Project Name: CAN
Project Code: CAN **Site ID:** CP129 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (VIC)

Site Information

Desc. By: C.L. Watson
Locality: Off Marnoo/Donald Road:Geddes` place:~15KM from Donald to site
Date Desc.: 14/10/78
Elevation: 120 metres
Map Ref.: Sheet No. : SJ7425 1:100000
Rainfall: 430
Northing/Long.: 142.966666666667
Runoff: Very slow
Easting/Lat.: -36.45
Drainage: Imperfectly drained

Geology

ExposureType: No Data
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: Very gently sloped
Slope: <1 %
Aspect: No Data

Surface Soil Condition (dry): Recently cultivated, Hardsetting

Erosion:

Soil Classification

Australian Soil Classification:
Episodic-Epicalcareous Epipedal Grey Vertosol
ASC Confidence:
Analytical data are incomplete but reasonable confidence.
Mapping Unit: N/A
Principal Profile Form: Ug5.24
Great Soil Group: Grey clay

Site Disturbance: No effective disturbance. Natural

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

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

0 - 0.05 m	Very dark greyish brown (10YR3/2-Moist); ; Light medium clay; Moderate grade of structure, 2-5 mm, Angular blocky; Strong consistence; Common (10 - 20 %), Calcareous, , Soft segregations;
0.05 - 0.1 m	Very dark greyish brown (10YR3/2-Moist); , 10YR53, 20-50% ; , 20-50% ; Heavy clay; Moderate grade of structure, 2-5 mm, Angular blocky; Weak consistence; Moderately plastic; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 8.5 (pH meter);
0.1 - 0.2 m	Brown (10YR5/3-Moist); , 10YR63, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Very weak consistence; Moderately plastic; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 9.1 (pH meter);
0.2 - 0.3 m	Brown (10YR5/3-Moist); , 10YR63, 2-10% ; , 2-10% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Very weak consistence; Moderately plastic; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 9.2 (pH meter);
0.3 - 0.4 m	Brown (10YR5/3-Moist); , 10YR63, 10-20% ; , 10-20% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Very weak consistence; Moderately plastic; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 9.2 (pH meter);
0.4 - 0.5 m	Pale brown (10YR6/3-Moist); , 10YR53, 20-50% ; , 5YR54, 20-50% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Very weak consistence; Moderately plastic; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 9.1 (pH meter);
0.5 - 0.6 m	Pale brown (10YR6/3-Moist); , 10YR53, 10-20% ; , 5YR54, 10-20% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Very weak consistence; Moderately plastic; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 9.1 (pH meter);
0.6 - 0.7 m	Pale brown (10YR6/3-Moist); , 10YR53, 2-10% ; , 5YR54, 2-10% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Very weak consistence; Moderately plastic; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 9.1 (pH meter);
0.7 - 0.8 m	Pale brown (10YR6/3-Moist); , 10YR53, 0-2% ; , 5YR54, 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Moderately plastic; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 9 (pH meter);

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0.8 - 0.9 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Moderately plastic; Common (10 - 20 %), Calcareous, , Concretions; Field pH 9 (pH meter);
0.9 - 1 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Field pH 8.9 (pH meter);
1 - 1.1 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Many (20 - 50 %), Calcareous, , Concretions; Field pH 8.9 (pH meter);
1.1 - 1.2 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Field pH 8.9 (pH meter);
1.2 - 1.3 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Many (20 - 50 %), Calcareous, , Concretions; Field pH 8.9 (pH meter);
1.3 - 1.4 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 8.8 (pH meter);
1.4 - 1.5 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Common (10 - 20 %), Calcareous, , Concretions; Field pH 8.8 (pH meter);
1.5 - 1.6 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 8.7 (pH meter);
1.6 - 1.7 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Common (10 - 20 %), Calcareous, , Concretions; Field pH 8.7 (pH meter);
1.7 - 1.8 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Few (2 - 10 %), Calcareous, , Soft segregations; Field pH 8.7 (pH meter);
1.8 - 1.9 m	Light brownish grey (10YR6/2-Moist); , 10YR64, 0-2% ; , 0-2% ; Heavy clay; Strong grade of structure, 2-5 mm, Angular blocky; Weak consistence; Few (2 - 10 %), Calcareous, , Soft segregations; Field pH 8.7 (pH meter);

Morphological Notes

Observation Notes

Site Notes

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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 - 0.05	8.5A	0.2A	24.2K	8.4	2.2	2	7.2B	44J		4.55
0.05 - 0.1	9.1A	0.36A								
0.1 - 0.2	9.2A	0.56A								
0.2 - 0.3	9.2A	0.84A								
0.3 - 0.4	9.1A	1.2A								
0.4 - 0.5	9.1A	1.5A								
0.5 - 0.6	9.1A	1.7A								
0.6 - 0.7	9A	1.8A								
0.7 - 0.8	9A	2.1A								
0.8 - 0.9	8.9A	2.3A								
0.9 - 1	8.9A	2A								
1 - 1.1	8.9A	1.9A								
1.1 - 1.2	8.9A	2.1A								
1.2 - 1.3	8.8A	2.1A								
1.3 - 1.4	8.8A	2.3A								
1.4 - 1.5	8.7A	2.4A								
1.5 - 1.6	8.7A	2.4A								
1.6 - 1.7	8.7A	2.6A								
1.7 - 1.8	8.7A	2.6A								
1.8 - 1.9	8.7A	2.5A								

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 - 0.05	5.45A	0.93D							15D	17	7	53
0.05 - 0.1												
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												

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 - 0.05								0.23B		

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0.05 - 0.1
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

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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
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_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
P3B_GV_15	15 BAR Moisture g/g - Gravimetric using pressure plate