Project Name: CAN
Project Code: CAN **Site ID:** CP235 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (NSW)

Site Information

Desc. By: P.H. Walker
Date Desc.: 10/09/84
Map Ref.: Sheet No. : 8824 1:100000
Northing/Long.: 149.543055555556
Easting/Lat.: -36.6194444444445
Locality: 2.5 KM west of Bemboka on Hwy (Neville`s)
Elevation: 180 metres
Rainfall: 770
Runoff: Moderately rapid
Drainage: Well drained

Geology

ExposureType: Soil pit
Geol. Ref.: No Data
Conf. Sub. is Parent. Mat.: No Data
Substrate Material: Non-porous, dense, Granite

Land Form

Rel/Slope Class: Undulating rises 9-30m 3-10%
Morph. Type: Crest
Elem. Type: Hillcrest
Slope: 8 %
Pattern Type: Hills
Relief: 20 metres
Slope Category: Moderately inclined
Aspect: 170 degrees

Surface Soil Condition (dry): Soft

Erosion:

Soil Classification

Australian Soil Classification:
Bleached Eutrophic Red Kandosol
ASC Confidence:
No analytical data are available but confidence is fair.
Mapping Unit: N/A
Principal Profile Form: Dr2.3
Great Soil Group: Red podzolic soil

Site Disturbance: Complete clearing. Pasture, native or improved, cultivated at some stage

Vegetation: Low Strata - Sod grass, , . *Species includes - Pennisetum clandestinum

Surface Coarse Fragments:

Profile Morphology

	0 - 0.03 m	; Field pH 5 (pH meter); Wavy change to -
A11	0.03 - 0.12 m	Very dark grey (7.5YR3/1-Moist); Grey (10YR5/1-Dry); ; Loam; Weak grade of structure, 20-50 mm, Subangular blocky; Moist; Very weak consistence; Field pH 5.3 (pH meter); Gradual change to -
A12	0.12 - 0.22 m	Dark brown (7.5YR3/2-Moist); Pinkish grey (7.5YR6/2-Dry); ; Loam; Weak grade of structure, 20-50 mm, Subangular blocky; Moist; Very weak consistence; Field pH 5.7 (pH meter); Clear, Irregular change to -
A2	0.22 - 0.3 m	Reddish yellow (5YR6/6-Moist); Pink (7.5YR7/4-Dry); , 7.5YR31, 2-10% ; , 2-10% ; Clay loam; Massive grade of structure; Moist; Very weak consistence; Common (10 - 20 %), Earthy, , Soft segregations; Field pH 6 (pH meter); Clear, Irregular change to -
B1	0.3 - 0.36 m	Dark red (2.5YR3/6-Moist); Dark red (2.5YR3/6-Dry); , 7.5YR54, 0-2% ; , 0-2% ; Light clay; Weak grade of structure, 50-100 mm, Angular blocky; Moist; Weak consistence; Few cutans, <10% of ped faces or walls coated, distinct; Few (2 - 10 %), Earthy, , Soft segregations; Field pH 6.3 (pH meter); Gradual change to -
B21	0.36 - 0.46 m	Red (2.5YR4/6-Moist); Red (2.5YR4/6-Dry); , 7.5YR54, 2-10% ; , 2-10% ; Medium heavy clay; Weak grade of structure, 50-100 mm, Angular blocky; Moist; Weak consistence; Few cutans, <10% of ped faces or walls coated, distinct; Field pH 6.5 (pH meter); Gradual change to -
B22	0.46 - 0.55 m	Red (2.5YR4/6-Moist); , 5YR34, 0-2% ; , 0-2% ; Medium heavy clay; Massive grade of structure; Moist; Weak consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Field pH 7 (pH meter); Gradual change to -
B31	0.55 - 0.76 m	Red (2.5YR4/6-Moist); , 2.5YR56, 20-50% ; , 5YR43, 20-50% ; Light clay; Massive grade of structure; Moist; Weak consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Field pH 7.5 (pH meter); Gradual change to -
B32	0.76 - 1.05 m	Red (2.5YR4/6-Moist); , 2.5YR56, 20-50% ; , 5YR43, 20-50% ; Clay loam; Massive grade of structure; Moist; Very weak consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Field pH 7.2 (pH meter); Gradual, Wavy change to -
C11	1.18 - 1.45 m	Dark brown (10YR3/3-Moist); , 2.5YR46, 2-10% ; , 2-10% ; Loam; Massive grade of structure; Moist; Very weak consistence; Common cutans, 10-50% of ped faces or walls coated, prominent; Field pH 6.3 (pH meter);

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C12	1.47 - 1.57 m	Dark brown (10YR3/3-Moist); , 2.5YR46, 2-10% ; , 2-10% ; Loam; Massive grade of structure; Moist; Very firm consistence; Few cutans, <10% of ped faces or walls coated, prominent; Clear change to -
C2	1.57 - 1.7 m	Dark brown (10YR3/3-Moist); , 2.5YR58, 0-2% ; , 2.5Y33, 0-2% ; Massive grade of structure; Moist; Strong consistence; Few cutans, <10% of ped faces or walls coated, prominent; Few (2 - 10 %), Argillaceous, , Laminae; Clear change to -
C3	1.7 - 1.78 m	Dark brown (10YR3/3-Moist); , 2.5YR58, 0-2% ; , 0-2% ; Massive grade of structure; Moist; Very weak consistence; Few cutans, <10% of ped faces or walls coated, prominent; Gradual change to -
C4	1.78 - 1.97 m	Yellowish brown (10YR5/4-Moist); , 2.5YR46, 0-2% ; , 0-2% ; Massive grade of structure; Moist; Few cutans, <10% of ped faces or walls coated, prominent;

Morphological Notes

Observation Notes

BEGA BATHOLITH/BEMBOKA SUITE:76-105CM POCKETS OF LOOSE GRANITE GRIT:WEATHERED GRANITE >120CM

Site Notes

BEMBOKA

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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							%
0.03 - 0.12	5A	0.08A	3.3K	0.61	0.14	0	3.5B	7.6J		0.00
0.12 - 0.22	5.3A	0.03A	2.5K	0.35	0.08	0	2.6B	5.5J		0.00
0.22 - 0.3	5.7A	0.05A	2.4K	0.59	0.1	0	1.4B	4.5J		0.00
0.3 - 0.36	6A	0.03A	3.4K	2.3	0.14	0.03	1.2B	7.1J		0.42
0.36 - 0.46	6.3A	0.03A	5.5K	5.4	0.16	0.35	0.8B	12.2J		2.87
0.46 - 0.55	6.5A	0.05A	6.2K	7.2	0.09	0.6	0B	11.7J		5.13
0.55 - 0.76	7A	0.04A	7K	9.4	0.05	1.1	0B	11.3J		9.73
0.76 - 1.05	7.5A	0.05A	6K	9.3	0.03	2.4	0B	8.2J		29.27
1.18 - 1.45	7.2A	0.06A	5.4K	9.4	0.02	3.1	0B	9.2J		33.70
1.47 - 1.57	6.3A	0.05A	5K	10.1	0.05	4	0B	10.7J		37.38
1.57 - 1.7	6.2A	0.04A	4.2K	8.7	0.06	4.1	0B	10.7J		38.32
1.7 - 1.78	6.2A	0.04A	4.4K	8.4	0.09	3.8	0B	9.6J		39.58
1.78 - 1.97	6.3A	0.03A	4K	8.2	0.09	3.8	0B	10.7J		35.51

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle Size Analysis				
		C	P	P	N	K	Density	GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0.03 - 0.12		2.4D										
0.12 - 0.22		0.94D										
0.22 - 0.3		0.56D										
0.3 - 0.36		0.43D										
0.36 - 0.46		0.48D										
0.46 - 0.55		0.32D										
0.55 - 0.76		0.23D										
0.76 - 1.05		0.11D										
1.18 - 1.45		0.07D										
1.47 - 1.57		0.05D										
1.57 - 1.7		0.05D										
1.7 - 1.78		0.04D										
1.78 - 1.97		0.04D										

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
0.03 - 0.12										
0.12 - 0.22										
0.22 - 0.3										
0.3 - 0.36										
0.36 - 0.46										
0.46 - 0.55										
0.55 - 0.76										
0.76 - 1.05										
1.18 - 1.45										
1.47 - 1.57										
1.57 - 1.7										
1.7 - 1.78										
1.78 - 1.97										

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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
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
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