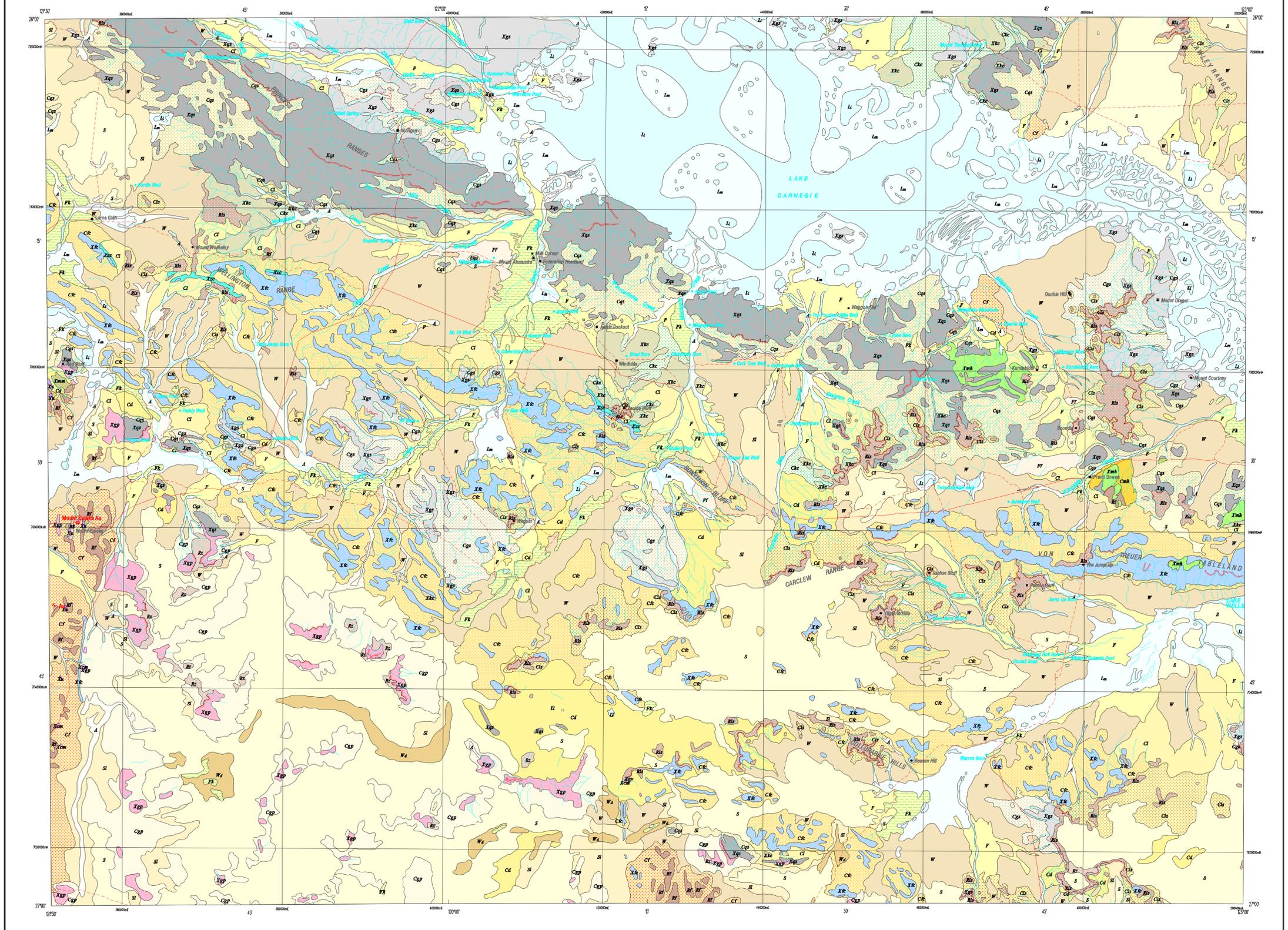


KINGSTON

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA

AUSTRALIA 1:250 000 REGOLITH GEOCHEMISTRY SERIES

SHEET SG 51-10



REGOLITH MATERIALS

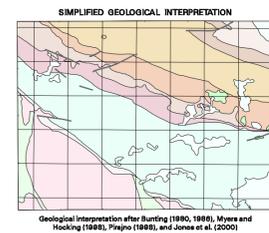
REFERENCE

- RESIDUAL (R)** - Residual sand and duricrust and proximal reworked material derived by weathering in situ
- Rf comprising mainly iron-rich material (ferrosols and ferruginous lag)
 - Rls derived from mixed sedimentary rock (Paterson Formation); locally alluvial
 - Rz comprising mainly silica-rich material (silicites and jasperoidal chert)
- EXPOSED (X)** - Outcrop of bedrock, subcrop, and apron with locally derived sand, silt, clay, and rubble
- Xcm derived from clay-rich metamorphic rock (phyllite, kaolinized schist, and kaolinized volcanoclastic rock)
 - Xlc derived from iron-rich chemical sedimentary rock (pelletal and banded iron-formation, hematitic shale, and chert)
 - Xgp derived from quartzofeldspathic plutonic rock (granitoid rock); locally kaolinized, alluvial, and ferruginized
 - Xgs derived from quartzofeldspathic siliciclastic sedimentary rock (sandstone, siltstone, and shale)
 - Xgv derived from quartzofeldspathic volcanic rock (felsic volcanic rock)
 - Xlc derived from carbonate-rich biochemical sedimentary rock (limestone, calcarenite, and dolomite)
 - Xmb derived from ferromagnesian hypabyssal rock (diorite)
 - Xmm derived from ferromagnesian metamorphic rock (metamorphosed tholeiitic basalt, metabasalt, and metagabbro)
 - Xqs derived from quartz-rich siliciclastic sedimentary rock (sandstone, quartzite, siltstone, and shale)
 - Xu derived from ultramafic rock (peridotite and metamorphosed ultramafic rock)
 - Xzc derived from silica-rich chemical sedimentary rock (pelletal chert)
- COLLUVIAL (C)** - Unconsolidated and semi-consolidated silt, sand, gravel, and rubble
- Cd undivided
 - Cf comprising iron-rich material
 - Cfc derived mainly from iron-rich chemical sedimentary rock (pelletal and banded iron-formation, hematitic shale, and chert)
 - Cgp derived mainly from quartzofeldspathic plutonic rock (granitoid)
 - Cgs derived mainly from quartzofeldspathic sedimentary rock (sandstone)
 - Clc derived mainly from carbonate-rich biochemical sedimentary rock (limestone, calcarenite, and dolomite)
 - Ct derived from mixed parentage
 - Cls derived mainly from mixed sedimentary rock (Paterson Formation)
 - Cmb derived mainly from ferromagnesian hypabyssal rock (diorite)
 - Cqs derived mainly from quartz-rich siliciclastic sedimentary rock (sandstone, quartzite, siltstone, and shale)
- DISTAL SHEETWASH (W)**
- W Sand- and clay-dominated colluvium or sheetwash
 - Wd Sand- and clay-dominated colluvium or sheetwash associated with depressions and drainages
- ALLUVIAL (A)**
- A Cobbles, gravel, sand, silt, and clay in alluvial channels
- FLOODPLAIN (F)**
- F Overbank deposits; sand- or clay-rich alluvium and colluvium on floodplains
 - Ff Overbank deposits; sand- or clay-rich alluvium and colluvium on floodplains containing iron-rich material
 - Fb Overbank deposits; sand- or clay-rich alluvium and colluvium on floodplains containing carbonate-rich material (valley calcrite)
- LACUSTRINE (L)**
- L Clay, silt, sand, and evaporitic material; locally saline and gypiferous
 - Li in playas and claypans
 - Lm in mixed dunes and playa terrain proximal to lakes
- SANDPLAIN (S)**
- S Residual and eolian sand; dominated by undulating sandplain and eolian dunes
 - Si Sandplain with clay-rich colluvium and sheetwash; minor eolian reworking

SYMBOLS

- Regolith boundary
- Breakaway
- Minor road
- Track
- Watercourse
- Pool, soak, spring bore, well
- Windilla Homestead
- Double Hill Locality
- Mount Eureka Mine
- Prospect
- Au Gold

Edited by N. Tetlow and G. Loan
Cartography by G. Jose
Topography from Australian Surveying and Land Information Group and modified from geological field survey (1986)
This map was compiled and produced using a Geographic Information System (ArcInfo), 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
Compiled by S. A. McGuinness and K. J. Pye 1999
Sampling by: S. Baejoux, E. Bosaquet, J. Hansen, E. Mikulski, J. Moore, N. Neave
Compiled using Landsat TM images (1984 data), black and white aerial photography, (1974, 1980), published GSWA 1:250 000 Geological Series maps and field observations 1999
The recommended reference for this map is: MCGUINNESS, S. A., and PYE, K. J., 2000, Regolith materials, Kingston, W.A. sheet SG 51-10, in Geological mapping of the Kingston 1:250 000 sheet, by K. J. Pye, P. A. Morris, and S. A. McGuinness: Western Australia Geological Survey, 1:250 000 Regolith Geochemistry Series Explanatory Notes, Plate 2



- PERMIAN**
- PATERSON FORMATION: fluvial or fluvio-glacial sandstone, conglomerate, and siltstone
 - Dolerite
- Eocene Group**
- MULGAIPA SANDSTONE: quartz sandstone; with minor shale and limestone
 - KULELE LIMESTONE: arenaceous limestone, calcarenite, and mudstone; minor sandstone
 - WONGAWOL FORMATION: very fine-grained sandstone, shale, and minor carbonate-rich rocks
 - CHALL FORMATION: Phospor Member quartz arenite with minor siltstone
 - Windward Member sandstone, siltstone, and shale; locally gypsiferous basal conglomerate
 - WINDICHA FORMATION: limestone, shale, and chert; arenaceous in part
 - FREIRE FORMATION: granular iron-formation, hematitic shale, chert, and siltstone
 - YELMA FORMATION: sandstone and shale; minor chert, and arenaceous carbonate
- Greenfield rock**
- Greenstone: basalt, dolerite, ultramafic rock, metamorphosed sedimentary rocks, and felsic volcanic rock
- Geological boundary
Fault

SCALE 1:250 000
UNIVERSAL TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: GEOCENTRIC DATUM OF AUSTRALIA 1994
VERTICAL DATUM: AUSTRALIAN HEIGHT DATUM
Grid lines indicate 20 000 metre interval of the Map Grid Australia, Zone 51
The Map Grid Australia (MGA) is based on the Geocentric Datum of Australia 1994 (GDA94)
GDA94 positions are compatible within one metre of the datum WGS84 positions



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REGOLITH MATERIALS

REGOLITH GEOCHEMISTRY SERIES

KINGSTON

SHEET SG 51-10
FIRST EDITION 2000
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