EDJUDINA

AUSTRALIA 1 : 250 000 GEOLOGICAL SERIES — **GEOLOGICAL SURVEY OF WESTERN AUSTRALIA** — **SHEET SH 51-6**

SYMBOLS

Geological boundary
- exposed
- concealed, interpreted from aeromagnetic data

Fault
- exposed
- concealed
- concealed, interpreted from aeromagnetic data

Fold, showing axial trace and generalized plunge direction
- anticline; exposed, concealed
- syncline; exposed, concealed

Minor fold, showing direction and plunge of axis
- unspecified

Bedding, showing strike and dip
- inclined
- vertical

Igneous layering, showing strike and dip
- inclined
- vertical

Way-up indicator
- igneous layering
- pillow structure
- sedimentary structure

Metamorphic foliation, showing strike and dip
- inclined
- vertical

Cleavage, showing strike and dip
- inclined

Mineral lineation, showing trend and plunge direction
- inclined
- horizontal

Intersection lineation, showing trend and plunge direction
- inclined
- horizontal

Joint, fracture, or vein, showing strike and dip
- inclined
- vertical

Aeromagnetic lineament

Formed road
Track
Landing ground
Townsite — Yerilla
Homestead — Mentmingina
Locality — Pyke Hollow
Building, yard
Microwave repeater station
National park boundary
Horizontal control, major, minor
Breakaway
Sand dune

Watercourse, ephemeral; pool
Gnamma hole, rockhole, waterhole — GH, RH, WH
Swamp
Soak — R
Pipeline
Bore, well — B, W
Windpump
Dam, tank — D, T
Abandoned, position doubtful — (dbd), (PD)

Mineral field boundary
Mineral field district boundary — YARRI
Mining centre — Broken Hill
Mining locality — Edjudina
Major mine
Mine (gold, unless otherwise indicated)
Major opencut
Opencut
Quarry
Alluvial workings
Prospect
Battery or treatment plant, operating, abandoned
Mineral exploration drillhole, showing subsurface data — Au
Mineral occurrence
- Copper — Cu
- Gemstone — Gs
- Gravel — Gr
- Magnesite — Ms
- Nickel — Ni

SHEET INDEX

1:100 000 maps shown in black
Published 1:100 000 maps used in compilation
1:50 000 maps shown in brown
Project maps used in compilation shown in green
See current GSWA map catalogue for full range of published products

The three indicate magnetic declination, 1998 value and annual change. Where shown, grid north is displaced leaning to give true bearing, means declination is west and correction must be subtracted from compass bearing to give true bearing
Annual change is 0° easterly

Compiled by S. F. Chen 1997
Geology by S. F. Chen 1997, and after GSWA and AGSO maps (see sheet index)

Edited by F. Apolopoulos and G. Loon
Cartography by S. Collopy and B. Williams
Topography from the Department of Land Administration Sheet SH 51-6 with modifications from geological field survey

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This map is also available in digital form

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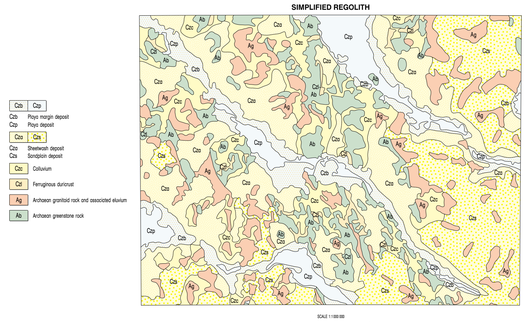
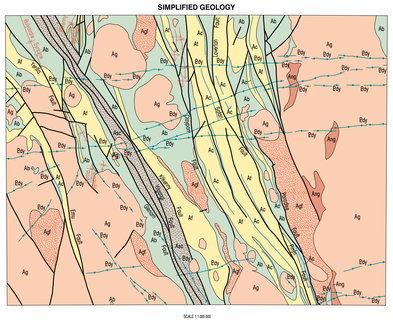
SIMPLIFIED REGOLITH



Czb Playa margin deposit
Czp Playa deposit
Czs Sheetwash deposit
Czs Sandplain deposit
Czc Colluvium
Czf Ferruginous duricrust
Ag Archaean granitoid rock and associated eluvium
Ab Archaean greenstone rock

SCALE 1:1 000 000
0 10 20 30 40 50
Kilometres

SIMPLIFIED GEOLOGY

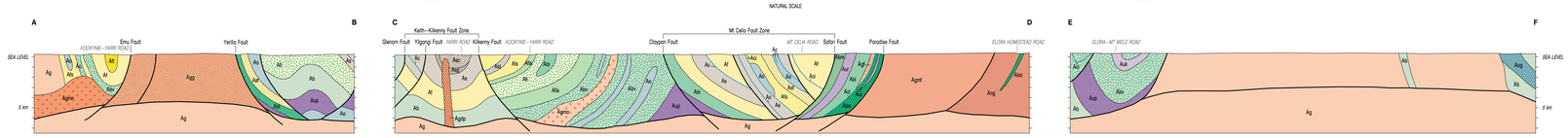


Bty/ Mafic and ultramafic dykes
Bty/—Pinjin Dyke
Ag Ag — Granitoid rock dominant
Ag Folded granitoid rock
Amg Granitoid gneiss
Asc Ac — Polymictic conglomerate and other sedimentary rocks; metamorphosed
Ac Banded iron-formation and chert; metamorphosed
Af Metamorphosed felsic volcanic, volcaniclastic, and sedimentary rocks dominant
Ab Metamorphosed mafic and ultramafic rocks dominant; includes layered intrusions

SCALE 1:1 000 000
0 10 20 30 40 50
Kilometres

DIAGRAMMATIC SECTIONS

NATURAL SCALE



REFERENCE

PHANEROZOIC — CAINOZOIC — QUATERNARY

Qa — Alluvium—clay, silt, sand, and gravel in channels and floodplains

Czb Czd Czp
- Czb — Ephemeral lake and dune deposits—evaporite, clay, silt, and sand in dunes, drainage basins, claypans, and channels surrounding major saline lakes
- Czd — Dune deposits—sand, silt, and gypsum as stabilized dunes adjacent to playa lakes
- Czp — Playa deposits—saline and gypsiferous evaporites, clay, silt, and sand in playa lakes

Czs Czs
- Czs — Sheetwash deposits—clay, silt, and sand as extensive fans; locally ferruginous
- Czs — Sandplain deposits—unconsolidated yellow sand; minor silt and clay; includes stabilized dunes

Czc Czf Czcg
- Czc — Colluvium—gravel, sand, and silt as proximal sheetwash and talus; locally ferruginous
- Czf — Ferruginous gravel and reworked laterite
- Czcg — Sand over granitoid rock—quartz-kaliophyllitic sand; includes scattered granitoid outcrop

Czf Czlu Czcz
- Czf — Ferruginous duricrust, massive and rubbly
- Czlu — Silica caprock over ultramafic rock; locally includes chalcedony and chrysoprase
- Czc — Silcrete; minor laterite and ferruginous gravel

PALAEOZOIC — PERMIAN

Ps — Sandstone and quartzose pebble conglomerate

PROTEROZOIC

Bty/ — Mafic and ultramafic dykes
Bty/—Pinjin Dyke

g / p / q — Veins and dykes: g—granitoid, p—granitoid pegmatite, q—quartz

Ag Agpu Agtu Agpto Agpb Agf Agh Agg Aggn
Agm Agmr Agmf Agmh Agmm Agmf Agp

- Ag — Granitoid rock, undivided; includes altered and weathered rock
- Agpu — **BULLAFFIE WELL SYENITE:** coarse-grained, K-feldspar megacrysts
- Agtu — **BULLA ROCKS MONZOGRANITE:** biotite monzogranite; with hornblende and biotite on the margin
- Agpto — **DAIRY MONZOGRANITE:** biotite monzogranite
- Agpb — Mirrow-biotite, porphyritic with phlogiochlase phenocrysts, K-feldspar megacrysts, and minor quartz phenocrysts
- Agf — Strongly foliated granitoid rock
- Agh — **FRIDAY MONZOGRANITE:** biotite monzogranite
- Agg — Granodiorite, tonalite, and diorite; with biotite±hornblende
- Aggn — **GALLALLEY MONZOGRANITE:** biotite monzogranite; locally foliated
- Agm — Biotite monzogranite, commonly with K-feldspar megacrysts
- Agmm — **YARRI MONZOGRANITE:** biotite monzogranite; pervasively foliated
- Agmf — Strongly foliated biotite monzogranite
- Agmh — Hornblende-biotite monzogranite
- Agmm — **MENANGINA MONZOGRANITE:** biotite monzogranite; cut by pegmatite and aplite dykes
- Agmn — **JUNGLE MONZOGRANITE:** biotite monzogranite
- Agpp — **PORPHYRY QUARTZ MONZONITE:** with biotite and prominent K-feldspar phenocrysts
- Agp — Porphyritic granitoid rock
- Aggn — Syenite and quartz syenite; with minor monzodiorite

Amg — Banded granitoid gneiss; locally migmatitic; schistosity commonly folded

Ald — Quartz-diumosilicate rock, with andalusite and/or kyanite

As Asc Asf Asg Ash Ac Aci

- As — Sedimentary rock, undivided; includes felsic volcanic and volcaniclastic rock; metamorphosed
- Asc — Polymictic conglomerate with subordinate sandstone; massive to strongly foliated; metamorphosed
- Asf — Volcaniclastic and sedimentary rock, foliated; includes quartz-kaliophyllitic schist; locally contains mafic schist
- Asg — Greywacke, with pebbly layers and minor siltstone; metamorphosed
- Ash — Shale, siltstone, and chert; metamorphosed; locally ferruginous, slate and fine-grained sericite schist
- Ac — Banded chert and silicified slate; locally ferruginous; metamorphosed
- Aci — Banded iron-formation; finely bedded; metamorphosed

Af Afc Afa Afs Aft Afv

- Af — Felsic volcanic and volcaniclastic rock, undivided; metamorphosed; includes deeply weathered and kaolinized rock
- Afc — Intermediate volcanic and volcaniclastic rock, mainly andesite; locally kaliapor-hornblende-phyric; metamorphosed
- Afa — Hornblende-quartz-kaliapor schist, derived from andesitic rocks; locally carbonated
- Afs — Quartz-feldspar-mica schist, locally mylonitic
- Aft — Felsic tuff, with lithic fragments; metamorphosed
- Afv — Felsic volcanic rock, locally feldspar(-quartz)-phyric; includes volcaniclastic rock; metamorphosed

Ao Aod Aog Aogk Aogt

- Ao — Dolerite and gabbro, undivided; minor basalt; metamorphosed
- Aod — Dolerite and quartz dolerite; medium-grained; metamorphosed
- Aog — Gabbro; medium- to coarse-grained; minor leucogabbro; metamorphosed
- Aogk — **KILKENNY GABBRO:** thoketiic gabbro sill; metamorphosed
- Aogt — Leucogabbro; metamorphosed

Ab Abo Abc Abf Abs Abm Abmf Abp Abh

- Ab — Metamorphosed basalt; includes minor metagabbro and mafic schist; generally deeply weathered
- Abo — Amphibolite and hornfels; includes basaltic schist
- Abc — Basalt, carbonated; metamorphosed
- Abf — Strongly foliated, fine-grained mafic rock; metamorphosed; includes amphibolite and mafic hornfels; locall epidote alteration
- Abs — Basaltic andesite; locally feldspar-phyric; metamorphosed
- Abm — High-Mg basalt; includes variolitic and pyroxene spinifex-textured basalt; metamorphosed
- Abmf — Strongly foliated high-Mg basalt; metamorphosed
- Abp — Basalt, with medium- to coarse-grained feldspar phenocrysts; includes minor feldspar-phyric gabbro; metamorphosed
- Abv — Amygdaloidal or vesicular basalt, mainly tholeiitic; massive to foliated; metamorphosed

Au Auk Aup Aur Aus

- Au — Ultramafic rock, undivided; metamorphosed
- Auk — Komatiite; relict olivine spinifex texture; metamorphosed
- Aup — Peridotite; commonly serpentinized; relict olivine cumulate texture; metamorphosed; includes talc-chlorite schist
- Aur — Tremolite-chlorite schist and talc-chlorite schist
- Aus — Pyroxenite; metamorphosed

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

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

AGSO — GEOSCIENCE AUSTRALIA

NGMA
PRODUCT OF THE NATIONAL GEOSCIENCE MAPPING ACCORD

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
DAVID BLIGHT, ACTING DIRECTOR

SCALE 1: 250 000

5000 0 5 10 15 20 25 30
Metres — Kilometres

TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: AUSTRALIAN GEODETIC DATUM 1984
VERTICAL DATUM: AUSTRALIAN HEIGHT DATUM
Grid lines indicate 20 000 metre interval of the Australia Map Grid Zone 51

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SHEET SH 51-6
SECOND EDITION 1998

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