

RELICT REGIME

- R1 Ferruginous silicates and nodules
- R2 Iron-rich duricrust forming remnant land-surfaces
- R3 Siliceous, often weakly ferruginized, mainly overlies granitoid rock and sedimentary rock
- R4 Quartz-rich sand and silt (locally reworked) overlying R1-3

EROSIONAL REGIME

- E1 Mottled zone and saprolite, generally poorly exposed
- E2 Granitoid rock outcrop, subcrop, and sporadic, locally derived sand and sandy clay; local boundary lag need to prominent ranges
- E3 Greenstone and other mafic rock outcrop, subcrop, and sporadic; locally derived sand and sandy clay; local boundary lag need to prominent ranges
- E4 Sedimentary rock outcrop, subcrop, and sporadic; locally derived sand and sandy clay; local boundary lag need to prominent ranges
- E5 Metamorphic rock outcrop, subcrop, and sporadic; locally derived sand and sandy clay; local boundary lag need to prominent ranges
- E6 Locally derived lag of ferruginous and/or siliceous fragments in a sandy clay to sand-rich matrix, associated with actively eroding outcrop
- E7 As for E4 derived from granitoid rock
- E8 As for E4 derived from greenstone and other mafic rock
- E9 As for E4 derived from sedimentary rock

DEPOSITIONAL REGIME

- DOMINANTLY COLLUVIAL
 - DC1 Medium to coarse detritus (clasts usually > 25 mm) mainly of lithic or ferruginous lithic nature in medium to coarse-grained sandy clay-rich matrix
 - DC1a As for DC1 with quartz- and/or feldspar-rich clasts
 - DC1b As for DC1 with ferruginized lithic clasts
 - DC1c As for DC1 with clasts of mixed provenance
 - DC2 Fine to medium-grained detritus (most clasts 4 - 25 mm) mainly of ferruginous lithic origin in a sandy clay matrix
 - DC2a As for DC2 with greenstone or other mafic rock clasts
 - DC2b As for DC2 with quartz- and/or feldspar-rich clasts
 - DC2c As for DC2 with quartz and ironstone clasts
 - DC3 Sand and clay (with or without ferruginous) dominated colluvium or sheetwash
 - DC3a As for DC3 with ferruginous detritus

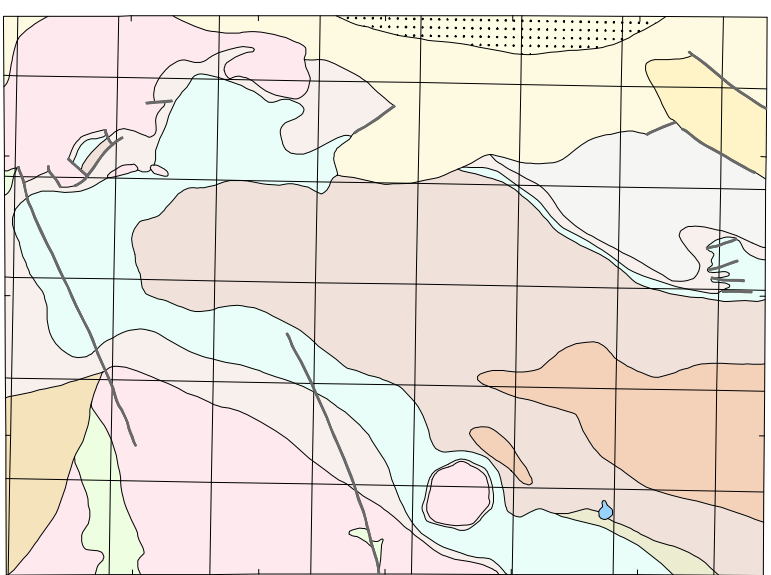
DOMINANTLY ALLUVIAL

- DA4 Gravely sand and sandy clay of active alluvial channels; includes ferruginous and siliceous lithic fragments
- DA5 Sand- or clay-rich alluvium and colluvium on drainage floors, including overbank deposits; includes siliceous lithic fragments
- DA6 Gypsiferous soils and sediments adjacent to playa lakes, usually vegetated
- DA7 Saline clay and silt of playa lakes, usually lacking vegetation
- DA8 Valley caliche
- D9 Eolian sandplains; may form dunes to this sheet, and overlie sheetwash, soil, or bedrock

SYMBOLS

- Regolith boundary
- Minor road
- Track
- Breakaway
- Watercourse, ephemeral
- Homestead
- Locality
- Abandoned
- Prospect, gold
- Mineral occurrence
- Lead, Uranium

GEOLOGICAL INTERPRETATION



Geological interpretation after Bunting et al (1982) and Bunting (1989)

- Geological boundary
- Fault
- PATERSON FORMATION: fluvial or fluvio-glacial sandstones, conglomerates, and siltstone
- Savory Group
 - GLASS SPRING FORMATION: sandstone and conglomerate; minor siltstone
- Bangemall Group
 - Sandstone with minor shale and siltstone
 - Sandstone, shale, conglomerate, and dolomite (Bongomul Sub-group)
- Earaheedy Group
 - PRINCESS RANGES QUARTZITE: quartz arenite with minor siltstone
 - WANDAWARRA FORMATION: sandstone and shale; locally developed glauconite
 - WINDOCH FORMATION: limestone, shale, chert, and conglomerate
 - FREIRE FORMATION: iron-formation, hematite shale, chert, and conglomerate
 - YELMA FORMATION: quartz arenite and shale; minor chert and atomorphic carbonates
- TROY CREEK BEDS: shale and sandstone; minor chert, carbonate, iron-formation, and felsic volcanic rock
- Yerrida Group
 - JUDERNA FORMATION (Fleayton Member): quartz arenite with minor shale; includes detritite of the Kibera Formation
 - Undivided granitoid rock
 - Greenstone: metamorphosed mafic-volcanic rock; detritite, and sedimentary rock

SHEET INDEX

GOLLIER SG 50-4	BULLEN SG 51-1	TRAINER SG 51-2
PEAK HILL SG 50-8	NABBERU SG 51-5	STANLEY SG 51-6
OLENGARRY SG 50-12	WILUNA SG 51-9	KINGSTON SG 51-10

REGOLITH MATERIALS

REGOLITH GEOCHEMISTRY SERIES

NABBERU

SHEET SG 51-5

FIRST EDITION 1997

© Western Australia 1997

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. Ladbroke
Topography from Australian Surveying and Land Information Group Sheet SG 51-5
and roads modified from geological field survey (1988)
This map is also available in digital form
Published by the Geological Survey of Western Australia. Copies of this map, or extracts from the database, are available from the Mining Information Centre, Department of Minerals and Energy, 100 Plain Street, East Perth, 6004. Phone (08) 9222 3459, Fax (08) 9222 3444



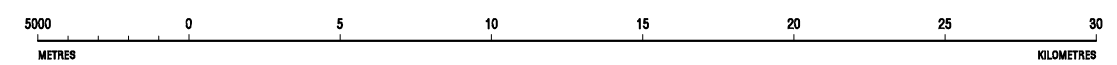
DEPARTMENT OF MINERALS AND ENERGY
L.C. RAYFORD, ACTING DIRECTOR GENERAL



GOVERNMENT OF WESTERN AUSTRALIA
HON. NORMAN MOORE, M.L.C.
MINISTER FOR MINES



GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
PETRO GUJ, DIRECTOR



SCALE 1:250 000
TRANSVERSE MERCATOR PROJECTION
Grid lines indicate 20 000 metre interval of the Australian Map Grid Zone 51

Compiled by J. Coker, A.J. Sanders, and P.A. Morris, 1997
Field observations by P.A. Morris (GSWA), J. Angeloni, S. Keeling, and E. Mead (Geochemex Australia) 1995
The recommended reference for this map is: COKER, J., SANDERS, A.J., and MORRIS, P.A., 1997, Nabburu, W.A. Sheet SG 51-5 -- Regolith Materials
Western Australia Geological Survey, 1:250 000 Regolith Geochemistry Series, Plate 1