BARDOC

AUSTRALIA 1 : 100000 GEOLOGICAL SERIES | **GEOLOGICAL SURVEY OF WESTERN AUSTRALIA** | **SHEET 3137**

121°00′ 10′ 20′ 121°30′ — 30°00′ 10′ 20′ 30°30′

CAINOZOIC

QUATERNARY

- Qo — Alluvium — clay, silt, sand and gravel in channels
- Czts — Evaporite interbedded with clay and sand in playas
- Cztd — Sand, silt and gypsum in stabilized dunes adjacent to playas
- Czc — Colluvium — gravel, sand as sheetwash and talus
- Czg — Quartzo-feldspathic sand over granitoid rock
- Czs — Sandplain — yellow sand with limonitic pisoliths near base
- Czl — Laterite and reworked products

PROTEROZOIC

- Edy — Mafic and ultramafic dyke

ARCHAEAN

- Agp — Granite, late-tectonic
- Agl — LIBERTY GRANODIORITE: fine- to coarse-grained; minor monzogranite
- Ago — LONE HAND GRANITE
- Ago — FAIR ADELAIDE GRANITE (subsurface only)

Late-tectonic granitoid rocks; massive, contacts discordant with greenstones, and/or foliation in Agd

- Agd — Granitoid rock
- Agg — GOONGARRIE MONZOGRANITE
- Agc — CAWSE MONZOGRANITE
- Agcr — CREDO GRANODIORITE
- Agcb — CROWBAR GRANODIORITE
- Agnm — NINE MILE MONZOGRANITE

Domcal (pre- to syn-D2) granitoid rocks; form cores to regional (D2) anticlines; moderate to weak pervasive foliation except at strongly deformed contacts with greenstones

- Apq — Quartz-feldspar porphyry, metamorphosed
- Apg — Granite porphyry and granophyre, metamorphosed
- Apo — Albite-rich porphyry, metamorphosed
- Aph — Hornblende-plagioclase porphyry, metamorphosed
- Apx — Quartz-feldspar porphyry, xenolithic, metamorphosed

- Akc — **KURRAWANG FORMATION:** conglomerate and sandy conglomerate
- Aks — **KURRAWANG FORMATION:** sandstone and pebbly sandstone

- Afv — Acid to intermediate volcaniclastic and epiclastic rocks including tuff, lapilli tuff and mattrix-supported conglomerate, and minor black shale, metamorphosed. Includes BLACK FLAG FORMATION in S.W. corner of map sheet
- Aiv — Intermediate volcaniclastic rock; tuff to tuff breccia, metamorphosed
- Ash — Shale and chert, grey to black; mainly interflow sediments, metamorphosed

- Aogq — Quartz-gabbro and granophyre; late differentiated products of layered mafic/ultramafic sills. Includes felsic granophyre (ORA BANDA SILL) and iron-rich quartz-gabbro with coarse granophyre segregations (MT ELLIS SILL). Metamorphosed
- Aox — Iron-rich granophyre, including marker horizon in MT PLEASANT SILL
- Aog — Metagabbro, metadolerite
- Aogl — Leucogabbro, andplagioclase-rich gabbro-norite, metamorphosed
- Aon — Gabbro-norite
- Aov — Gabbro-norite marker horizon in MT PLEASANT SILL, metamorphosed
- Axd — Pyroxenite and pyroxene-phyric dolerite, metamorphosed

- Ab — Mafic extrusive rock, metamorphosed
- Abmo — High-Mg basalt, ocelli-bearing, metamorphosed
- Abp — Porphyritic basalt and dolerite, metamorphosed
- Abm — High-Mg basalt with acicular to plumose pyroxene spinifex texture, metamorphosed

- Auk — Komatiite with spinifex texture, metamorphosed
- Aox — Bronzitite and norite
- Aup — Massive ultramafic rock (dominantly olivine orthocumulate) at base of layered mafic/ultramafic sills, including thick komatiite and discrete intrusive bodies, metamorphosed

- Atb — BARDOC TECTONIC ZONE: strongly deformed and corbonated, interleaved mafic and ultramafic rocks and felsic volcaniclastic sediments

Geological boundary
- accurate
- approximate
- interpreted
- interpreted from aeromagnetic data

Fault

Shear zone, mostly concealed

Fold, showing plunge
- anticline
- syncline
- minor

Bedding
- inclined
- vertical

Igneous lamination
- inclined
- vertical

Foliation in metamorphic rocks
- inclined
- vertical

Cleavage, spaced
- inclined
- vertical

Cleavage, crenulation

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

Lineation
- showing direction and plunge
- horizontal
- on foliation plane

Air photo lineament

Mineral field boundary

Highway

Formed road

Track

Railway, with siding

Fence, generally with track

Homestead — Mt Vetters

Locality — Conegross

Building

Horizontal control; major, minor

Sand dune

Contour line, 20 metre interval

Watercourse, ephemeral — Kop

Bore — B

Well — W

Windpump

Dam, Tank — D, T

Position doubtful — (PD)

Mining centre — BARDOC

Mining locality — WINDANYA

Mine or opencut (gold unless otherwise indicated) — Credo

Alluvial or deep lead

Gravel pit

Battery or treatment plant
- operating
- abondoned

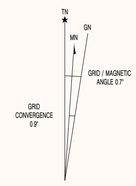
Mineral exploration drillhole or other subsurface data — Atb

Interpreted subsurface lithology

Mineral occurrence
- Chrysoprase — Ce
- Cobalt — Co
- Copper — Cu
- Gemstone (moss agate) — Gm
- Nickel — Ni
- Road material — Rm

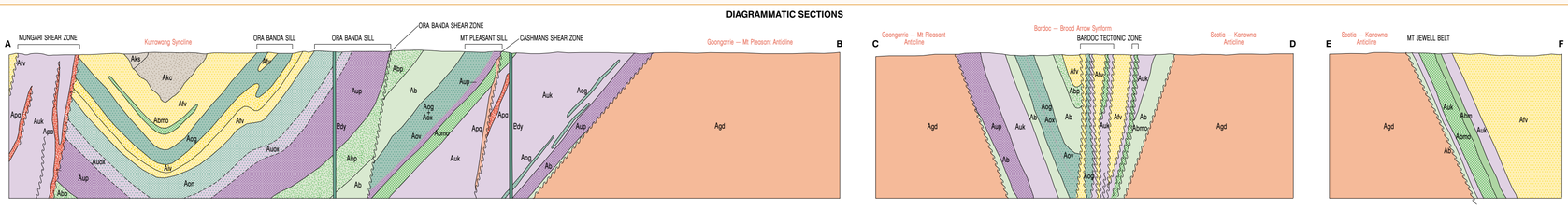
MOUNT MASON 2959	BALLARD 3039	MELITA 3139	YERILLA 3239	LAKE CAREY 3339	MOUNT CELIA 3439
	MENZIES SH 51-5			EDJUDINA	
MULLINE 2958	RIVERINA 3038	MENZIES 3138	BOYCE 3238	SH 51-9 EDJUDINA 3338	YARBOO 3438
NEARAMINGA 2957	DAYHURST 3037		SINDALBIE 3237	MULGARRIE 3337	PAJIN 3437
	KALGOORLIE			KURNALPI	
MOUNT WALTER 2956	KALGOORLIE 3036	KANOWNA 3136	KANOWNA 3236	SH 51-10 KURNALPI 3336	ROE 3436

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 1983 and moves westerly by approx. 0.1° in about seven years.

DIAGRAMMATIC SECTIONS



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SCALE 1:100 000

1000 0 1 2 3 4 5 6 7 8 9 10
Metres — Kilometres

TRANSVERSE MERCATOR PROJECTION
Grid lines indicate 1000 metre interval of the Australian Map Grid Zone 51

Geology by: W.K. Witt 1985-86 and C.P. Swager 1986.

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