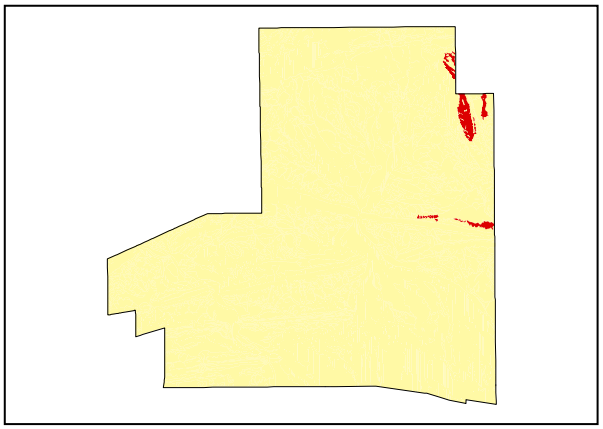
Mountains, Hills and Ranges

LAND UNIT 1.08

Emily Gap Schist Hills

DESCRIPTION: Rugged Hills of Emily Gap Schist with Whitewood and Ironwood over annual grasses.
SITES: 027, **033**

Distribution of land unit.



Area = 2.92 km^2, 0.89% of mapped area.

LAND CAPABILITY:

ATTRIBUTES	
SLOPE (%)	40
RELIEF (m)	80
SOIL DEPTH (m)	0.05
SURFACE CONDITION	Loose
DEPTH to SUBSTRATE (m)	0.05 - 0.20
REACTION TREND (pH)	6.5
OUTCROP (%)	95
RUNOFF	Very rapid
PERMEABILITY	Highly permeable
DRAINAGE	Rapidly drained
SALINITY (µs/cm)	40.7

DEVELOPMENT RISKS	
EROSION	Severe
ROCK FALL	Severe
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	Poor	Very Poor

TECHNICAL DETAILS — LAND UNIT 1.08

DESCRIPTION: Rugged outcrop of Emily Gap Schist. Characterised by a distinct lack of wide (1.0-3.0m) quartz dyke outcrops.

GEOLOGY: Part of the Early Proterozoic Hayes Metamorphic Complex. The lithology of this land unit mostly comprises re-crystallised sediments with narrow (<1.0m) quartz lenses following the schistose laminations.

LANDFORM: The steep eroded hills of this land unit are generally capped with jagged crests of quartz that appears to be part of small pegmatite outcrops within the overall schist unit. The general is up to 80m with slopes up to 40%. Fracturing and the steep dip of the laminations enable rapid drainage whilst the clayey sand soil texture would enable high permeability. Steep dip of strata and slope would enable very rapid runoff.

SOIL: Example from **Site 033**
MGA. Coords: 7384093mN, 389322mE

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

SURFACE: 30% 600-2m angular tabular schistose boulder rock fragments and 20% 200-600mm angular tabular schistose stony rock fragments. Rudimentary soil development is a result of rock fragments trapping erosional material.

DEPTH (m)	HORIZON	TEXTURE	pH	SALINITY (µs/cm)	OTHER DETAILS
0.00 - 0.05	A1	Clayey sand (CS)	6.5	40.7	Strong brown (7.5YR 5/6). 5% 20-60mm angular tabular quartz and parent rock fragments. 15% 6-200mm angular tabular quartz and parent rock fragments. 25% 2-6mm angular tabular quartz and parent rock fragments.

VEGETATION: **Site 115** (Albrecht, D. and Pitts, B. 1999).

UPPER STRATUM - Isolated trees	
Dominant species	Whitewood.
Other species	Ironwood.
MID STRATUM - Isolated shrub	
Dominant species	Witchetty Bush.
Other species	Native Fuchsia, Dead Finish.
LOWER STRATUM - Isolated clump of tussock grass	
Dominant species	Bunched Kerosene Grass, Tickweed, Green Peppercress, Dense Cassia, Narrow Thread-petal, Five-minute Grass.
Other species	Dead Finish, *Acetosa vesicaria*, Dwarf Lantern Flower, Tar Vine, Buffel grass, Woolly Cloak Fern, *Chrysocephalum semicalvum*, Cotton Panic grass, Ruby Saltbush, Oatgrass, Woollyoat Grass, Mountain Wanderrie, Caustic Weed, Desert Spurge, Tropical Speedwell, *Heliotropium sp. (*one or both *of H.cunninghamii & H.tanythrix),* Orange Spade Flower, Sticky Indigo, *Marsdenia australis*, Munyeroo, Large Green Pussytail, Buck Bush, Tall Copper Burr, Silver Cassia, Wild Tomato, Kangaroo Grass, *Tribulus eichlerianus s.lat.,* Cattle Bush.

(See Appendix 3 for botanical names)