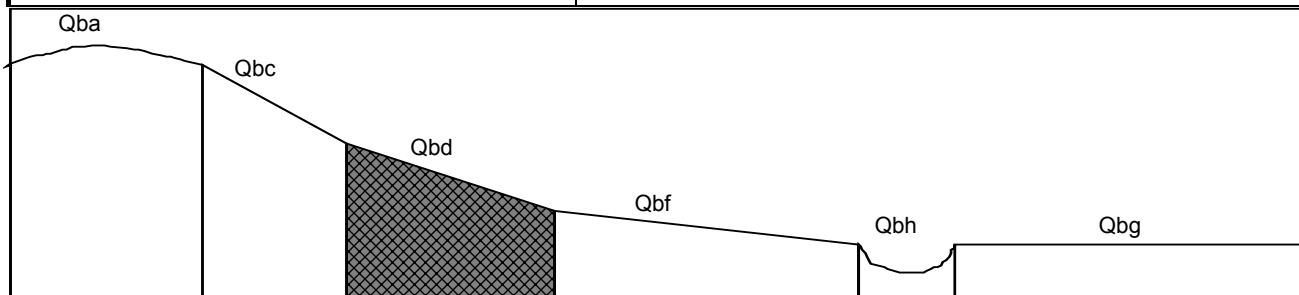


MAP UNIT SYMBOL : Qbd	MAP UNIT : Quaternary basalt, moderate slope.
Area : 240 ha	



A. GENERAL DESCRIPTION :

These moderate slopes are frequently found surrounding the basalt cones and within the undulating basalt low hills. The associated soils are very similar to those occurring on the crests and steeper slopes of the cones (Qba and Qbc1) described previously. The soil depth is variable (from 100mm to 700mm) with dark reddish-brown clay loam top soils grading into reddish brown light to medium clay subsoils. These overlie either solid rock, yellow/brown light-medium clay or yellow/brown clay loam subsoils. Where the soils are very shallow, the clay loam top soil may overlie rock only. In some locations, the colour of the soil may be darker, (very dark grey top soils) but in all other aspects the two soil profiles are very similar. Coarse fragments are present throughout the profile and rock outcrop is generally common. The soils are well structured and moderately permeable. Occasionally uniform cracking clays occur within this unit (near the quarry for example). These soils are similar to those described in Qbf. This unit is very susceptible to sheet erosion and moderately susceptible to mass movement. There is evidence of mass movement on the Bald Hills range.

SITE CHARACTERISTICS :

Parent Material Age:	Quaternary	Depth to Seas. Watertable:	>5.0m
Parent Material Lithology:	Basalt	Flooding Risk:	Nil
Landform Pattern:	Undulating low hills/ rolling hills	Drainage:	Rapidly drained
Landform Element:	Mid-slope	Rock Outcrop:	0 - 20%
Slope a) common:	15%	Depth to Hard Rock:	0.1-0.7m
Slope b) range:	11-20%	Present Land Use:	Grazing
Potential Recharge to Groundwater:	Moderate		
Major Vegetation Species:	River Red Gum, Blackwood		

LAND DEGRADATION :

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A	0-180mm	Dark reddish-brown (5YR3/3) heavy clay loam, strong subangular blocky structure, peds 2-5mm, rough fabric, moderately firm consistence, a few fine basalt gravel fragments, pH 4.7. Gradual transition to:
B	180-480mm	Dark reddish-brown (5YR3/4) medium clay, strong subangular blocky structure, peds 2-5mm, smooth fabric, moderately weak consistence, common basalt gravel fragments, pH 5.5. Clear transition to:
BC	480-600mm	Brown (7.5YR5/4) fine sandy clay loam, common medium sized distinct red and grey mottles, moderate subangular blocky structure, peds 5-10mm, smooth fabric, moderately firm consistence, abundant coarse basalt fragments, pH 6.5. Gradual transition to:

C 600mm Rock (basalt)

CLASSIFICATION

Factual Key (Northcote):	Gn3.12/3 (major), Gn4.1/42, Ug6.2 (minor)
Australian Soil Classification:	Haplic, Eutrophic Red Ferrosol; medium, slightly gravelly, silty/clayey, moderate
Unified Soil Group:	MH

INTERPRETATION OF LABORATORY ANALYSIS

Horizon	pH (CaCl ₂)	%Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A	4.7	4.8	VL	M	D	D	S	H	L
B	5.5	27.5	VL	H	D	D	S	M	L
BC	6.5	33.1	VL	H	D	D	S	L	L

VL : Very low L : Low M : Moderate H : High VH : Very High D : Deficient S : Satisfactory
 T : Toxic * see appendix D for analytical results ** : Strongly acidic N.A. : Not Available

SOIL PROFILE CHARACTERISTICS:

Permeability :	Moderate (average 268mm/day, range 88-500 mm/day)
Available Water Capacity:	Low (95 mmH ₂ O)
Linear Shrinkage (B horizon):	Moderate (17%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C ₃ T ₄ S ₅	Very susceptible to sheet erosion
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	4	Moderately steep slope
Rural Residential	5	Farm dams, building foundations
Small Farms	5	Agriculture, building foundations