

c. 2813 Ma

Murchison Domain

Youanmi Terrane

YILGARN CRATON