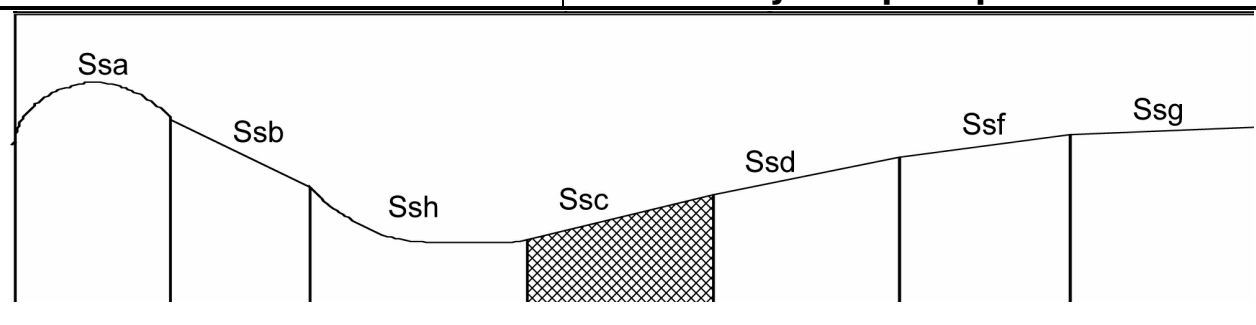


MAP UNIT SYMBOL: Ssc

Area: 42 847

**MAP UNIT: Silurian sediments,
moderately steep slope.**



A. GENERAL DESCRIPTION

The soils on the moderately steep slopes are duplex with a mottled, yellowish subsoil. Varieties include yellow gradational soils and whole coloured yellow duplex. This component is susceptible to erosion due to the parent material and slope range and the dispersible subsoil. The soil is strongly acidic, and potentially toxic in aluminium and has a very low nutrient status. As the soils are developed and deep, the permeability and therefore the potential groundwater recharge is low.

SITE CHARACTERISTICS

Parent Material Age:	Silurian/Ordovician	Depth to Seas. Watertable:	> 5.0 m
Parent Material Lithology:	Sedimentary	Flooding Risk:	Nil
Landform Pattern:	Rolling low hills	Drainage:	Well drained
Landform Element:	Hillslope	Rock Outcrop:	0%
Slope a) common:	26%	Depth to Hard Rock:	> 1.5 m
Slope b) range:	21-32%	Present Land Use:	Grazing, forested and recreation.

Potential Recharge to Groundwater: Low
Major Native Vegetation Species: Narrow-leaved Peppermint, Broad-leaved Peppermint, Long-leaved Box, Grey Box, Messmate, Silver Wattle

LAND DEGRADATION

Land Degradation	Water Erosion		Wind Erosion	Mass Movement	Salting	Acidification
	sheet/rill	gully				
Susceptibility	High	Mod - high	Moderate	Moderate	Low	Low
Incidence	High - mod	Moderate	Low	Low	Low	Low

B. SOIL PROFILE

PROFILE DESCRIPTION

A1	0-135 mm	Very dark grey (10YR3/1) loam, weak subangular blocky structure, peds less than 2 mm, earthy fabric, very weak consistence, many coarse subangular and angular sedimentary and quartz gravel fragments, pH 4.5. Clear transition to:
A1 2	135-190 mm	Dark greyish brown (10YR4/2) loam, weak subangular blocky structure, peds 10-20 mm, rough fabric, moderately firm consistence, many medium subrounded sedimentary and quartz gravel fragments, pH 4.5. Abrupt transition to:
B1	190-420 mm	Light yellowish brown (10YR6/4) light clay with fine sand, weak subangular blocky structure, peds 20-50 mm, rough fabric, moderately strong consistence, organic segregations are common, a few fine subangular quartz, sedimentary and gravel fragments, pH 5.0. Clear transition to:

- B2** 420-790 mm Light yellowish brown (10YR6/4) medium clay, medium faint orange and yellow mottles are common, strong subangular blocky structure, peds 10-20 mm, rough fabric, a few medium subangular sedimentary gravel fragments, pH 5.5. Clear transition to:
- B3** 790-1060mm Very pale brown (10YR7/4) light clay, many coarse distinct orange and yellow mottles, moderate subangular blocky structure, peds 10-20 mm with some 2-5 mm, rough fabric, very strong consistence, pH 6.0. Clear transition to:
- BC** 1060-1400 mm+ Partially weathered sedimentary rock.

CLASSIFICATION

Factual Key:	Dy3.11 (major) , Dy2.11, Gn3.91, Gn4.51 (minor)
Australian Soil Classification:	Mottled, Dystrophic, Yellow Kurosol; medium, moderately gravely, loamy/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	3.6**	27.9	VL	L	S	S	T	H	L
A12	3.8**	49.3	VL	VL	D	D	T	L	H
B1	4.0**	3.7	VL	VL	D	D	T	L	H
B2	4.0**	9.3	VL	VL	D	D	T	VL	H
B3	4.0**	<1	VL	VL	D	D	T	VL	H

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 (average 140 mm/day, range 40-330 mm/day)
Available Water Capacity: Moderate (130 mm H₂O)
Linear Shrinkage (B horizon): Low (11%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C ₂ T ₄ S ₄	Susceptibility to sheet, rill and gully erosion, slope, dispersive topsoil
Effluent Disposal (septic tanks)	4	Slope
Farm Dams	5	Slope
Building Foundations slab stumps/footings	4 3	Slope Slope, gravel content, susceptibility to slope failure