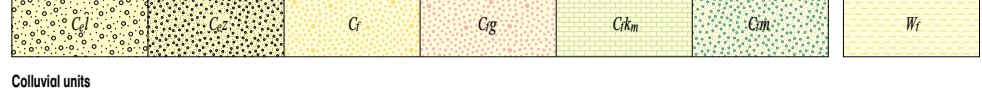
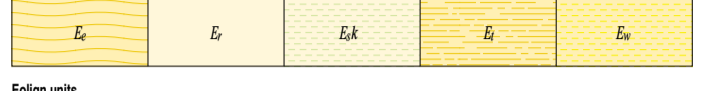


Alluvial units
Aa Alluvial plain
ApC Claypan; locally with salt efflorescences
Au Superficial channel



Colluvial units
Cl Pediment at foot of breakaway; dominated by vein quartz rubble and ferruginous lag
Cz Colluvium; quartz
Cr Colluvium
Cg Colluvium; dominantly quartzfeldspathic materials
Ckm Colluvium; magnesite
Cm Colluvium; dominantly ferromagnesian materials
Sheetwash units
Wf Sheetwash fan; very gently inclined landform (< 1° slope); extremely low relief

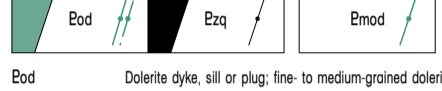


Eolian units
Ee Sand dune
Er Eolian sandplain
Ek Eolian sandplain overlying alluvial-playa plain; subsurface calcrete and abundant m-scale calcrete ridges and mounds
Et Eolian veneer over alluvium and/or colluvium
Ew Swale

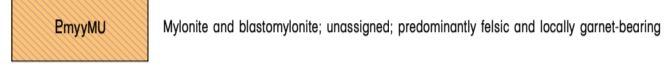


Residual or relict units
Rd Residual soils overlying saprolite and ferruginous material; locally with pedogenic calcrete
Rf Residual or relict ferruginous materials; including: ferruginous and ferruginized saprolite, ferruginous duricrust; also includes transported material; cemented or uncemented ferruginous gravel
Rkg Groundwater calcrete; locally forms low mounds; nodular to massive; commonly with alternating layers of carbonate and chalcedony
Rz Duricrust (residual or relict); silcrete

Petermann Orogeny (c. 570-530 Ma<sup>1</sup>)

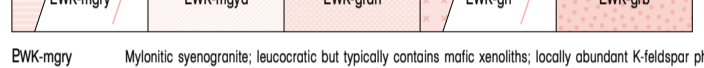


Eod Dolerite dyke, sill or plug; fine- to medium-grained dolerite and gabbro; interpreted from aeromagnetic data where dashed
Ezq Massive, coarse-grained vein quartz
Emod Metadolerite and dolerite of various ages; typically ophitic to sub-ophitic textured; locally with garnet coronas around pyroxene

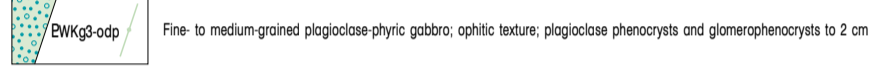


EmyyMU Mylonite and blastomylonite; unassigned; predominantly felsic and locally garnet-bearing

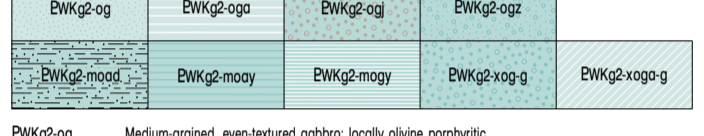
Giles Event (c. 1082-1060 Ma<sup>1,2,3</sup>)



EWK-mgry Mylonitic syenogranite; leucocratic but typically contains mafic xenoliths; locally abundant K-feldspar phenocrysts up to 1 cm
EWK-mgyd Mylonitic leucogranite; strongly epidotized and cut by abundant quartz and pegmatite veins
EWK-grah Fine-grained, leucocratic hornblende syenogranite; locally granophytic texture and with acicular or skeletal hornblende
EWK-grl Fine- to medium-grained, porphyritic to seriate-textured syenogranite; leucocratic but typically contains mafic xenoliths; locally abundant K-feldspar phenocrysts up to 1 cm; rare rapakivi texture
EWK-grb Massive, medium- to coarse-grained biotite syenogranite; typically with abundant K-feldspar phenocrysts up to 3 cm



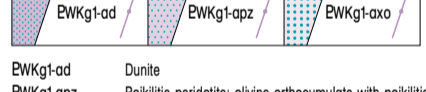
EWK-g3-odp Fine- to medium-grained plagioclase-phryic gabbro; ophitic texture; plagioclase phenocrysts and glomerophenocrysts to 2 cm



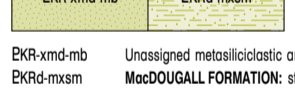
EWK-g2-og Medium-grained, even-textured gabbro; locally olivine porphyritic
EWK-g2-oga Massive to strongly foliated, fine-grained leucogabbro to leucogabbro; ophitic to subophitic texture with granoblastic interstitial pyroxene; locally associated with chill margins; locally mylonitic; locally epidotized and cut by abundant quartz and pegmatite veins
EWK-g2-ogj Magnetite-rich gabbro; ophitic to subophitic texture; locally biotite-rich and mixed and mingled with leucogranite
EWK-g2-ogz Massive, weakly metamorphosed gabbro; well-developed ophitic to subophitic texture with oikocrysts up to 1 cm; locally epidotized and cut by abundant quartz and pegmatite veins
EWK-g2-mood Moderately to strongly foliated amphibolite after fine- to medium-grained gabbro; strongly epidotized and cut by abundant quartz and pegmatite veins; locally mylonitic
EWK-g2-moay Mylonitic amphibolite after fine- to medium-grained gabbro
EWK-g2-mogy Mylonite derived from gabbro or from mixed and mingled gabbro and leucogranite
EWK-g2-xog-g Gabbro; ophitic to subophitic texture; variably mixed and mingled with leucogranite; locally foliated and mylonitic
EWK-g2-xoga-g Moderately to strongly foliated, fine- to medium-grained leucogabbro to leucogabbro variably mingled with leucogranite; ophitic to subophitic texture with granoblastic interstitial pyroxene; mingling textures range from 1 cm leucogranite xenoliths (typical) to oegmatite; locally mylonitic; locally epidotized and cut by abundant quartz and pegmatite veins



EWK-g1-xo-a Layered mafic-ultramafic intrusions; undivided
EWK-g1-oany Medium-grained anorthosite interlayered on a cm- to m-scale with troctolite and olivine gabbro
EWK-g1-otly Coarse-grained leucotroctolite; layered; cumulate texture with glomeroporphyritic olivine commonly enclosed in orthopyroxene
EWK-g1-otn Olivine-rich troctolite; olivine poikilitic to granoblastic texture; contains up to 70% olivine; locally foliated
EWK-g1-og Medium-grained, even-textured gabbro; locally olivine porphyritic
EWK-g1-ol Fine- to coarse-grained gabbro; interstitial magnetite typically penetrates mineral fractures
EWK-g1-oly Medium-grained, leucocratic olivine gabbro; locally with lesser troctolite, gabbro, olivine gabbro, and olivine norite; locally with cm- to m-scale layers and lenses of fine-grained leucocratic olivine gabbro and olivine gabbro
EWK-g1-oo Medium-grained, leucocratic olivine gabbro; typically shows cm- to m-scale mineralogical layering; locally with cm- to m-scale layers and lenses of fine-grained leucocratic olivine gabbro and olivine gabbro
EWK-g1-ooy Olivine gabbro; magnetite-rich layers 1-2 m thick
EWK-g1-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

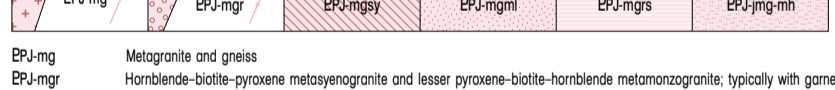


EWK-g1-ad Dunite
EWK-g1-apz Poikilitic peridotite; olivine orthocumulate with poikilitic clinopyroxene and interstitial plagioclase
EWK-g1-axo Orthopyroxenite

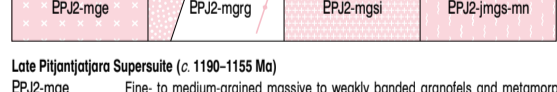


EKR-xmd-mb Unassigned metasiliclastic and metamorphic volcanic rocks
EKRd-mxsm MacDOUGALL FORMATION: strongly foliated quartz-pebble conglomerate, feldspathic sandstone, muscovite quartzite, and phyllite; metamorphosed; locally garnetiferous near mafic intrusions

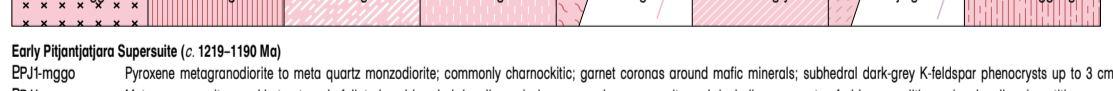
Musgraven Orogeny (c. 1219-1155 Ma<sup>4</sup>)



EPJ-mg Metagranite and gneiss
EPJ-mgr Hornblende-biotite-pyroxene metasyenogranite and lesser pyroxene-biotite-hornblende metazonogranite; typically with garnet coronas around mafic minerals; seriate to porphyritic; rounded K-feldspar phenocrysts up to 5 cm and commonly with rapakivi texture
EPJ-mgsy Mylonitic and blastomylonitic seriate to porphyritic granitic rock
EPJ-mgml Massive, fine- to medium-grained, leucocratic metazonogranite; typically equigranular
EPJ-mgrs Moderately to strongly foliated, porphyritic pyroxene(-hornblende-biotite) metasyenogranite; typically leucocratic; abundant elongate K-feldspar phenocrysts to 5 cm; locally garnetiferous; cut by abundant leucogranite
EPJ-jmg-mh Weakly to strongly foliated, medium- to coarse-grained equigranular leucosyenogranite; locally contains rounded garnet to 2 cm; rafts of metatextitic psammite and pelite

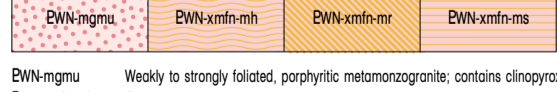


Late Pijlntjara Supersuite (c. 1190-1155 Ma)
EPJ2-mge Fine- to medium-grained massive to weakly banded granofels and metamorphosed schlieric leucogranite; typically < 5% mafic minerals; seriate to K-feldspar porphyritic
EPJ2-mrg Fine- to coarse-grained leucocratic syenogranite; large grain size variation at hand specimen scale; graphic texture; locally garnetiferous; pelite and psammite inclusions
EPJ2-mgsi Fine- to medium-grained schlieric orthopyroxene(-hornblende)-bearing metaleucogranite; weakly to strongly foliated; locally abundant xenoliths and layers of metatextitic to diatextitic granule and gneiss
EPJ2-jmgs-mn Fine- to medium-grained schlieric orthopyroxene(-hornblende)-bearing metaleucogranite; weakly to strongly foliated; abundant xenoliths and rafts of metasedimentary and metagranitic gneiss

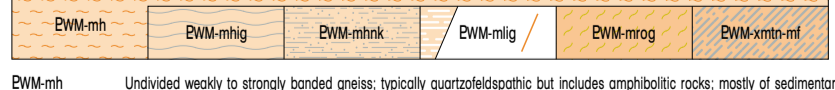


Early Pijlntjara Supersuite (c. 1219-1190 Ma)
EPJ1-mggo Pyroxene metagranodiorite to meta quartz monzodiorite; commonly charnockitic; garnet coronas around mafic minerals; subhedral dark-grey K-feldspar phenocrysts up to 3 cm
EPJ1-mgm Metazonogranite; weakly to strongly foliated and banded; locally gneissic; commonly a composite rock including remnants of older granulitic gneiss; locally migmatitic
EPJ1-mgmn Strongly foliated to gneissic porphyritic leucogranite; locally migmatitic and intruded by schlieric leucogranite; K-feldspar phenocrysts to 2 cm; locally mylonitic
EPJ1-mgmu Weakly to strongly foliated porphyritic leucocratic metazonogranite; contains clinopyroxene, orthopyroxene, and hornblende; K-feldspar phenocrysts to 2 cm; locally mylonitic
EPJ1-mgru Massive to moderately foliated, porphyritic pyroxene(-hornblende-biotite) metasyenogranite; typically leucocratic; abundant elongate K-feldspar phenocrysts to 5 cm; local trachytic texture; locally garnetiferous; cut by abundant leucogranite
EPJ1-mgry Mylonitic, medium- to coarse-grained leucocratic syenogranite; quartz ribbons to 2 cm in a feldspathic groundmass
EPJ1-jmg-md Strongly foliated to gneissic, porphyritic monzogranite with schlieren, rafts, and screens of metasedimentary rock
EPJ1-xmgn-mg Mixed weakly to strongly foliated and gneissic pyroxene granodiorite, quartz monzodiorite and monzogranite intruded by and included within fine- to medium-grained schlieric orthopyroxene(-hornblende)-bearing metaleucogranite

Mount West Orogeny (c. 1336-1293 Ma<sup>5</sup>)



EWN-mgmu Weakly to strongly foliated, porphyritic metazonogranite; contains clinopyroxene, orthopyroxene, and hornblende; K-feldspar phenocrysts up to 2 cm; locally mylonitic
EWN-xmfn-mh Composite gneiss comprising felsic volcanic and volcanoclastic units interlayered on a cm- to m-scale with psammite, garnetiferous pelite, and rare calc-silicate rocks; typically metatextitic and cut by locally abundant, variably transposed leucogranite veins; locally epidotized along faults
EWN-xmfn-mr Composite gneiss comprising leucocratic felsic volcanic and volcanoclastic units interlayered on a cm- to m-scale with orthopyroxene-plagioclase(-quartz) acid to intermediate granulite; locally metatextitic and cut by variably transposed leucogranite veins
EWN-xmfn-ms Composite gneiss comprising medium-grained, orthopyroxene-bearing felsic volcanic and volcanoclastic units; local m-scale interlayers of orthopyroxene-bearing psammite and minor pelite



EWM-mh Undivided weakly to strongly banded gneiss; typically quartzfeldspathic but includes amphibolitic rocks; mostly of sedimentary or volcanosedimentary protolith but possibly includes felsic to mafic intrusive protoliths
EWM-mhig Metatextitic gneiss comprising cm- to m-thick layers of garnet-orthopyroxene-biotite(-cordierite, hercynite, hornblende) pelite and psammite with rare quartzite, feldspathic psammite, and calc-silicate layers; cut by locally abundant, variably transposed leucogranite veins
EWM-mhmk Medium-grained kyanite-garnet pelitic gneiss; poorly to well-banded; metatextitic to diatextitic; rounded garnet porphyroblasts up to 1 cm diameter; locally interlayered with medium- to coarse-grained psammite
EWM-mlig Diatextitic, coarse-grained garnet-orthopyroxene-biotite(-cordierite) pelite; leucocratic; rounded garnet porphyroblasts to 2 cm; migmatitic textures range from stromatic to nebulitic to raft migmatite
EWM-mrog Medium-grained orthopyroxene-plagioclase-garnet-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 metatextitic and cut by locally abundant, variably transposed leucogranite veins
EWM-xmtn-mf Composite gneiss comprising orthopyroxene-bearing psammite and minor pelite interlayered on a m-scale with lesser metamorphosed medium-grained, orthopyroxene-bearing felsic volcanic and volcanoclastic units; locally garnetiferous

Warakurna Supersuite

Giles Suite

Bentley Supergroup

Kunmarara Group

Pijlntjara Supersuite

Wankanki Supersuite

Wirku Metamorphics