

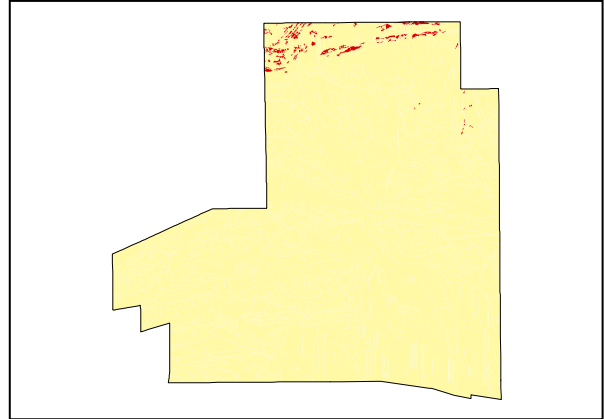
Rises

LAND UNIT 2.05
Calcareous Rises

DESCRIPTION: Loose calcareous concretions overlying amphibolite rich Charles River Gneiss with sparse Shrubs over perennial grasses.

SITES: 002, 005, 007, **008**

Distribution of land unit.



Area = 2.35 km², 0.72% of mapped area.

LAND CAPABILITY:

ATTRIBUTES	
SLOPE (%)	10
RELIEF (m)	30
SOIL DEPTH (m)	0.25
SURFACE CONDITION	Loose
DEPTH TO SUBSTRATE (m)	0.25
REACTION TREND (pH)	7.5 to 9.5
OUTCROP (%)	20
RUNOFF	Rapid
PERMEABILITY	Highly permeable
DRAINAGE	Rapidly drained
SALINITY (µs/cm)	76.5 to 94.0

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

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

Rises

TECHNICAL DETAILS**LAND UNIT 2.05**

DESCRIPTION: Low rises with loose calcareous concretions overlying amphibolite rich Charles River Gneiss supporting sparse shrubs over perennial grasses.

GEOLOGY: Calcrete nodules with calcrete concretions overlying amphibolite rich, early Proterozoic, Charles River Gneiss.

LANDFORM: Undulating rises and occasional ridges up to 30m wide with slopes of 10% and a general relief of 20m. This land unit forms a calcareous capping on areas close to and overlying outcrop of Charles River Gneiss. These perched areas show calcium carbonate haloes around detrital, unaltered amphibole fragments. A process of chemical leaching of calcium from the original amphibole minerals (actinolite or tremolite) may explain the coating effect. Runoff and permeability appear to be moderately rapid and the unit appears to be well drained. Carbonate is disseminated throughout the amphibolite substrate rock matrix.

SOIL: Example from **Site 007**.
MGA. Coords: 7385679mN, 380812mE
Surface soil showed minor root or organic material distribution and appeared to be restricted to spaces between loose and substrate material.

CLASSIFICATION: Red-brown calcareous soils. Calcarosols CA, FB, CZ, IC, A, H, L, U					
SURFACE: 50% 20-60mm angular tabular calcareous fragments as float within areas of about 20% amphibole rich gneiss outcrop.					
DEPTH (m)	HORIZON	TEXTURE	pH	SALINITY ($\mu\text{s}/\text{cm}$)	OTHER DETAILS
0.00 - 0.01	A1k	Sandy loam (SL)	7.5	76.5	Dark brown (7.5YR3/3). 25% 2-6mm angular calcrete concretions. 5% 6-20mm angular gneiss fragments with thin calcareous skin. Moderate effervescence.
0.01 - 0.25	A2k	Sandy loam (SL)	9.5	94.0	Light brown (7.5YR6/4). 25% 2-6mm angular calcrete concretions. Very effervescent.

VEGETATION: **Site 264** (Albrecht, D. and Pitts, B. 1999).

UPPER STRATUM - Absent	
Dominant species	
Other species	
MID STRATUM - Isolated clump of shrubs	
Dominant species	
Other species	<i>Acacia bivenosa</i> , Desert Poplar, <i>Cyperus centralis</i> ,
LOWER STRATUM - Sparse tussock grassland	
Dominant species	Desert Chinese Lantern, Dolomite Daisy, Oat Grass.
Other species	Curly Pod Wattle, Acacia Bush, Bullockbush, Common Joyweed, <i>Boerhavia repleta</i> , Wild Turnip, Buffel Grass, Spreading Sneezeweed, Desert Sneezeweed, Rock Fern, Perennial Sunray, Australian Hounds Tooth, Hopbush, Hopbush, Oatgrass, <i>Euphorbia centralis</i> , Smooth Heliotrope, Slender Sunray, Fire Sida, Goosefoot Potato Bush, Rock Nightshade, <i>Stipa centralis</i> , Wertabona Daisy, <i>Tephrosia supina</i> , Peach-leaved Poison Bush.

(See Appendix 3 for botanical names)