Site Code[1] **SW60**

Trenched site showing clear transition from PODOSOL (near) to CHROMOSOL (far)

Location South of Simpson: Cooriemungle Road and Princetown Road

Landform Gently undulating plain

Geology Neogene Hanson Plain Sand Formation

Element Level to slightly sloping plain

Slope <1%

Aspect 0

Horizon	Depth (cm)	Description
Ah	0-25	Very dark greyish brown (10YR3/2 moist and dry); loamy sand, apedal, pH 5.1; abrupt and smooth boundary to:
A2	25-40	Brownish yellow (10YR6/8); sandy clay loam; massive; pH 6.0; clear and wavy change to:
B21t	40-70/90	Light olive brown (2.5Y5/3) ped exterior, yellowish brown (10YR5/6) to red (2.5YR5/8) interiors; medium clay; fine to coarse (5-30 mm) polyhedral structure; smooth ped faces; very firm consistence; pH 5.8; irregular and clear change to:
B/C	70/90+	Light grey (2.5Y7/1) ped exterior, with yellowish brown (10YR5/8) to yellowish red (5YR5/6) interiors conspicuous coarse (50-100 mm) reticulate mottling; very coarse to coarse (30-100 mm) polyhedral, parting to medium to fine (5-30 mm) polyhedral structure; smooth faced peds; pH 5.5

Management considerations

This is one of the better soils of the dairying country in the south east of the region. It has generally higher clay content and better structure than other soils derived from the Hanson Plain Sand (compare SW61 Podosol and SW62 Hydrosol). Topsoils across all of the Hanson Plain Sand soils are very sandy and acid. The soil at this dairy farm will have had lime added, hence the favourable surface horizon pH. Low Ca:Mg ratio in the subsoil could limit plant growth. The change from one soil type to another is quite abrupt across the plains and it is virtually impossible to know the soil type at any point on the plain unless excavation is carried out.(See image upper left)

Reticulate, Mesotrophic, Brown CHROMOSOL

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

Analytical data[2]

Site SW60	Sample depth	pH		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex Acidity	FC –10kPa	PWP –1500kPa	KS	FS	Z	C
Horizon	cm	H_2O	$CaCl_2$	dS/m	%	$cmol_c/kg$	$cmol_c/kg$	$cmol_c/kg$	$cmol_c/kg$	mg/kg	$cmol_c/kg$	%	%	%	%	%	%
A1	0-25	6.2	5.6	0.15	N/R	6.2	0.55	0.51	0.18	<10	9.3	17.6	7.4	29.3	45.6	12	7.5
A2	25-40	6	5.4	0.08	N/R	1.8	0.92	0.24	0.09	<10	4.3	15.5	8.9	27.1	40.9	8	24
B21	40-80	5.8	5.6	0.09	N/R	1.7	5	0.45	0.25	<10	8	32.7	24.4	15.4	17.6	6	57.5
B22	80-105	5.5	5.1	0.08	N/R	0.82	4.7	0.17	0.33	<10	6.8	31.7	21.1	25.1	16.2	3.5	52

[2] Source: Government of Victoria State Chemistry Laboratory.