

Project Name: SC
Project Code: SC **Site ID:** CP108 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (NSW)

Site Information

Desc. By:	P.H. Walker	Locality:	Mayfair just east of Bruneel Swamp: levee toeslope
Date Desc.:	19/12/78	Elevation:	1 metres
Map Ref.:	Sheet No. : 8737 1:100000	Rainfall:	1150
Northing/Long.:	150.663888888889	Runoff:	Very slow
Easting/Lat.:	-34.9111111111111	Drainage:	Poorly drained

Geology

Exposure Type:	No Data	Conf. Sub. is Parent. Mat.:	No Data
Geol. Ref.:	No Data	Substrate Material:	Porous, Unconsolidated material (unidentified)

Land Form

Rel/Slope Class:	Level plain <9m <1%	Pattern Type:	Flood plain
Morph. Type:	Lower-slope	Relief:	No Data
Elem. Type:	Levee	Slope Category:	Very gently sloped
Slope:	<1 %	Aspect:	270 degrees

Surface Soil Condition (dry): Soft

Erosion:

Soil Classification

Australian Soil Classification:	Mapping Unit:	N/A
No Available Class Stratic Oxyaquic Hydrosol	Principal Profile Form:	Um5.51
ASC Confidence:	Great Soil Group:	Alluvial soil

Analytical data are incomplete but reasonable confidence.

Site Disturbance: Complete clearing. Pasture, native or improved, but never cultivated

Vegetation: Low Strata - Shrub, , Sparse. *Species includes - None recorded

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A	0 - 0.1 m	Black (5Y2/1-Moist); , 10YR22, 0-2% ; , 0-2% ; Loam (Sapric); Massive grade of structure; Moist; Weak consistence; Field pH 4.6 (pH meter); Clear change to -
D	0.1 - 0.15 m	Dark grey (5Y4/1-Moist); ; Sandy clay loam; Massive grade of structure; Moist; Firm consistence; Field pH 4.5 (pH meter); Clear change to -
D	0.15 - 0.2 m	Grey (5Y5/1-Moist); ; Sand; Massive grade of structure; Moist; Very weak consistence; Field pH 4.5 (pH meter); Clear change to -
D	0.2 - 0.3 m	Grey (5Y5/1-Moist); , 10YR33, 0-2% ; , 0-2% ; Loamy sand; Massive grade of structure; Wet; Very weak consistence; Slightly plastic; Slightly sticky; Field pH 4.4 (pH meter); Clear change to -
D	0.3 - 0.4 m	Grey (5Y5/1-Moist); , 5Y84, 2-10% ; , 2-10% ; Sandy loam; Massive grade of structure; Wet; Very weak consistence; Slightly plastic; Slightly sticky; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Tubules; Field pH 4.3 (pH meter); Gradual change to -
D	0.4 - 0.5 m	Dark grey (5Y4/1-Moist); , 5Y84, 2-10% ; , 10YR44, 2-10% ; Loamy fine sand; Massive grade of structure; Wet; Very weak consistence; Slightly plastic; Slightly sticky; Common (10 - 20 %), Ferruginous, Coarse (6 - 20 mm), Tubules; Field pH 4.2 (pH meter); Gradual change to -
D	0.5 - 0.6 m	Dark grey (5Y4/1-Moist); , 5Y84, 2-10% ; , 10YR44, 2-10% ; Loamy fine sand; Wet; Very weak consistence; Slightly plastic; Slightly sticky; Common (10 - 20 %), Ferruginous, Coarse (6 - 20 mm), Tubules; Field pH 4.1 (pH meter); Clear change to -
D	0.6 - 0.7 m	Dark grey (5Y4/1-Moist); , 5Y84, 10-20% ; , 10-20% ; Silty loam; Wet; Very weak consistence; Slightly plastic; Slightly sticky; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Tubules; Field pH 4 (pH meter); Gradual change to -
D	0.7 - 0.8 m	Dark grey (5Y4/1-Moist); , 5Y84, 10-20% ; , 10-20% ; Silty loam; Wet; Very weak consistence; Slightly plastic; Slightly sticky; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Tubules; Field pH 3.9 (pH meter); Gradual change to -
D	0.8 - 0.9 m	Dark grey (5Y4/1-Moist); , 5Y84, 10-20% ; , 10-20% ; Silty loam; Wet; Very weak consistence; Slightly plastic; Slightly sticky; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Tubules; Field pH 4 (pH meter); Gradual change to -

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D	0.9 - 1 m	Dark grey (5Y4/1-Moist); , 5Y84, 2-10% ; , 2-10% ; Sandy loam; Wet; Very weak consistence; Slightly plastic; Slightly sticky; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Tubules; Field pH 3.9 (pH meter); Gradual change to -
D	1 - 1.2 m	Very dark grey (2.5Y3/0-Moist); , 10YR32, 0-2% ; , 0-2% ; Silty loam; Wet; Very weak consistence; Moderately plastic; Moderately sticky; Field pH 4.2 (pH meter); Gradual change to -
D	1.2 - 1.4 m	Very dark grey (2.5Y3/0-Moist); , 10YR32, 0-2% ; , 0-2% ; Silty loam; Wet; Very weak consistence; Moderately plastic; Moderately sticky; Field pH 4.8 (pH meter); Gradual change to -
D	1.4 - 1.6 m	Very dark grey (2.5Y3/0-Moist); ; Silty loam; Wet; Very weak consistence; Moderately plastic; Moderately sticky; 2-10%, fine gravelly, 2-6mm, dispersed, Shells, coarse fragments; Field pH 5.8 (pH meter); Gradual change to -
D	1.6 - 1.8 m	Very dark grey (2.5Y3/0-Moist); ; Silty loam; Wet; Very weak consistence; Moderately plastic; Moderately sticky; 2-10%, fine gravelly, 2-6mm, dispersed, Shells, coarse fragments; Field pH 6.4 (pH meter);

Morphological Notes

Observation Notes

ALLUVIAL SEDIMENTS

Site Notes

BRUNDEE

Observation ID: 1

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations			Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na	Acidity		%
						Cmol (+)/kg			
0 - 0.1	4.6A	4.2A							
0.1 - 0.15	4.5A	1.7A							
0.15 - 0.2	4.5A	1A							
0.2 - 0.3	4.4A	1.1A							
0.3 - 0.4	4.3A	1.6A							
0.4 - 0.5	4.2A	2A							
0.5 - 0.6	4.1A	2.1A							
0.6 - 0.7	4A	2.7A							
0.7 - 0.8	3.9A	3.3A							
0.8 - 0.9	4A	3.5A							
0.9 - 1	3.9A	3.9A							
1 - 1.2	4.2A	4.7A							
1.2 - 1.4	4.8A	5.3A							
1.4 - 1.6	5.8A	6.3A							
1.6 - 1.8	6.4A	6.7A							

Depth m	CaCO3	Organic	Avail.	Total	Total	Total	Bulk Density Mg/m3	Particle		Size FS %	Analysis	
	%	C %	P mg/kg	P %	N %	K %		GV	CS		Silt	Clay
0 - 0.1		16.1D							2D	12	24	31
0.1 - 0.15		2.88D							9D	35	21	29
0.15 - 0.2		0.69D							29D	48	11	12
0.2 - 0.3		0.94D							28D	50	11	10
0.3 - 0.4		1.48D							7D	51	22	17
0.4 - 0.5		1.16D							3D	57	20	18
0.5 - 0.6		0.99D							2D	62	19	14
0.6 - 0.7		1.44D							2D	54	23	18
0.7 - 0.8		1.72D							2D	51	24	21
0.8 - 0.9		1.56D							2D	57	20	17
0.9 - 1		2.26D							2D	57	20	16
1 - 1.2		3.82D							1D	46	27	20
1.2 - 1.4		3.61D							1D	43	27	21
1.4 - 1.6		3.87D							0D	26	35	31
1.6 - 1.8		3.5D							0D	23	37	33

[illegible]

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1 - 1.2
1.2 - 1.4
1.4 - 1.6
1.6 - 1.8

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Laboratory Analyses Completed for this profile

13C1_AL	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
13C1_FE	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
2A1	Air-dry moisture content
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
5A2	Chloride - 1:5 soil/water extract, automated colour
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
P10_PB_C	Clay (%) - Plummet balance
P10_PB_CS	Coarse sand (%) - Plummet balance
P10_PB_FS	Fine sand (%) - Plummet balance
P10_PB_Z	Silt (%) - Plummet balance