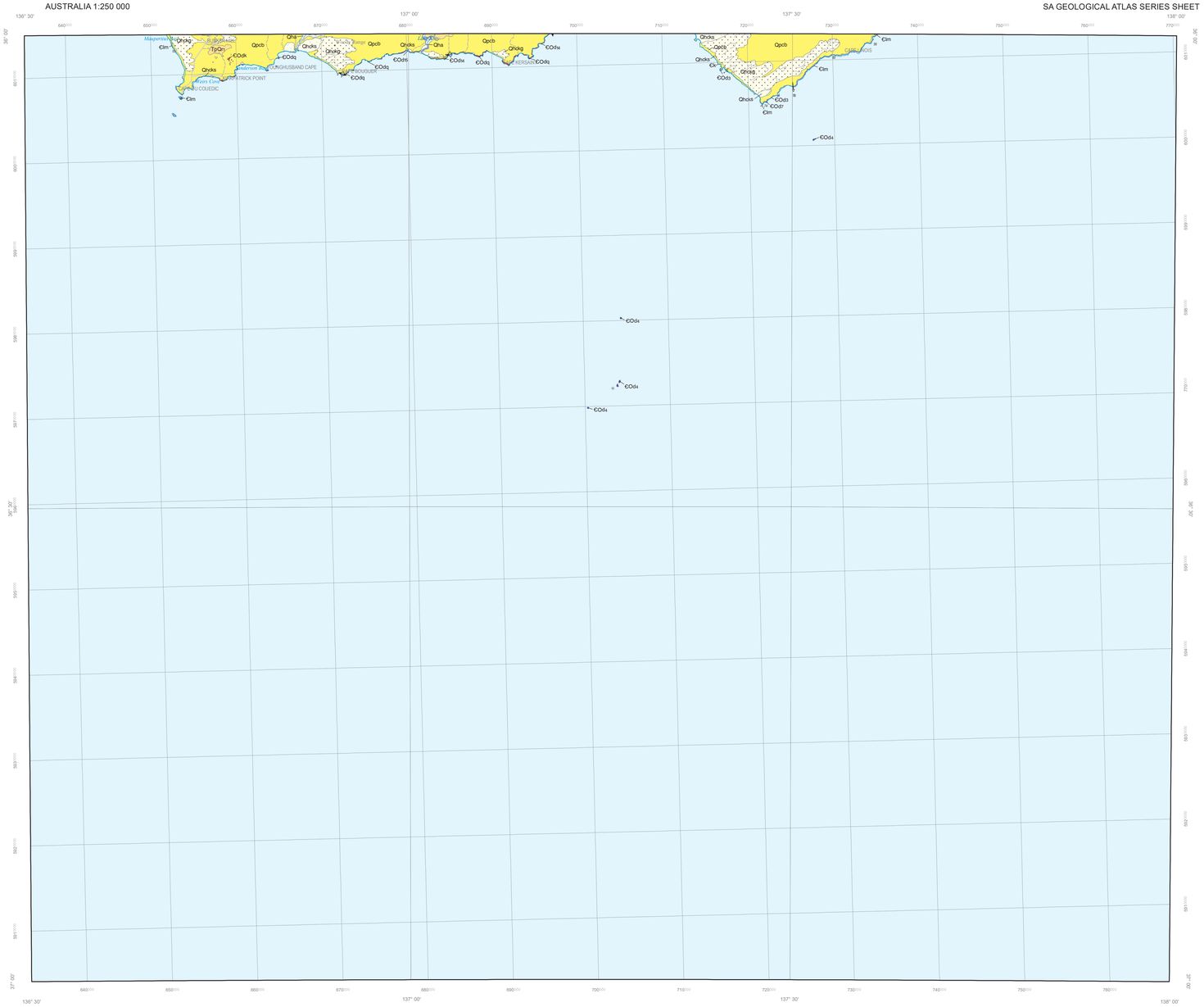
KERSAINT

GEOLOGICAL SURVEY OF SOUTH AUSTRALIA
DEPARTMENT FOR ENERGY AND MINING

AUSTRALIA 1:250 000

SA GEOLOGICAL ATLAS SERIES SHEET SJ5304



REFERENCE

HOLOCENE

- Qhcks — SEMAPHORE SAND MEMBER: Unconsolidated white bioclastic quartz-carbonate sand of modern beaches and transgressive dune fields.
- Qhckg — GANTHEAUME SAND MEMBER: Unconsolidated aeolian cliff top dunes and sand spreads from reworking of Bridgewater Formation.
- Qha — HOLOCENE ALLUVIAL/FLUVIAL SEDIMENTS: Undifferentiated Holocene alluvial/fluvial sediments.
- Qhl_4 — HOLOCENE LACUSTRINE/PLAYA UNIT 4: Holocene lacustrine sediment. KINGSCOTE 1:250 000.

PLEISTOCENE

- Qpcb — BRIDGEWATER FORMATION: Coastal barrier and shallow sub-tidal sediments: bioclastic and aeolian cross-bedded calcarenite, palaeosol horizons, often capped by calcrete.
- Qpce — POINT ELLEN FORMATION: Calcarenite and shelly sandstone, fossiliferous, laminate. Rb/Sr isotopic age 1.2 Ma.

PLIOCENE-PLEISTOCENE

- $TpQr_1$ — PLIOCENE-PLEISTOCENE REGOLITH/COLLUVIAL UNIT 1: Pliocene to Pleistocene gravelly clay, clay, sand, local ferruginous nodules. Based on Czo on ELLISTON, KIMBA; T-Q on BURRA(1964)?.

PLIOCENE

- Tpr_{er} — PLIOCENE FERRICRETE: Undifferentiated Pliocene ferricrete.

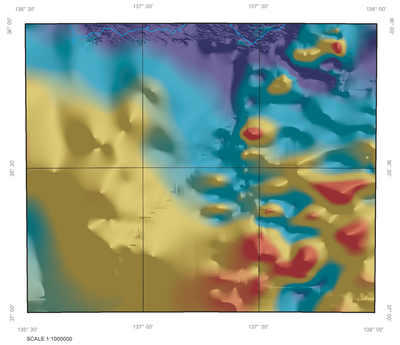
CAMBRIAN-ORDOVICIAN

- EOd_3 — DELAMERIAN IGNEOUS UNIT 3: Dolerite dykes: WARRINA sheet.
- EOd_4 — DELAMERIAN IGNEOUS UNIT 4: Undifferentiated Delamerian felsic intrusives. Early I- and S-type, late A-type, ~514-480 Ma.
- EOd_7 — DELAMERIAN IGNEOUS UNIT 7: Porphyritic rhyolite dykes. Age 488+/-86 Ma (U-Pb), Cape Gantheaume.
- EOd_{14} — DELAMERIAN IGNEOUS UNIT 14: Migmatised metasediment. Metamorphic differentiated layering. Highly contorted and disrupted sedimentary layering, poorly preserved.
- EOd_{15} — DELAMERIAN IGNEOUS UNIT 15: Granitised metasediments: partially melted and recrystallised metasediment with granitic texture and composition.
- EOdq — STUN SAIL BOOM GRANITE: Grande, deformed, medium-grained, porphyritic, quartz-plagioclase-biolite, opalescent blue-quartz phenocrysts and large feldspar megacrysts. Syn-tectonic. Age: 505+/-7 Ma (U-Pb).
- EOdk — REMARKABLE GRANITE: Granite, grey, medium-grained, equigranular biolite granite. Minor metasedimentary xenoliths.

CAMBRIAN

- Ek — KANMANTOO GROUP: Marine metasandstone, phyllite, schist, gneiss, minor calcsilicate rock and marble.
- Elm — MIDDLETON SANDSTONE: Metasandstone, fine grained, grey, quartzose, large-scale tabular crossbeds with heavy mineral laminations, slumped tops to foresets, rare angular shale clasts at base of scour channels. Relatively shallow marine.

TOTAL MAGNETIC INTENSITY IMAGE



SCALE 1:1000000

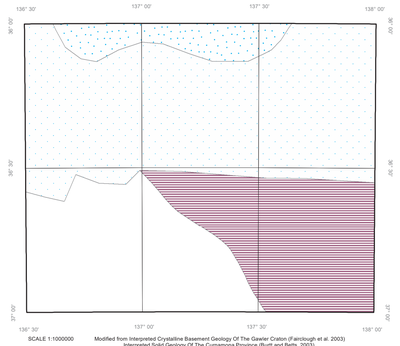
The Total Magnetic Intensity Image has been compiled using aeromagnetic data from the Department for Energy and Mining, South Australia. Aeromagnetic data have been merged, gridded and image processed by the Geological Survey of South Australia.

nTesla

-422.913 — -291.208 — -109.729 — 71.75 — 183.379

A two standard deviation contrast stretch has been applied to the raster image above.

SOLID GEOLOGY INTERPRETATION



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Modified from Interpreted Crystalline Basement Geology Of The Gawler Craton (Fairclough et al. 2003)
Interpreted Solid Geology Of The Curnamona Province (Burtt and Betts, 2003),
Musgrave Block, Central Australia: regional geology from interpretation of
aeromagnetic data (Rankin and Newton, 2002), Solid Geology South Australia (Cowley, 2006).

Solid Geology

- AO — Archaean-Ordovician rocks
- AM8 — Archaean-Mesoproterozoic unit 8
- AM11 — Archaean-Mesoproterozoic unit 11

SCALE 1:250,000

KILOMETRES 5 — 0 — 5 — 10 — 15 — 20 — 25 KILOMETRES

Topographic detail based on TOPO-250K GEODATA (source scale 1:250 000)
supplied by Geoscience Australia - National Mapping Division, ACT.
The relationship between this data and DEM data is not guaranteed.

Computer generated from SA_GEOLOGY database
(Digital data available upon request)
Current version 2018.Digital

Product of Spatial Information Services.
Published by, and with the authority of, the
Department for Energy and Mining SA.

Grey numbered lines indicate the 10000 metre Map Grid
Transverse Mercator Projection, Geocentric Datum Australia, 2020.

The lake boundaries displayed on this map may have been derived from geological interpretation
and may not match lakes interpreted by topographic mapping authorities.
Not all structures are represented on this particular map.

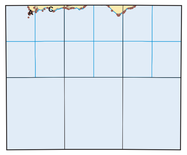
Compiled by A.P. Belperio, Ph.D., M.C. Fairclough, B.Sc.(Hons), and J.P.J. Randabel, B.Sc.(Hons). Mapping by A.P. Belperio, Ph.D., J.P.J. Randabel, B.Sc.(Hons), G.J. Ambrose, B.Sc.(Hons), W. Zang, Ph.D., M.C. Fairclough, B.Sc.(Hons), A.C. Burtt, B.Sc.(Hons), and S.M. Twining, B.Sc.(Hons)

R.C. Cobcroft, Director, Geological Survey of South Australia.

Geological boundaries displayed on this map have been
Derived from geological interpretation and are not
intended to be used for navigational purposes.

Copies of this map can be obtained from the
Department for Energy and Mining SA, Adelaide.
4/11/2019

GEOLOGICAL RELIABILITY DIAGRAM



Kersaint sheet 2nd Edition published 2008 — SCALE 1:2000000

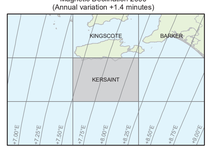
Geological Field Observations

A. Detailed ground traverses
B. Image interpretation with limited ground traverses
C. Image interpretation with potentially some minor ground traverses
D. Image interpretation only

INDEX TO 1:100 000 SHEETS

Du Couedic 6225	Kersaint 6325	Linois 6425
6224	6324	6424

INDEX TO ADJOINING 1: 250 000 SHEETS
Magnetic Declination 2000
(Annual variation +1.4 minutes)



DIGITAL EDITION
SUBJECT TO AMENDMENT
See published printed map for further information

CULTURAL FEATURES

- ROCKS BARE OR AWASH
- SECONDARY ROAD
- MINOR ROADS
- VEHICULAR TRACKS
- IDENTIFIED POINT

HYDROGRAPHIC AND GEOMORPHIC FEATURES

- INTERMITTENT LAKE
- MAJOR WATERCOURSE
- MINOR WATERCOURSE
- FLOODPLAIN
- SAND RIDGE

STRUCTURAL FEATURES

- FOLD AXIS
- MIGMATITIC LAYERING - GENERATION
- TECTONIC FOLIATION - VERTICAL GENERATION

GEOLOGICAL BOUNDARY

- COASTLINE
- GEOLOGICAL BOUNDARY POSITION ACCURATE

Government of South Australia
Department for Energy and Mining

GDA2020

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SJ5304