

MURCHISON PROVINCE  
PRECAMBRIAN GEOLOGY AND MINERAL DEPOSITS



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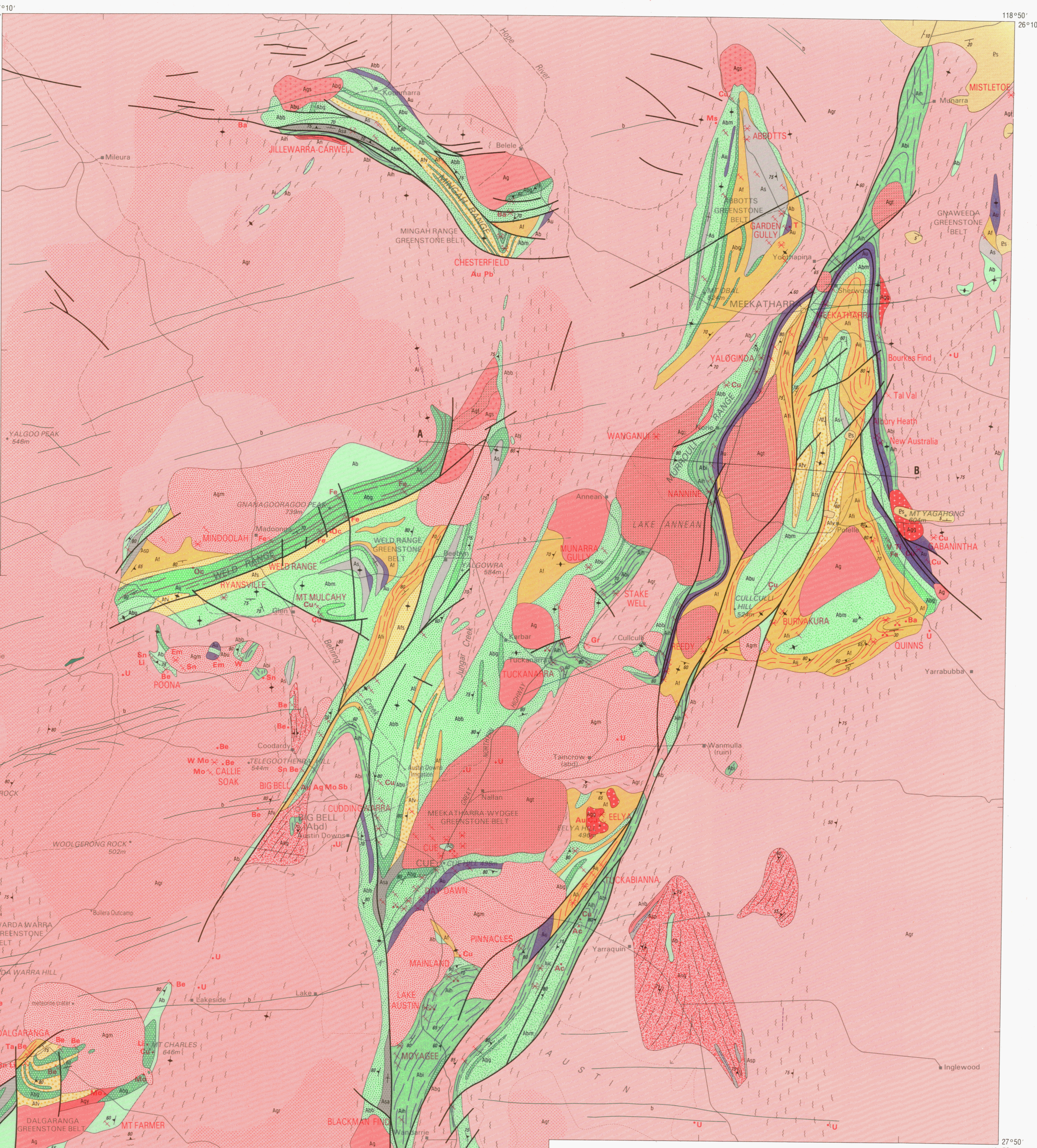
SCALE 1:500 000

0 10 20 30 40 50  
Kilometres

Geology by K.P. Walters and A.H. Hickman 1982-86

INDEX TO 1:250 000 SHEETS

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REFERENCE

All rocks are metamorphosed unless stated otherwise

- Py** Sedimentary rocks unconformably overlying granitoids and greenstone belts, may be weakly metamorphosed
- Di** Criss-cutting mafic intrusions, mainly dykes, generally unmetamorphosed
- Ar** Sedimentary rocks, undivided
- As** Shale, may include some sandstone
- Asa** Sandstone, may include some shale and/or conglomerate
- Asc** Conglomerate, may include some sandstone
- Ar** Banded iron-formation, undivided
- Arh** Quartz and hematite banded iron-formation, may contain magnetite and/or chert
- Arj** Red jasper and hematite banded iron-formation, may contain magnetite and/or chert
- Ark** Grey and white banded chert
- M** Felsic volcanic rocks, undivided
- Ms** Rhyolite, dacite and/or andesite lava and tuff
- Ms** Volcanogenic sedimentary rocks of rhyolite, dacite and/or andesite composition
- Ms** Volcanogenic sedimentary rocks, felsic lava and tuff, and minor mafic rocks, intertongued with banded iron-formation (mainly Arj and Ark)
- M** Mafic rocks, undivided
- Mh** Tholeiitic basalt, includes amphibolite and schist derived from tholeiitic basalt, may contain some high-Mg basalt and minor mafic intrusive rocks
- Mh** High-Mg basalt, often with pyroxene relict spinel texture (generally pseudomorphed by amphibole), includes schist derived from high-Mg basalt, may contain some tholeiitic basalt and minor mafic and ultramafic intrusive rocks
- Mh** Intertongued tholeiitic and high-Mg basalt, may contain minor mafic and ultramafic intrusive rocks
- Mh** Mafic and ultramafic rocks intertongued with banded iron-formation (mainly Arj)
- Mh** Mafic dykes and sills
- Mh** Gabbro and diorite, includes layered sills
- U** Ultramafic rocks, undivided
- Gr** Granitoids, undivided
- Grp** Granodiorite
- Grp** Syenogranite
- Grp** Microgranite
- Grp** Granodiorite
- Grp** Tonallite
- Grp** Tonalite
- Grp** Biotitised monzonite, may include some syenogranite and/or granodiorite, commonly contains veins, xenoliths and crystallized remnants of Arj
- Gr** Gneiss, undivided
- Gr** Granitoid gneiss with supracrustal enclaves
- Gr** Pegmatite banded quartz-microcline-plagioclase-biotite gneiss pervasively intruded by veins, dykes and plutons of Arj
- Gr** Early gneiss complex

SYMBOLS

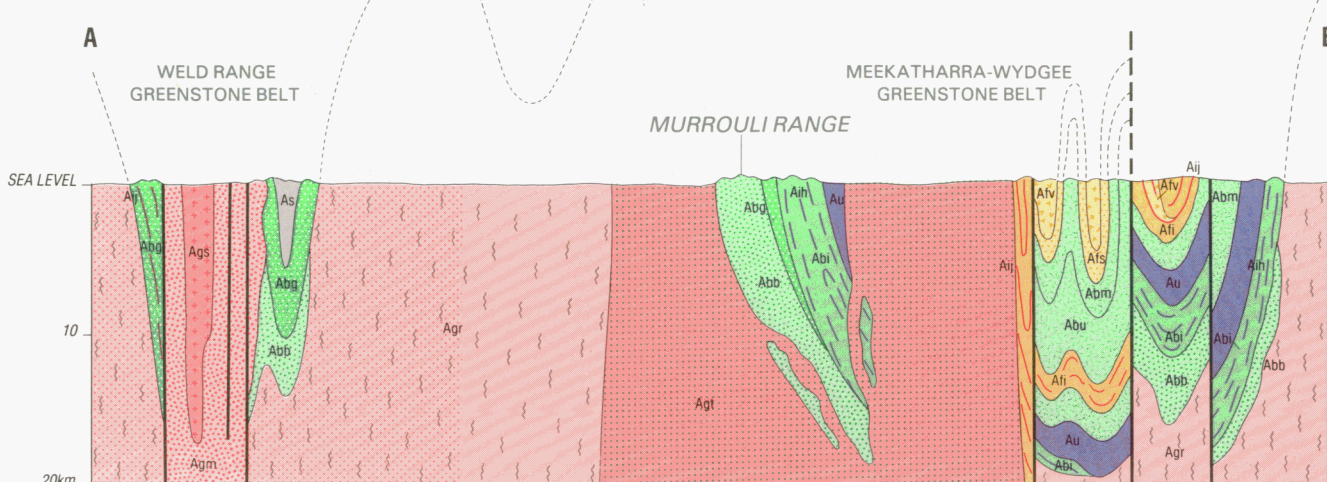
- Geological boundary
- Fault or shear zone
- Primary layering in supracrustals
- Included
- Vertical
- Foliation
- Included
- Vertical
- Banding in gneiss
- Included
- Vertical
- Trend of foliation in gneiss
- Trend of banding in gneiss
- Porphyritic texture in Arj
- Highway
- Road
- Traverse
- Intersect
- Watercourse, intermittent
- Salt lake
- Mining locality
- Mine (gold unless otherwise indicated)
- Mine (iron-ore unless indicated)
- Open cut
- Abandoned workings
- Prospect
- Mineral occurrence
- Antimony
- Asbestos
- Bauxite
- Beryl
- Copper
- Crocidolite
- Emerald
- Feldspar
- Garnet (excluding Cr)
- Gypsum
- Iron ore
- Kapnickite
- Lead
- Lithium
- Magnetite
- Molybdenum
- Osmium
- Silver
- Talc
- Tantalum
- Tin
- Titanium
- Tungsten
- Uranium
- Vanadium
- Zinc

Note: vanadium and gypsum occur in surficial deposits overlying Precambrian bedrock

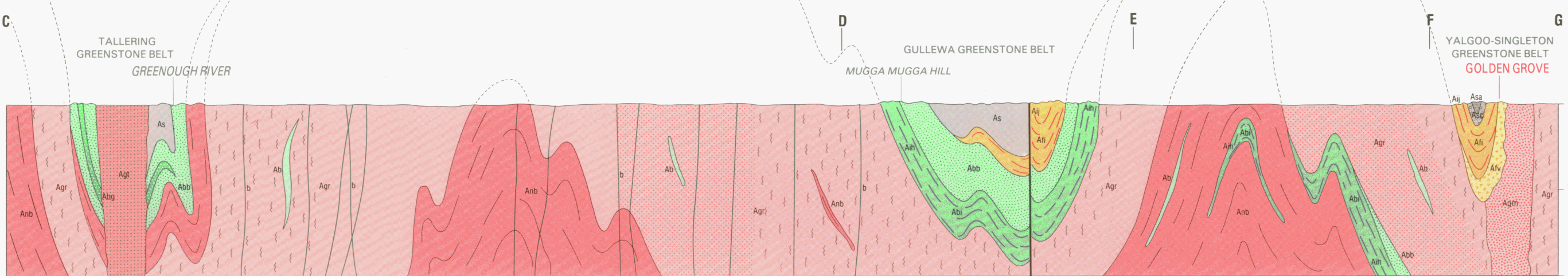
DIAGRAMMATIC SECTIONS

NATURAL SCALE

SECTION A-B



SECTION C-G



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