Project Name: LSG
Project Code: LSG **Site ID:** CP83 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By:	J.R. Sleeman	**Locality:**	30M upstream of Fairburn Ave.bridge(west bank)site 3:
Date Desc.:	01/04/77	**Elevation:**	610 metres
Map Ref.:	Sheet No. : S155-16 1:250000	**Rainfall:**	640
Northing/Long.:	149.183333333333	**Runoff:**	Moderately rapid
Easting/Lat.:	-35.2833333333333	**Drainage:**	Moderately well drained

Geology

ExposureType:	Undisturbed soil core	**Conf. Sub. is Parent. Mat.:**	No Data
Geol. Ref.:	No Data	**Substrate Material:**	Undisturbed soil core, Slightly porous, Unconsolidated material (unidentified)

Land Form

Rel/Slope Class:	Undulating plains <9m 3-10%	**Pattern Type:**	Hills
Morph. Type:	Lower-slope	**Relief:**	No Data
Elem. Type:	Hillslope	**Slope Category:**	Gently inclined
Slope:	4 %	**Aspect:**	210 degrees

Surface Soil Condition (dry): Firm

Erosion:

Soil Classification

Australian Soil Classification:
Mesotrophic Subnatric Red Sodosol
ASC Confidence:
All necessary analytical data are available.

Mapping Unit: N/A
Principal Profile Form: Dy2.52
Great Soil Group: Red earth

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

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

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

Profile Morphology

A11	0 - 0.1 m	Brown (7.5YR4/4-Moist); ; Loam; Massive grade of structure; Sandy (grains prominent) fabric; Few (<1 per 100mm2) macropores, Dry; Firm consistence; 2-10%, fine gravelly, 2-6mm, Substrate material, coarse fragments; Field pH 5.7 (pH meter); Clear change to -
A12	0.1 - 0.3 m	Dark reddish brown (5YR3/4-Moist); ; Loam (Heavy); Massive grade of structure; Sandy (grains prominent) fabric; Many (>5 per 100mm2) macropores, Dry; Firm consistence; 2-10%, coarse gravelly, 20-60mm, Substrate material, coarse fragments; Field pH 6.2 (pH meter); Clear change to -
A2	0.3 - 0.42 m	Pink (7.5YR7/4-Moist); Reddish yellow (7.5YR6/6-Dry); , 5YR56, 20-50% , Distinct; , 20-50% , Distinct; Clay loam; Massive grade of structure; Sandy (grains prominent) fabric; Many (>5 per 100mm2) macropores, Dry; Very firm consistence; Field pH 6.7 (pH meter); Clear change to -
B	0.42 - 0.6 m	Yellowish red (5YR5/6-Moist); ; Medium clay; Massive grade of structure; Earthy fabric; Dry; Very strong consistence; Field pH 7.1 (pH meter); Abrupt change to -
	0.6 - 0.74 m	Yellowish red (5YR5/8-Moist); Brownish yellow (10YR6/8-Dry); ; Medium clay; Massive grade of structure; Earthy fabric; Very strong consistence; 20-50%, coarse gravelly, 20-60mm, angular, Substrate material, coarse fragments; Field pH 8 (pH meter); Clear change to -
	0.74 - 1 m	Yellowish red (5YR5/6-Moist); , 5YR73, 20-50% , Distinct; , 20-50% , Distinct; Light clay; Massive grade of structure; Earthy fabric; Very strong consistence; , Manganiferous, , Soft segregations; Field pH 8.9 (pH meter);

Morphological Notes

Observation Notes

42-100CM SOME LUSTROUS CLAY FACES:COLLIUM:

Site Notes

C'BERRA A'PORT

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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	5.7A	0.05A	4.1K	1.5	0.38	0.13	9.2B	15.3J		0.85
0.1 - 0.3	6.2A	0.02A	3.6K	1.5	0.22	0.15	5.7B	11.3J		1.33
0.3 - 0.42	6.7A	0.02A	3.2K	2.5	0.11	0.38	7.3B	13.6J		2.79
0.42 - 0.6	7.1A	0.02A	2.9K	3.2	0.14	1	9.8B	17.1J		5.85
0.6 - 0.74	8A	0.06A	3.3K	5.6	0.17	2.1	4.8B	16.1J		13.04
0.74 - 1	8.9A	0.16A	2.6K	6	0.17	2.6	3.6B	14J		18.57

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		2.11D			0.173B			6	14D	40	24	20
0.1 - 0.3		0.85D			0.067B			13	17D	37	24	22
0.3 - 0.42		0.47D			0.063B			4	9D	37	25	31
0.42 - 0.6		0.43D			0.054B			4	7D	32	21	44
0.6 - 0.74	0.03A	0.33D						26	9D	31	19	44
0.74 - 1	0.05A	0.12D						23	7D	30	25	39

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										
0.1 - 0.3										
0.3 - 0.42										
0.42 - 0.6										
0.6 - 0.74										
0.74 - 1										

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Laboratory Analyses Completed for this profile

13C1_FE	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
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
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
7_NR	Total nitrogen (%) - Not recorded
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