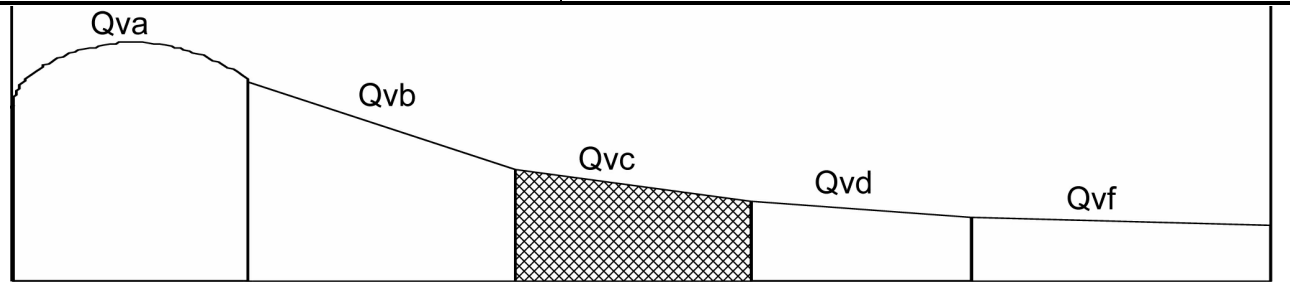


MAP UNIT SYMBOL: Qvc

Area: 4342 ha

MAP UNIT: Quaternary volcanic, moderately steep slope



A. GENERAL DESCRIPTION

The Quaternary volcanics occur between Romsey and Lancefield extending to the western boundary of the Shire around and on Mt. Kerrie. The common soils are red gradational with a mottled B horizon. The top soil is potentially strongly acidic and toxic in aluminium as well as having a very low nutrient status. The topsoil is relatively deep, commonly loam or silt loam. The first 85 mm of the A horizon is often only moderately susceptible to sheet and rill erosion due to the high level of organic matter mixed with silt. Susceptibility to erosion increases when the level of organic matter decreases, therefore the rest of the silty topsoil is very highly susceptible to sheet and rill erosion.

SITE CHARACTERISTICS

Parent Material Age: Quaternary	Depth to Seas. Watertable: >5.0 m
Parent Material Lithology: Volcanic	Flooding Risk: Nil
Landform Pattern: Rolling hills/Rolling low hills	Drainage: Well drained
Landform Element: Hillslope	Rock Outcrop: 0%
Slope a) common: 30%	Depth to Hard Rock: >1.5 m
Slope b) range: 21-32%	Present Land Use: Grazing, forested (minor)
Potential Recharge to Groundwater: Moderate	
Major Native Vegetation Species: Manna Gum, Narrow-leaved Peppermint, Silver Wattle, Bracken Fern	

LAND DEGRADATION

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A11 0-85 mm	Dark brown (7.5YR4/3) silty loam, apedal single grain, earthy fabric, very weak consistence, a few oxidized root channels, pH 5.5. Diffuse transition to:
A12 85-250 mm	Dark brown (7.5YR4/4) silty loam, moderate subangular blocky structure, peds 10-20 mm, rough fabric, very weak consistence, less than 2% ferruginous segregations throughout, pH 6.0. Abrupt transition to:
A13 250-450 mm	Brown (7.5YR5/4) silty loam, weak subangular blocky structure, peds 20-50 mm, rough fabric, moderately weak consistence, less than 2% ferruginous segregations throughout, pH 6.0. Diffuse transition to:

B1 450-700 mm Yellowish red (5YR4/8) heavy silt loam, very coarse distinct red and yellow mottles are common, weak to moderate subangular blocky structure, peds 5-10 mm, rough fabric, moderately weak consistence, pH 6.0. Abrupt transition to:

B2 700-1500 mm+ Yellowish red (5YR4/6) heavy clay loam, very coarse distinct red and yellow mottles are common, moderate subangular blocky structure, peds 5-10 mm, smooth fabric, moderately weak consistence, many fine subrounded basalt gravel fragments, pH 6.5.

CLASSIFICATION

Factual Key:	Gn3.51
Australian Soil Classification:	Mottled, Eutrophic, Red Ferrosol; thick, non-gravelly, silty/clay loamy, deep
Unified Soil Group:	ML

INTERPRETATION OF LABORATORY ANALYSIS*

Horizon	pH (CaCl ₂)	% Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A11	4.3**	<1	VL	VL	D	S	T	H	L
A12	4.4**	<1	VL	VL	D	S	T	M	L
A13	4.6	<1	VL	VL	D	D	T	L	L
B1	4.8	<1	VL	VL	D	S	T	L	L
B2	5.4	35.7	VL	M	D	S	S	VL	VL

VL: Very Low L: Low M: Moderate H: High VH: Very High D: Deficient S: Satisfactory
 T: Potentially Toxic NA: Not Available * see appendix D for analytical results ** Strongly Acidic

SOIL PROFILE CHARACTERISTICS:

Permeability: Moderate (average 500 mm/day, range 370 - 640 mm/day)
Available Water Capacity: Very high (206 mm H ₂ O)
Linear Shrinkage (B horizon): Very low (1%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C ₂ T ₄ S ₃	Slope
Effluent Disposal (septic tanks)	4	Slope
Farm Dams	5	Slope
Building Foundations slab	4	Slope, susceptible to slope failure
stumps/footings	4	Susceptible to slope failure