CAN **Project Name:**

Project Code: CAN CP59 Observation ID: 1 Site ID:

CSIRO Division of Soils (ACT) Agency Name:

Site Information

Desc. By: Date Desc.: Locality: J.R. Sleeman **Experimental Station**

24/11/75 Elevation: 650 metres

Map Ref.: Sheet No.: 8727 1:100000 Rainfall: 630

Northing/Long.: Runoff: 149.1 Moderately rapid Moderately well drained Easting/Lat.: -35.2Drainage:

Geology

ExposureType: No Data Conf. Sub. is Parent. Mat.: No Data

Geol. Ref.: **Substrate Material:** No Data Non-porous, dense, Siltstone

Land Form

Rel/Slope Class: Rolling low hills 30-90m 10-Pattern Type: Low hills Morph. Type: Lower-slope Relief: No Data Slope Category: Elem. Type: Gently inclined Hillslope Aspect: 200 degrees Slope: 5 %

Surface Soil Condition (dry): Soft

Erosion:

Soil Classification

Australian Soil Classification: N/A **Mapping Unit:** Calcic Subnatric Brown Sodosol **Principal Profile Form:** Dy2.34 **ASC Confidence: Great Soil Group:** Solodic soil

All necessary analytical data are available.

Site Disturbance: Complete clearing. Pasture, native or improved, cultivated at some stage Low Strata - Sod grass, , Mid-dense. *Species includes - None recorded Vegetation:

Surface Coarse Fragments: 2-10%, fine gravelly, 2-6mm, , Siltstone

Profile Morphology

PIOIII	e worphology	
A1	0 - 0.1 m	Brown (10YR5/3-Moist); ; Fine sandy loam (Heavy); Massive grade of structure; Very weak consistence; Few (2 - 10 %), Ferruginous, Fine (0 - 2 mm), Soft segregations; Field pH 5.7 (pH meter); Clear change to -
A2	0.1 - 0.27 m	Pale brown (10YR6/3-Moist); ; Fine sandy loam; Massive grade of structure; Firm consistence; Few (2 - 10 %), Ferruginous, Fine (0 - 2 mm), Soft segregations; Field pH 6.5 (pH meter); Abrupt change to -
B1	0.27 - 0.34 m	Brown (10YR5/3-Moist); ; Light medium clay; Massive grade of structure; Firm consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Soft segregations; Field pH 7.4 (pH meter); Abrupt change to -
B2	0.34 - 0.52 m	Yellowish brown (10YR5/4-Moist); ; Medium clay; Strong grade of structure, 20-50 mm, Angular blocky; Very firm consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Soft segregations; Field pH 7.6 (pH meter); Sharp change to -
2B2k	0.52 - 0.83 m	Brownish yellow (10YR6/5-Moist); ; Medium clay; Strong grade of structure, 20-50 mm, Angular blocky; Very strong consistence; Common (10 - 20 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Few (2 - 10 %), Calcareous, , ; Field pH 8.1 (pH meter); Gradual change to -

; Medium clay (Light); Strong grade of structure, 20-50 mm, Angular blocky; Very strong 0.84 - 1.06 m consistence; Common (10 - 20 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Few (2

- 10 %), Calcareous, , ; Field pH 8.2 (pH meter);

Morphological Notes

Observation Notes

SILTSTONE SUBSTRATE MATERIAL NOT CONFIRMED: UNDERLIE >52CM: A2 SL. BLEACHED

Site Notes

2B2k

GINNINDERRA

Project Name: CAN

Project Code: Agency Name: CAN Site ID: CP59 Observation ID: 1

CSIRO Division of Soils (ACT)

Laboratory Test Results:

Depth	pН	1:5 EC		hangeable Cations Mg K		Exchangeable Na Acidity		CEC		ECEC	E	SP
m		dS/m		- 5			Cmol (+)/kg				C	%
0 - 0.1	5.7A	0.1A	1.9K	0.74	0.14	0.17	6.2B	9.1	J		1	.87
0.1 - 0.27	6.5A	0.11A	2.3K	0.68	0.06	0.14	0.3E	3.5	J		4	.00
0.27 - 0.34	7.4A	0.14A	5K	2.4	0.12	0.58	0.5E	8.6	J		6	.74
0.34 - 0.52	7.6A	0.22A	8.4K	5.8	0.25	1	0.9E	16.4	IJ		6	.10
0.52 - 0.83	8.1A	0.21A	7.1K	8.5	0.29	1.3	0.3E	17.5	J		7	.43
0.84 - 1.06	8.2A	0.17A	6.4K	7.1	0.23	0.96	0E	13.8	BJ		6	.96
Depth	CaCO3 Organic		Avail.	Total	Total	Total	Bulk	Particle		Size Analysis		
		С	Р	P	N	K	Density	G۷	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.1		1.97D	15A		0.18	DED			3D	53	29	11
			10/1		0.10	OOD			SD	55	29	
0.1 - 0.27		0.54D	1A		0.06	-			3D	53	34	10
0.1 - 0.27 0.27 - 0.34		-				62B			-			10 27
		0.54D	1A		0.06	52B 54B			3D	53	34	_
0.27 - 0.34	0.1A	0.54D 0.38D	1A 0A		0.06 0.05	52B 54B 6B			3D 2D	53 41	34 30	27
0.27 - 0.34 0.34 - 0.52	0.1A 0.16C	0.54D 0.38D 0.38D 0.19D	1A 0A 0A		0.06 0.05 0.0	52B 54B 6B 37B			3D 2D 1D	53 41 24	34 30 29	27 47

COLE **Gravimetric/Volumetric Water Contents** K unsat Depth K sat 0.05 Bar 0.1 Bar 0.5 Bar 1 Bar g/g - m3/m3 Sat. 5 Bar 15 Bar m mm/h mm/h

0 - 0.1 0.1 - 0.27

0.27 - 0.34 0.34 - 0.52 0.52 - 0.83 0.84 - 1.06

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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++) - meg per 100g of soil - Not recorded Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded Exch. basic cations (Na++) - meq per 100g of soil - Not recorded 15_NR_MG 15_NR_NA

Exchangeable aluminium - meq per 100g of soil - Aluminium By difference of C and A or B Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0 15G_C_AL1 15G1_H

19A1

Carbonates - rapid titration
Calcium Carbonate (CaCO3) - Not recorded 19B_NR

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

7_NR Total nitrogen (%) - Not recorded

Available P (mg/kg) - Bicarbonate P - 0.5M NaHCO3 extractable 9B_9C

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