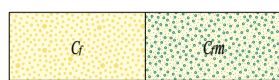


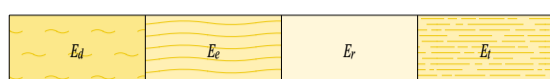
Alluvial units
Apc Claypan; locally with salt efflorescences
Au Superficial channel



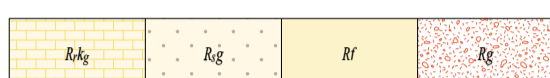
Colluvial units
Cr Colluvium
Cm Colluvium; dominantly ferromagnesian materials



Sheetwash units
Wf Sheetwash fan; very gently inclined landform (less than 1° slope); extremely low relief
Wfhi Sheetwash fan; abundant ferruginous pisoid gravel; iron cement



Eolian units
Ed Eolian dunefield
Ee Sand dune
Er Eolian sandplain
Et Eolian veneer over alluvium and/or colluvium

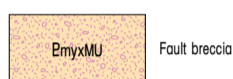


Residual units
Rrk Groundwater calcrete; locally forms low mounds; nodular to massive; commonly with alternating layers of carbonate and chalcedony
Rrg Quartzofeldspathic sand, commonly over granite
Rf Residual or relict ferruginous materials; ferruginous and ferruginized saprolite; ferruginous duricrust; also includes transported material; cemented or uncemented ferruginous gravel
Rg Saprolite derived from felsic rock

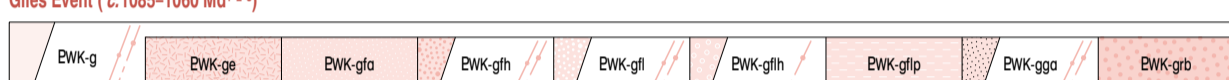
Petermann Orogeny (c. 570–530 Ma¹)



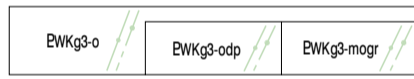
Eod Dolerite dyke, sill or plug; fine- to medium-grained dolerite and gabbro
Ezd Fine-grained epidote veins; locally contains quartz
Ezq Massive, coarse-grained vein quartz
Ezqix Quartz vein breccia with magnetite/hematite infill



Giles Event (c. 1085–1060 Ma^{1, 2, 3})



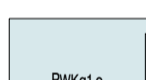
EWK-g Granite, undivided
EWK-ge Fine- to medium-grained quartz syenite; contains K-feldspar phenocrysts up to 5 cm; locally with rapakivi texture
EWK-gfa Fine-grained, leucocratic, alkali feldspar granite and alkali feldspar quartz syenite
EWK-gfh Medium-grained, hornblende-bearing alkali feldspar granite; contains perthite and antiperthite
EWK-gfl Medium-grained, leucocratic, alkali feldspar granite with pervasive granophyric texture
EWK-gflh Medium-grained, leucocratic, alkali feldspar granite with hornblende clusters and pervasive granophyric texture
EWK-gflp Medium-grained, leucocratic, alkali feldspar granite; contains anhedral quartz phenocrysts; pervasive granophyric texture; locally epidotized
EWK-gga Massive, fine-grained granodiorite; locally epidotized
EWK-grb Massive to moderately foliated, medium- to coarse-grained, porphyritic biotite syenogranite to monzogranite; K-feldspar phenocrysts; contains perthite, and trace garnet and spinel



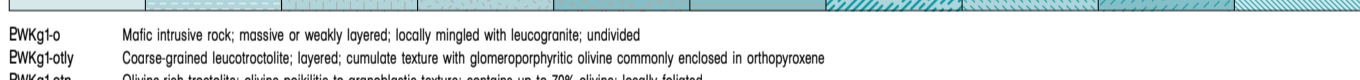
EWKg3-o Mafic intrusive rock; massive to layered; undivided
EWKg3-odp Fine- to medium-grained plagioclase-phyric gabbro; ophitic texture; plagioclase phenocrysts and glomerophenocrysts to 2 cm
EWKg3-mogr Metamorphosed gabbro; massive with well-developed subophitic texture; extensive actinolite replacement of igneous pyroxene



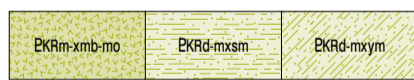
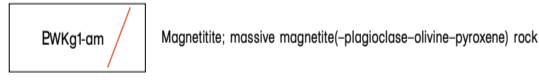
TLLs-tp Trachytic, dacitic, and rhyolitic volcanic rocks with associated subvolcanic granophyre sills; acicular texture of hornblende needles up to 3 cm in a felsitic to granophyric groundmass; locally plagioclase porphyritic



EWKg2-xog-g Gabbro; ophitic to subophitic texture; variably mixed and mingled with leucogranite; locally foliated and mylonitic

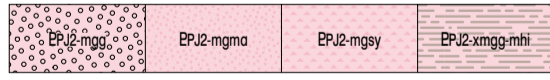
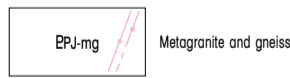


EWKg1-o Mafic intrusive rock; massive or weakly layered; locally mingled with leucogranite; undivided
EWKg1-oly Coarse-grained leucotroctolite; layered; cumulate texture with glomeroporphyritic olivine commonly enclosed in orthopyroxene
EWKg1-otn Olivine-rich troctolite; olivine poikilitic to granoblastic texture; contains up to 70% olivine; locally foliated
EWKg1-og Medium-grained, even-textured gabbro; locally olivine porphyritic
EWKg1-oghp Massive, coarse-grained, porphyritic gabbro; subhedral plagioclase phenocrysts and glomerophenocrysts up to 5 cm; interstitial amphibole and clinopyroxene
EWKg1-ogjp Medium-grained, porphyritic, olivine-bearing gabbro to gabbro-norite; subhedral to anhedral plagioclase phenocrysts up to 2 cm; magnetite oikocrysts locally up to 1 cm
EWKg1-ogl Medium- to coarse-grained leucogabbro; poikilitic; locally weakly metamorphosed
EWKg1-ogn Medium-grained olivine-bearing gabbro
EWKg1-xoga-og Fine-grained gabbro; quenched marginal facies to larger intrusions; heavily intruded by dykes and sills of ferrogabbro and ferrogabbro-norite
EWKg1-ol Medium-grained, leucocratic olivine gabbro-norite; locally with lesser troctolite, gabbro-norite, olivine gabbro, and olivine norite; locally with cm- to m-scale layers and lenses of fine-grained leucocratic olivine gabbro-norite and olivine gabbro
EWKg1-oly Medium-grained, leucocratic olivine gabbro-norite; typically shows cm- to m-scale mineralogical layering; locally with cm- to m-scale layers and lenses of fine-grained leucocratic olivine gabbro-norite and olivine gabbro
EWKg1-om Medium- to coarse-grained gabbro-norite; equigranular; massive to weakly layered; locally foliated
EWKg1-oo Fine- to medium-grained olivine gabbro; massive to weakly foliated; locally shows cm-scale mineralogical banding
EWKg1-oaj Medium-grained olivine gabbro; magnetite aggregates up to 5 mm
EWKg1-oajy Olivine gabbro; magnetite-rich layers 1–2 m thick
EWKg1-xoaj-am Medium-grained, magnetite-rich olivine gabbro; 1 to 10 m thick magnetite seams
EWKg1-oajp Fine- to medium-grained olivine gabbro; contains up to 20% olivine; plagioclase phenocrysts up to 2 cm; locally with well developed cm-scale layering
EWKg1-moe Fine- to medium-grained metagabbro and metamorphosed olivine-gabbro; granoblastic texture with locally preserved mineralogical layering and orthopyroxene oikocrysts; typically amphibolite facies but granulite adjacent to earlier mafic intrusions; quenched marginal facies to mafic intrusion
EWKg1-mosy Mylonite derived from mafic intrusive rock

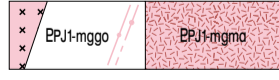


MACDOUGALL FORMATION
EKRM-xmb-mo Amygdaloidal basalt to andesite interleaved and intruded by microgabbro locally containing orthopyroxene oikocrysts and plagioclase glomerophenocrysts; typically metamorphosed to lower amphibolite facies; microgabbro forms quenched marginal facies to mafic intrusion
EKRD-mxsm Strongly foliated quartz-pebble metaconglomerate, feldspathic metasandstone, muscovite quartzite, and phyllite; locally garnetiferous near mafic intrusions
EKRD-mxym Mylonitic quartz-pebble metaconglomerate, feldspathic metasandstone, muscovite quartzite, and phyllite; locally garnetiferous near mafic intrusions

Musgravian Orogeny (c. 1219–1155 Ma⁴)

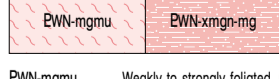


Late Pitjantjatjara Supersuite
EPJ2-mgg Weakly to strongly foliated metagranodiorite to metamonzogranite; hornblende and lesser biotite replaces pyroxene
EPJ2-mgma Massive to moderately foliated, medium-grained, mesocratic to leucocratic amphibole metamonzogranite; equigranular to porphyritic; contains green amphibole and minor biotite; perthite phenocrysts
EPJ2-mgsy Mylonitic and blastomylonitic, seriate to porphyritic metagranitic rock
EPJ2-xmgg-mhi Metagranodiorite with intercalations or inclusions of diatexitic pelitic gneiss

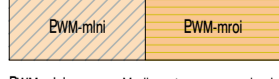


Early Pitjantjatjara Supersuite
EPJ1-mggo Pyroxene metagranodiorite to metamorphosed quartz monzodiorite; commonly charnockitic; garnet coronas around mafic minerals; subhedral dark-grey K-feldspar phenocrysts up to 3 cm
EPJ1-mgma Foliated to gneissic, porphyritic amphibole-orthopyroxene metamonzogranite; commonly intruded by leucogranite veins; K-feldspar phenocrysts; mafic enclaves common; local perthite and myrmekite

Mount West Orogeny (c. 1219–1155 Ma⁵)



EWN-mgmu Weakly to strongly foliated, porphyritic metamonzogranite; contains clinopyroxene, orthopyroxene, and hornblende; K-feldspar phenocrysts up to 2 cm; locally mylonitic
EWN-xmgn-mg Interleaved orthopyroxene-clinopyroxene-biotite gneissic granite and fine- to medium-grained schlieric orthopyroxene-(hornblende)-bearing leucogranite



EWM-mlni Medium- to coarse-grained garnet-sillimanite pelitic gneiss; poorly to well banded; metatexitic to diatexitic; rounded garnet porphyroblasts up to 2 cm; locally interlayered with well-banded to laminated, medium-grained quartzofeldspathic paragneiss
EWM-mroi Medium-grained orthopyroxene-plagioclase(-quartz) acid to intermediate granulite gneiss; laminated to banded on a mm- to cm-scale and interlayered with leucogranite veins on a cm- to m-scale; typically metatexitic and cut by locally abundant, variably transposed leucogranite veins

1075–1060 Ma

c. 1067 Ma

c. 1075 Ma

> 1078 Ma

> 1078 Ma

1190–1155 Ma

1219–1190 Ma

1360–1293 Ma