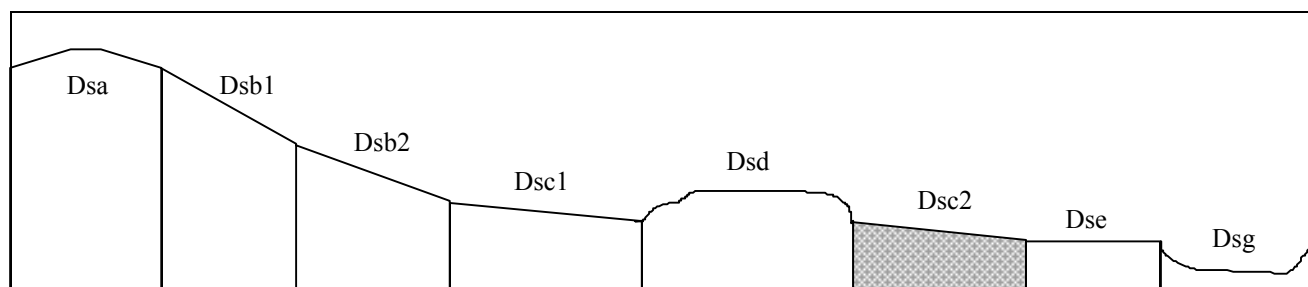


<b>Land Unit:</b> Devonian sediments, lower moderate slopes	<b>Land Unit symbol:</b> Dsc2
	<b>% of study area:</b> 21.6



### General Description:

This lower section (10 - 20%) of the moderate slope category is a common land unit throughout the study area. The topsoils are prone to compaction which leads to an increase in runoff and a decline in pasture vigour and the quantity of water stored in the soil for the following growing season. Improved pastures sown into the acidic topsoils have had limited success whereas the native pastures alone have a limited yield potential.

### Site characteristics:

**Site No.** 109 and 4

Parent material		Depth to seasonal watertable:		> 2 m
Age:	Devonian	Potential recharge to groundwater:		Moderate
Lithology:	Sandstones and siltstones	Flooding risk:		Nil
Landform		Drainage:		Imperfectly drained
Pattern:	Steep hills	Depth to hardrock:		1.5 m
Element:	Lower moderate slopes	Rock outcrop:		0%
Slope		Annual rainfall:		940 mm
Common:	17%			
Range:	10 - 20%			
Native vegetation:		Broad-leaf and Narrow-leaf Peppermint, Red Stringybark, Red Box, Long-leaf Box		
Present land use:		Cleared; native and improved pastures for grazing		

### Land degradation:

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

### Soil profile characteristics:

Permeability	(measured - average, range):	300 (125 - 490) mm/day
	(estimated):	-
Available water capacity:		210 mm H <sub>2</sub> O
Linear Shrinkage (B horizon):		8%

**Soil profile description:****Land Unit symbol:** Dsc2

- A 0 - 10 cm Brown (10YR5/3) silty loam, apedal massive (structure), earthy fabric, moderately weak consistence - slightly moist, ironstone gravel fragments are common, high organic matter, pH 5.1. Abrupt transition to:
- B21 10 - 23 cm Yellowish brown (10YR5/4) silty clay loam, conspicuously bleached when dry, rough fabric, moderately firm consistence, slightly moist, ironstone gravel fragments are common, pH 5.2. Clear transition to:
- B22 23 - 56 cm Light yellowish brown (10YR6/4) medium heavy clay, many medium distinct red mottles, strong angular blocky structure, peds 15 mm, smooth fabric, moderately firm consistence - moist, 5% humic segregations, many angular ironstone gravel fragments, pH 5.4. Diffuse transition to:
- B23 56 - 140 cm Light yellowish brown (10YR6/4) light medium clay, many medium prominent red mottles, moderate angular blocky structure, peds 10 mm, smooth fabric, moderately firm consistence - moist, angular sandstone gravel fragments are abundant, pH 5.4.

**Soil classification:**

Factual Key (Northcote, 1979):

Gn 3.04 - 3/0/023

Australian Soil Classification (Isbell, 1992):

Bleached - Acidic, Magnesic, Yellow, Dermosol; medium, gravelly, silty/clayey, moderate

Unified Soil Group:

ML

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

Horizon	pH	Gravel %	E.C. (salts)	Nutrient status	P	K	Al	Organic matter	Dispersibility
A	5.1 **	13	VL	VL	D	S	T	H	L
B21	5.2 **	16	VL	VL	D	D	T	L	L
B22	5.4 **	25	VL	VL	D	D	T	VL	L
B23	5.4 **	12	VL	VL	D	D	T	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 <sub>3</sub> T <sub>4</sub> S <sub>3</sub>	Steep slopes
Building foundations		
- slab	4	Steep slopes, imperfect drainage, high susceptibility to slope failure
- stumps/footings	4	Steep slopes, imperfect drainage, high susceptibility to slope failure
Effluent disposal (septic tanks)	4	Imperfect drainage
Farm dams	4	Steep slopes, low suitability of subsoil, shallow soils, high permeability, high susceptibility to slope failure
Residential - rural	4	Low capability for slab foundations effluent disposal, secondary roads and farm dams
- urban	4	Low capability for slab foundations and secondary roads
Scenic value	3 & 4	Low Scenic Quality
Secondary roads	4	Steep slopes, imperfect drainage, high susceptibility to slope failure, high dispersibility and low suitability of subsoil