

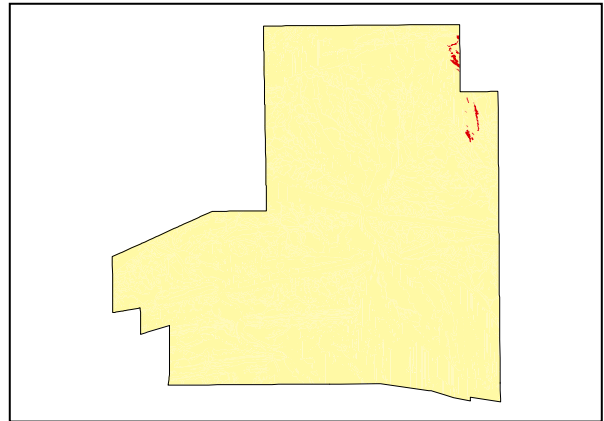
Mountains, Hills and Ranges

LAND UNIT 1.07
Quartz Rich Emily Gap Schist

DESCRIPTION: Rugged low hills of silcrete / quartz rich Emily Gap Schist with occasional Whitewood, Mulga and Witchetty Bush over annual grasses.

SITE: 022

Distribution of mapped area.



Area = 0.64 km², 0.19% of mapped area.

LAND CAPABILITY:

ATTRIBUTES	
SLOPE (%)	30
RELIEF (m)	30
SOIL DEPTH (m)	0.05
SURFACE CONDITION	Loose
DEPTH to SUBSTRATE (m)	0.05
REACTION TREND (pH)	6.5
OUTCROP (%)	90
RUNOFF	Very rapid
PERMEABILITY	Slowly permeable
DRAINAGE	Rapidly drained
SALINITY (µs/cm)	26.1

DEVELOPMENT RISKS	
EROSION	None
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	Very Poor	Very Poor	Very Poor

Hills and Ranges

TECHNICAL DETAILS**LAND UNIT 1.07****DESCRIPTION:** Rugged outcrop of Silcrete / Quartz rich Emily Gap Schist.**GEOLOGY:** Part of the Early Proterozoic Hayes Metamorphic Complex. Lithology is mostly broad (up to 10m) quartz lenses that protrude from the surrounding Emily Gap Schist. The lensoidal quartz is most likely part of a pegmatite outcrop as feldspars and mica fragments occur nearby.**LANDFORM:** The low hills of this land unit are generally capped with jagged crests of quartz and, in some areas, with silcrete. Relief and slope vary from 30m to 40m and 30% to 45% respectively. The steep, jagged *insitu* quartz lenses show extreme fracture characteristics which would enable rapid drainage whilst the quartz would retard permeability.**SOIL:** Example from **Site 022**
MGA. Coords: 7384754.00mN, 389622.00mE**CLASSIFICATION:** Lithosol. Rudosol - RU, CY, DU, AR, I, K, T

SURFACE: 80% 600mm -2m angular quartz boulders and 10% 60-200mm angular quartz cobbles form the major part of the slopes. Rudimentary soil formation has occurred between boulders and other rock fragments that have protected areas from the flushing effects of rapid water runoff.

DEPTH (m)	HORIZON	TEXTURE	pH	SALINITY ($\mu\text{s/cm}$)	OTHER DETAILS
0.00 - 0.05	A1	Loamy sand (LS)	6.5	26.1	Strong brown (7.5YR 5/6). 30% 2-6mm angular quartz fragments and 20% 6-20mm angular quartz fragments. Mica flakes evident in coarse and fine fraction.

VEGETATION: **Site 250** (Albrecht, D. and Pitts, B. 1999).

UPPER STRATUM - Isolated trees	
Dominant species	
Other species	Whitewood,
MID STRATUM - Sparse shrubland	
Dominant species	Witchetty Bush, Rock Fuchsia Bush,
Other species	Blunt-leaf Cassia, White Cassia, Mulga, Dead Finish, Native Fuchsia,
LOWER STRATUM - Isolated clump of tussock grass	
Dominant species	
Other species	<i>Heliotropium sp.</i> (one or both of <i>H.cunninghamii</i> & <i>H.tanythrix</i>), Green Peppercross, Veined Peppercross, <i>Tephrosia brachyodon s.lat.</i> , Five-minute Grass, Dwarf Lantern Flower, <i>Acetosa vesicaria</i> , Tar Vine, Bogan Flea, Leafy Burr Daisy, Tickweed, Cotton Panic Grass, Woollyoat Grass, Weeping Emu Bush, Mountain Wanderrie, Desert Spurge, Tropical Speedwell, Orange Spade Flower, Sticky Indigo, Munyeroo, Yellow Tails, Silver Tails, <i>Rhagodia eremaea</i> , <i>Rhodanthe floribunda</i> , Buck Bush, Tall Copper Burr, <i>Sida phaeotricha</i> , Wild Tomato, <i>Tribulus eichlerianus s.lat.</i> , Cattle Bush.

(See Appendix 3 for botanical names)