

BLEACHED SILICEOUS SAND

General Description: *Deep bleached sand, organically darkened at the surface*

Landform: Gently undulating sandhill country

Substrate: Windblown Lowan Sand.

Vegetation: Mallee



Type Site:	Site No.:	MM054	1:50,000 mapsheet:	7026-2 (Shaugh)
	Hundred:	Shaugh	Easting:	479200
	Section:	7	Northing:	6024700
	Sampling date:	24/08/1992	Annual rainfall:	430 mm average

Crest of low to moderate sandhill. Loose surface, no stones.

Soil Description:

Depth (cm)	Description
0-9	Dark greyish brown single grain loose sand. Abrupt to:
9-19	Brown single grain loose sand. Sharp to:
19-45	Yellow and light grey speckled loose single grained sand. Diffuse to:
45-210	Light grey and yellow speckled loose single grained sand.



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



Summary of Properties

- Drainage:** Rapidly drained. Soil never remains saturated for more than a couple of hours.
- Fertility:** Inherent fertility is very low, as indicated by the exchangeable cation data, and low clay and organic carbon levels. A range of nutrient deficiencies is likely and suggested by the available analyses. Phosphorus, zinc, copper and manganese all appear to be deficient, and organic carbon levels are sub-optimal.
- pH:** Slightly acidic throughout.
- Rooting depth:** 80 cm in pit.
- Barriers to root growth:**
- Physical:** No physical barriers.
- Chemical:** No chemical barriers. Low root densities are a function of low nutrient status and retention capacity.
- Waterholding capacity:** 50 mm in the rootzone.
- Seedling emergence:** Reduced by water repellence.
- Workability:** Soft / loose surface is easily worked.
- Erosion Potential:**
- Water:** Low.
- Wind:** Moderately high to high.

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	6.5	6.3	<1	0.03	0.23	0.4	13	47	0.88	0.051	-	0.69	0.28	2.1	1.54	0.32	0.08	0.10	na
0-9	6.6	6.3	<1	0.03	0.31	0.4	17	68	<0.40	<0.05	-	0.54	0.29	1.7	1.13	0.32	0.04	0.14	na
9-19	6.4	5.7	<1	0.03	0.18	0.2	7	58	0.48	<0.05	-	0.094	<0.06	1.5	0.74	0.24	0.06	0.13	na
19-45	6.4	6.1	<1	0.05	0.14	<0.1	<2	50	<0.40	<0.05	-	<0.06	<0.06	1.0	0.37	0.17	0.05	0.11	na
45-100	6.5	6.5	<1	0.02	0.09	<0.1	<2	48	<0.40	<0.05	-	<0.06	<0.06	0.8	0.29	0.14	0.04	0.08	na
100-150	6.7	6.7	<1	0.01	0.11	<0.1	<2	<40	1.2	<0.05	-	<0.06	0.08	0.8	0.37	0.20	0.05	0.10	na
150-210	6.2	6.5	<1	0.01	0.1	<0.1	<2	<40	<0.40	<0.05	-	<0.06	0.1	0.8	0.33	0.22	0.04	0.06	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](#)

