

Mountains, Hills and Ranges

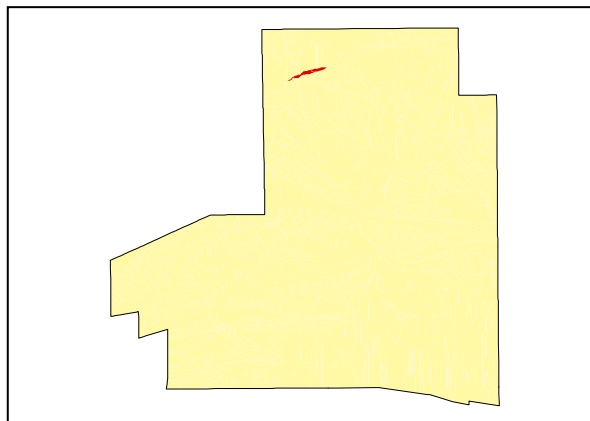
**LAND UNIT 1.14****Highly Deformed Schistose Biotite Hills**

**DESCRIPTION:** Highly deformed schistose biotite hills with Mulga and /or Witchetty Bush and Ironwood over Silver Indigo and annual and perennial grasses.

**SITE:** 140



**Distribution of land unit.**



Area = 0.32 km<sup>2</sup>, 0.10% of mapped area.

**LAND CAPABILITY:**

ATTRIBUTES	
SLOPE (%)	40
RELIEF (m)	90
SOIL DEPTH (m)	0.20
SURFACE CONDITION	Loose. Firm in part.
DEPTH to SUBSTRATE (m)	0.20
REACTION TREND (pH)	6.5
OUTCROP (%)	80
RUNOFF	Rapid
PERMEABILITY	Moderately permeable
DRAINAGE	Moderately well drained
SALINITY (µs/cm)	68.5

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

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

## Mountains, Hills and Ranges

**TECHNICAL DETAILS****LAND UNIT 1.14**

**DESCRIPTION:** Highly deformed schistose hills with biotite being the dominant mineral.

**GEOLOGY:** Late Proterozoic highly deformed rocks formed within the Charles River Gneiss formation. Deformation may be due to the influence of the Charles River Fault on the gneiss and the abutting Teppa Hill Metamorphic unit.

**LANDFORM:** The Steep Hills of this elongate ridge (250m x 2.4km) dominate a landform pattern that comprises Very Steep Hills to Rolling Hills. A loose detrital surface of schist fragments overlays, in part, extensive bedrock outcrop. A well-developed integrated channel network exists between individual hills and flows to a common sand bed creek. The general relief of 90m and slopes of 40% promote rapid runoff, moderate permeability and moderate drainage.

**SOIL:** Example **Site 140**  
MGA. Coords: 7383740mN, 381416mE

**CLASSIFICATION:** Lithosol. Rudosol - CU, CY, CZ, AR, I, K, T

**SURFACE:** 30% 20-60mm coarse gravelly angular platy fragments of schist and quartz. 10% 600mm-2m large angular platy boulder of schist and quartz and 2% angular platy boulders of schist and quartz.

DEPTH (m)	HORIZON	TEXTURE	pH	SALINITY ( $\mu\text{s/cm}$ )	OTHER DETAILS
0.00 - 0.20	A1	Clayey sand (CS)(K)	6.5	68.5	Dark reddish brown (2.5YR3/4). 40% 2-6 fine gravelly angular platy schist and quartz fragments and 10% 6-20mm medium gravelly angular platy schist and quartz fragments. Non-effervescent.

**VEGETATION:** **Site 274** (Albrecht, D. and Pitts, B. 1999).

<b>UPPER STRATUM</b> - Isolated trees	
Dominant species	
Other species	Mulga, Bloodwood,
<b>MID STRATUM</b> - Sparse shrubland	
Dominant species	
Other species	Witchetty Bush, Acacia Bush, Native Fuchsia, Sturts Hibiscus, Poison Peach, Needle-leaved Threeawn, Native Thornapple, Holly Grevillea, Apple Bush, Mulga Stick-plant, Desert Chinese Lantern,
<b>LOWER STRATUM</b> - Open heath	
Dominant species	Silver Indigo.
Other species	Leafy Burr Daisy, Pale Spike-rush, <i>Euphorbia centralis</i> , Smooth Heliotrope, <i>Kohautia australiensis</i> , Sand Sunray, Fan Flower, Slender Glasswort, Dwarf Lantern Flower, Mimosa Bush, Barley Mitchell Grass, <i>Boerhavia repleta</i> , Buffel Grass, Desert Sneezeweed, Rat-tail Goosefoot, Rat Tails, <i>Eragrostis olida</i> , Silky Browntop, Caustic Weed, <i>Heliotropium supinum</i> , Limestone Pussycats tails, Silver Tails, Crimson Foxtail, Tangled Poverty Bush, <i>Senecio laceratus</i> , Diel's Pigeon Grass, Australian Dropseed, Desert Chinese Lantern, Wire-leaf Mistletoe, Crested Goosefoot, Knottybutt Neverfail, <i>Heliotropium sp.</i> (one or both of <i>H.cunninghamii</i> & <i>H.tanythrix</i> ), Cottonbush, Common Nardo, Large Green Pusssytail, Slender Spurge, <i>Sida laevis</i>

(See Appendix 3 for botanical names)