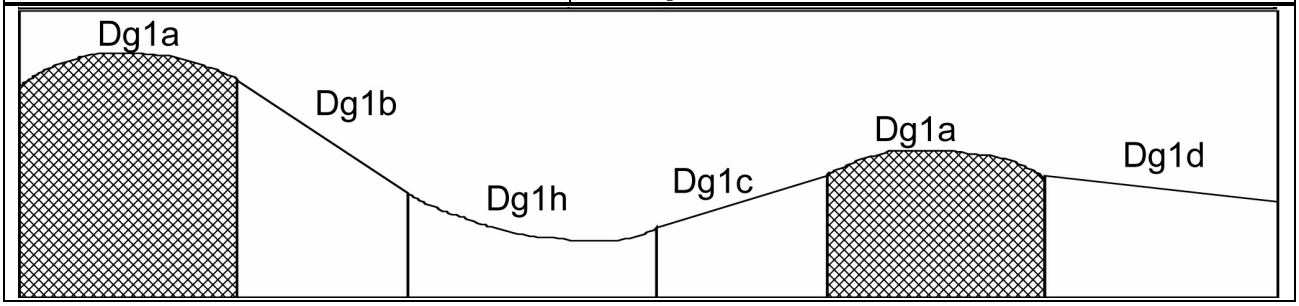
MAP UNIT SYMBOL: **Dg1a** Area: 724 ha	MAP UNIT: **Devonian granitic, red, steep crest**



A. GENERAL DESCRIPTION

The steep and gentle crests and ridges on the red granitic soils, which are found only on the granodiorite, have similar soils, therefore have been classed as one component. The soils which commonly occur on this component are mottled, red duplex, with a bleached A2 horizon. Depth to hardrock varies, and the B3 is absent on the shallow variant. Red gradational soils with sandy clay loam topsoils and sandy clay subsoils are less common. Although the component is highly susceptible to wind erosion, the incidence is low as the area is mainly vegetated.

SITE CHARACTERISTIC:

Parent Material Age:	Devonian	**Depth to Seas. Watertable:**	>5.0 m
Parent Material Lithology:	Granodiorite	**Flooding Risk:**	Nil
Landform Pattern:	Rolling/steep hills.	**Drainage:**	Moderately well drained.
Landform Element:	Hillcrest	**Rock Outcrop:**	0-2%
Slope a) common:	2%	**Depth to Hard Rock:**	0.8 m (variable)
Slope b) range:	0-5%	**Present Land Use:**	grazing, forested, rural residential (minor)

Potential Recharge to Groundwater: Low
Major Native Vegetation Species: Broad-leaved Peppermint, Messmate, Prickly Tea Tree, Bracken Fern, Manna Gum, Silver Wattle

LAND DEGRADATION:

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A11 0-110 mm — Brown (10YR4/3) sandy loam, weak subangular blocky structure, peds 2-5 mm, rough fabric, loose consistence, a few subrounded granitic cobbles and stones, pH 6.0. Clear transition to:

A12 110-220 mm — Brown (10YR4/3) sandy loam, weak subangular blocky structure, peds 10-20 mm, rough fabric, moderately weak consistence, a few fine subrounded granitic gravel fragments, pH 6.5. Gradual transition to:

A2 220-400 mm — Dark yellowish brown (10YR4/6) sandy loam with coarse sand, bleached (10YR7/4) when dry, apedal massive, sandy fabric, moderately weak consistence, pH 6.5. Clear transition to:

B2 400-610 mm — Reddish brown (5YR4/4) sandy clay, many fine faint orange and red mottles, moderate subangular blocky structure, peds 5-10 mm, rough fabric, moderately weak consistence, pH 6.0 Abrupt transition to:

B3 610-810 mm Dark reddish brown (5YR3/4) light clay with fine sand, many medium prominent orange and red mottles, moderate subangular blocky structure, peds 10-20 mm, smooth fabric, moderately weak consistence, pH 6.0 Gradual transition to:

R 810 mm+ Granodiorite rock.

CLASSIFICATION

Factual Key: Dr3.41 (major) Gn4.12(minor)
Australian Soil Classification: Bleached-mottled, Mesotrophic, Red Chromosol; thick, slightly gravely, loamy/clayey, moderate
Unified Soil Group: CL

INTERPRETATION OF LABORATORY ANALYSIS*

Horizon	pH ($CaCl_2$)	% Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A11	4.8	3.5	VL	L	D	S	S	H	L
A12	5.1	5.0	VL	VL	D	S	S	H	L
A2	4.8	<1	VL	VL	D	S	T	L	L
B2	4.8	<1	VL	L	D	S	T	VL	L
B3	5.3	<1	VL	L	D	S	S	VL	VL

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 75 mm/day, range 18-170 mm/day)
Available Water Capacity: Moderate (129 mm H_2O)
Linear Shrinkage (B horizon): Low (10%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C_2 T_1 S_4	Depth to hard rock, susceptibility to wind erosion, topsoil conditions (A2)
Effluent Disposal (septic tanks)	3	Drainage, depth to hard rock, permeability
Farm Dams	5	Depth to hard rock
Building Foundations		
slab	3	Drainage
stumps/footings	3	Drainage