

Site Code ¹ **SW59**

Location South of Simpson: Cooriemungle Road and Princetown Road

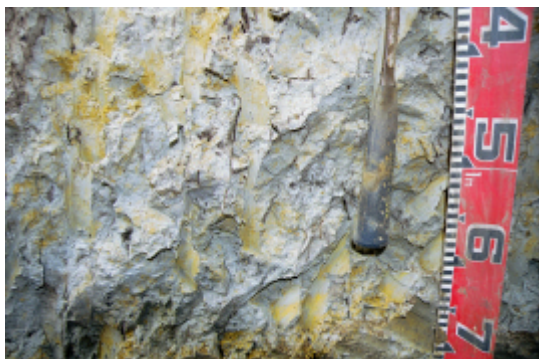
Landform Dissected plain

Geology Veneer of Neogene Hanson Plain Sand overlying Neogene Gellibrand Marl

Element Upper slope / crest

Slope 2%

Aspect South-west



Waterlogged mottled clay subsoil at 1.5 m



Sesquic, Semiaquic PODOSOL

Horizon	Depth (cm)	Description
A1	0-15	Black (2.5Y2.5/1); sandy loam; pH 5.6; smooth boundary to:
A2	15-30	Intermittent horizon; conspicuously bleached; clear and wavy boundary to:
B21s	15/30-60	Mottled yellowish brown (10YR5/8 moist) and very dark greyish brown (10YR3/2 moist); sandy clay loam; weak very fine polyhedral structure; weak to firm consistence (weakly cemented, weak 'coffee rock'); pH 5.3; gradual and wavy boundary to:
B22g	60-90	Light olive brown (2.5Y5/4 moist) with prominent yellowish brown (10YR7/8 moist) to yellow (10YR5/8 moist) mottles; sandy clay; very coarse (50-100 mm) polyhedral, parting to coarse (20-50 mm) blocky structure; sand coatings (whitish) on the larger ped faces; pH 5.5; clear smooth boundary to:
B23gss	90+	Light greenish grey (5GY7/1 moist); heavy clay; brownish yellow (10YR6/8 moist) mottles; very coarse (50-100 mm) polyhedral, parting to coarse (20-50 mm) blocky structure; slickensides (>50 mm) present; pH 6.3.

Management considerations

The lighter textured topsoil and landscape position renders the soil surface less prone to pugging damage than many of the soils in the district. The weakly cemented subsoil (B21s) is acid, has low levels of nutrients and poor nutrient holding capacity. Regular applications of balanced fertilizer as well as lime are needed to get good pasture production on these soils. The severe waterlogging and saturation of the deeper heavy clay subsoil is a permanent limitation to root growth as well as contributing to the landslide hazard associated with the slopes below this site. See also SW53 for soil in equivalent landscape position but without Hanson Plain Sand topsoil

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

Analytical data²

Site SW59	Sample depth Horizon	pH		EC dS/m	NaCl %	Ex Ca cmolc/kg	Ex Mg cmolc/kg	Ex K cmolc/kg	Ex Na cmolc/kg	Ex Al mg/kg	Ex Acidity cmolc/kg	FC -10kPa %	PWP -1500kPa %	KS %	FS %	Z %	C %	
		H ₂ O	CaCl ₂															
	A	0-30	5.6	5	0.16	N/R	5.8	0.87	0.26	0.33	<10	12	19.9	9.1	24.4	49.2	11	8.5
Sporadic A2 not sampled																		
	B21	30-60	5.3	4.5	0.08	N/R	0.83	1	0.12	0.27	150	11	19.6	11.3	18.4	47.6	2	25
	B22	60-90	5.5	4.6	0.08	N/R	1.2	2.8	0.14	0.41	61	5.7	22.4	12.4	18	44.2	3.5	33
	B23	90+	6.3	5.2	0.14	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R



² Source: Government of Victoria State Chemistry Laboratory.