BLEACHED SILICEOUS SAND

General Description: *Thick bleached sand with an organically darkened surface and a yellow or brown sandy subsoil at moderate depth*

Landform: Gently undulating plain with irregular sandhills.

Substrate: Windblown Molineaux Sand.

Vegetation: Mallee heath

Type Site: Site No.: MM086

1:50,000 sheet:	6726-1 (Meningie)	Hundred:	Bonney
Annual rainfall:	475 mm	Sampling date:	1992
Landform:	Crest of moderate sandhill, 10% slope		
Surface:	Loose with no stones		

Soil Description:

Depth (cm)	*Description*
0-12	Dark greyish brown loose single grain sand. Abrupt to:
12-24	Greyish brown (bleached when dry) loose single grain sand. Clear to:
24-60	Yellowish brown loose single grain sand. Diffuse to:
60-100	Orange, red and light grey loose single grained sand. Diffuse to:
100-210	Orange, red and light grey loose single grained sand.

Classification: Basic, Arenic, Bleached-Orthic Tenosol; medium, non-gravelly, sandy / sandy, very deep

Summary of Properties

Drainage Rapidly drained. Soil never remains wet for more than a few hours.

Fertility Inherent fertility is very low, as indicated by the exchangeable cation data. Phosphorus, nitrogen, copper and zinc deficiencies can be expected. Manganese required by lupins. Organic carbon concentrations are also below ideal at sampling site.

pH Acidic at the surface, slightly acidic at depth.

Rooting depth 60 cm in pit.

Barriers to root growth

Physical: No physical barriers.

Chemical: No chemical barriers. Low nutrient retention capacity is the main reason for lack of root penetration.

Water holding capacity 40 mm in root zone.

Seedling emergence: Satisfactory, but can be reduced by water repellence in dry years.

Workability: Soft / loose surface is easily worked.

Erosion Potential

Water: Low.

Wind: Moderately high.

Laboratory Data

Depth cm	pH H_2O	pH $CaC1_2$	CO_3 %	EC1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Avail. K mg/kg	Boron mg/kg	Trace Elements mg/kg (DTPA)				CEC cmol (+)/kg	Exchangeable Cations cmol(+)/kg				ESP
										Cu	Fe	Mn	Zn		Ca	Mg	Na	K	
Paddock	5.8	5.0	<1	0.02	0.16	0.70	6.0	31	0.2	-	-	-	-	2.3	2.06	0.36	0.24	0.07	na
0-12	5.8	5.4	0	0.02	0.14	0.52	6.8	420	0.2	-	-	-	-	1.6	1.48	0.22	0.20	0.08	na
12-24	5.8	5.2	0	0.02	0.09	0.19	5.0	270	0.1	-	-	-	-	1.4	1.02	0.13	0.22	0.07	na
24-60	6.3	6.1	0	0.02	0.09	0.12	2.6	140	0.2	-	-	-	-	1.3	1.06	0.16	0.26	0.12	na
60-100	6.3	6.0	0	0.01	0.08	0.04	2.2	110	0.1	-	-	-	-	1.4	0.68	0.24	0.16	0.07	na
100-150	6.6	6.2	0	0.02	0.10	0.02	<2.0	130	0.2	-	-	-	-	1.4	0.78	0.38	0.21	0.14	na
150-210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Paddock sample bulked from cores (0-10 cm) taken around the pit.

CEC (cation exchange capacity) is a measure of the soil's capacity to store and release major nutrient elements.

ESP (exchangeable sodium percentage) is derived by dividing the exchangeable sodium value by the CEC.