

#### A. GENERAL DESCRIPTION

The soils on the basalt cones are commonly shallow, although there are pockets of deeper soils up to 1 metre in depth. The B horizon often has a very high percentage of weathered basalt and is usually a transitional layer to the C horizon. The soils are commonly uniform silty loams to silty clay loams although gradational soils with clay subsoils do occur.

#### SITE CHARACTERISTICS

Parent Material Age:	Quaternary	Depth to Seas. Watertable:	>5.0 m		
Parent Material Lithology:	Basalt	Flooding Risk:	Nil		
Landform Pattern:	Lava plain/rolling low hills				
Landform Element:	Cone	Rock Outcrop:	50-60%		
Slope a) common:	1%	Depth to Hard Rock:	0.5-1.0 m (variable)		
Slope b) range: 0-2%		Present Land Use:	Grazing		
Potential Recharge to Groundwater: High					
Major Native Vegetation Species: Manna Gum, Narrow-leaved Peppermint, Blackwood					

#### **LAND DEGRADATION**

EARL DEGITADATION							
Land Degradation	Water Erosion	Wind Erosion		Mass Movement	Salting	Acidification	
2 ogradation	2.00.0	sheet/rill	gully	ovoom			
Susceptibility	Moderate	Low	High	Very low	Very low	Moderate	
Incidence	Low	Low	Low	Very low	Nil	Not available	

# **B. SOIL PROFILE**

### PROFILE DESCRIPTION

<b>A</b> 1	0-60 mm	Very dark grey (10YR3/1) silty loam, weak subangular blocky structure, peds 2-5 mm, rough fabric, very weak consistence, a few fine subangular basalt gravel fragments, pH 6.0. Clear transition to:
А3	60-275 mm	Dark reddish brown (5YR2.5/2) silty loam, weak subangular blocky structure, peds 2-5 mm, rough fabric, very weak consistence, abundant subrounded basalt cobbles, pH 5.0. Clear transition to:
D2	275 550 mm	D

275-550 mm+ Dark reddish brown (5YR3/3) silty loam, weak subangular blocky structure, peds 2-5 mm, rough fabric, abundant subangular basalt cobbles, pH 6.0.

### **CLASSIFICATION**

Factual Key:	Um1.41 (major), Gn4.41(minor)
Australian Soil Classification:	Lithic, Leptic, Rudosols; slightly gravely, silty, shallow
Unified Soil Group:	ML

### **INTERPRETATION OF LABORATORY ANALYSIS\***

Horizon	pH (CaCl <sub>2</sub> )	% Gravel	E.C. (salts)	Nutrient Status	Р	К	Al	Organic matter	Dispersibility
<b>A</b> 1	4.5	3.6	VL	М	S	S	Т	Н	L
A3	4.5	94.3	VL	М	D	S	S	Н	L
В3	5.1	83.5	VL	М	D	S	S	Н	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 (average 1,400 mm/day, range 740-1,950 mm/day)

Available Water Capacity: Very low (21 mm H<sub>2</sub>O)

**Linear Shrinkage (B horizon):** Very low (6%)

# C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C <sub>2</sub> T <sub>1</sub> S <sub>5</sub>	Available water capacity, gravel and boulder content
Effluent Disposal (septic tanks)	4	Depth to hard rock
Farm Dams	5	Suitability of subsoil, depth to hardrock
Building Foundations		
slab	5	Stone and boulder content
stumps/footings	5	Stone and boulder content