

A. GENERAL DESCRIPTION :

Gentle crests generally found in the undulating and low sedimentary hills. The soils associated with these crests are variable in depth and gravelly throughout. These soils are gradational in nature with hardsetting loam top soils overlying bleached clay loams and light grey light to light-medium clays. Nutrient status is low throughout the profile and bedrock may outcrop occassionally. Yellow duplex soils that occur on the gentle and moderate slopes may also occur in this unit.

SITE CHARACTERISTICS :

Parent Material Age:	Devonian	Depth to Seas. Watertable:	>10.0m	
Parent Material Lithology:	Sediments	Flooding Risk:	Nil	
Landform Pattern:	Undulating/ low hills	Drainage:	Well drained	
Landform Element:	Crest	Rock Outcrop:	0-5%	
Slope a) common:	0%	Depth to Hard Rock:	0.5-1.0m	
Slope b) range:	0-3%	Present Land Use:	Native forest/grazing	
Potential Recharge to Groun	dwater: Moderate/ high	Moderate/ high		
Major Vegetation Species:	Long-leaf Box,	Long-leaf Box, Broad-leaf Peppermint, Blackwood		

LAND DEGRADATION :

Land Degradation	Water Erosion		Wind Erosion	Mass Movement	Salting	Acidification
	sheet / rill	gully				
Susceptibility	Very low	Low	Very low	Very low	Very low	Low
Incidence	Very low	Very low	Very low	Very low	Very low	Not available

B. SOIL PROFILE

PROFILE DESCRIPTION

A1	0-60mm	Hardsetting greyish brown (10YR4/2) loam fine sandy, apedal, earthy c, moderately firm consistence, common medium sized angular sedimentary gravel fragments, high organic matter, pH 3.9. Clear transition to:
A21	60-380mm	Yellowish brown (10YR5/6) fine sandy clay loam with silt, bleached (10YR7/4) when dry, apedal, earthy, very firm consistence, many sedimentary gravel fragments and ironstone nodules, pH 4.0. Gradual transition to:
A22	380-640mm	Light yellowish brown (10YR6/4) silty clay, bleached (10YR8/2) when dry, a few faint red and orange mottles, apedal, earthy, very firm consistence, abundant medium sized sedimentary gravel fragments, pH 4.8. Gradual transition to:
В	640-1000mm	Light grey (10YR7/1) light medium clay, many coarse distinct orange mottles, apedal, earthy, moderately strong consistence, many medium sized sedimentary gravel fragments, pH 4.1.

C 1000mm Rock (sedimentary)

Factual Key (Northcote):

Australian Soil Classification:

INTERPRETATION OF LABORATORY ANALYSIS

Gn2.94 (major), Dy3.41, Gn4.64, Gn4.51 (minor)

Bleached-Mottled, Magnesic, Grey Kandosol; thin, moderately gravelly, loamy/clayey, moderate.

Unified Soil Group:

CL

Horizon	pH (CaCl ₂)	%Gravel	E.C. (salts)	Nutrient Status	Р	к	AI	Organic matter	Dispersibility
A1	3.9**	29.9	VL	VL	D	S	Т	Н	L
A21	4.0**	31.5	VL	VL	D	S	Т	L	М
A22	4.8	38.0	VL	VL	D	D	Т	VL	М
В	4.1**	15.3	VL	L	D	S	Т	VL	Н
VL: Very low L: Low M: Moderate H: High			VH : Very High D : Deficient		ent S:	Satisfactory			
T : Toxic	* see appendix D for analytical results				** : Strongly acidic			N.A	. : Not Available

SOIL PROFILE CHARACTERISTICS:

Permeability:	Rapid (average 785mm/day, range 82-1538 mm/day)
Available Water Capacity:	Moderate (116 mmH ₂ O)
Linear Shrinkage (B horizon):	Very low (6%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C₃T₁S₄	Poor top soil condition, shallow depth to hard rock, high gravel/stone /boulder content
Effluent Disposal (septic tanks)	4	Shallow depth to hard rock
Farm Dams	5	Very low suitability of subsoil, very shallow depth to hard rock
Secondary Roads	3	Unified Soil Group
Rural Residential	5	Farm dams
Small Farms	4	Agriculture, effluent disposal, farm dams