## **DEEP SAND**

General Description: Thick brown sand, yellower with depth

**Landform:** Gently undulating plains

with extensive low to moderate sandhills

**Substrate:** Windblown Molineaux

Sand.

Vegetation: Mallee



Type Site: Site No.: MM117 1:50,000 mapsheet: 6827-3 (Moorlands)

Hundred:RobyEasting:376300Section:X1ANorthing:6078450

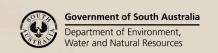
Sampling date: 05/04/1993 Annual rainfall: 395 mm average

Crest of sandhill. Loose surface, no stones.

## **Soil Description:**

Depth (cm)	Description					
0-10	Brown loose sand. Sharp to:	100			752	
10-20	Brown soft sand. Clear to:					
20-33	Yellowish brown soft sand. Abrupt to:					
	Original soil surface					
33-47	Brown soft sand. Clear to:					
47-70	Yellowish brown soft sand. Gradual to:					
70-115	Brownish yellow soft sand. Diffuse to:					
115-185	Brownish yellow soft sand.					

Classification: Basic, Arenic, Brown-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 low, as indicated by the exchangeable cation data. Regular

phosphorus applications are necessary. Nitrogen deficiencies are likely, and zinc and copper may be deficient from time to time. Manganese is required by lupins. Organic

carbon levels are low.

**pH:** Neutral to slightly acidic throughout.

**Rooting depth:** 185 cm in pit, but few roots below 70 cm.

Barriers to root growth:

**Physical:** No physical barriers.

**Chemical:** There are no chemical barriers, but low nutrient retention capacity limits extent of

root growth.

Waterholding capacity: 45 mm in the rootzone.

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

**Workability:** Soft to loose surface is easily worked.

**Erosion Potential** 

Water: Low.

Wind: Moderately high.

## Laboratory Data

Depth cm	pH H <sub>2</sub> O	pH CaC1 <sub>2</sub>	CO <sub>3</sub> %	EC1:5 dS/m	ECe dS/m	Org.C %	P	P K mg/k			8 8			CEC cmol	Exchangeable Cations cmol(+)/kg				ESP
							mg/kg	mg/kg		Cu	Fe	Mn	Zn	(+)/kg	Ca	Mg	Na	K	
Paddock	6.8	6.4	<1	0.06	0.51	0.7	25	95	0.39	0.15	1	2.2	0.76	3.1	3.19	0.54	0.03	0.33	na
0-10	6.9	6.4	1	0.07	0.80	0.3	21	110	0.57	0.10	-	1.4	0.60	1.9	2.09	0.43	0.02	0.46	na
10-20	6.5	6.0	<1	0.04	0.39	0.6	21	57	0.33	0.14	-	1.4	0.80	3.1	4.02	0.59	0.04	0.26	na
20-33	6.6	6.1	1	0.03	0.30	0.2	12	54	0.72	0.09	-	0.74	0.12	2.0	2.63	0.58	0.07	0.23	na
33-47	6.4	5.7	1	0.02	0.15	0.2	8	55	0.65	<.05	-	0.90	<.06	2.1	1.73	0.39	0.05	0.23	na
47-70	6.5	6.0	<1	0.01	0.11	< 0.1	5	56	0.68	<.05	i	0.39	<.06	1.9	1.43	0.34	0.04	0.25	na
70-115	6.8	6.3	<1	0.01	0.09	<0.1	4	53	0.29	<.05	-	0.18	<.06	1.5	1.30	0.43	0.05	0.24	na
115-185	6.8	6.3	<1	0.01	0.11	<0.1	<2	42	0.12	<.05	-	0.17	<.06	1.7	1.19	0.49	0.06	0.26	na

**Note**: Paddock sample bulked from 20 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



