

BLEACHED SILICEOUS SAND

General Description: *Deep bleached sand with an organically darkened surface and a yellower subsoil*

Landform: Gently undulating dunefield

Substrate: Windblown Molineaux Sand.

Vegetation: Mallee / Banksia scrub



Type Site: Site No.: MM061

1:50,000 sheet: 7026-4 (Bainton)

Hundred: Day

Annual rainfall: 390 mm

Sampling date: 26/08/92

Landform: Crest of high sandhill

Surface: Loose with no stones

Soil Description:

<i>Depth (cm)</i>	<i>Description</i>
0-15	Dark greyish brown loose single grained strongly water repellent sand. Diffuse to:
15-50	Brownish yellow and very pale brown (bleached) speckled loose single grain sand. Diffuse to:
50-220	Yellow and reddish yellow speckled loose single grain 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. The soil has very limited capacity to retain nutrients, and deficiencies of phosphorus, nitrogen, zinc, copper and manganese are common. Organic carbon is low at sampling site.
pH	Neutral to slightly acidic throughout.
Rooting depth	50 mm in pit.
Barriers to root growth	
Physical:	No physical barriers.
Chemical:	Low nutrient status and retention capacity prevent roots extending further.
Water holding capacity	30 mm in root zone.
Seedling emergence:	Reduced by water repellence.
Workability:	Soft / loose surface is easily worked.
Erosion Potential	
Water:	Low.
Wind:	High to extreme.

Laboratory Data

Depth cm	pH H ₂ O	pH CaCl 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	6.7	6.3	<1	0.02	0.21	0.4	3	67	<0.40	<0.05	12	0.81	0.14	1.7	1.25	0.33	0.06	0.10	na
0-15	6.5	6.2	<1	0.02	0.16	0.3	3	52	<0.40	<0.05	20	0.7	0.11	2.0	1.41	0.34	0.05	0.08	na
15-50	6.7	6.6	<1	0.01	0.11	0.1	<2	52	<0.40	<0.05	12	<0.06	<0.06	1.1	0.66	0.23	0.05	0.07	na
50-100	6.7	6.8	<1	0.01	0.08	<0.1	<2	40	0.83	<0.05	7.6	4.4	<0.06	1.0	0.46	0.24	0.05	0.09	na
100-150	6.8	6.7	<1	0.01	0.08	<0.1	<2	<40	0.52	<0.05	3	<0.06	<0.06	1.0	0.35	0.30	0.05	0.05	na
150-200	6.9	6.8	<1	0.01	0.12	<0.1	<2	59	0.41	<0.05	2.8	<0.06	<0.06	1.0	0.45	0.35	0.04	0.09	na

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.