

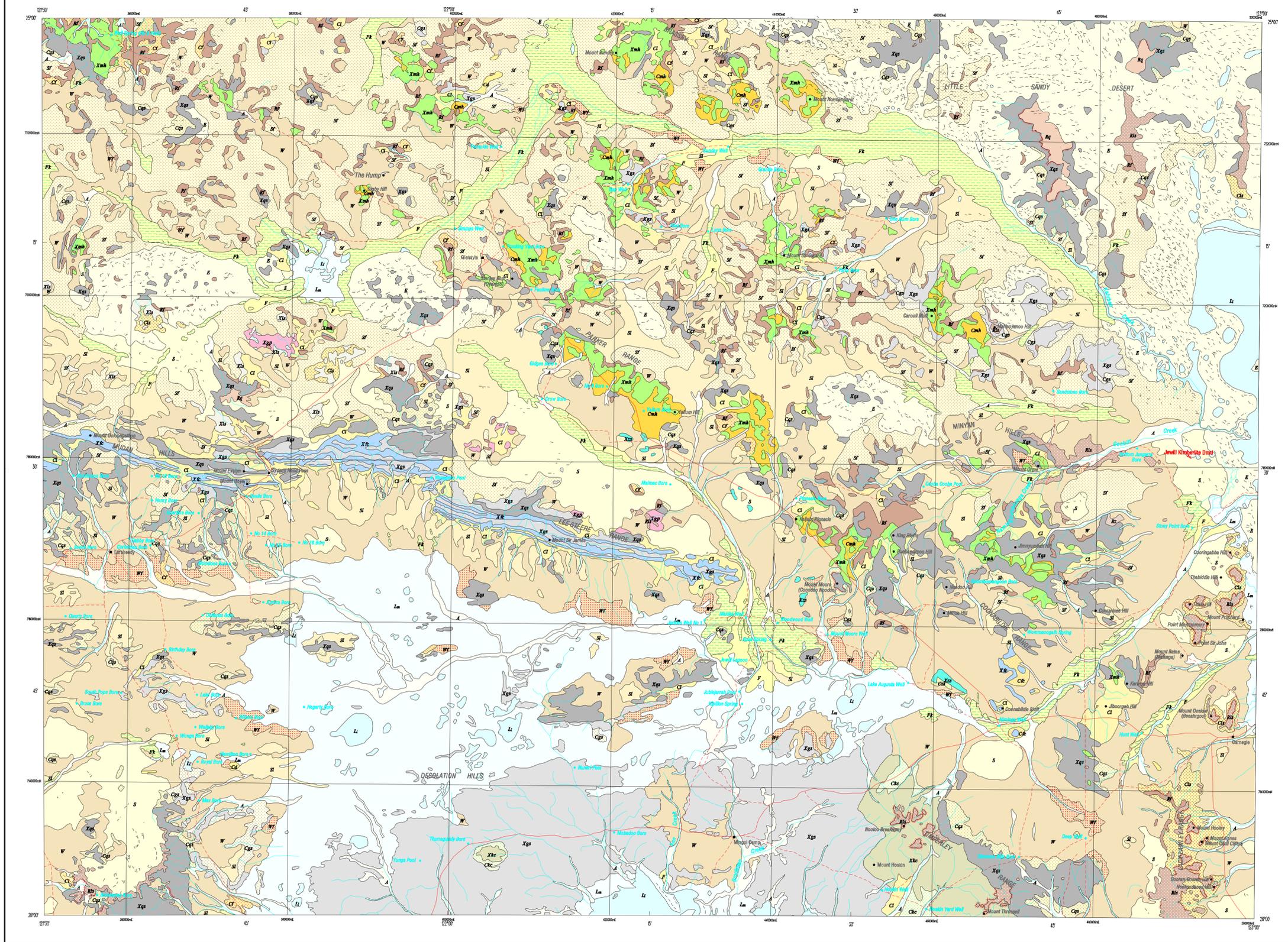
STANLEY

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA

SHEET SG 51-6

REGOLITH MATERIALS

AUSTRALIA 1:250 000 REGOLITH GEOCHEMISTRY SERIES



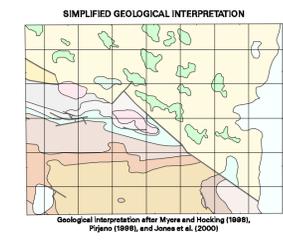
- REFERENCE**
- RESIDUAL (X) -** Residual sand, duricrust, and proximal reworked material derived by weathering in situ
- Rf** comprising mainly iron-rich material (ferrosite)
 - Rls** derived from mixed sedimentary rock (Palaeozoic Formation); locally silicified
 - Rq** comprising mainly quartz-rich material
 - Rz** comprising mainly silica-rich material (silicite)
- EXPOSED (X) -** Outcrop of bedrock, subcrop, and approach with locally derived sand, silt, clay, and rubble
- Xf** derived from iron-rich sedimentary rock (pelletal and banded iron-formation, hematitic shale, and chert)
 - Xgp** derived from quartzofeldspathic plutonic rock (granitoid rock)
 - Xgs** derived from quartzofeldspathic sedimentary rock (sandstone, siltstone, and shale)
 - Xlc** derived from carbonate-rich biochemical sedimentary rock (limestone, calcarenite, and dolomite)
 - Xls** derived from mixed metamorphosed sedimentary rock
 - Xmh** derived from ferromagnesian hypabyssal rock (diorite and metabasite)
 - Xqs** derived from quartz-rich silicified sedimentary rock (sandstone and mudstone)
 - Xsa** derived from silica-rich sedimentary rock
- COLLUVIAL (C) -** Unconsolidated and semi-consolidated silt, sand, gravel, and rubble; small rock outcrops may be present
- Cd** undivided
 - Cf** comprising iron-rich material
 - Cfb** derived mainly from iron-rich sedimentary rock (pelletal and banded iron-formation, hematitic shale, and chert)
 - Cgs** derived mainly from quartzofeldspathic sedimentary rock (sandstone, siltstone, and shale)
 - Clc** derived mainly from carbonate-rich biochemical sedimentary rock (limestone, calcarenite, and dolomite)
 - Cs** derived from mixed parentage
 - Csa** derived mainly from mixed sedimentary rock
 - Cmh** derived mainly from ferromagnesian hypabyssal rock (diorite)
 - Cqs** derived mainly from quartz-rich silicified sedimentary rock (sandstone and mudstone)
 - Csa** derived mainly from silica-rich sedimentary rock
- DISTAL SHEETWASH (W) -**
- Wf** Sand- and clay-dominated colluvium or sheetwash
 - Wf** Sand- and clay-dominated colluvium or sheetwash with abundant iron-rich material
- 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
 - Fk** Overbank deposits; sand- or clay-rich alluvium and colluvium on floodplains containing carbonate-rich material (valley calcare)
- LACUSTRINE (L) -** Clay, silt, sand, and evaporitic material; locally saline and gypiferous
- Lz** 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
 - Sf** Colluvial and residual sand with abundant iron-rich material; locally eolian
 - Sr** Sandplain with clay-rich colluvium and sheetwash; minor eolian reworking
- EOLIAN (E) -**
- E** Dominantly eolian sand; extensive dunes

- SYMBOLS**
- Regolith boundary
 - Breakaway
 - Sand dune
 - Formed road
 - Track
 - Watercourse
 - Pool, spring, bore, well
 - Earheedy Homestead
 - Mount Royal Locality
 - Jewell Kimberlite Prospect
 - Dmd Diamond

Edited by M. Tetlow, K. Greenberg, and G. Loan
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 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 9459, Fax (08) 9222 3444

Compiled by S. A. McGuinness and A. J. Sanders 2000
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 MCGUINNESS S. A. and SANDERS A. J. 2000, Regolith Materials, Stanley, W.A. Sheet SG 51-6 in Geological Mapping of the Stanley 1:250 000 sheet (Dr P. A. MORRIS, S. A. MCGUINNESS, A. J. SANDERS, and J. COKER: Western Australia Geological Survey, 1:250 000 Regolith Geochemistry Series Explanatory Notes, Plate 3



- PHANEROZOIC**
- PERMIAN**
 - PATERSON FORMATION: fluvial and fluvio-glacial sandstone, conglomerate, and siltstone
 - Dolerite
 - Sunbeam Group**
 - Sandstone, siltstone, conglomerate, shale, mudstone, dolomite, and evaporite
 - Coller Group**
 - Sandstone with minor shale and siltstone
 - Scorpion Group**
 - Sandstone, shale, conglomerate, and dolomite
 - Earheedy Group**
 - Metamorphosed shale and sandstone; minor chert
 - MILBARRA SANDSTONE: quartz sandstone; with minor shale and limestone
 - KULELE LIMESTONE: stromatolitic limestone, calcarenite, and mudstone; minor sandstone
 - WONGAWOL FORMATION: very fine-grained sandstone, shale, and minor carbonate-rich rocks
 - CHALL FORMATION
 - Pinacoe Range Member: quartz arenite and minor siltstone
 - Woodwards Member: sandstone, siltstone, and shale; locally glauconitic basal conglomerate
 - FRIERE FORMATION: granular iron-formation, hematitic shale, chert, and siltstone
 - YELMA FORMATION: sandstone and shale; minor chert and stromatolitic carbonate
 - ARCHAIC**
 - Granitoid 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
STANLEY
 SHEET SG 51-6
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