

DEEP BLEACHED SILICEOUS SAND

General Description: *Thick bleached sand with a yellowish sandy subsoil*

Landform: Gently undulating plain.

Substrate: Windblown sand.

Vegetation:



Type Site:	Site No.:	SE053	1:50,000 mapsheet:	6923-2 (Kennion)
	Hundred:	Mt Muirhead	Easting:	435300
	Section:	34	Northing:	5851550
	Sampling date:	15/04/1996	Annual rainfall:	725 mm average

Midslope of very low rise on plain, 2% slope. Soft surface with no stones.

Soil Description:

<i>Depth (cm)</i>	<i>Description</i>
0-19	Very dark grey soft single grain loamy sand. Abrupt to:
19-41	Bleached soft single grain sand. Diffuse to:
41-100	Bleached soft single grain fine sand. Diffuse to:
100-150	Bleached with light yellowish brown speckles loose single grain fine sand. Diffuse to:
150-180	Yellowish brown loose single grain fine sand.



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



Summary of Properties

- Drainage:** Rapidly drained. The soil never remains wet for more than a few hours.
- Fertility:** Inherent fertility is low, as indicated by the exchangeable cation data. Nutrient retention capacity is limited by lack of clay, but is boosted by favourable organic matter levels. Potassium, calcium and magnesium levels are all low, as is surface phosphorus. High sub surface phosphorus indicates leaching.
- pH:** Acidic throughout.
- Rooting depth:** 180 cm in pit.
- Barriers to root growth:**
- Physical:** There are no physical barriers.
- Chemical:** There are no toxic barriers. Low nutrient retention capacity is the main cause of sub-optimal root growth.
- Waterholding capacity:** Approximately 110 mm in the rootzone.
- Seedling emergence:** Fair to satisfactory, depending on the degree of water repellence.
- Workability:** The soft surface is easily worked.
- Erosion Potential:**
- Water:** Low.
- Wind:** Moderate

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	SO ₄ 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	5.4	4.6	0	0.07	0.62	1.7	25	68	10	0.3	1.32	42	10.3	5.75	5.6	3.57	0.49	0.10	0.11	na
0-19	5.2	4.4	0	0.05	0.43	1.4	24	51	14	0.3	-	-	-	-	4.4	2.54	0.29	0.12	0.07	na
19-41	5.5	4.6	0	0.02	0.09	0.2	41	35	5	0.1	-	-	-	-	1.5	0.54	0.11	0.10	0.02	na
41-81	6.1	5.2	0	0.01	0.09	0.2	16	32	5	0.1	-	-	-	-	1.3	0.54	0.14	0.11	0.05	na
100-140	6.4	5.7	0	0.01	0.07	0.1	<4	37	2	0.0	-	-	-	-	0.9	0.32	0.07	0.10	0.01	na
150-180	6.3	5.5	0	0.01	0.10	0.1	<4	26	7	0.0	-	-	-	-	1.0	0.30	0.13	0.10	0.27	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](#)

