## **LAND UNIT 1.02**

# Calc - Silicate Hills

**DESCRIPTION:** Calc-Silicate rock hills and ranges with Bloodwood, Mulga and Fuchsia Bush.

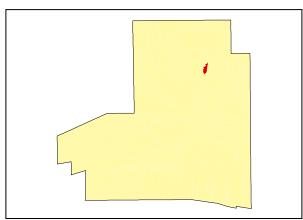
**SITES:** 038, **039** 

**LAND CAPABILITY:** 



ATTRIBUTES		
SLOPE (%)	35	
RELIEF (m)	100	
SOIL DEPTH (m)	0.20	
SURFACE CONDITION	Loose	
DEPTH to SUBSTRATE (m)	0.20	
REACTION TREND (pH)	6.0	
OUTCROP (%)	80	
RUNOFF	Very Rapid	
PERMEABILITY	Moderately permeable	
DRAINAGE	Rapidly drained	
SALINITY (µs/cm)	67.1	

#### Distribution of land unit



Area =  $0.39 \text{ km}^2$ , 0.12% of mapped area.

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

<sup>\*</sup> If developing on slope, consideration should be given to the potential of Rock fall (strike slip).

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

Mountains, Hills and Ranges

#### TECHNICAL DETAILS

### **LAND UNIT 1.02**

**DESCRIPTION:** A rugged range of calc-silicate rock distinguished mainly by its flat topped, plateau surface.

**GEOLOGY:** Part of the Early Proterozoic, Hayes Metamorphic Complex. The formation is within the

Sadadeen Range Gneiss rock unit, shows a typical schistose texture and contains random

quartz veining.

**LANDFORM:** This land unit is characterised by a relatively flat plateau, possibly a residual palaeosurface,

with steep to very steep slopes and is prominent within the surrounding Sadadeen Range Gneiss Hills and Rises. Relief is generally up to about 100m with slopes varying from 40 to 58%. Due to the rocky nature of the land unit drainage features are not well formed. Runoff is very rapid but dispersed by large rock fragments that form the steep slopes.

Permeability would be moderate and drainage would be rapid due to the highly fractured and

laminated nature of the rock.

SOIL: Example from Site 039

MGA. Coords: 7380505mN, 387024mE

#### CLASSIFICATION: Lithosol, Rudosol - RU, CY, DU, AR, I, K, T

**SURFACE:** Loose with 10% 200-600mm subangular, platy gneiss fragments. Soil formation on the slopes is negligible and restricted to small crevices between boulder size rocks whilst the undulating plateau surface has a broader but shallow soil distribution.

DEPTH	HORIZON	TEXTURE	рН	SALINITY	OTHER DETAILS
(m)				(μs/cm)	
0.00 - 0.20	A1	Clayey sand (CS)	6.0	67.10	Strong brown (7.5YR 5/6). Apedal, single grained structure with a sandy fabric. 5% 20-60mm angular fragments of quartz, 10% 6-20mm angular platy fragments of quartz and gneiss, 20% 2-6mm angular platy fragments of gneiss and quartz.

**VEGETATION:** Site 91 (Albrecht, D. and Pitts, B. 1999).

UPPER STRATUM - Isolated trees			
Dominant species			
Other species	Mulga, Dead Finish, Bloodwood.		
MID STRATUM - Isola	MID STRATUM - Isolated low shrubs		
Dominant species			
Other species	Long-leaf Corkwood, Velvet Hibiscus, Silver Cassia, Blunt-leaf Cassia, Silver Sida, Rock Fuchsia Bush, Native Fuchsia.		
LOWER STRATUM - Isolated grasses			
Dominant species	Dwarf Lantern Flower, Wild Hops, Bunched Kerosene Grass, Tar Vine, Woolly Cloak Fern, Black Crumbweed, Cotton panic Grass, Mountain Wanderrie, Caustic Weed, Tropical Speedwell, Green Peppercress, Five-minute grass.		
Other species	Slender Lantern Bush, Flat-awned Threeawn, Buffel Grass, Woollyoat Grass, Prostrate Heliotrope, Sticky Indigo, Indigofera leucotricha, Hairy Mulla Mulla, Yellow Tails, Silver Tails, Ptilotus sessilifolius, Rhagodia eremaea, Buckbush, Cartwheel Burr, Hill Thread-petal, Kangaroo Grass, Tribulus eichlerianus s.lat., Bulbostylis barbata, Tickweed, Australian Bindweed, Climbing Saltbush, Ruby saltbush, Gnephosis arachnoidea, Low Bluebush, Native Millet.		

(See Appendix 3 for botanical names)