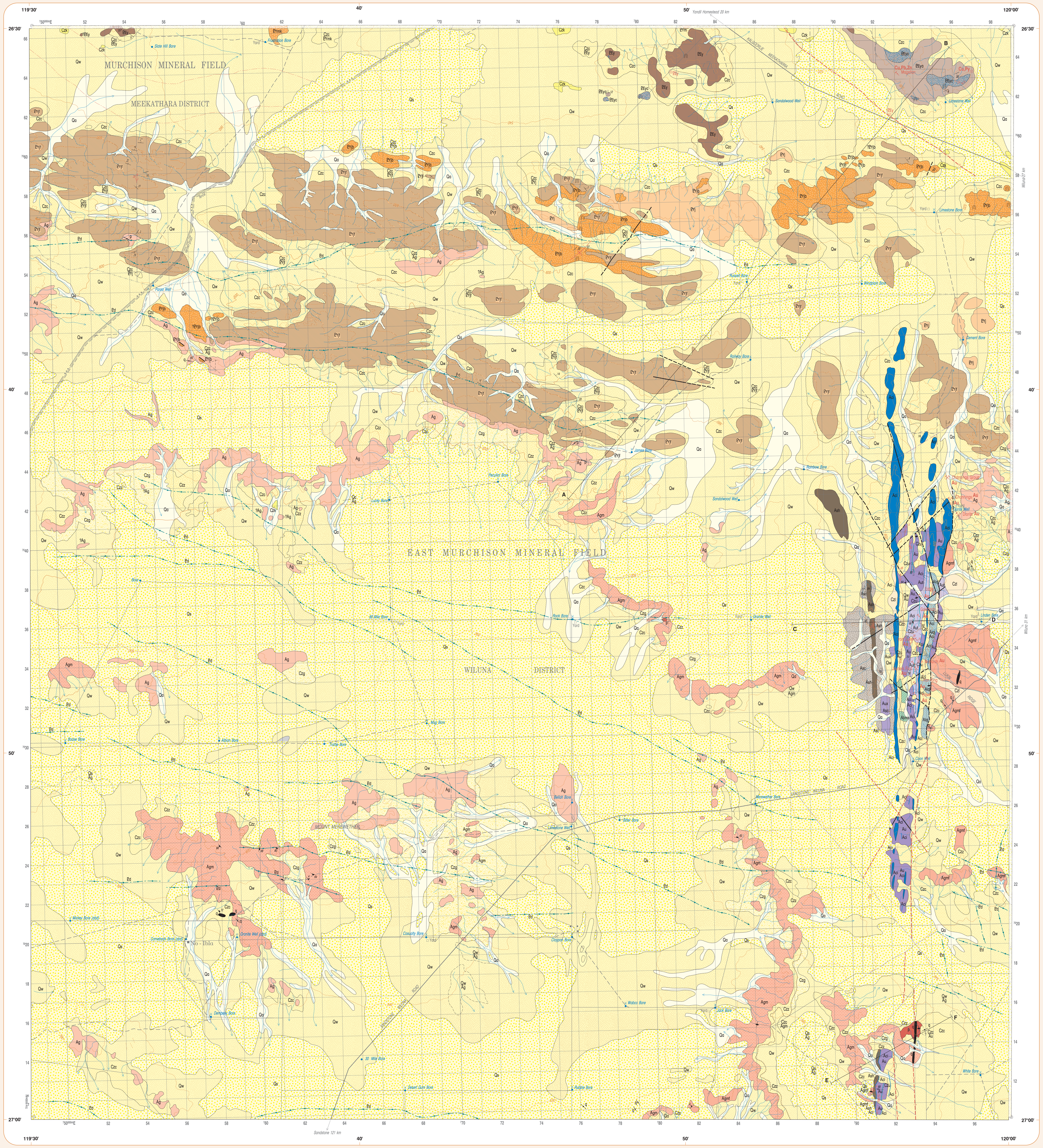
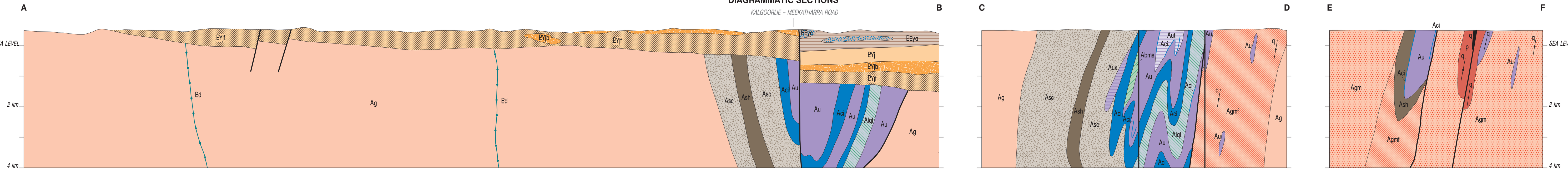
MEREWETHER

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA



DIAGRAMMATIC SECTIONS



LEGEND

PHANEROZOIC — CAINOZOIC — QUATERNARY

Qa Alluvial deposits — sand and silt in channels and on floodplains
Qc Colluvial deposits — unconsolidated rock fragments on scree slopes
Qs Sandplain — unconsolidated sand as sheets and rare dunes
Qw Sheetwash — clay, silt, sand, and gravel in distal outwash deposits

Czc Colluvium — gravel, sand, and silt as scree and sheetwash
Czg Sand over granitoid rock — predominantly quartzofeldspathic
Czk Calcrete
Czl Lateritic deposits — nodular and pisolitic ferruginous duricrust, and associated debris
Czu Silica caprock over ultramafic rock
Czz Siliceous duricrust

q Quartz veins and pods

p Pegmatite veins and pods

PROTEROZOIC — PALAEOPROTEROZOIC

Ed Dolerite dyke; interpreted from aeromagnetic data where dashed — YILGARN CRATON

Earaheedy Group — Tooloo Subgroup — EARAHEEDY BASIN

EEy YELMA FORMATION: dolomitic siltstone and shale in graded laminites; minor dolomite lenses
EEyc Stromatolitic chert and chert breccia
EEya Thin-bedded, fine- to medium-grained sandstone, siltstone, and shale; locally feldspathic

Yerrida Group — Mooloogool Subgroup; Windplain Subgroup — YERRIDA BASIN

EYmk MARALOOU FORMATION
Calcareous siltstone with minor quartz arenite and quartz wacke

EYj JUDERINA FORMATION: quartz sandstone; minor siltstone, chert breccia, and pebble conglomerate
EYjb Bubble Well Member: stromatolitic chert and chert breccia
EYjf Finlayson Member: quartz arenite and minor siltstone; planar bedded or cross-stratified; commonly ripple marked

ARCHAEAN — YILGARN CRATON

Ag Granitoid rock, undivided
Agm Biotite monzogranite; local epidote alteration
Agmf Strongly foliated porphyritic biotite monzogranite; locally interleaved with mafic schist

Alql Quartz–chlorite schist; includes mafic rock fragments

Asc Pebble conglomerate; contains chert and banded iron-formation clasts; metamorphosed
Ash Shale and siltstone; metamorphosed to quartz-biotite-garnet schist
Aci Banded iron-formation and chert; metamorphosed

Abms High-Mg basalt; metamorphosed to tremolite-actinolite-plagioclase schist

Au Ultramafic rock, undivided; local spinifex texture; includes some mafic rock; metamorphosed
Aut Talc–actinolite-chlorite(–tremolite) schist; typically deeply weathered; local spinifex texture
Aux Feldspathic pyroxenite; metamorphosed

SYMBOLS

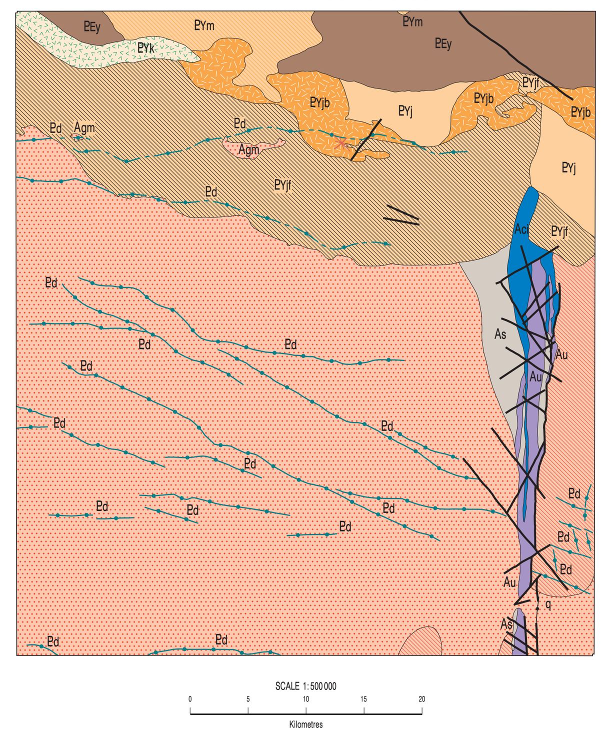
Geological boundary
exposed
concealed
concealed, interpreted from aeromagnetic data
Fault or shear
exposed
concealed
concealed, interpreted from aeromagnetic data
Strongly foliated rock
Fold, showing axial trace
syncline; exposed, concealed
Small-scale fold axis, showing trend and plunge
anticline
syncline
Z-vergence
Bedding, showing strike and dip
inclined
vertical
Foliation, showing strike and dip
inclined
vertical
Cleavage, showing strike and dip
inclined
Lineation, showing trend and plunge
axis of crenulation, inclined
Joint, showing strike and dip
inclined
Airphoto or satellite lineament
fracture pattern in granitoid rock
Aeromagnetic lineament
Stromatolite fossil locality

Formed road
Track
Fence, generally with track
Abandoned railway
Homestead — No - Ibla
Building
Yard
Breakaway
Sand dune
Contour line, 20 metre interval — 560

Watercourse
Bore, well — Bore, Well
Windpump
Abandoned — (abd)

Mineral field boundary
Mine — Joyners Find
Prospect
Mineral exploration drillhole, showing subsurface data — Au
Mineral occurrence
Copper — Cu
Gold — Au
Lead — Pb
Pyrite — Py
Zinc — Zn

INTERPRETED BEDROCK GEOLOGY

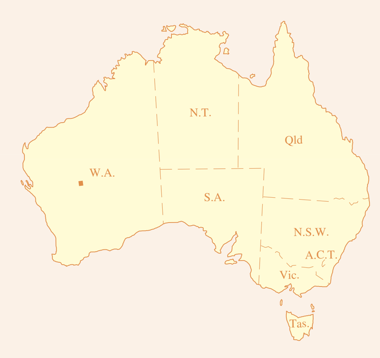


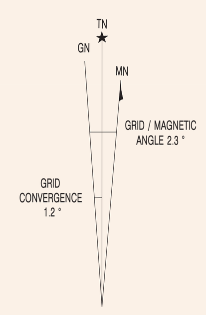
q Quartz vein
Ed Mafic dyke; dashed beneath Proterozoic rock — YILGARN CRATON
Earaheedy Group: EEy Yelma Formation — EARAHEEDY BASIN
Yerrida Group: EYm Maraloou Formation; EYk Killara Formation; EYj Juderina Formation; EYjb Bubble Well Member; EYjf Finlayson Member — YERRIDA BASIN
Agm Monzogranite
Agmf Strongly foliated monzogranite
As Metasedimentary rock
Aci Banded iron-formation and chert
Au Metamorphosed ultramafic and mafic rocks
— YILGARN CRATON

SHEET INDEX

GLENGARRY 2645	MOOLOOGOOL 2745 GLENGARRY	MOUNT BARTLE 2845	CUNYU 2945	MILLROSE 3045 WILUNA	BALLIMORE 3145
GABANINTHA 2644	SG 50-12 YAGANOO 2744	MEREWETHER 2844	WILUNA 2944	SG 51-9 LAKE VIOLET 3044	SANDALWOOD 3144
NOWTHANNA 2643	YOUNO DOWNS 2743 SANDSTONE	MONTAGU 2843	YEELIRRIE 2943	MOUNT KEITH 3043 SIR SAMUEL	WANGGANNOO 3143
WOODLEY 2642	SG 50-16 SANDSTONE 2742	LAKE MASON 2842	DEPOT SPRINGS 2942	SG 51-13 SIR SAMUEL 3042	DARLOT 3142

1:100 000 maps shown in black
1:250 000 maps shown in brown





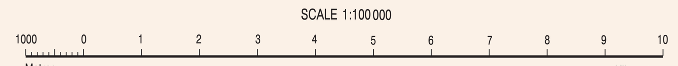
True north, grid north and magnetic north are shown diagrammatically for the centre of the map. Magnetic north is correct for 1999 and moves easterly by about 0.1° in 2 years.

DEPARTMENT OF MINERALS AND ENERGY
L. C. RANFORD, DIRECTOR GENERAL

GOVERNMENT OF WESTERN AUSTRALIA
HON. NORMAN MOORE, M.L.C.
MINISTER FOR MINES

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
DAVID BLIGHT, DIRECTOR

SCALE 1:100 000



UNIVERSAL TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: GEOCENTRIC DATUM OF AUSTRALIA 1994
VERTICAL DATUM: AUSTRALIAN HEIGHT DATUM

Grid lines indicate 1000 metre interval of the Map Grid Australia Zone 50

The Map Grid Australia (MGA) is based on the Geocentric Datum of Australia 1994 (GDA94)
GDA94 positions are compatible with one metre of the datum WGS84 positions

Reference points to align maps based on the previous datum, AGD84, have been placed near the map corners

Geology by D. D. Ferdinando and N. S. Tetlaw 1997, 1998

Edited by F. Eddison and G. Loan

Cartography by G. Fletcher, S. Coldicutt, and K. Greenberg

Topography from the Department of Land Administration Sheet SG 50-12, 2844, with modifications from geological field survey

Published by the Geological Survey of Western Australia. Copies available from the Information Centre, Department of Minerals and Energy, 100 Plain Street, East Perth, WA, 6004. Phone (08) 9222 3459, Fax (08) 9222 3444

This map is also available in digital form

Plotted by Geological Survey of Western Australia

The recommended reference for this map is:
FERDINANDO, D. D., and TETLAW, N. S., 2000, Merewether, W.A. Sheet 2844: Western Australia Geological Survey, 1:100 000 Geological Series

MEREWETHER

SHEET 2844 FIRST EDITION 2000

© Western Australia 2000