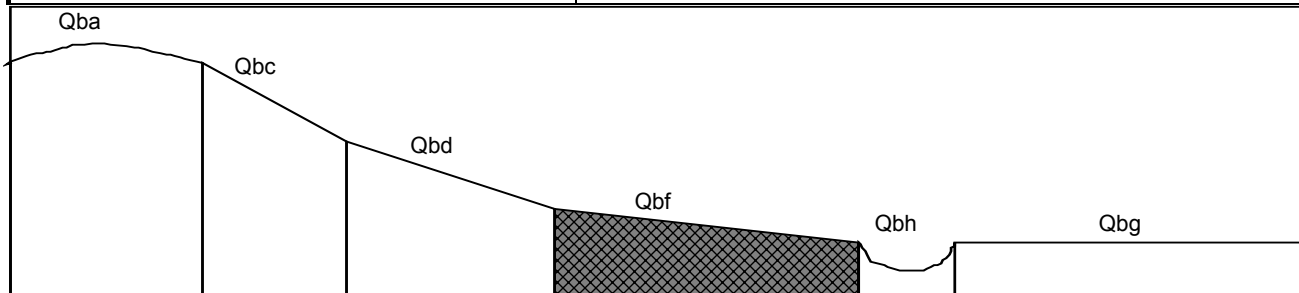


MAP UNIT SYMBOL : Qbf	MAP UNIT : Quaternary basalt, gentle slope.
Area : 409 ha	



A. GENERAL DESCRIPTION :

The gentle basalt slopes are frequently found surrounding the basalt cones and within the undulating basalt low hills and rises. The soils are similar to those associated with the basalt map units previously described, red gradational with dark reddish brown clay loam top soils and dark reddish brown light to medium clay subsoils, although in this map unit the dark brown gradational variant is as common as the red. Both soils vary in depth from very shallow (250mm) to moderately deep (800mm). Where the soils are very shallow, the clay loam top soil may overlie rock only. Coarse fragments are present throughout the profile and some mottling occurs in the subsoils. Rock outcrop is not common. This unit is highly susceptible to sheet erosion.

SITE CHARACTERISTICS :

Parent Material Age:	Quaternary	Depth to Seas. Watertable:	>5.0m
Parent Material Lithology:	Basalt	Flooding Risk:	Nil
Landform Pattern:	Gently undulating rises/ low hills	Drainage:	Well drained
Landform Element:	Mid-slope	Rock Outcrop:	0%
Slope a) common:	9%	Depth to Hard Rock:	0.25-0.8m
Slope b) range:	4-10%	Present Land Use:	Grazing
Potential Recharge to Groundwater:	Low - Moderate		
Major Vegetation Species:	River Red Gum, Blackwood		

LAND DEGRADATION :

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A1	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	480-720mm	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	720mm	Rock (basalt)

CLASSIFICATION

Factual Key (Northcote):	Gn3.12/3 (major), Gn4.1/42 (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:	Moderate (95-158 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 ₃ S ₄	Shallow depth to hard rock, low available water capacity, highly 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	3	Moderate slope, shallow depth to hard rock, moderate linear shrinkage, Unified Soil Group
Rural Residential	5	Farm dams
Small Farms	4	Agriculture, effluent disposal, farm dams, building foundations