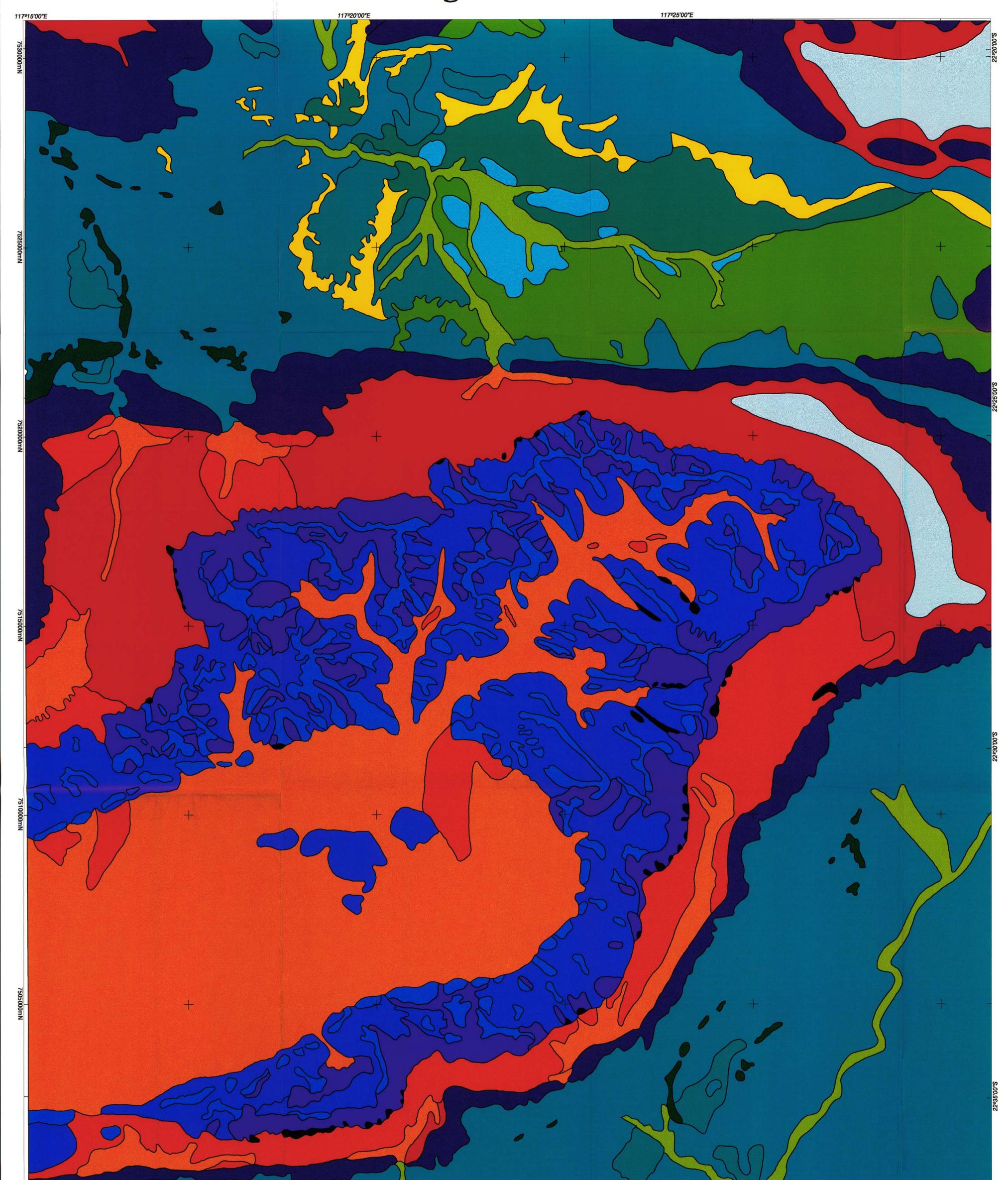
HAMERSLEY PROJECT - REGOLITH LANDFORM MAPS

Brockman Regolith-Landform Units





Compiled by H.M. Churchward (CRC LEME/CSIRO), 1996

It is recommended that this map be referred to as: H.M. Churchward - 1996 - Hamersley Project Regolith-Landform Maps (1:50 000 map scale). Cooperative Research Centre for Landscape Evolution and Mineral Exploration, (CRC LEME) Perth

The regolith map is based on photo interpretation and field observations.

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Inquiries should be directed to:

The Director

Regolith-Landform Units

hDr hgap hDr hgf hDr hgif hbErc hbErm

> CRCLEME c/- CSIRO Division of Exploration and Mining Private Mail Bag Post Office, WEMBLEY. W.A. 6014

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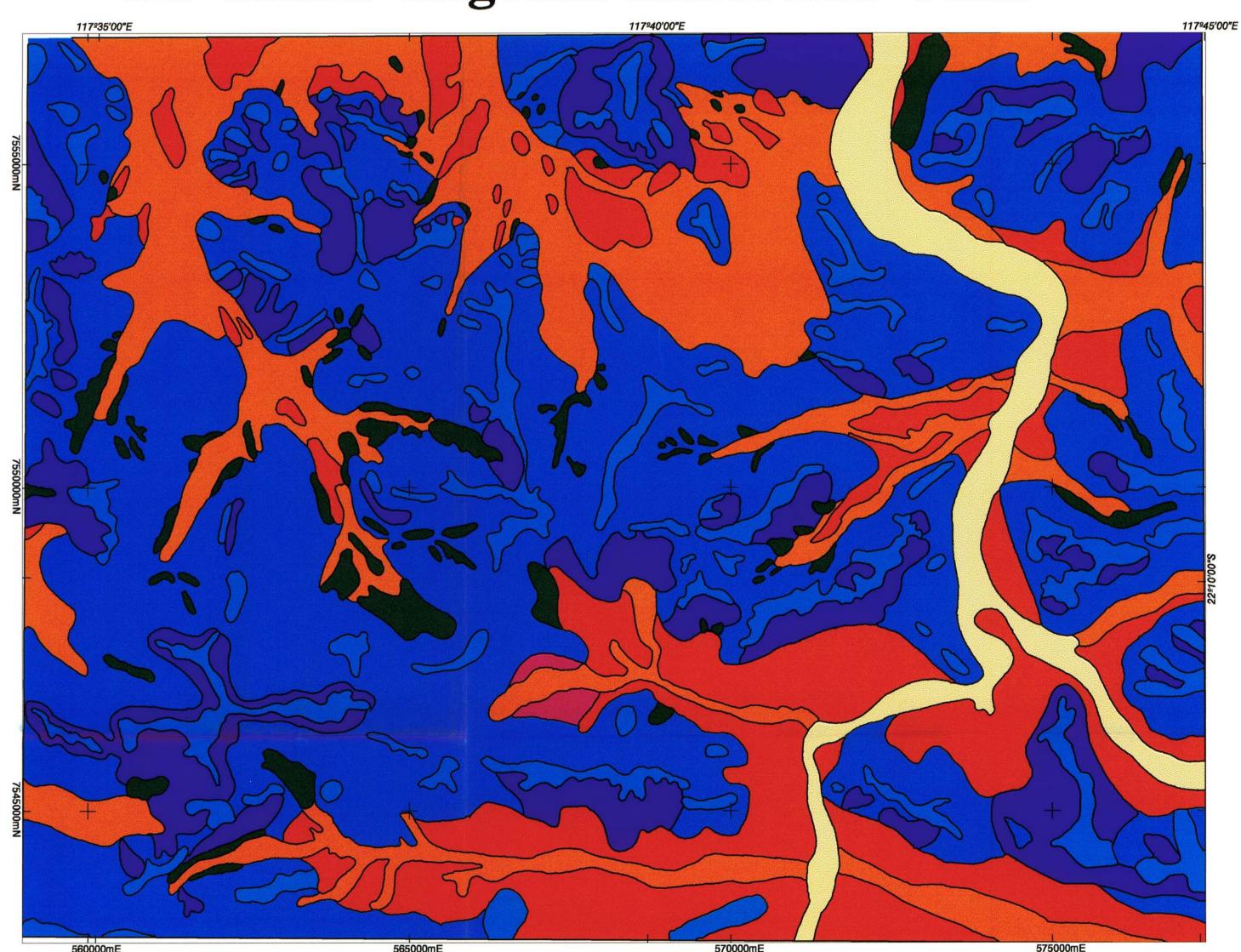
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Mt Margaret Regolith-Landform Units Regolith-Landform Units hDhg+ hDrhgap hDrhgf hDrhgif hbErc hbErm hbErv

Mt Sheila Regolith-Landform Units



Key	•			(9)
	General nature of the regolith	Soil	Lag	Topography
fRg	Laterite profiles and goethitic crusts extensive. Pallid saprolite, crusts extensive. Pallid saprolite, crusts extensive. Pallid saprolite, mainly out of shaly rocks, a common substrate.	Shallow, gravelly, brown sandy clay loams. Goethitic crust is close to the surface.	Brown, goethitic gravels	Gently undulating or planar tracts: some as caps of mesas.
fEs	Saprolite, as outcrop/subcrop, mainly from shaly rocks. Some fresh rock outcrop.	Duplex profiles: compact sodic B horizons.	Quartz, shale and fe-coated gravels.	Slightly undulating plains with minor drainage floors.
fEr	Rock outcrop extensive, mainly of shales and cherts: some volcanics.	Very thin profiles of red stoney, clay loam.	Cobble and gravels of cherts, shales and volcanics	Rises, low hills and low strike ridges.
fDg	Deposits, probably over discontinuous goethitic crusts.	Gravelly light clay.	Goethitic gravels with some Fe-stained shales and cherts.	Gently inclined plains merging in places with unifRg.
fDhg	Deposits: hematite granule now as crusts with goethitic matrix. Goethitic crusts a common substrate.	Very shallow gravelly sandy clay loam.	Hematitic granules extensive.	Very gently inclined planar tracts: usually as caps of mesas.
fDrp	Deposits: gravel of chert and shale.	Very gravelly red clay loam and light clay.	Gravels of chert and shale: some hematitic and goethitic granules.	Flat plain.
fDrac	Deposits: gravels of chert and shales.	No soil developed.	Gravels of chert and shale some hematitic and goethitic granules.	Broad, anastomotic, active, stream channels.
hsRg	Laterite profiles: goethitic crusts extensive. Pallid saprolite from McRae shale, a common substrate.	Shallow gravelly brown, acid sandy clay loams.	Goethitic gravels and granules: hematitic granules uncommon.	Slightly undulating tracts: usually deeply incised at the margins.
hbErc	Rock outcrop common: mainly banded-iron and chert. Few pockets of weathered zone.	Rare patches of shallow stoney red clay.	Cobbles of banded-iron and chert.	Smooth, broadly convex crests and slopes.
hbErv	Rock outcrop extensive: mainly banded-iron and chert.	Very rare patches of shallow stoney red clay.	Cobbles of banded-iron and chert.	Steep, irregular slopes and ravines.
hbErm	Rock outcrop extensive: mainly banded-iron and chert.	Rare patches of shallow stoney red clay.	Cobbles of banded-iron and cherts.	Complex of smooth, broadly convex and, locally steep, irregular slopes.
hm Er	Rock outcrop extensive: mainly banded-iron and chert.	Rare patches of shallow stoney, red clay.	Cobbles of banded-iron and chert.	Crests and slopes of broad ridges.
hDrac	Stream channel deposits:cobble and gravel of banded-iron and chert.	No soil.	Cobbles and gravels of banded-iron and chert.	Broad, active, anastomotic channels of major streams.
hDrhgf	Deposits: cobble and gravel of banded-iron and chert, both hematitic and lithic. Hematitic granule sequence as a thick substrate; commonly some clayey deposits, also. Goethitic zone common at depth.	Very stoney, red clay.	Cobbles and gravels of banded-iron and chert: some hematitic granules.	Piedmont tracts, often as gently inclined, fan-like features. Complex of broad shallow drainage floors.
hDrhgif	As above.	As above.	As above.	As above but complexly incised and, in part, fragmented by later phases of erosion.
hDrhgap	As above, but crusts less common.	As above.	As above.	Fluvially active, aggradational plains. Complex array of broad shallow channels and low banks.
hDchg	Deposits: clays, some gravel lenses of banded- iron and chert. Thick sequences of hematitic granule at depth: some goethitic crust.	Friable red clay:some profiles more gravelly than others.	Sporadic patches of hematitic granules.	Stable plains at the toe of piedmont slopes.
hDhg	Deposits of hematitic gravels and granules, as crusts; hematitic and/or goethitic substrate.	Very shallow stony red clay loam.	Hematitic granules and gravels: some goethitic gravels.	Crests of mesas: usually planar and, slightly to moderately inclined. In dissected ends of tributary valleys.
	Calcrete-capped rock outcrop (rocks usually shaly).	Shallow stony calcareous earths.	Scattered fragments of calcrete and shale.	Broadly convex, slightly undulating tracts.
	Index to Map Unit Symbols	٦		
	Geological	Regolithic	Topographic	Landforms
	f Fortescue Group	s saprolite	R Relict terrain	p plains
	h Hamersley Group	r lithic fragments	E Erosional terrain	ap active plains
	m Marra Mamba	c clayey deposits	D Depositional terrain	f fans
	s McRae shale	h hematitic fragments and/or crusts		if incised fans
	b Brockman Formation	g goethitic crusts k calcrete		ac active channels c crests
		r carriere		v ravines, steep slopes.
	the same of the sa	the second secon	1	m complex of crests and ravines.

Regolith-Landform Units hDhg hDrac hDr hgap hDrhgf hDr hgif hbErc hbErm hbErv

10 Kilometers Scale: 1:50,000