Project Name: CAN
Project Code: CAN **Site ID:** C618A **Observation ID:** 1
Agency Name: CSIRO Division of Soils (NSW)

Site Information

Desc. By: J.R. Sleeman
Locality: 12km east of Jerilderie on Oaklands Road:100m east of road
Date Desc.: 13/07/66
Elevation: 120 metres
Map Ref.: Sheet No. : 8027 1:100000
Rainfall: 410
Northing/Long.: 145.85
Runoff: Very slow
Easting/Lat.: -35.4166666666667
Drainage: Imperfectly drained

Geology

ExposureType: Soil pit
Conf. Sub. is Parent. Mat.: No Data
Geol. Ref.: No Data
Substrate Material: Slightly porous, Unconsolidated material (unidentified)

Land Form

Rel/Slope Class: Level plain <9m <1%
Pattern Type: Plain
Morph. Type: Flat
Relief: No Data
Elem. Type: Plain
Slope Category: Level
Slope: 0 %
Aspect: No Data

Surface Soil Condition (dry): Self-mulching, Cracking

Erosion:

Soil Classification

Australian Soil Classification:
N/A
ASC Confidence:
Confidence level not specified
Mapping Unit: N/A
Principal Profile Form: Ug5.43
Great Soil Group: Brown clay

Site Disturbance: Extensive clearing, for example poisoning, ringbarking

Vegetation: Low Strata - Sod grass, , Closed or dense. *Species includes - None recorded

Tall Strata - Tree, , Sparse. *Species includes - None Recorded

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

0 - 0.08 m Very dark greyish brown (10YR3/2-Moist); Greyish brown (10YR5/2-Dry); ; Light clay; Weak grade of structure, 2-5 mm, Subangular blocky; Very strong consistence; Field pH 6.4 (pH meter); Abrupt change to -

0.08 - 0.3 m Very dark grey (10YR3/1-Moist); Dark grey (10YR4/1-Dry); ; Heavy clay; Weak grade of structure, 50-100 mm, Angular blocky; Very strong consistence; 2-10%, fine gravelly, 2-6mm, dispersed, Gravel, coarse fragments; , Manganiferous, Medium (2 -6 mm), Soft segregations; Field pH 7 (pH meter);

0.3 - 0.4 m Very dark grey (10YR3/1-Moist); Dark grey (10YR4/1-Dry); ; Heavy clay; Weak grade of structure, 50-100 mm, Angular blocky; Very strong consistence; 2-10%, fine gravelly, 2-6mm, dispersed, Gravel, coarse fragments; , Manganiferous, Medium (2 -6 mm), Soft segregations; Very few (0 - 2 %), Calcareous, , Concretions; Field pH 7.3 (pH meter); Clear change to -

0.4 - 0.6 m Dark grey (10YR4/1-Moist); Dark grey (10YR4/1-Dry); ; Heavy clay; Weak grade of structure, 50-100 mm, Angular blocky; Very strong consistence; 0-2%, fine gravelly, 2-6mm, dispersed, Gravel, coarse fragments; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Very few (0 - 2 %), Calcareous, , Soft segregations; Field pH 7.7 (pH meter);

0.6 - 0.7 m Dark grey (10YR4/1-Moist); Dark grey (10YR4/1-Dry); ; Heavy clay; Weak grade of structure, 50-100 mm, Angular blocky; Very strong consistence; 0-2%, fine gravelly, 2-6mm, dispersed, Gravel, coarse fragments; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Common (10 - 20 %), Calcareous, , Concretions; Field pH 8.7 (pH meter); Gradual change to -

0.7 - 0.9 m Dark greyish brown (10YR4/2-Moist); Brown (10YR5/3-Dry); ; Heavy clay; Weak grade of structure, 50-100 mm, Angular blocky; Very strong consistence; 0-2%, fine gravelly, 2-6mm, dispersed, Gravel, coarse fragments; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 9 (pH meter);

0.9 - 1.2 m Dark greyish brown (10YR4/2-Moist); Brown (10YR5/3-Dry); ; Heavy clay; Weak grade of structure, 50-100 mm, Angular blocky; Very strong consistence; 0-2%, fine gravelly, 2-6mm, dispersed, Gravel, coarse fragments; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Few (2 - 10 %), Calcareous, , Concretions; Field pH 9.2 (pH meter);

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1.2 - 1.3 m	Dark greyish brown (10YR4/2-Moist); Brown (10YR5/3-Dry); ; Heavy clay; Weak grade of structure, 100-200 mm, Angular blocky; Very strong consistence; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Few (2 - 10 %), Calcareous, , Soft segregations; Field pH 9.2 (pH meter); Diffuse change to -
1.3 - 1.5 m	Brown (10YR5/3-Moist); , 10YR42; Heavy clay; Weak grade of structure, 100-200 mm, Angular blocky; Very strong consistence; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Common (10 - 20 %), Calcareous, , Concretions; Field pH 9.1 (pH meter);
1.5 - 1.65 m	Brown (10YR5/3-Moist); , 10YR42, 2-10% ; , 2-10% ; Heavy clay; Weak grade of structure, 100-200 mm, Angular blocky; Very strong consistence; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Few (2 - 10 %), Calcareous, , Soft segregations; Field pH 9.1 (pH meter);

Morphological Notes

Observation Notes

QUATERNARY ALLUVIUM:SHELP MICRO. SAMPLED AT SITE C618:

Site Notes

JERILDIE

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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable Acidity	CEC	ECEC	ESP
			Ca	Mg	K	Na				
m		dS/m	Cmol (+)/kg							%
0 - 0.02	8A	0.18A	30.2K	10.7	2.3	0.16				
0.02 - 0.1	8.3A	0.15A	40.6K	12.3	1.6	0.25				
0.1 - 0.2	8.5A	0.18A	40.1K	14.9	0.98	0.61				
0.2 - 0.3	8.7A	0.21A	39.8K	17.2	0.89	1.2				
0.3 - 0.6	9A	0.33A	37.6K	19.2	0.95	3				
0.6 - 0.9	9.1A	0.51A	27K	18.5	1.1	2.7				
0.9 - 1.2	9.2A	0.36A	21.1K	12.3	0.98	3.4				
1.2 - 1.3	9.2A	0.48A	21.3K	12.8	0.97	2				
1.3 - 1.5	9.1A	0.6A	25.9K	14.2	1	2.2				
1.5 - 1.65	9.1A	0.804A	18.8K	13.3	1.1	2.2				

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis				
								GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.02	1.3A	1.61F	6A		0.172B		1.20		9D	27	10	44
0.02 - 0.1	3.2A	0.84F	2A		0.091B				7D	20	6	55
0.1 - 0.2	3.9A	0.57F	1A		0.065B		1.20		6D	19	4	62
0.2 - 0.3	3.8A	0.48F	1A		0.054B		1.30		6D	19	4	63
0.3 - 0.6	4.7A	0.37F	1A		0.047B		1.40		5D	19	5	63
0.6 - 0.9	5.2A	0.29F	1A		0.034B				4D	19	8	65
0.9 - 1.2	3.2A	0.22F	1A		0.026B				9D	27	9	51
1.2 - 1.3	3.5A	0.18F	1A		0.023B				7D	26	8	54
1.3 - 1.5	3.1A	0.16F	1A		0.024B				4D	26	10	56
1.5 - 1.65	2.7A	0.12F	2A		0.022B				4D	25	9	57

Depth	COLE	Gravimetric/Volumetric Water Contents						K sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar	
m		g/g - m3/m3						mm/h	mm/h
0 - 0.02				0.37C				0.23C	
0.02 - 0.1									
0.1 - 0.2				0.33C				0.23C	
0.2 - 0.3				0.39C				0.25C	
0.3 - 0.6				0.4C				0.27C	
0.6 - 0.9									
0.9 - 1.2									
1.2 - 1.3									
1.3 - 1.5									
1.5 - 1.65									

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Laboratory Analyses Completed for this profile

15_NR_CA	Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded
15_NR_K	Exch. basic cations (K++) - meq per 100g of soil - Not recorded
15_NR_MG	Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded
15_NR_NA	Exch. basic cations (Na++) - meq per 100g of soil - Not recorded
19A1	Carbonates - rapid titration
2_LOI	Loss on Ignition (%)
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
6_DC	Organic carbon (%) - Dry combustion
7_NR	Total nitrogen (%) - Not recorded
9B_9C	Available P (mg/kg) - Bicarbonate P - 0.5M NaHCO3 extractable
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
P3A_NR	Bulk density - Not recorded
P3B_VL_01	0.1 BAR Moisture m3/m3 - Volumetric using suction plate
P3B_VL_15	15 BAR Moisture m3/m3 - Volumetric using pressure plate