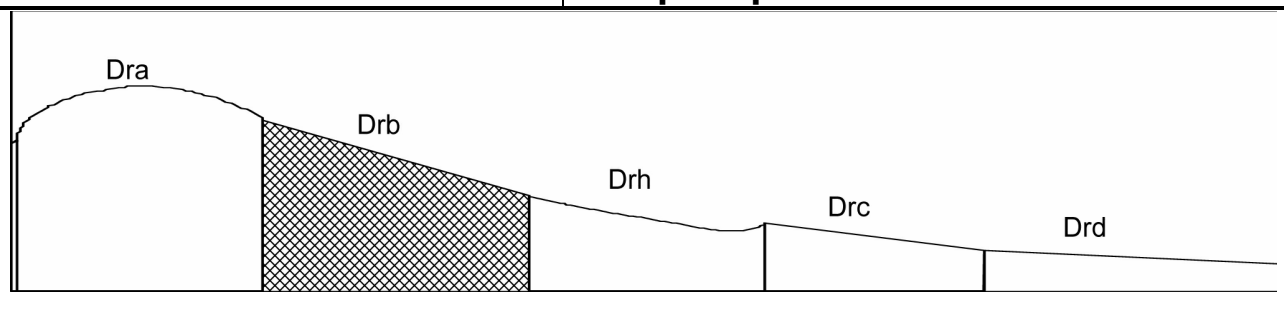


MAP UNIT SYMBOL: **Drb** Area:
1645 ha

MAP UNIT: **Devonian Rhyodacite,
steep slope**



A. GENERAL DESCRIPTION

The soils on the rhyodacite are similar for every map unit except for the drainage depressions. Red gradational profiles with loam to clay loam topsoils and clay subsoils are dominant. A silty clay loam B1 horizon is common, although a minor variety is the absence of this horizon, thus making the profile a red duplex. Mottling does occur although this is not a common characteristic. Another minor variant is a red duplex or gradational soil with an A2 horizon which is rarely bleached. High aluminium and phosphorus deficiency occurs throughout the profile, except for the organic topsoil.

SITE CHARACTERISTICS

Parent Material Age:	Devonian	Depth to Seas. Watertable:	>5.0 m
Parent Material Lithology:	Rhyodacite	Flooding Risk:	Nil
Landform Pattern:	Steep hills	Drainage:	Well drained
Landform Element:	Hillslope	Rock Outcrop:	0-2%
Slope a) common:	36%	Depth to Hard Rock:	>1.5 m
Slope b) range:	33-56%	Present Land Use:	Forested, grazing
Potential Recharge to Groundwater:	Moderate		
Major Native Vegetation Species:	Broad-leaved Peppermint, Messmate, Blackwood, Silver Wattle, Hedge Wattle, Bracken Fern		

LAND DEGRADATION

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A10 0-140 mm	Very dark grey (10YR3/1) loam, apedal single grained, earthy fabric, loose consistence, many medium subangular rhyodacite gravel fragments, pH 6.5. Clear transition to:
A11 140-240 mm	Very dark brown (10YR2/2) clay loam, strong subangular blocky structure, peds 5-10 mm, rough fabric, moderately weak consistence, many fine subrounded rhyodacite gravel fragments, pH 6.5. Clear transition to:
A3 240-380 mm	Dark brown (7.5YR3/3) clay loam, moderate subangular blocky structure, peds 2-5 mm, rough fabric, moderately firm consistence, a few fine subrounded rhyodacite gravel fragments, pH 6.0. Clear transition to:
B11 380-720 mm	Dark brown (7.5YR3/3) silty clay loam, many medium faint yellow mottles, moderate subangular blocky structure, peds 5-10 mm, rough fabric, moderately weak consistence, a few fine and coarse subrounded rhyodacite gravel fragments, pH 6.0. Gradual transition to:

- B12** 720-990 mm Dark reddish brown (5YR3/4) silty clay loam, moderate subangular blocky structure, peds 5-10 mm, rough fabric, moderately firm consistence, a few medium subrounded rhyodacite gravel fragments, pH 6.0. Clear transition to:
- B2** 990-1400 mm+ Dark reddish brown (5YR3/4) light medium clay with silt, moderate subangular blocky structure, peds 10-20 mm, smooth fabric, moderately firm consistence, less than 2% medium subrounded rhyodacite gravel fragments, pH 6.0.

CLASSIFICATION

Factual Key:	Gn3.11 (major) Dr2.11, Dr2.21, Gn4.14 (minor)
Australian Soil Classification:	Halpic, Eutrophic, Red Dermosol; medium, moderately gravelly, clay loamy/clayey, very 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
A10	5.3	23.7	VL	H	D	S	S	H	L
A11	5.1	21.5	VL	M	D	S	T	H	L
A3	5.0	2.0	VL	M	D	S	T	M	L
B11	4.9	6.2	VL	L	D	D	T	L	L
B12	4.9	4.3	VL	L	D	S	T	L	L
B2	4.9	<1	VL	L	D	S	T	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: Rapid (estimate)
Available Water Capacity: Very high (227 mm H₂O)
Linear Shrinkage (B horizon): Moderate (15%)

C. LAND CAPABILITY ASSESSMENT

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