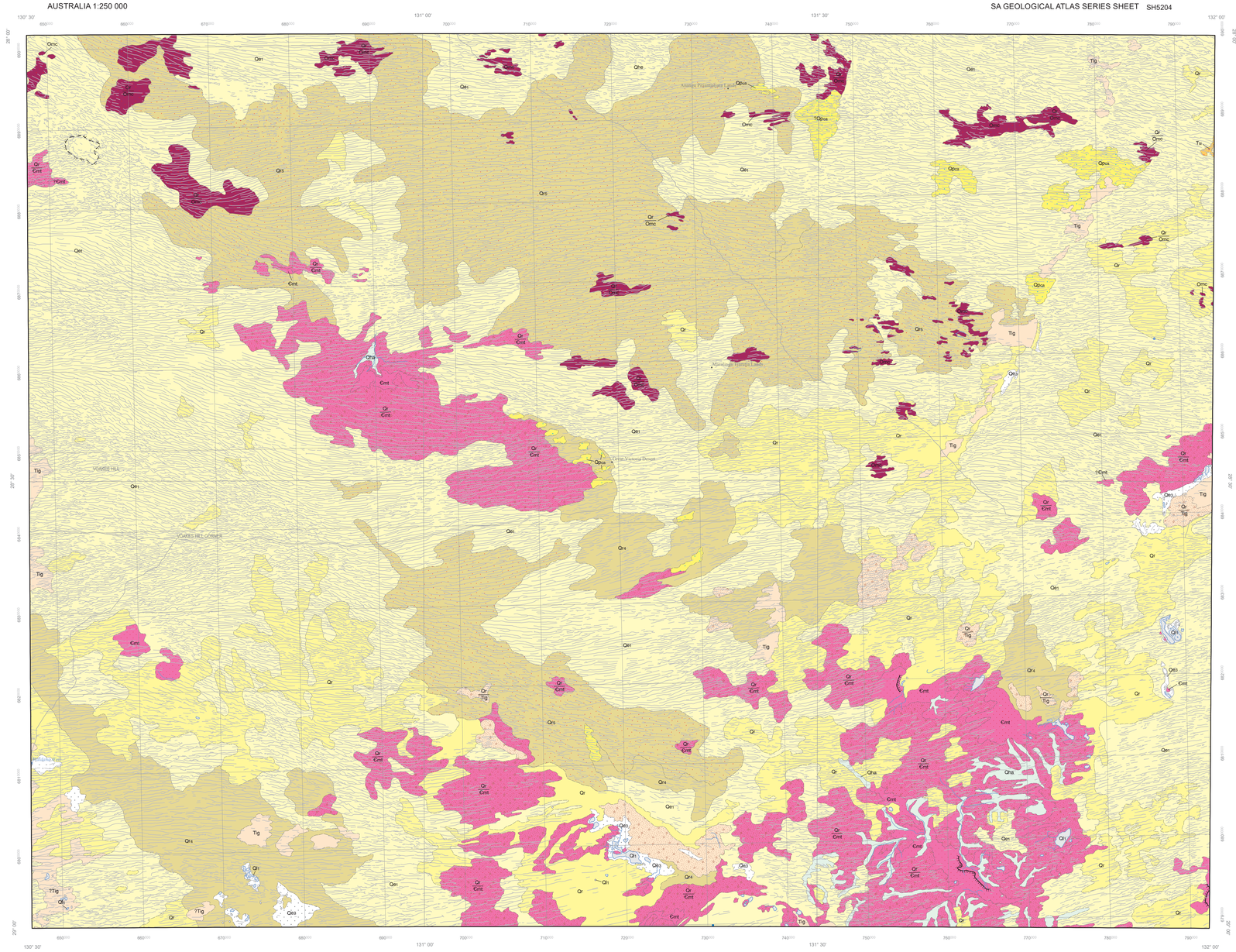
WELLS

GEOLOGICAL SURVEY OF SOUTH AUSTRALIA
DEPARTMENT FOR ENERGY AND MINING

AUSTRALIA 1:250 000

SA GEOLOGICAL ATLAS SERIES SHEET SH5204



REFERENCE

HOLOCENE

- Qha — HOLOCENE ALLUVIAL/FLUVIAL SEDIMENTS: Undifferentiated Holocene alluvial/fluvial sediments.

PLEISTOCENE-HOLOCENE

- Qe_1 — QUATERNARY AEOLIAN UNIT 1: Quaternary dunefield sands.
- Qe_3 — QUATERNARY AEOLIAN UNIT 3: Quaternary gypsiferous dunes/lunettes.
- Qr_1 — QUATERNARY LACUSTRINE/PLAYA UNIT 1: Quaternary playa sediments.
- Qr — QUATERNARY REGOLITH/COLLUVIAL SEDIMENTS: Undifferentiated Quaternary colluvial/regolith sediments.
- Qr_4 — QUATERNARY REGOLITH/COLLUVIAL UNIT 4: Quaternary calcareous sandy regolith. Interpreted from Landsat imagery. NOORINA, WELLS, WYOLA.
- Qr_5 — QUATERNARY REGOLITH/COLLUVIAL UNIT 5: Quaternary ferruginous sandy regolith. Interpreted from Landsat imagery. NOORINA, WELLS, WYOLA.

PLEISTOCENE

- Qpca — PLEISTOCENE CALCRETE: Undifferentiated Pleistocene calcrete.

EOCENE-PLEISTOCENE

- Tig — GARFORD FORMATION: Mudstone, carbonate, stromatolitic, oncolitic and oolitic, gastropods, minor sandstone and grit horizons. Upward change from argillaceous to carbonate mudstone. Lacustrine to flood plain.

TERTIARY

- Tsi — TERTIARY SILCRETE: Undifferentiated Tertiary silcrete.

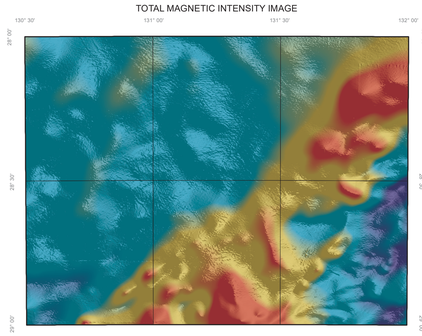
ORDOVICIAN-SILURIAN

- Omc — MOUNT CHANDLER SANDSTONE: Quartz sandstone, well rounded, fine to medium grained, white, crossbeds with heavy mineral laminae, sandstone, feldspathic, burrowed, orange to reddish; minor layers of polished quartz pebbles.

CAMBRIAN

- Cmt — TRAINOR HILL SANDSTONE: Sandstone, well-sorted, kaolinitic, feldspathic, calcareous, white, grey, red-brown; siltstone and claystone, micaceous, red-brown; pebbly horizons.

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.

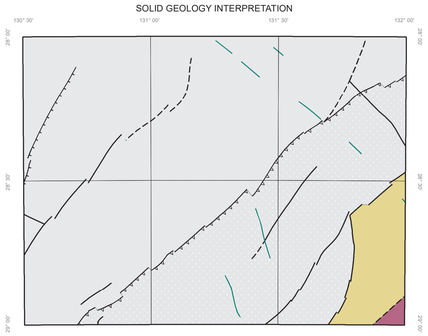
nTesla

-275.076 — 648.638

-268.526 -34.284 199.957

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

SOLID GEOLOGY INTERPRETATION



SCALE 1:1000000

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

- LM9 — Palaeoproterozoic-Mesoproterozoic unit 9
- LM10 — Palaeoproterozoic-Mesoproterozoic unit 10
- L40 — Palaeoproterozoic unit 40
- AM1 — Archaean-Mesoproterozoic unit 1
- Hy — Gairdner Dolerite

Solid Geology - Linear Structure

- Fault position accurate
- Fault position approximate
- Fault normal ticks on younger rocks
- Fault reverse approximate triangles upthrown side
- Fault reverse triangles upthrown side

SCALE 1:250,000

KILOMETRES 5 0 5 10 15 20 25 KILOMETRES

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2020

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.

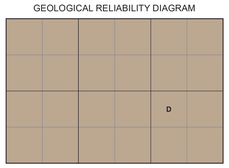
Mapping and Compilation by G.W. Krieg, B.Sc.(Hons), from LANDSAT imagery with limited ground control, with contributions from M.C. Benbow, B.Sc., and G.M. Pitt, B.Sc.

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. 2020

GEOLOGICAL RELIABILITY DIAGRAM



Wells sheet preliminary published 1971

SCALE 1:2000000

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

Niarrie 5041	Pupilla 5141	Ungoolya 5241
Waldana 5040	Mena 5140	Leemurra 5240

INDEX TO ADJOINING 1: 250 000 SHEETS

Magnetic Declination 2000
(Annual variation +1.4 minutes)

BIRKSGATE	LINDSAY	EVERARD
NOORINA	WELLS	GILES
WYOLA	MAURICE	TALLARINGA

GEOLOGICAL BOUNDARY

- GEOLOGICAL BOUNDARY POSITION ACCURATE
- GEOLOGICAL BOUNDARY POSITION APPROXIMATE

LINEAR STRUCTURES

- ESCARPMENT
- ESCARPMENT APPROXIMATE, TOPOGRAPHIC DEPRESSION
- GYPSITE DUNES

CULTURAL FEATURES

- VEHICULAR TRACKS
- IDENTIFIED POINT

HYDROGRAPHIC AND GEOMORPHIC FEATURES

- INTERMITTENT LAKE
- MINOR WATERCOURSE
- BORE
- WATER TANK
- SAND RIDGE

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

Government of South Australia
Department for Energy and Mining

GDA2020

GEOLOGICAL SURVEY OF SOUTH AUSTRALIA

WELLS
SH5204