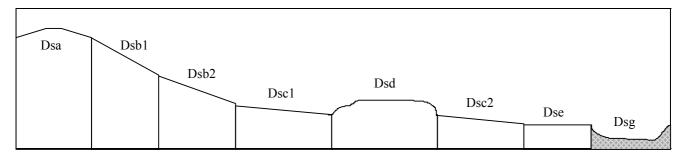
Land Unit:	Devonian sediments, drainage	Land Unit symbol:	Dsg
	depressions	% of study area:	1.6



General Description:

Within this landscape, a dendritic drainage pattern prevails but the soil profile varies considerably in depth and textural changes, depending on the position of the drainage depression in the landscape, the size of the catchment area and the slope. Tree-clearing, house and road construction and any other lower-water-use activity within the catchment places additional pressure on the drainage depressions through increased water flow and sediment load, thereby increasing the hazard of sheet, gully and streambank erosion. A variable hardpan occurs.

Site characteristics: Site No. 5

Parent material		Depth to seasonal			
Age:	Devonian	watertable:	0 - 1 m		
Lithology:	Sandstones and siltstones	Potential recharge			
Landform		to groundwater:	Variable *		
Pattern:	Undulating rises	Flooding risk:	High		
Element:	Drainage depression	Drainage:	Poorly drained		
Slope		Depth to hardrock:	> 2 m		
Common:	5%	Rock outcrop:	0%		
Range:	3 - 7%	Annual Rainfall:	940 mm		
Native vegetation:	Cleared				
Present land use:	Present land use: Cleared; native and improved pastures for the grazing of sheep and cattle				

^{*} Low when impermeable hardpan occurs, High when bedrock is intersected

Land degradation:

Degradation	Water erosion		Wind erosion	Coltina	Acidification	
process	Sheet/rill	Gully	willa erosion	Salting	Actumeation	
Susceptibility	High	High	Low	Moderate	High	
Incidence	Low	Low	Nil	Low	Low	

Soil profile characteristics:

Permeability	(measured - average, range): (estimated):	- Slow: 50 - 100 mm/day
Available water capacity:		160 mm H ₂ O
Linear Shrinkage (B horizon):		10%

Soil profile description:

Land Unit symbol: Dsg

A 0 - 12 cm Dark brown (7.5YR3/2) silty loam, weak subangular blocky structure, peds 12 mm, rough fabric, very weak consistence - moist, high organic matter, pH 5.5. Clear transition to:

Brown (7.5YR5/4) silty clay loam, weak angular blocky structure, peds 5 mm, smooth fabric, moderately weak consistence - moist, few ironstone gravel fragments, low organic matter, pH 5.7.

Gradual transition to:

B2 43 - 67 cm Reddish yellow (7.5YR6/6) medium clay, medium faint brown mottles are common, moderate

subangular blocky structure, peds 12 mm, very weak consistence - moist, many angular ironstone

gravel fragments, pH 5.9. Abrupt transition to:

Pan A strongly cemented, continuous, massive sesquioxidic hardpan.

Soil classification:

Factual Key (Northcote, 1979): Gn 3.71 - 3/1/012

Australian Soil Classification (Isbell, 1992): Ferric, Petroferric, Yellow, Brown, Dermosol; medium,

slightly gravelly silty/clayey, deep

Unified Soil Group:

Interpretation of soil analyses: (see Appendix 2 for analytical results)

Horizon	pН	Gravel %	E.C. (salts)	Nutrient status	P	K	Al	Organic matter	Dispersibility
A	5.5	5	VL	L	D	S	T	Н	L
B1	5.7	8	VL	L	D	D	T	L	M
B21	5.7	7	VL	VL	D	D	T	L	M
B22	5.9	30	VL	VL	D	D	S	VL	L

VL: Very Low L: Low M: Moderate H: High VH: Very High D: Deficient S: Satisfactory T: Toxic NA: Not Available ** Acidic

Land capability ratings and limitations for specific land uses:

Land use	Rating	Major limiting factor(s)				
Agriculture	C ₃ T ₃ S ₅	Depth to seasonal watertable < 1 metre, seasonal overland water flow, high susceptibility to erosion				
Building foundations						
- slab	5	Poor - very poor drainage, depth to seasonal watertable < 1 metre and				
- stumps/footings	5	seasonal overland water flow				
Effluent disposal	5	Poor - very poor drainage seasonal overland water flow, seasonal water				
(septic tanks)		table < 1 metre				
Farm dams	5	Very low suitability of subsoil, depth to seasonal watertable < 3 metres				
Residential - rural	5	Very low capability for effluent disposal, farm dams and secondary roads				
- urban	5	Very low capability for secondary roads				
Scenic value	3, 4 & 5	Low Scenic Quality and distance from public thoroughfares				
Secondary roads 5		Poor - very poor drainage, highly susceptible to seasonal flooding, seasonal water table at < 1 metre				