Site code¹ SW53



Location Cooriemungle (Boorook Road), Heytesbury district, south-west Victoria

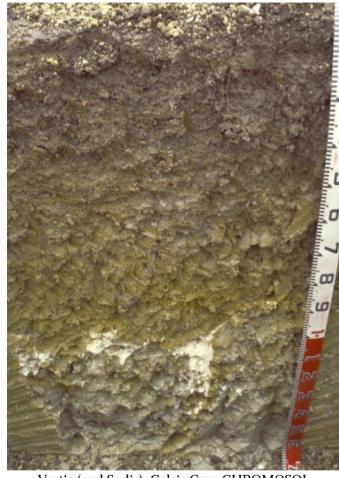
Landform	Rolling hills
Geology	Neogene Gellibrand Marl: <i>marine clays</i>
Element	Crest
Slope	2%
Aspect	South-west

View to south-west from site

Horizon	Depth (cm)	Description
A1	0–15	Very dark greyish brown (10YR3/2 moist and 10YR5/3 dry); silty clay loam; weakly pedal structure; medium to fine (2–20 mm) polyhedral structure; pH 5.7; abrupt and smooth boundary to:
B21g	15-60/70	Dark greyish brown (2.5Y4/2 moist) common (~15%), yellowish brown (10YR5/8 moist) mottles; medium clay; coarse (20–50 mm) polyhedral, parting to medium to fine (2–20 mm) polyhedral structure; pH 5.7; gradual and wavy boundary to:
B22g	60/70-105/115	Light olive grey (2.5Y5/4 moist [50%] and grey 2.5Y5/1 moist [50%]); medium to heavy clay; coarse (50 mm) polyhedral or angular blocky, parting to medium to fine (5–20 mm) polyhedral structure; slickensides (>20 mm); pH 7.4; abrupt and irregular boundary to:
B23kgss	105/115-160+	Light olive grey (5Y6/2 moist); common (~20%),yellowish brown (10YR5/8 moist) mottles; heavy clay; very coarse (100–300 mm) angular blocky, parting to coarse (20–50 mm) polyhedral or angular blocky, and medium to fine (2–20 mm) lenticular structure; soft white calcareous accumulations (up to 100 mm) at top of horizon; slickensides (>100 mm); pH 8.9.

Management considerations

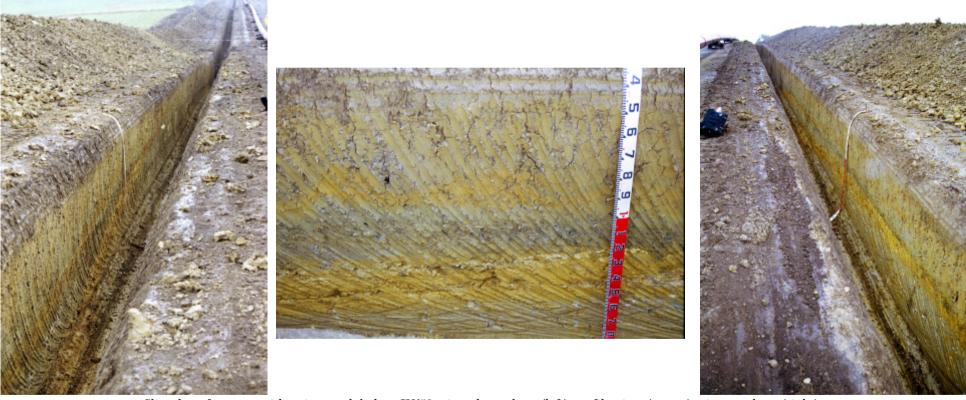
Generally used for dairying, these soils are prone to waterlogging and pugging. Although there is calcium carbonate at depth, surface horizons tend to be acidic and respond well to liming. On the steeper slopes this soil is highly prone to landslides. Subsurface drainage incorporating closely spaced mole drains works well in these soils.



Vertic (and Sodic), Calcic Grey CHROMOSOL

¹ Source: MacEwan R, Imhof M (in press) Major Soils and Landscapes along the Southwest Gas Pipeline 1999. DPI

Sample	р	Н	EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex	FC	PWP	KS	FS	Z	С
depth										Acidity	-10kPa	–1500kPa				
cm	H2O	CaCl ₂	dS/m	%	cmolc/kg	cmolc/kg	cmolc/kg	cmolc/kg	mg/kg	cmol _c /kg	%	%	%	%	%	%
0-10	5.7	4.9	0.11	N/R	8.8	3.8	0.63	0.48	13	15	38.6	17.4	7.4	25.4	30	27
15-60	5.7	4.5	0.1	N/R	8.5	9.4	0.51	1.2	240	13	44.5	24.1	0.5	17.4	19	58.5
70-105	7.4	6.2	0.16	N/R	16	13	0.43	3.2	N/R	N/R	53	26.3	0.7	12.1	17.5	65
105-160	8.9	8.9	0.77	0.09	16	14	2.9	5.8	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
	depth cm 0-10 15-60 70-105	depth H2O 0-10 5.7 15-60 5.7 70-105 7.4	depth H2O CaCl2 0-10 5.7 4.9 15-60 5.7 4.5 70-105 7.4 6.2	depth H2O CaCl2 dS/m 0-10 5.7 4.9 0.11 15-60 5.7 4.5 0.1 70-105 7.4 6.2 0.16	depth H2O CaCl2 dS/m % 0-10 5.7 4.9 0.11 N/R 15-60 5.7 4.5 0.1 N/R 70-105 7.4 6.2 0.16 N/R	depth H2O CaCl2 dS/m % cmole/kg 0-10 5.7 4.9 0.11 N/R 8.8 15-60 5.7 4.5 0.1 N/R 8.5 70-105 7.4 6.2 0.16 N/R 16	depth cm H2O CaCl2 dS/m % cmolc/kg cmolc/kg 0-10 5.7 4.9 0.11 N/R 8.8 3.8 15-60 5.7 4.5 0.1 N/R 8.5 9.4 70-105 7.4 6.2 0.16 N/R 16 13	depth cm H2O CaCl2 dS/m % cmole/kg cmole/kg cmole/kg 0-10 5.7 4.9 0.11 N/R 8.8 3.8 0.63 15-60 5.7 4.5 0.1 N/R 8.5 9.4 0.51 70-105 7.4 6.2 0.16 N/R 16 13 0.43	depth cm H2O CaCl2 dS/m % cmole/kg cmole/kg	depth cm H2O CaCl2 dS/m % cmol/kg cmol/kg cmol/kg cmol/kg mg/kg 0-10 5.7 4.9 0.11 N/R 8.8 3.8 0.63 0.48 13 15-60 5.7 4.5 0.1 N/R 8.5 9.4 0.51 1.2 240 70-105 7.4 6.2 0.16 N/R 16 13 0.43 3.2 N/R	depth H2O CaCl2 dS/m % cmolc/kg cmolc/kg cmolc/kg cmolc/kg cmolc/kg mg/kg cmolc/kg 0-10 5.7 4.9 0.11 N/R 8.8 3.8 0.63 0.48 13 15 15-60 5.7 4.5 0.1 N/R 8.5 9.4 0.51 1.2 240 13 70-105 7.4 6.2 0.16 N/R 16 13 0.43 3.2 N/R N/R	depth H2O CaCl2 dS/m % cmol/kg cmol/kg<	depth cm H2O CaCl2 dS/m % cmole/kg	depth H2O CaCl2 dS/m % cmol/kg cmol/kg cmol/kg cmol/kg mg/kg mg/kg -10kPa -1500kPa -6000 (1000) (1	depth H2O CaCl2 dS/m % cmolc/kg cmolc/kg cmolc/kg mg/kg mg/kg -10kPa -1500kPa % % % 0-10 5.7 4.9 0.11 N/R 8.8 3.8 0.63 0.48 13 15 38.6 17.4 7.4 25.4 15-60 5.7 4.5 0.1 N/R 8.5 9.4 0.51 1.2 240 13 44.5 24.1 0.5 17.4 70-105 7.4 6.2 0.16 N/R 16 13 0.43 3.2 N/R N/R 53 26.3 0.7 12.1	depth cm H2O CaCl2 dS/m % cmol/kg cmol/kg cmol/kg cmol/kg mg/kg mg/kg cmol/kg -10kPa -1500kPa %



Slip plane features evident in trench below SW53: view downslope (left) profile view (centre), view upslope (right)

² Source: Government of Victoria State Chemistry Laboratory.