

Mountains, Hills and Ranges

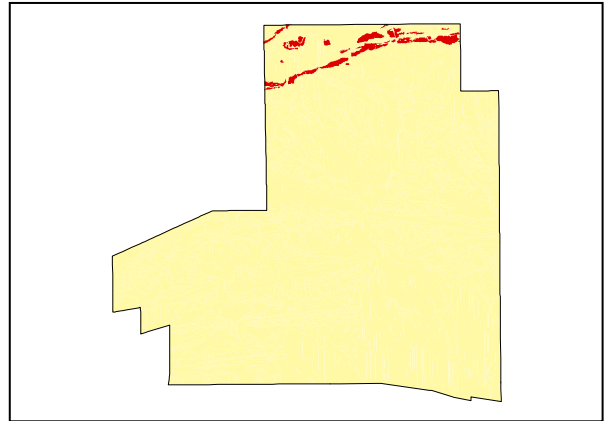
LAND UNIT 1.12
Charles River Gneiss Hills

DESCRIPTION: Hills and Ranges of Charles River Gneiss with sparse Coolabah and Desert Cassia over annual grasses.

SITES: 001, 011, 013, 020



Distribution of land unit.



Area = 4.59 km². 1.39% of mapped area.

LAND CAPABILITY:

ATTRIBUTES	
SLOPE (%)	23
RELIEF (m)	30
SOIL DEPTH (m)	0.05
SURFACE CONDITION	Loose
DEPTH to SUBSTRATE (m)	0.05
REACTION TREND (pH)	7.0
OUTCROP (%)	90
RUNOFF	Rapid
PERMEABILITY	Moderate
DRAINAGE	Moderate
SALINITY (µs/cm)	36.3

DEVELOPMENT RISKS	
EROSION	Severe
ROCK FALL	Moderate
SHEET FLOODING	None
INUNDATION	None
SALINITY	None
ALKALINITY	None
ACIDITY	None

CAPABILITY CLASS					
Formed Roads	Shallow excavations	Septic Disposal	Horticulture	Building Foundations	Landscaping
Poor	Very Poor	Very Poor	Poor	Poor	Poor

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TECHNICAL DETAILS**LAND UNIT 1.12****DESCRIPTION:** Hills and Ranges of Charles River Gneiss outcrops.**GEOLOGY:** The Early Proterozoic Charles River Gneiss forms part of the Arunta Block and is truncated, in the south, by the Charles River Fault that trends generally east-west.**LANDFORM:** The Steep Hills of this land unit, comprising a detrital ridgeline, dominate a landform pattern that includes Very Steep Hills to Rolling Hills. Minor stream channel occurrences follow an interrupted channel network. The general relief of 30m and slopes of 23% promote rapid runoff, moderate permeability and moderate drainage.**SOIL:** Example **Site 011**
MGA. Coords: 7385755mN, 385031mE**CLASSIFICATION:** Lithosol. Rudosol - RU, CY, CZ, AR, I, K, T**SURFACE:** 60% 600mm-2m subangular tabular quartz and gneiss boulder fragments. 20% 200-600mm subangular tabular quartz and gneiss stony fragments. Minimal soil development is restricted to areas between larger gneiss fragments with coarse fragments present throughout the profile.

DEPTH (m)	HORIZON	TEXTURE	pH	SALINITY (µs/cm)	OTHER DETAILS
0.00 - 0.05	A1	Clayey sand (CS)	7.0	36.3	Brown (7.5YR4/4) 20% 6-20mm subangular tabular fine gravelly quartz and 30% 2-6mm subangular tabular medium gravelly quartz.

VEGETATION: **Site 129** (Albrecht, D. and Pitts, B. 1999).

UPPER STRATUM - Usually absent	
Dominant species	
Other species	Coolabah.
MID STRATUM - Isolated shrubs	
Dominant species	Desert Cassia.
Other species	Dead Finish, Harlequin Mistletoe.
LOWER STRATUM - Isolated heath shrubs	
Dominant species	Lignum, Nitre Goosefoot.
Other species	Wild Hops, Bunched Kerosene Grass, Spreading Saltbush, Small Water-fire, Yellow Billybuttons, Bogan Flea, Channel Burr Daisy, Wild orange, Buffel Grass, <i>Centipeda D18576 Andado</i> , Black Crumbweed, Australian Bindweed, <i>Cullen cinereum</i> , Climbing Saltbush, Ruby Saltbush, Curly Windmill Grass, Canegrass, Narrow-leaf Neverfail, Weeping Emu Bush, Mallee Lovegrass, Eight Day Grass, Mueller's Peppergrass, Redflower Trefoil, <i>Maireana scleroptera</i> , Three-wing Bluebush, Swayback Nardoo, Short-fruit Nardoo, Burr Stickseed, Apple Bush, Small Yellow Daisy, White Paper Daisy, Goathead Burr, Tall Copper Burr, <i>Sclerolaena costata</i> , Grey Copper Burr, <i>Sporobolus blakei</i> , Dwarf Swainsona, Grey Germander, Red Spinach, Bindieye, Five-minute Grass.

(See Appendix 3 for botanical names)