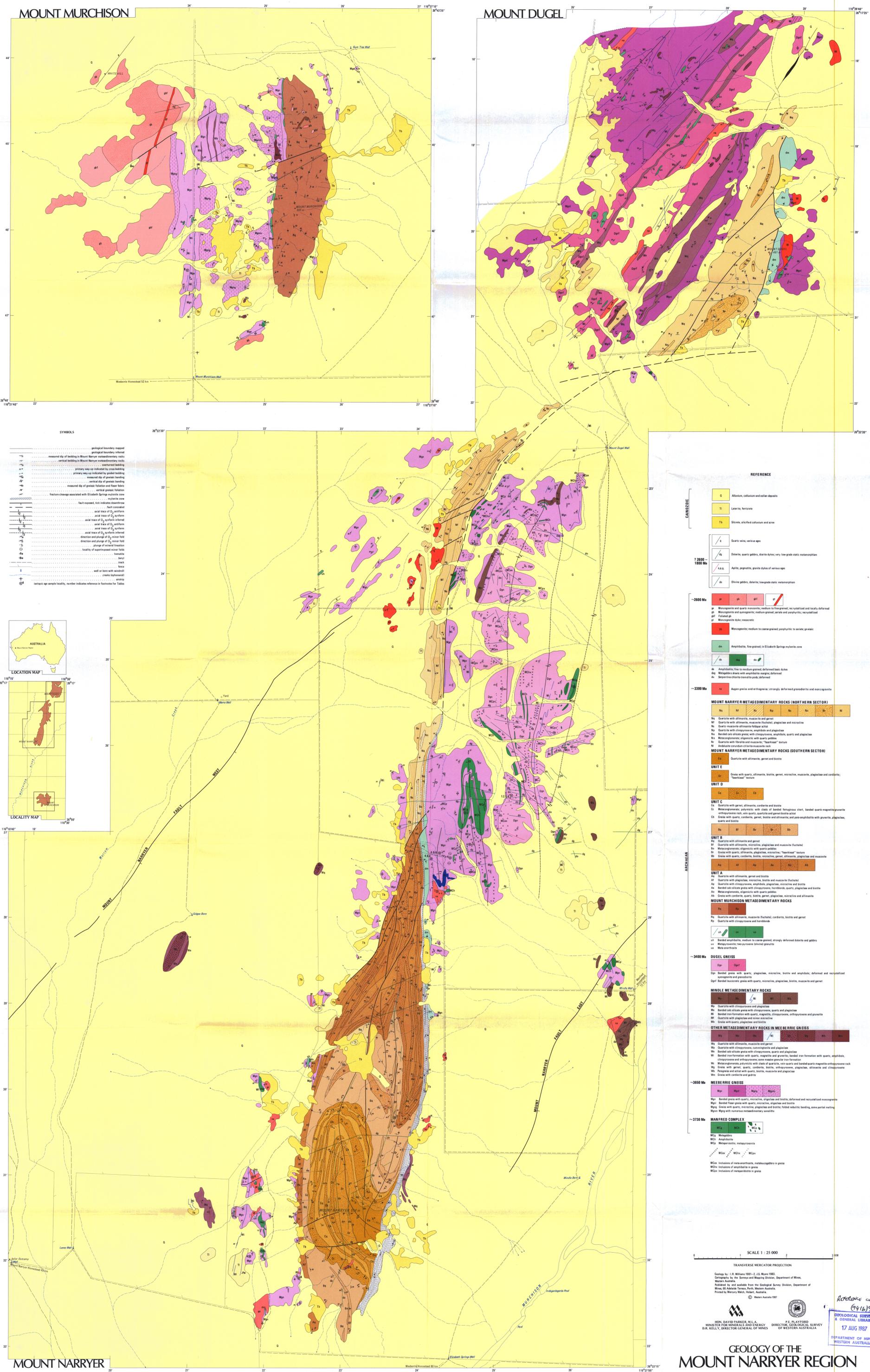


MOUNT MURCHISON

MOUNT DUGEL



- SYMBOLS**
- geological boundary inferred
 - measured dip of bedding in Mount Narryer metamorphic rocks
 - vertical bedding in Mount Narryer metamorphic rocks
 - overturned bedding
 - primary way up indicated by cross bedding
 - measured dip of gneiss bedding
 - vertical dip of gneiss bedding
 - vertical gneiss foliation
 - fracture cleavage associated with Elizabeth Springs mylonite zone
 - mylonite zone
 - fault exposed, rock indicates downthrow
 - fault concealed
 - axial trace of D₁ mylonite
 - axial trace of D₂ mylonite
 - axial trace of D₃ mylonite
 - axial trace of D₄ mylonite
 - direction and plunge of D₁ minor fold
 - plunge of folded location
 - locality of superimposed minor folds
 - horst
 - scarp
 - well of bore with recorded depth (topographic)
 - asterisk
 - isotopic age sample locality, number indicates reference in footnotes for Tables



REFERENCE

- Q Alluvium, calcareous and siliceous deposits
- Ti laterite, ferronite
- Th siliceous, silicified calcareous and iron
- Quartz veins, various ages
- Diagenetic quartz, gabbro, diorite dikes; very low-grade static metamorphism
- Amphibole, pyroxene, garnet, clinopyroxene of various ages
- Chlorite gabbro, diorite; low-grade static metamorphism

2200 - 1800 Ma

- Mg Monzonitic and quartz monzonitic; medium to fine grained; not crystallized and locally deformed
- Mg Monzonitic and quartz monzonitic; medium grained; variably and anastomosingly recrystallized
- Foliated gabbro
- Monzonitic dyke, resected
- Monzonitic; medium to coarse grained; porphyroblastic to variably granitic

~2000 Ma

- Amphibolite, fine grained; in Elizabeth Springs mylonite zone
- Amphibolite; fine to medium grained; deformed basic dikes
- Metagabbro dykes with amphibolite margins; deformed
- Superimposed chlorite mylonite zone, deformed

~2300 Ma

- Alpine gneiss and orthogneiss; strongly deformed granodiorite and monzonitic

MOUNT NARRYER METASEDIMENTARY ROCKS (NORTHERN SECTOR)

- Nq Quartzite with allanite, muscovite and garnet
- Nf Quartzite with allanite, muscovite, biotite and microcline
- Nr Quartzite with allanite, muscovite, biotite and microcline
- Ns Quartzite with allanite, muscovite, biotite and microcline
- Nt Quartzite with allanite, muscovite, biotite and microcline
- Nu Quartzite with allanite, muscovite, biotite and microcline
- Nv Quartzite with allanite, muscovite, biotite and microcline
- Nw Quartzite with allanite, muscovite, biotite and microcline
- Nx Quartzite with allanite, muscovite, biotite and microcline
- Ny Quartzite with allanite, muscovite, biotite and microcline
- Nz Quartzite with allanite, muscovite, biotite and microcline

MOUNT NARRYER METASEDIMENTARY ROCKS (SOUTHERN SECTOR)

- Es Quartzite with allanite, garnet and biotite

UNIT E

- Ea Gneiss with quartz, allanite, biotite, garnet, microcline, muscovite, plagioclase and cordierite; "horstlike" texture

UNIT D

- Da Gneiss with quartz, allanite, biotite, garnet, microcline, muscovite, plagioclase and cordierite; "horstlike" texture

UNIT C

- Ca Gneiss with quartz, allanite, biotite, garnet, microcline, muscovite, plagioclase and cordierite; "horstlike" texture
- Cb Metagabbro; porphyroblastic with clasts of banded ferrous gneiss, banded quartz-magnetite gneiss, orthopyroxene rock with quartz, cordierite and biotite
- Cc Gneiss with quartz, cordierite, garnet, biotite and allanite; and para-amphibolite with quartz, plagioclase, quartz and biotite

UNIT B

- Ba Quartzite with allanite and garnet
- Bb Quartzite with allanite, microcline, plagioclase and muscovite (textured)
- Bc Metagabbro; porphyroblastic with quartz cordierite
- Bd Gneiss with quartz, allanite, biotite, garnet, microcline, muscovite, plagioclase and cordierite; "horstlike" texture
- Be Gneiss with quartz, cordierite, biotite, microcline, garnet, allanite, plagioclase and muscovite

UNIT A

- Aa Quartzite with allanite, garnet and biotite
- Ab Quartzite with allanite, microcline, biotite and muscovite (textured)
- Ac Quartzite with allanite, microcline, biotite and muscovite (textured)
- Ad Banded calc-silicate gneiss with orthopyroxene, quartz and plagioclase
- Ae Metagabbro; porphyroblastic with quartz cordierite
- Af Metagabbro; porphyroblastic with quartz cordierite
- Ag Gneiss with quartz, cordierite, biotite, microcline, garnet, allanite, plagioclase and muscovite

MOUNT MURCHISON METASEDIMENTARY ROCKS

- Mq Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mr Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mn Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Ml Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mk Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mj Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mi Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mh Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mg Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mf Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Me Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Md Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mc Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Mb Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet
- Ma Quartzite with allanite, muscovite, biotite, cordierite, biotite and garnet

~3400 Ma

- Du Banded gneiss with quartz, plagioclase, microcline, biotite and amphibole; deformed and recrystallized orthopyroxene and granodiorite
- Dv Banded gneiss with quartz, microcline, plagioclase, biotite, muscovite and garnet

MIDDLE METASEDIMENTARY ROCKS

- Mp Quartzite with orthopyroxene and plagioclase
- Mq Banded calc-silicate gneiss with orthopyroxene, quartz and plagioclase
- Mr Banded calc-silicate gneiss with orthopyroxene, quartz and plagioclase
- Mn Quartzite with orthopyroxene and plagioclase
- Ml Quartzite with orthopyroxene and plagioclase
- Mk Quartzite with orthopyroxene and plagioclase
- Mj Quartzite with orthopyroxene and plagioclase
- Mi Quartzite with orthopyroxene and plagioclase
- Mh Quartzite with orthopyroxene and plagioclase
- Mg Quartzite with orthopyroxene and plagioclase
- Mf Quartzite with orthopyroxene and plagioclase
- Me Quartzite with orthopyroxene and plagioclase
- Md Quartzite with orthopyroxene and plagioclase
- Mc Quartzite with orthopyroxene and plagioclase
- Mb Quartzite with orthopyroxene and plagioclase
- Ma Quartzite with orthopyroxene and plagioclase

OTHER METASEDIMENTARY ROCKS IN MEEBERIE GNEISS

- Os Quartzite with allanite, muscovite and garnet
- Oq Quartzite with allanite, muscovite, biotite and microcline
- Or Quartzite with allanite, muscovite, biotite and microcline
- Op Quartzite with allanite, muscovite, biotite and microcline
- Oo Quartzite with allanite, muscovite, biotite and microcline
- On Quartzite with allanite, muscovite, biotite and microcline
- Om Quartzite with allanite, muscovite, biotite and microcline
- Ol Quartzite with allanite, muscovite, biotite and microcline
- Ok Quartzite with allanite, muscovite, biotite and microcline
- Oj Quartzite with allanite, muscovite, biotite and microcline
- Oi Quartzite with allanite, muscovite, biotite and microcline
- Oh Quartzite with allanite, muscovite, biotite and microcline
- Og Quartzite with allanite, muscovite, biotite and microcline
- Of Quartzite with allanite, muscovite, biotite and microcline
- Oe Quartzite with allanite, muscovite, biotite and microcline
- Od Quartzite with allanite, muscovite, biotite and microcline
- Oc Quartzite with allanite, muscovite, biotite and microcline
- Oa Quartzite with allanite, muscovite, biotite and microcline

~3600 Ma

- Mp Banded gneiss with quartz, microcline, plagioclase and biotite; deformed and recrystallized orthopyroxene and granodiorite
- Mq Banded gneiss with quartz, microcline, plagioclase and biotite
- Mr Gneiss with quartz, microcline, plagioclase and biotite; folded subvolcanic, some partial melting
- Mn Mg with numerous metamorphic xenoliths

~3700 Ma

- Manfred Complex
- Mf1 Amphibolite
- Mf2 Amphibolite
- Mf3 Amphibolite
- Mf4 Amphibolite
- Mf5 Amphibolite
- Mf6 Amphibolite
- Mf7 Amphibolite
- Mf8 Amphibolite
- Mf9 Amphibolite
- Mf10 Amphibolite
- Mf11 Amphibolite
- Mf12 Amphibolite
- Mf13 Amphibolite
- Mf14 Amphibolite
- Mf15 Amphibolite
- Mf16 Amphibolite
- Mf17 Amphibolite
- Mf18 Amphibolite
- Mf19 Amphibolite
- Mf20 Amphibolite

SCALE 1 : 25 000

TRANSVERSE MERCATOR PROJECTION

Geology by I. B. Williams 1981-2, J. S. Munn 1983.
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