



General Description:

These outwash slopes from the volcanic extension points such as the Jim Jim and Hanging Rock comprise <1% of the Shire. The soils have an unusually deep fine sandy loam topsoil which is particularly susceptible to erosion, should the usually dense grass cover be removed. The very low nutrient status of the topsoil severely limits the introduction of improved pasture species.

Site characteristics: Site No. 24

Parent material		Depth seasonal	> 2 m
Age:	Tertiary	watertable:	
Lithology:	Volcanic		
Landform		Potential recharge to	High
Pattern:	Gently undulating plain with isolated cones	groundwater:	
Element:	Outwash slope		
Slope		Flooding risk:	Nil
common:	6%		
range:	3 – 10%		
Rock outcrop:	0%	Drainage:	> 2.0 m
		Depth to hardrock:	1.0%
		Proportion of Shire:	

Native vegetation: Swamp Gum, Manna Gum

Present land use: Grazing (native & introduced pastures)

Land	Water erosion		Wind	Salting	Acidification
degradation:	Sheet/rill	Gully			
Susceptibility	Moderate	Low	Low	Very low	High
Incidence	High	Low	Nil	Nil	Moderate

Soil profile characteristics:

Permeability (measured - average, range):	
(estimated):	1100, 450 - 2200 mm/d
Available water capacity:	300 mm H ₂ O
Linear Shrinkage (B horizon):	14%

Map Unit Symbol: Tvo

Soil profile description:

A₁₁ 0-18 cm Dark brown (10YR 3/3) fine sandy loam, root-hair mottling, weak granular

structure, 3 mm, rough fabric, loose consistence, pH 5.5. Clear transition to

A₁₂ 18-34 cm Yellowish brown (10YR 5/6), fine sandy loam, root-hair mottling, moderate

granular structure 4 mm, rough fabric, <2% ferruginous gravel, pH 5.3. Abrupt

transition to

A₂ 34-65 cm Light yellowish brown (10YR 6/4) fine sandy loam, bleached (10 YR 7/2 dry)

medium distinct yellow-brown mottles, moderate granular structure 4 mm earthy fabric, moderately cemented massive broken fragipan, <2%,

ferruginous gravel pH 5.9. Abrupt transition to

B₂ 65-200+ cm Dark greyish brown (10YR 4/2) light medium clay, many coarse prominent

orange mottles, moderate subangular blocky structure, 40 mm, smooth fabric

pH 5.0.

Soil classification:

Factual Key (Northcote): Dy 3.41

Australian Soil Classification: Bleached mottled Magnesic, Grey Chromosol, very deep, thick,

loamy, non-gravelly

Unified Soil Group: NA

Interpretation of soil analyses*

Horizon	рН	Gravel	E.C.	Nutrient status	Р	K	Al	Org. matter	Dispersibility
A ₁₁	5.5**	<1	VL	VL	D	D	Т	M	L
A ₁₂	5.3**	<1	VL	VL	D	D	Т	L	L
A ₂	5.9	< 1	VL	VL	D	D	S	VL	L
B ₂	5.6	< 1	VL	M	D	S	Т	VL	L

 VL : Very Low
 L : Low
 M : Moderate
 H: High
 VH : Very High

 D: Deficient
 S: Satisfactory
 T: Toxic
 ** Acid
 NA : Not available

Land capability assessment

Land use	Class	Major limiting feature (s)
Agriculture (CTS values)	C ₃ T ₃ S ₄	High susceptibility to gully erosion
Effluent disposal (septic tanks)	2	Nil
Farm dams (earthen)	4	Rapid permeability
Building foundations * slab * stumps/footings	3 3	Moderate slopes, moderate risk of slope failure Moderate linear shrinkage, moderate risk of slope failure