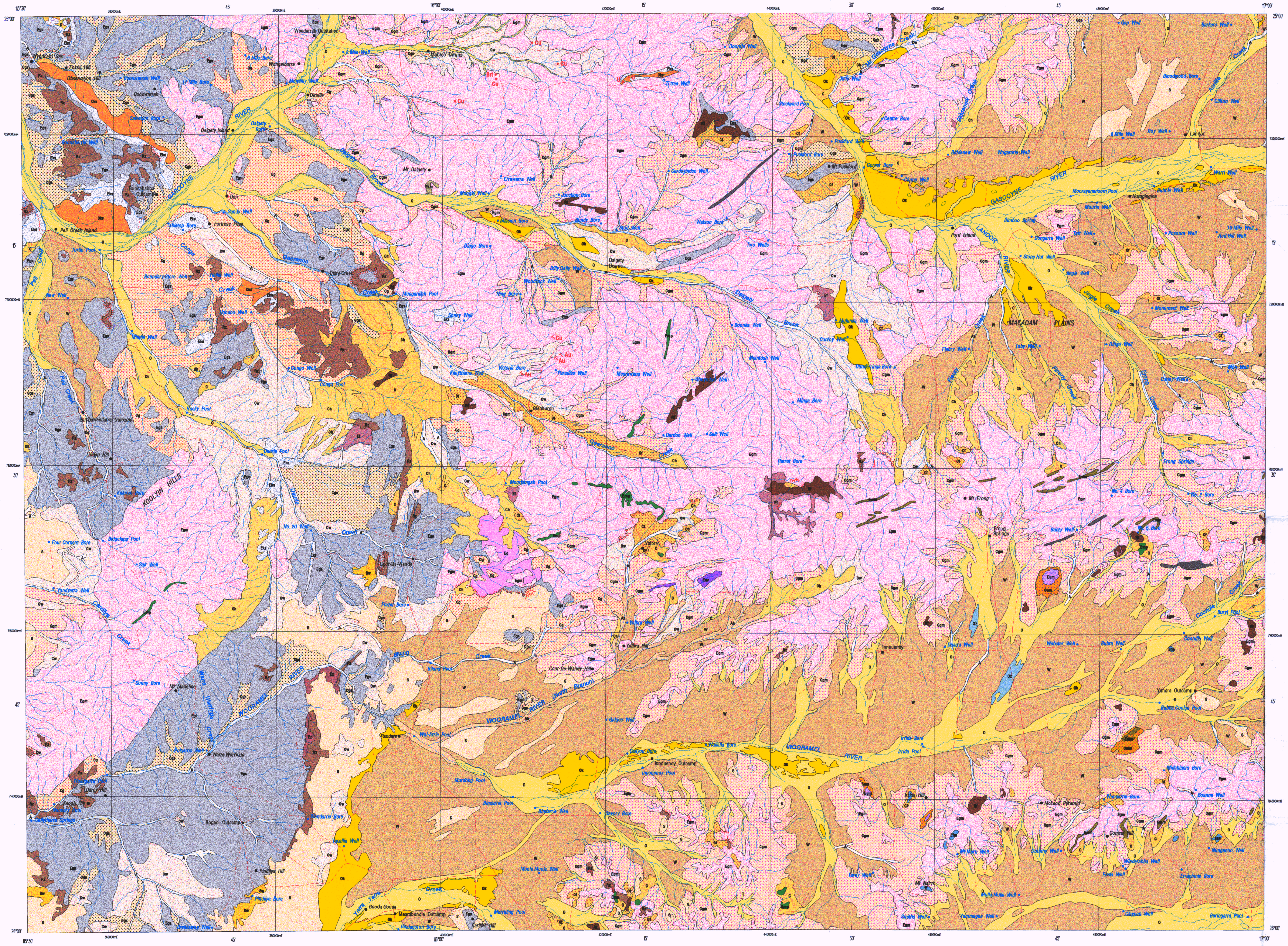
AUSTRALIA 1:250 000 REGOLITH GEOCHEMISTRY SERIES

GLENBURGH

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA

SHEET SG 50-6



REFERENCE

RELICT REGIME

- **Rz** Silcrete, sometimes weakly ferruginized, forming remnant land surfaces; may include chalcedonic cappings on calcrete
- **Rf** Iron-rich duricrust forming remnant land surfaces

EROSIONAL REGIME

- **Eg** Outcrop of saprock, bedrock, and subcrop with locally derived sand and sandy clays. Coarse bouldery lag may be present adjacent to prominent ranges: derived from quartzofeldspathic rock
- **Egs** As for 'Eg': derived from quartzofeldspathic sedimentary rock
- **Egm** As for 'Eg': derived from quartzofeldspathic metamorphic rock
- **Eks** As for 'Eg': derived from carbonate-rich sedimentary rock
- **Ekm** As for 'Eg': derived from carbonate-rich metamorphic rock
- **Emp** As for 'Eg': derived from coarse-grained ferromagnesian rock
- **Emm** As for 'Eg': derived from ferromagnesian metamorphic rock
- **Euv** As for 'Eg': derived from fine-grained ultramafic rock
- **Eum** As for 'Eg': derived from ultramafic metamorphic rock
- **Eq** As for 'Eg': derived from quartz-rich outcrop
- **Ef** As for 'Eg': derived from ferruginized outcrop
- **Efm** As for 'Eg': derived from iron-rich metamorphic rock
- **Ez** As for 'Eg': derived from silcretized outcrop

DEPOSITIONAL REGIME

DOMINANTLY COLLUVIAL

- **C** Unconsolidated and semi-consolidated sand, silt, gravel, and rubble derived from various sources
- **Cg** As for 'C': derived mainly from quartzofeldspathic rocks
- **Cgs** As for 'C': derived mainly from quartzofeldspathic sedimentary rocks
- **Cgm** As for 'C': derived mainly from quartzofeldspathic metamorphic rocks
- **Cks** As for 'C': derived mainly from carbonate-rich sedimentary rocks
- **Cmm** As for 'C': derived mainly from ferromagnesian metamorphic rocks
- **Cum** As for 'C': derived mainly from ultramafic metamorphic rocks
- **Cf** As for 'C': strongly ferruginized
- **Cw** Consolidated to semi-consolidated sand, silt, gravel, and rubble
- **Ch** Consolidated to semi-consolidated sand, silt, gravel, and rubble; commonly deeply incised; may include areas of hardpan

DOMINANTLY ALLUVIAL

- **A** Gravelly sand and sandy clay of active alluvial channels with ferruginous and variably altered lithic fragments
- **Ah** Consolidated colluvium (may include areas of hardpan) associated with active alluvial channels
- **O** Overbank deposits, sand or clay rich alluvium and colluvium on drainage floors. Includes non-saline claypans; calcrete fragments
- **Ok** Valley calcrete, silicified in places
- **Oz** Silica-rich material associated with overbank deposits
- **W** Sand/clay dominated colluvium or sheetwash; merges into alluvial plains; may be scattered with small lakes

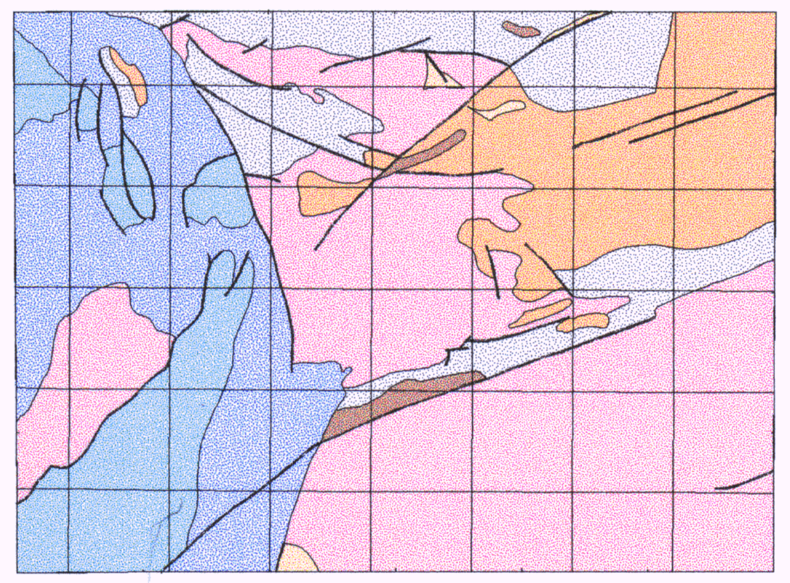
DOMINANTLY EOLIAN

- **S** Eolian and residual sand
- **Sw** Consolidated sandplain

SYMBOLS

- Regolith boundary
- Minor road
- Track
- Breakaway
- Watercourse
- Lake
- ■ Landor — Homestead
- ● Mt Nairn — Locality
- Prospect
- Mineral occurrence
- Brt — Barite
- Cu — Copper
- Au — Gold
- U — Uranium

SIMPLIFIED GEOLOGICAL INTERPRETATION



PHANEROZOIC

PERMIAN — Byro and Wooramel Groups: Sandstone, siltstone, and shale

PERMO – CARBONIFEROUS — Lyons Group and CALLYTHARRA FORMATION: Limestone, conglomerate, sandstone, and siltstone; glacigene and marine

PROTEROZOIC

Bangemall Group: Shale, sandstone, conglomerate, and dolomite

MOUNT JAMES FORMATION: metamorphosed conglomerate, sandstone, chert, siltstone, and mudstone

Biotite granodiorite, biotite gneiss, biotite-muscovite granodiorite, and monzogranite

Morrissey Metamorphic Suite: quartzite, schist, paragneiss, and migmatite

ARCHAEAN – PROTEROZOIC

Gneiss, quartzite, granitoid rock, and quartz-magnetite rock

Geological boundary

Fault

Geological interpretation after Williams et al. (1983), Hocking (1990), and Hunter (1990).

SHEET INDEX

KENNEDY RANGE SG 50-1	MOUNT PHILLIPS SG 50-2	MOUNT EGERTON SG 50-3
WOORAMEL SG 50-5	GLENBURGH SG 50-6	ROBINSON RANGE SG 50-7
YARINGA SG 50-9	BYRO SG 50-10	BELELE SG 50-11

REGOLITH MATERIALS

REGOLITH GEOCHEMISTRY SERIES

GLENBURGH

SHEET SG 50-6

FIRST EDITION 1998

WARNING: Inks are water soluble and will fade with prolonged exposure to light

Edited by D. Ferdinando and G. Loan

Cartography by G. Jose and D. Ladbrook

Topography from Australian Surveying and Land Information Group Sheet SG 50-6 and modified from geological field survey (1997)

This map was compiled and produced using a Geographic Information System (Arc/Info), and the data are available in digital form

Published by the Geological Survey of Western Australia. Copies of this map, or extracts of the data, are available from the Information Centre, Department of Minerals and Energy, 100 Plain Street, East Perth, W. A., 6004. Phone (08) 9222 3459, Fax (08) 9222 3444

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GOVERNMENT OF WESTERN AUSTRALIA
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MINISTER FOR MINES

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
DAVID BLIGHT, DIRECTOR

SCALE 1:250 000

5000 METRES 0 5 10 15 20 25 30 KILOMETRES

TRANSVERSE MERCATOR PROJECTION

HORIZONTAL DATUM: AUSTRALIAN GEODETIC DATUM 1984

VERTICAL DATUM: AUSTRALIAN HEIGHT DATUM

Grid lines indicate 20 000 metre interval of the Australian Map Grid Zone 50

Compiled by J. Coker and J. A. Faulkner, 1997

Field observations by C. Swager, S. Occhipinti, I. Copp, R. Hocking, S. Sheppard, K. Chakraborty, and D. Flint (GSWA), 1997

Compiled using Landsat TM images 1986, black and white aerial photography 1995, GSWA geology 1976 - 1997, and field observations 1997

The recommended reference for this map is: COKER, J., FAULKNER, J. A., and SANDERS, A. J., 1998, Glenburgh, W.A., Sheet SG 50-6 -- Regolith materials, Plate 1: Western Australia Geological Survey, 1:250 000 Regolith Geochemistry Series.