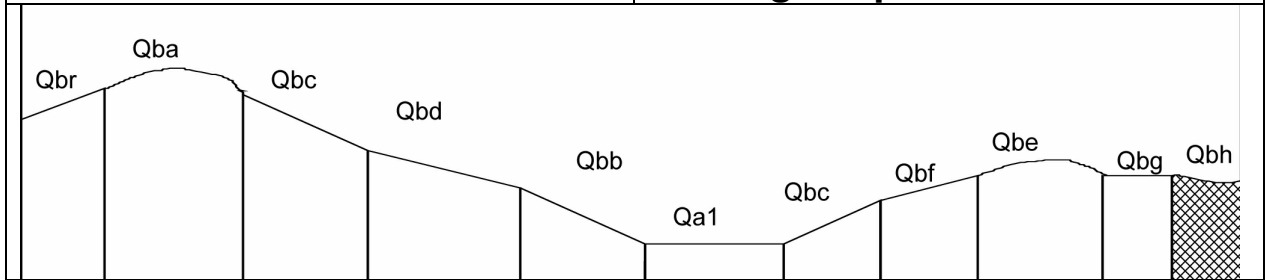


MAP UNIT SYMBOL: Qbh

Area: 9 462 ha

MAP UNIT: Quaternary basalt, drainage depression



A. GENERAL DESCRIPTION

Basalt drainage depressions are numerous, particularly on the very gentle and gentle slopes. Some may be slightly exaggerated in width, although there are some quite wide depressions on the very gentle slopes. The smaller and deeply incised depressions have not been mapped. The drainage depressions have a high flood risk due to overland flow which leads to periodic water-logging. The soils are quite variable, although duplex soils with dark, mottled subsoils predominate. Minor soil types include duplex soils with a mottled yellowish subsoil, with an A2 horizon absent, or if present is not bleached, uniform clays, and gradational dark soils.

SITE CHARACTERISTICS

Parent Material Age:	Quaternary	Depth to seas. Watertable:	>1.1 m
Parent Material Lithology:	Basalt	Flooding Risk:	High
Landform Pattern:	Lava plain	Drainage:	Moderately well drained
Landform Element:	Drainage depression	Rock Outcrop:	0%
Slope a) common:	2%	Depth to Hard Rock:	>1.1 m
Slope b) range:	1 - 3%	Present Land Use:	Grazing
Potential Recharge to Groundwater: Low			
Major Native Vegetation Species: Rushes, Kangaroo Grass, Manna Gum, Blackwood			

LAND DEGRADATION

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A1 0-60 mm	Very dark greyish brown (10YR3/2) loam, weak subangular blocky structure, peds 2-5 mm, rough fabric, very weak consistence, pH 6.0. Clear transition to:
A3 60-260 mm	Very dark greyish brown (10YR3/2) silty clay loam, strong subangular blocky structure, peds 2-5 mm, rough fabric, very weak consistence, less than 2% medium coarse subangular basalt gravel fragments, pH 6.0. Gradual transition to:
B21 260-520 mm	Very dark greyish brown (10YR3/2) medium clay, strong subangular blocky structure, peds 5-10 mm, smooth fabric, moderately weak consistence, a few medium subangular basalt gravel fragments, pH 6.5. Gradual transition to:
B22 520-810 mm	Very dark greyish brown (10YR3/2) heavy clay, less than 2% fine faint yellow mottles, strong subangular blocky structure, peds 5-10 mm, smooth fabric, moderately weak consistence, a few medium subangular basalt gravel fragments, pH 7.0. Clear transition to:

- B23** 810-915 mm Dark brown (10YR3/3) heavy clay, medium faint orange and yellow mottles are common, strong subangular blocky structure, peds 5-10 mm, smooth fabric, moderately weak consistence, less than 2% fine subangular basalt gravel fragments, pH 7.0. Abrupt transition to:
- B3** 915-990 mm Very dark greyish brown (10YR3/2) heavy clay, medium faint orange and yellow mottles are common, strong subangular blocky structure, peds 5-10 mm, smooth fabric, moderately weak consistence, coarse subrounded basalt gravel fragments are common, pH 7.0. Abrupt transition to:
- BC** 990-1140 mm+ Partially weathered basalt rock.

CLASSIFICATION

Factual Key:	Dd1.12 (major), Dy3.21, Dy3.12, Uf6, Gn3.42/3
Australian Soil Classification:	Haplic, Eutrophic, Black Chromosol; medium, non-gravelly, silty/clayey, moderate
Unified Soil Group:	CH

INTERPRETATION OF LABORATORY ANALYSIS*

Horizon	pH (CaCl ₂)	% Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A1	4.8	<1	VL	M	D	S	S	H	L
B1	5.0	1.5	VL	M	D	D	S	H	L
B21	5.5	9.1	VL	H	D	D	S	M	L
B22	5.8	3.3	VL	VH	D	D	S	M	L
B23	6.1	1.4	VL	VH	D	D	S	L	L
B3	6.3	14.5	VL	VH	D	D	S	L	L

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 Slow (average 70 mm/day, range 30-100 mm/day)
Available Water Capacity: Moderate (143 mm H₂O)
Linear Shrinkage (B horizon): High (19%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C ₂ T ₁ S ₄	Depth of topsoil
Effluent Disposal (septic tanks)	5	Flood risk
Farm Dams	3	Linear shrinkage, suitability of subsoil, depth to water table, depth to hardrock
Building Foundations slab	5	Flooding risk
stumps/footings	5	Flooding risk