

General Description:

Situated immediately downslope of land unit Tfc1 these areas have a deep soil profile with a moderate permeability. The low fertility, low pH and high erosion risk restrict agricultural land use however the high water holding capacity of the soil profile and the gentler slopes have resulted in all of this land unit being cleared and used for grazing.

Site characteristics:

Site No. 84

Parent material		Depth to seasonal		
Age:	Tertiary	watertable:	> 2 m	
Lithology:	Colluvium	Potential recharge		
Landform		to groundwater:	Low	
Pattern:	Rolling rises	Flooding risk:	Nil	
Element:	Midslopes	Drainage:	Moderately well drained	
Slope		Depth to hardrock:	> 2 m	
Common:	15%	Rock outcrop:	0%	
Range:	10 - 20%	Annual rainfall:	940 mm	
Native vegetation: Broad leaf Peppermint, Common Cassinia, Bracken				
Present land use:	Cleared; native and improved pastures for sheep and cattle production			

Land degradation:

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

Soil profile characteristics:

Permeability	(measured - average, range): (estimated):	250 (140 - 340) mm/day -
Available water capacity:		280 mm H ₂ O
Linear Shrinkage (B horizon):		14%

Soil profile description:

Land Unit symbol: Tfc2

- A1 0-11 cm Dark brown (7.5YR4/2) loam fine sandy, apedal massive (structure), earthy fabric, moderately weak consistence dry, few subangular medium ironstone gravel fragments, moderate organic matter, pH 5.4. Clear transition to:
- A2e 11 37 cm Strong brown (7.5YR5/6) light sandy clay loam, apedal massive (structure), conspicuously bleached (7.5YR7/4 dry), sandy fabric, moderately firm consistence dry, few ironstone gravel fragments, pH 5.4. Clear transition to:
- B21t 37 74 cm Strong brown (7.5YR5/6) medium clay, medium faint yellow mottles are common, strong subangular blocky structure, peds 7 mm, smooth fabric, moderately firm consistence slightly moist, subangular sandstone fragments are common, pH 5.5. Diffuse transition to:
- B22 74 120⁺cm Strong brown (7.5YR5/6) medium clay, many coarse distinct grey and orange mottles, strong lenticular structure, peds 15 mm, moderately firm consistence slightly moist, few subangular sandstone stones, pH 5.4.

Soil classification:

Factual Key (Northcote, 1979):	Dy 3.41 - 3/0/037
Australian Soil Classification (Isbell, 1992):	Bleached - Mottled, Magnesic, Brown, Chromosol;
	medium slightly gravelly, loamy/clayey, deep
Unified Soil Group:	MH

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

Horizon	рН	Gravel %	E.C. (salts)	Nutrient status	Р	K	Al	Organic matter	Dispersibility
A1	5.4 **	9	VL	VL	D	S	Т	М	L
A2e	5.4 **	4	VL	VL	D	D	Т	VL	L
B21t	5.5	11	VL	VL	D	D	Т	VL	L
B22	5.4 **	2	VL	VL	D	D	Т	VL	L
VL: Very Low L: Low		M	M: Moderate		H: High		VH: Very H	igh	
D: Deficient S: Satisfactory		y T:	Toxic	c NA: Not Available ** Acidic					

Land capability ratings and limitations for specific land uses:

Land use	Rating	Major limiting factor(s)
Agriculture	C ₃ T ₄ S ₃	Steep slopes
Building foundations - slab - stumps/footings	4 4	Steep slopes, high susceptibility to slope failure Steep slopes, high susceptibility to slope failure
Effluent disposal (septic tanks)	3	Nil
Farm dams	5	Very low suitability of subsoil, steep slopes, high permeability, high susceptibility to slope failure
Residential - rural - urban	5	Very low capability for farm dams, low capability for slab foundations and secondary roads Low capability for slab foundations and secondary roads
Scenic value	3 & 4	Low Scenic Quality
Secondary roads	4	Steep slopes, high susceptibility to slope failure