Project Name: CAN
Project Code: CAN **Site ID:** CP100 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (NSW)

Site Information

Desc. By:	J. Loveday	**Locality:**	Leeton Agricultural Experiment Station
Date Desc.:	10/10/78	**Elevation:**	150 metres
Map Ref.:	Sheet No. : 8128 1:100000	**Rainfall:**	430
Northing/Long.:	146.35	**Runoff:**	Slow
Easting/Lat.:	-34.6166666666667	**Drainage:**	Imperfectly drained

Geology

ExposureType:	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:**	Alluvial plain
Morph. Type:	Flat	**Relief:**	No Data
Elem. Type:	Plain	**Slope Category:**	Level
Slope:	<1 %	**Aspect:**	No Data

Surface Soil Condition (dry): Recently cultivated, Self-mulching

Erosion:

Soil Classification

Australian Soil Classification:
Epicalcareous-Endohypersodic Self-Mulching Aquic Vertosol

Mapping Unit: N/A
Principal Profile Form: Ug5.24

ASC Confidence:
All necessary analytical data are available.

Great Soil Group: Grey clay

Site Disturbance: Cultivation. Irrigated, past or present

Vegetation:

Surface Coarse Fragments:

Profile Morphology

0 - 0.1 m	Dark greyish brown (2.5Y4/2-Moist); ; Medium heavy clay; 50-100 mm, Subangular blocky; Weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 7.5 (pH meter); Common, coarse (>5mm) roots;
0.1 - 0.2 m	Dark greyish brown (2.5Y4/2-Moist); ; Medium heavy clay; 50-100 mm, Subangular blocky; Weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 7.8 (pH meter); Common, coarse (>5mm) roots; Gradual change to -
0.2 - 0.3 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; , Angular blocky; Very weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 8.2 (pH meter); Common, coarse (>5mm) roots;
0.3 - 0.4 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; , Angular blocky; Very weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 8.3 (pH meter); Common, coarse (>5mm) roots;
0.4 - 0.5 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; , Angular blocky; Very weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 8.3 (pH meter); Common, coarse (>5mm) roots;
0.5 - 0.6 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; , Angular blocky; Very weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 8.5 (pH meter);
0.6 - 0.7 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; , Angular blocky; Very weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 8.6 (pH meter);
0.7 - 0.8 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; , Angular blocky; Very weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 8.7 (pH meter);
0.8 - 0.9 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; , Angular blocky; Very weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 8.8 (pH meter);
0.9 - 1 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; , Angular blocky; Very weak consistence; Few (2 - 10 %), Calcareous, , Concretions; Field pH 9 (pH meter);
1 - 1.1 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; Very weak consistence; Field pH 9.1 (pH meter);
1.1 - 1.2 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; Very weak consistence; Field pH 9 (pH meter);

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1.2 - 1.3 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; Very weak consistence; Field pH 9.2 (pH meter);
1.3 - 1.4 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; Very weak consistence; Field pH 9.3 (pH meter); Gradual change to -
1.4 - 1.5 m	Olive grey (5Y4/2-Moist); , 5Y63, 20-50% ; , 20-50% ; Medium heavy clay; Loose consistence; Very few (0 - 2 %), Calcareous, , Concretions; Field pH 9.3 (pH meter);
1.5 - 1.6 m	Olive grey (5Y4/2-Moist); , 5Y63, 20-50% ; , 20-50% ; Heavy clay; Loose consistence; Very few (0 - 2 %), Calcareous, , Concretions; Field pH 9.4 (pH meter);
1.6 - 1.7 m	Olive grey (5Y4/2-Moist); , 5Y63, 20-50% ; , 20-50% ; Heavy clay; Loose consistence; Very few (0 - 2 %), Calcareous, , Concretions; Field pH 9.4 (pH meter);
1.7 - 1.8 m	Pale olive (5Y6/3-Moist); ; Heavy clay; Loose consistence; Very few (0 - 2 %), Calcareous, , Concretions; Field pH 9.3 (pH meter);
1.8 - 1.9 m	Pale olive (5Y6/3-Moist); ; Heavy clay; Loose consistence; Very few (0 - 2 %), Calcareous, , Concretions; Field pH 9.3 (pH meter);
1.9 - 2 m	Pale olive (5Y6/3-Moist); ; Heavy clay; Loose consistence; Very few (0 - 2 %), Calcareous, , Concretions; Field pH 9.3 (pH meter);

Morphological Notes

Observation Notes

ALLUVIUM

Site Notes

LEETON

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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable	CEC	ECEC	ESP
			Ca	Mg	K	Na	Acidity			
m		dS/m	Cmol (+)/kg							%
0 - 0.1	7.5A	0.12A	19.3K	6.4	1.9	0.24	8.8B	36.6J		0.66
0.1 - 0.2	7.8A	0.14A	19.9K	6.8	1.8	0.32	7.8B	36.6J		0.87
0.2 - 0.3	8.2A	0.14A	21.9K	8.3	1.2	0.45	5.7B	37.6J		1.20
0.3 - 0.4	8.3A	0.14A	22.4K	9.3	1.1	0.58	5.7B	39.1J		1.48
0.4 - 0.5	8.3A	0.16A	21K	9.9	1.2	0.88	5.6B	38.6J		2.28
0.5 - 0.6	8.5A	0.16A	19.2K	10.3	1.2	1.3	6.2B	38.2J		3.40
0.6 - 0.7	8.6A	0.19A	18.5K	10.3	1.3	1.7	5.7B	38J		4.47
0.7 - 0.8	8.7A	0.2A	17.5K	11.3	1.3	2.4	6B	38.5J		6.23
0.8 - 0.9	8.8A	0.2A	16.2K	11.4	1.3	3	6.8B	38.7J		7.75
0.9 - 1	9A	0.22A	15.3K	11.3	1.3	3.7	5.4B	37J		10.00
1 - 1.1	9.1A	0.23A								
1.1 - 1.2	9A	0.26A								
1.2 - 1.3	9.2A	0.29A								
1.3 - 1.4	9.3A	0.32A								
1.4 - 1.5	9.3A	0.31A	11K	12	1.3	5.5	5.4E	35.2J		15.63
1.5 - 1.6	9.4A	0.35A								
1.6 - 1.7	9.4A	0.38A								
1.7 - 1.8	9.3A	0.39A	9.1K	12.6	1.3	5.6	5.1E	33.7J		16.62
1.8 - 1.9	9.3A	0.4A								
1.9 - 2	9.3A	0.39A	8.8K	13.4	1.4	6	4E	33.6J		17.86

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 - 0.1		1.33D						0	7D	20	10	60
0.1 - 0.2	0.29A	1.14D						0	7D	20	10	59
0.2 - 0.3	0.59A	0.53D						0	7D	19	10	63
0.3 - 0.4	0.48A	0.36D						0	6D	18	13	60
0.4 - 0.5	0.79A	0.3D						0	6D	18	12	63
0.5 - 0.6	0.81A	0.31D						0	6D	17	11	61
0.6 - 0.7	1.11A	0.26D						1	5D	18	14	59
0.7 - 0.8	1.15A	0.27D						1	5D	18	14	60
0.8 - 0.9	0.82A	0.27D						1	6D	19	13	60
0.9 - 1	0.9A	0.27D						1	6D	18	13	59
1 - 1.1												
1.1 - 1.2												
1.2 - 1.3												
1.3 - 1.4												
1.4 - 1.5	0.98A							1	5D	18	27	47
1.5 - 1.6												
1.6 - 1.7												
1.7 - 1.8	1.37A							3	6D	17	25	50
1.8 - 1.9												
1.9 - 2	1.33A							3	4D	17	21	54

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 - 0.1										

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0.1 - 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1
1 - 1.1
1.1 - 1.2
1.2 - 1.3
1.3 - 1.4
1.4 - 1.5
1.5 - 1.6
1.6 - 1.7
1.7 - 1.8
1.8 - 1.9
1.9 - 2

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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_CEC	CEC - 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
15G_C_AL1	Exchangeable aluminium - meq per 100g of soil - Aluminium By difference of C and A or B
15G1_H	Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0
19A1	Carbonates - rapid titration
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_GRAV	Gravel (%)
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