

Site Code¹ SW61



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

Sharp boundary (at <3 m depth) between overlying Hanson Plain Sand and underlying Gellibrand Marl represents a throttle to downward percolation of water in this landscape.

Horizon	Depth (cm)	Description
A1	0–45	Black (7.5YR2.5/1 moist, 7.5YR3/1 dry); loamy fine sand; apedal structure; pH 4.2; clear and smooth boundary to:
A2	45–65/75	Grey (10YR5/1 moist); light grey (10YR7/1 dry); loamy medium sand; apedal structure; pH 4.4; abrupt and irregular boundary to:
B21h	65/75–90	Black (7.5YR2.5/1 moist and dry); sandy loam; massive structure; pH 4.2; clear and wavy boundary to:
B22hs	90–100/110	Very dark brown (10YR2/2 moist); cemented sand ('coffee rock'); massive; pH 4.5; abrupt and wavy boundary to:
B23s	100/110+	Mottled yellow (2.5Y7/6 moist), yellowish brown (10YR5/8 moist) and dark red (2.5YR4/8 moist) mottling; cemented sand; massive; pH 4.8.

Management considerations

Extremely acid profile is typical for this type of soil. The bleached A2 horizon is “spewy” and weak when wet and very hard when dry. The B horizon ‘coffee rock’ acts as a barrier to water movement and to root growth. Compare this profile with SW60.



Melacic, Humic/Humosesquic, Semiaquic PODOSOL

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

Analytical data²

Site SW61	Sample depth Horizon cm	pH		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex Acidity	FC	PWP	KS	FS	Z	C
		H ₂ O	CaCl ₂	dS/m	%	cmol _c /kg	cmol _c /kg	cmol _c /kg	cmol _c /kg	mg/kg	cmol _c /kg	-10kPa %	-1500kPa %	%	%	%	%
A1	0-10	4.2	3.1	0.11	N/R	0.71	1.1	0.45	0.37	42	18	N/R	N/R	33.5	42.8	14.5	3
A2	45-70	4.4	3.6	<0.05	N/R	<0.05	0.15	0.05	0.07	<10	1.5	N/R	N/R	34.1	47.8	18.5	<1
B21	70-90	4.2	3.3	0.09	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	29.6	44.8	17	5.5
B22	90-105	4.5	4.1	0.1	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
B23	105+	4.8	4.8	0.09	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.