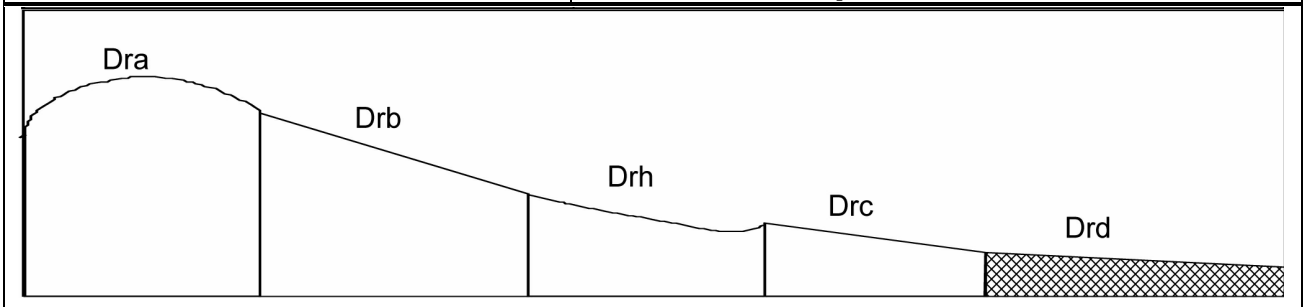
MAP UNIT SYMBOL: **Drd** Area: 1204 ha	MAP UNIT: **Devonian Rhyodacite, moderate slope**



A. GENERAL DESCRIPTION

The moderate slopes have similar soils to the rest of the rhyodacite, the only difference being the depth of horizons and the shallower topsoil. Red gradational soils with a loam topsoil, silty clay loam B1 horizon and light to medium clay subsoil predominate. Mottling does occur although it is not a common characteristic. The soil is potentially toxic in aluminium and deficient in phosphorus in the B horizon, although not strongly acidic.

SITE CHARACTERISTICS

Parent Material Age:	Devonian	**Depth to Seas. Watertable:**	>5.0 m
Parent Material Lithology:	Rhyodacite	**Flooding Risk:**	Nil
Landform Pattern:	Rolling low hills	**Drainage:**	Well drained
Landform Element:	Hillslope	**Rock Outcrop:**	0-2%
Slope a) common:	14%	**Depth to Hard Rock:**	>1.5 m
Slope b) range:	11-20%	**Present Land Use:**	Grazing, forestry

Potential Recharge to Groundwater: Moderate
Major Native Vegetation Species: Messmate, Broad-leaved Peppermint, Silver Wattle, Blackwood, Hedge Wattle, Bracken Fern

LAND DEGRADATION

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A1 0-100 mm — Very dark grey (10YR3/1) loam, apedal single grained, earthy fabric, loose consistence, many medium subangular rhyodacite gravel fragments, pH 6.5. Gradual transition to:

B11 100-330 mm — Dark brown (7.5YR3/3) silty clay loam, moderate subangular blocky structure, peds 5-10 mm, rough fabric, moderately weak consistence, a few fine subrounded rhyodacite gravel fragments, pH 6.5. Gradual transition to:

B12 330-470 mm — Dark reddish brown (7.5YR3/4) silty clay loam, moderate subangular blocky structure, peds 510 mm, rough fabric, moderately firm consistence, a few medium subrounded rhyodacite gravel fragments, pH 6.0. Clear transition to:

B21 470-700 mm — Dark reddish brown (5YR3/3) light clay, moderate subangular blocky structure, peds 5-10 mm, smooth fabric, moderately firm consistence, less than 2% medium subrounded rhyodacite gravel fragments, pH 6.0. Gradual transition to:

B22 700-1000+ Dark reddish brown (5YR3/4) light medium clay, moderate subangular blocky structure, peds 10-20 mm, smooth fabric, moderately firm consistence, pH 6.0.

CLASSIFICATION

Factual Key: Gn3.11 (major) Gn4.11, Dr2.11 (minor)
Australian Soil Classification: Haplic, Eutrophic, Red Dermosol; medium, moderately gravely, 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
A11	5.3	21.5	VL	M	D	S	T	H	L
B11	5.1	6.2	VL	L	D	S	T	M	L
B12	5.0	4.3	VL	L	D	S	T	L	L
B21	4.9	<1	VL	L	D	S	T	L	L
B22	NA	NA	NA	NA	NA	NA	NA	NA	NA

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: Moderate (estimate)
Available Water Capacity: High (155 mm H_2O)
Linear Shrinkage (B horizon): Moderate (15%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	$C_2\ T_3\ S_4$	Depth of top soil
Effluent Disposal (septic tanks)	3	Slope
Farm Dams	4	Slope, permeability
Building Foundations		
slab	4	Slope
stumps/footings	3	Slope, slope failure risk, linear shrinkage