Site Code[1] **SW58**

Mole channel formed in subsoil

Location Cooriemungle road / Gallum road, tributary of Ross Creek, Heytesbury district

Landform Valley floor

Geology Neogene Hanson Plain Sand and Gellibrand Marl: Alluvium

Element Plain on valley floor

Slope 0%

Aspect NE

Upper profile (A1 and B21 horizons)

Deeper profile (B22g and B23g horizons)
Humose, Kurosolic, Redoxic HYDROSOL

Horizon	Depth (cm)	Description
A1	0-30	Very dark brown (10YR2/2 moist and 10YR5/2 dry); clay loam; weakly pedal; medium (10-20 mm) polyhedral structure; weak consistence; pH 5.9; clear and smooth change to:
B21	30-45	Black (10YR2/1 moist and 10YR4/1 dry); with reddish yellow (5YR6/8 moist) mottles common (mainly in root channels); medium clay; coarse polyhedral (tending to prismatic), parting to medium blocky structure; weak consistence; pH 5.3; abrupt and smooth change to:
B22g	45-75	Dark grey (10YR4/1 moist) with brownish yellow (10YR6/8 moist) mottles common; medium clay; medium (20-50 mm) prismatic, parting to medium (10-20 mm) blocky structure; firm consistence; pH 5.5; clear and smooth change to:
B23g	75 +	Grey (10YR5/1 moist) with many reddish yellow (7.5YR6/8 moist) mottles; sandy clay; very coarse (100-300 mm) prismatic structure, (larger at depth), parting to very coarse (50-100 mm) and coarse (20-50 mm) blocky structure; very firm consistence; pH 5.8; strong sulphidic smell (i.e. anaerobic).

Management considerations

This and similar soils in the district respond well to close spaced drains to alleviate waterlogging and form reasonably stable mole channels. See also profile SW57 for variation in the soil profile at this site.

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

Analytical data[2]

Site SW58	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	0-30	5.9	5.4	0.22	N/R	12.0	2.8	0.40	0.46	<10	13.0	35.8	15.4	4.5	45.5	21.0	19.0
B21	30-45	5.3	4.5	0.16	N/R	8.2	5.2	0.38	0.80	140	18.0	39.4	22.2	5.4	19.9	21.0	46.0
B22	45-75	5.5	4.6	0.11	N/R	5.1	5.2	0.34	0.71	110	12.0	35.5	23.5	9.1	27.6	20.0	39.5
B23	75-130	5.8	4.8	0.10	N/R	3.4	3.8	0.23	0.54	22	5.4	25.1	13.4	13.3	39.0	23.0	25.5
B23g	130-150	5.8	5.0	0.15	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.