

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 mapsheet:	7026-4 (Bainton)
	Hundred:	Day	Easting:	475600
	Section:	27	Northing:	6070300
	Sampling date:	26/08/1992	Annual rainfall:	375 mm average

Crest of high sandhill. Loose surface, no stones.

Soil Description:

Depth (cm)	Description
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 cm in pit.
Barriers to root growth:	
Physical:	No physical barriers.
Chemical:	Low nutrient status and retention capacity prevent roots extending further.
Waterholding capacity:	30 mm in rootzone.
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.

Further information: [DEWNR Soil and Land Program](#)

