#### **Location** East of Colac, between Warncoort-Birregurra road and railway line



LandformGently undulating plainGeologyQuaternary basaltElementFlatSlope0Aspect0

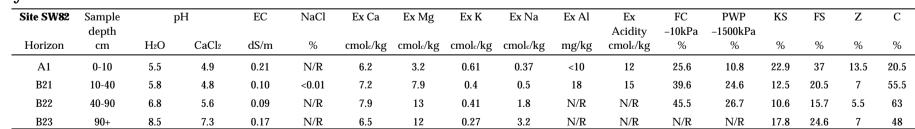
Excavation at site of SW82 and SW83

Horizon	Depth (cm)	Description							
A1	0-10	Very dark brown (10YR2/2 moist and 10YR4/2 dry); pH 5.5; loam; clear boundary to:							
B21	10-40	Black (10YR3/2 moist); medium heavy clay; medium to fine (5-20 mm) polyhedral structure; strong consistence; pH 5.8; gradual boundary to:							
B22	40-90	Black (10YR2/1 moist); heavy clay; some pockets of fine bucksho;t coarse prismatic, parting to fine lenticular structure; strong consistence; pH 6.8; abrupt boundary to:							
B23ssgk	90 +	Dark greyish brown (10YR4/2 moist) with brownish yellow (10YR6/6 moist) and minor (<2%), light olive brown (2.5Y5/4 moist) mottles; soft carbonate and strongly vertic; medium (20-50 mm) prismatic structure; strong consistence; pH 8.5							

#### **Management considerations**

The soil is a 'puff' in a variable Gilgai complex comprising Sodosols (**SW83**), Chromosols and Vertosols (**SW84**). Waterlogging and shrink-swell activity of the clays are the principle hazards in this landscape.

## Analytical data





Vertic (& Sodic), Calcic Black CHROMOSOL

<sup>1</sup> Source: MacEwan R, Imhof M (in press) Major Soils and Landscapes along the Southwest Gas Pipeline 1999. DPI. (Analytical data from Government of Victoria, State Chemistry Laboratory)

# Site Code<sup>2</sup> SW83



**Location** East of Colac, between Warncoort-Birregurra road and railway line

Landform	Gently undulating plain
Geology	Quaternary basalt
Element	Flat
Slope	0
Aspect	0

Gilgai features close to SW82 and SW83

Horizon	Depth (cm)	Description								
A1	0-10	Very dark brown (10YR2/2 moist), dark greyish brown (10YR4/2 dry); loam; pH 5.5; clear change to:								
A2	10-60	Dark greyish brown (10YR4/2 moist), conspicuously bleached; (10YR7/2 dry); sandy clay loam; apedal massive structure; few [2%], fine buckshot nodules [concentrated in pockets]; pH 6.6; abrupt and wavy change to:								
B21	60-90	Black (10YR2/1 moist); heavy clay; few pockets of ferruginous fine gravel; coarse prismatic structure; pH 6.8; abrupt change to:								
B22	90 +	Mottled dark greyish brown grey with (10YR6/1 moist) and minor [<2%], brownish yellow (10YR6/8 moist) and light olive brown (2.5Y5/4 moist) mottles, soft calcareous segregations; strongly vertic; medium clay; medium prismatic structure; pH 8.6								

### **Management considerations**

The soil is a 'hollow' in a variable Gilgai complex comprising Sodosols, Chromosols (**SW82**) and Vertosols (**SW84**). Waterlogging and shrink-swell activity of the clays are the principle hazards in this landscape.

# Analytical data

Site SW83	Sample	pH		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex	FC	PWP	KS	FS	Z	С
Horizon	depth cm	H2O	CaCl <sub>2</sub>	dS/m	%	cmol <sub>c</sub> /kg	cmolc/kg	cmolc/kg	cmolc/kg	mg/kg	Acidity cmolc/kg	–10kPa %	–1500kPa %	%	%	%	%
A1	0-10	5.5	4.9	0.21	N/R	6.2	3.2	0.61	0.37	<10	12	25.6	10.8	22.9	37	13.5	20.5
A2	10-60	6.6	6	0.06	N/R	1.7	1.4	< 0.05	0.18	N/R	3.3	16.6	3.8	28.6	46.2	14	11.5
B21	60-90	6.8	5.6	0.11	N/R	5.9	11	0.3	2.4	N/R	11	39.4	22.4	14.4	21.4	7	54.5
B22	90+	8.6	7.5	0.25	N/R	7	12	0.28	4	N/R	N/R	39.3	19.9	15.3	28.4	7.5	46.5





Vertic (& Calcic), Subnatric, Black SODOSOL