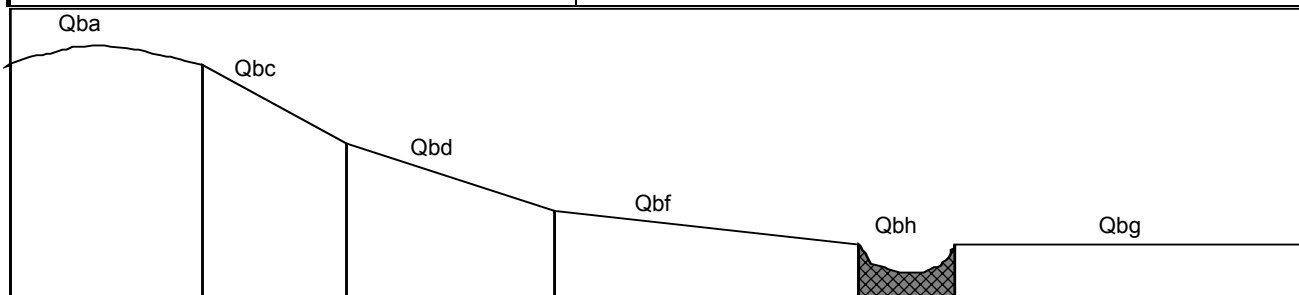


MAP UNIT SYMBOL : Qbh Area : 15 ha	MAP UNIT : Quaternary basalt, drainage depression.
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A. GENERAL DESCRIPTION :

The soils associated with drainage depressions on the basalt plains are generally moderately deep yellow duplex with black light clay to clay loam top soils and brown heavy clay subsoils. Mottles are common in the subsoils indicating impeded drainage. Minor soil variations include a cracking brown gradational soil on the edge of drainage depressions where drainage is slightly improved and a uniform cracking clay similar to those that occur on the very gentle slopes (Qbf).

SITE CHARACTERISTICS :

Parent Material Age:	Quaternary	Depth to Seas. Watertable:	>2.0m
Parent Material Lithology:	Basalt	Flooding Risk:	Low
Landform Pattern:	Gently undulating rises/ low hills	Drainage:	Imperfectly drained
Landform Element:	Drainage depression	Rock Outcrop:	0%
Slope a) common:	12%	Depth to Hard Rock:	>1.46m
Slope b) range:	3-15%	Present Land Use:	Grazing
Potential Recharge to Groundwater:	Low		
Major Vegetation Species:	River Red Gum		

LAND DEGRADATION :

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A11	0-235mm	Black (10YR2.5/1) light clay, strong subangular blocky structure, peds 2-5mm, rough fabric, moderately firm consistence, high organic matter content, pH 4.6. Clear transition to:
A12	235-490mm	Dark greyish brown (10YR4/2) clay loam with silt, weak to moderate subangular blocky structure, peds 10-20mm, rough fabric, moderately weak consistence, pH 5.2. Gradual transition to:
B21	490-720mm	Dark greyish brown (10YR4/2) medium-heavy clay, many fine distinct orange and red mottles, weak to moderate subangular blocky structure, 2-5mm, rough fabric, pH 7.4. Clear transition to:
B22	720-1095mm	Brown (10YR5/3) heavy clay, many orange, grey and red mottles, weak subangular blocky structure, peds 5-10mm, rough fabric, moderately firm consistence, a few basalt fragments, pH 6.0. Clear transition to:

- B23** 1095-1375mm Yellowish brown (10YR5/4) medium heavy clay, many brown, red and orange mottles, moderate subangular blocky structure, peds 10-20mm, rough fabric, moderately firm consistence, a few basalt fragments, pH 7.6. Clear transition to:
- B3** 1375-1460+mm Brown (7.5YR5/4) light clay, common yellow and orange mottles, moderate subangular blocky structure, peds 5-10mm, rough fabric, moderately firm consistence, pH 7.8.

CLASSIFICATION

Factual Key (Northcote):	Dy3.13 (major), Gn 3.4/92 , Ug6.2 (minor)
Australian Soil Classification:	Eutrophic, Mottled-Mesonatric, Grey Sodosol; thick, non-gravelly, silty/clayey, deep.
Unified Soil Group:	CH

INTERPRETATION OF LABORATORY ANALYSIS

Horizon	pH (CaCl ₂)	%Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A11	4.6	< 1	VL	M	D	D	S	H	M
A12	5.2	< 1	VL	L	D	D	S	L	M
B21	7.4	< 1	VL	M	D	D	S	L	H
B22	6.0	4.6	VL	M	D	D	S	L	H
B23	7.6	2.5	VL	M	D	D	S	VL	VH
B3	7.8	1.5	VL	M	D	D	S	VL	VH

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:	Slow (average 34mm/day, range 7-62 mm/day)
Available Water Capacity:	very high (222 mmH ₂ O)
Linear Shrinkage (B horizon):	Moderate (13%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C ₃ T ₄ S ₄	Moderately steep slope
Effluent Disposal (septic tanks)	4	Imperfect drainage, low permeability
Farm Dams	4	Highly dispersible subsoil
Secondary Roads	4	Imperfect drainage, highly dispersible subsoil
Rural Residential	4	Effluent disposal, farm dams, secondary roads, building foundations
Small Farms	4	Agriculture, farm dams, secondary roads, building foundations