AUSTRALIA 1 : 250.000 GEOLOGICAL SERIES

BALLADONIA

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA

SHEET SI 51 - 3

SYMBOLS

Geological boundaries
- Accurate
- Approximate
- Inferred
- Inferred and concealed boundary between Tertiary and Precambrian rocks

Fault: inferred, concealed, normal

Strike and dip of bedding

Igneous foliation
- Inclined
- Vertical
- Trend

Metamorphic foliation
- Inclined
- Vertical
- Trend

Trend of foliation

Direction and plunge of metamorphic lineation

Specimen locality

Highway with National route number and mile peg

Road

Track

Track with telegraph line

Telegraph line

Landing ground

Building

Microwave station

Horizontal control, major

Bench mark, height accurate

Spot height, approximate

Cave

Watercourses
- Intermittent
- Ancient

Tank or dam
- Iron
- Earth

Rockhole

Soak

Sand dunes

Cliff

REFERENCE

CAINOZOIC — QUATERNARY

RECENT
- Qro — Colluvium—calcareous clay, in places containing sand; overlying Tertiary rocks
- Qrc — Colluvium—clay containing limestone floaters of underlying Nullarbor Limestone
- Qrn — Eolian sand—calcareous and siliceous; forming coastal dunes
- Qrw — Lake deposits—silt and clay; saline and gypsiferous

RECENT – PLEISTOCENE
- Qe — Eolian deposits—quartz sand, silt, clay; sometimes gypsiferous; in dunes and sheets; derived from lakes

PLEISTOCENE
- Qpv — Alluvium—clay to pebble deposits; surface of unit approximates position of present drainage
- Qpc — Colluvium—sand, silt, clay, rock fragments; small rock outcrops may be present
- Qpn — Eolian sand—siliceous sand in places containing sheet and nodular kankar at or near the surface; forming coastal dunes
- Qpl — Residual and eolian loam—clay, silt and sand containing sheet and nodular kankar

PLEISTOCENE – PLIOCENE
- TQr — Residual clay and kankar—clay containing sheet and nodular kankar with oolitic texture; overlying Nullarbor Limestone
- TQl — Ferruginous capping—laterite, limonite-cemented ironstone gravel
- TQs — Deeply weathered granitic rock

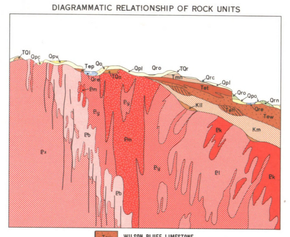
TERTIARY — LOWER MIOCENE
- Tmn — **NULLARBOR LIMESTONE:** foraminiferal calcarenite

UPPER EOCENE
- Tep — **PALLINUP SILTSTONE:** siltstone, sandstone, conglomerate; containing sponge spicules
- Tet — **TOOLINNA LIMESTONE:** porrus, bryozoan calcarenite

IGNEOUS AND METAMORPHIC ROCKS

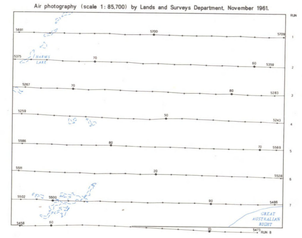
PROTEROZOIC
- Eg — Equigranular leucocratic granite
- Ef — Granite—generally with potassium feldspar phenocrysts
- Em — Migmatite—complex of leucocratic granite and gneisses locally containing basic enclaves
- Eh — Garnet-biotite-quartz-feldspar gneiss containing feldspar augen
- Ek — Gneissic adamellite—fine-grained
- Ec — Granite and gneiss—not subdivided on map
- Ex — **FRASER COMPLEX:** acid and basic granulites, acid gneiss, gabbroic rocks, microgranite, acid pegmatite

DIAGRAMMATIC RELATIONSHIP OF ROCK UNITS



FLIGHT DIAGRAM

Air photography (scale 1: 85,700) by Lands and Surveys Department, November 1961.



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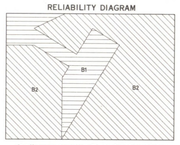
Published by Bureau of Mineral Resources, Geology and Geophysics, Department of National Development, Canberra, A.C.T.

Copies of this map may be obtained from the Geological Survey of Western Australia, in Perth; or the Bureau of Mineral Resources, Geology and Geophysics in Canberra, A.C.T.

RELIABILITY DIAGRAM



B1 Numerous traverses with air photo interpretation

B2 Air photo interpretation with a few traverses

HON. D.G. MAY, M.L.A.
MINISTER FOR MINES

J. H. LORD, DIRECTOR, GEOLOGICAL SURVEY

SCALE 1 : 250,000

5 0 5 10 15 20 Miles

10,000 0 10,000 20,000 30,000 Yards

5 0 5 10 15 20 25 30 Kilometres

TRANSVERSE MERCATOR PROJECTION

ZONES 2 & 3 AUSTRALIA SERIES

INDEX TO ADJOINING SHEETS

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Geology by D. C. Lowry 1965; J. J. G. Doepel and P. R. Koehn 1968

Printed by Mercury-Walch Pty Ltd, Hobart, Australia.

DECLINATION DIAGRAM

The lines indicate magnetic declination 1965.
+ means declination is east and correction must be added to compass bearing to give true bearing
- means declination is west and correction must be subtracted from compass bearing to give true bearing
Annual change is +1' easterly

DIAGRAMMATIC SECTION A - B

NATURAL SCALE

K & T Cretaceous and Tertiary

Fault

BALLADONIA

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