

<b>Site code<sup>1</sup></b>	<b>MM204</b>
<b>Location</b>	<b>Rokewood Junction (Dereel Road), Rokewood district, south-west Victoria</b>
<b>Landform</b>	Low hills
<b>Geology</b>	Neogene Hanson Plain Sand: <i>fluvial gravel, sand, silt</i>
<b>Element</b>	Crest

### Profile morphology

Horizon	Depth (cm)	Description
A1	0–25	Brown (7.5YR4/4); sandy loam; apedal massive structure; weak consistence (dry); common fine segregations; clear boundary to:
A2	25–50	Strong brown (7.5YR5/6), pink (7.5YR7/4 dry) conspicuously bleached; sandy loam; very many fine to coarse segregations; sharp boundary to:
B21	50+	Yellowish brown (10YR5/6) with red (2.5YR4/6) mottles; medium clay; moderate fine blocky structure; firm consistence (moderately moist); common fine segregations.

**ASC:** Ferric, Mottled-Subnatric, Brown Sodosol

### Analytical data<sup>2</sup>

Site MM204	Sample depth	pH		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex acidity
Horizon	cm	H <sub>2</sub> O	CaCl <sub>2</sub>	dS/m	%	cmol <sub>c</sub> /kg	cmol <sub>c</sub> /kg	cmol <sub>c</sub> /kg	cmol <sub>c</sub> /kg	mg/kg	cmol <sub>c</sub> /kg
A1	0–25	5.6	N/R	0.05	N/R	1.1	1.1	0.2	0.1	N/R	9.9
A2	25–50	6.1	N/R	0.03	N/R	1.2	1.2	0.1	0.1	N/R	5
B21	50+	6.3	N/R	0.05	N/R	0.5	0.5	0.2	0.7	N/R	4.7

Site MM204	Sample depth	FC	PWP	KS	FS	Z	C	Org C	Bulk density
Horizon	cm	(-10kPa) %	(-1500kPa) %	%	%	%	%	%	t m <sup>-3</sup>
A1	0–25	13.1	5.7	56	28	7	6	1.6	1.65
A2	25–50	N/R	N/R	47	31	8	12	0.8	N/R
B21	50+	32.1	25.1	17	13	3	68	N/R	1.31

### Management considerations

Strong texture contrast between the surface soil and the subsoil is a very important soil feature and may impact upon subsoil permeability. Conspicuously bleached A2 horizons containing Ferruginous and Ferromanganiferous nodules and concretions are key features of this profile. Sodic and mottled subsoils are other prominent features of this soil type.

The application of gypsum would be suitable for soil structure and improved permeability, while increasing organic matter and maintaining vegetative cover is important to help improve the soil structure. Penetration by deep-rooted crops is also useful as is minimum tillage practices which avoids bringing the sodic material to the surface.

<sup>1</sup> Source: Maher JM, Martin JJ (1987) Soils and landforms of south-western Victoria. Department of Agriculture and Rural Affairs. Research Report No. 40.

<sup>2</sup> Source: Government of Victoria, State Chemistry Laboratory.