Project Name: LON
Project Code: LON **Site ID:** H90 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (TAS)

Site Information

Desc. By: J. Loveday
Date Desc.: 25/02/54
Map Ref.: Sheet No. : 8314 1:100000
Northing/Long.: 147.016666666667
Easting/Lat.: -41.55
Locality: 9.7km SW of Longford and 8.9km NW of Cressy:
Elevation: 160 metres
Rainfall: 620
Runoff: Slow
Drainage: Poorly drained

Geology

ExposureType: Soil pit
Geol. Ref.: No Data
Conf. Sub. is Parent. Mat.: No Data
Substrate Material: Unconsolidated material (unidentified)

Land Form

Rel/Slope Class: Level plain <9m <1%
Morph. Type: Flat
Elem. Type: Plain
Slope: 0 %
Pattern Type: Alluvial plain
Relief: No Data
Slope Category: Level
Aspect: No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:
Mottled Epipedal Aquic Vertosol
ASC Confidence:
All necessary analytical data are available.
Mapping Unit: N/A
Principal Profile Form: Ug5.16
Great Soil Group: Humic gley

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

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A	0 - 0.08 m	Very dark brown (10YR2/2-Moist); ; Heavy clay; 5-10 mm, Granular; Moderately moist; Firm consistence; Very few (0 - 2 %), Ferruginous, , Concretions; Diffuse change to -
	0.08 - 0.18 m	Very dark grey (2.5Y3/1-Moist); ; Heavy clay; 5-10 mm, Granular; Firm consistence; Very few (0 - 2 %), Ferruginous, , Concretions; CommonDiffuse change to -
	0.18 - 0.34 m	Black (5Y2/1-Moist); ; Heavy clay; Moderate grade of structure, Granular; Weak consistence; Very few (0 - 2 %), Ferruginous, , Concretions; CommonSharp, Irregular change to -
	0.36 - 0.52 m	Very dark grey (5Y3/1-Moist); , 7.5YR56; Heavy clay; , Granular; Very firm consistence; Common (10 - 20 %), Ferruginous, , Concretions; Diffuse change to -
	0.55 - 0.63 m	Very dark grey (2.5Y3/0-Moist); , 7.5YR56; Heavy clay; , Angular blocky; , Granular; Very firm consistence; Few (2 - 10 %), Ferruginous, , Concretions; Diffuse change to -
	0.63 - 0.75 m	Very dark grey (2.5Y3/0-Moist); , 7.5YR56; Heavy clay; 20-50 mm, Angular blocky; Very firm consistence; Few (2 - 10 %), Ferruginous, Fine (0 - 2 mm), Concretions; Diffuse change to -
	0.82 - 0.94 m	Very dark grey (2.5Y3/0-Moist); , 7.5YR56; Heavy clay; Massive grade of structure; Very firm consistence; Common (10 - 20 %), Ferruginous, Medium (2 -6 mm), Concretions; CommonDiffuse change to -
	0.94 - 1.07 m	Strong brown (7.5YR5/6-Moist); , 5Y32; Heavy clay; Massive grade of structure; Very firm consistence; Common (10 - 20 %), Ferruginous, , Concretions; Diffuse change to -
	1.24 - 1.35 m	Olive grey (5Y5/2-Moist); , 10YR66; Heavy clay; Massive grade of structure; Moderately plastic; Normal plasticity; Common (10 - 20 %), Ferruginous, , Concretions;
	1.55 - 1.65 m	Olive grey (5Y5/2-Moist); , 5Y71; , 10YR66; Heavy clay; Moderately plastic; Normal plasticity; Common (10 - 20 %), Ferruginous, , Concretions;
	1.98 - 2.08 m	Light grey (5Y7/1-Moist); , 7.5YR56, 2-10% ; , 5Y41, 2-10% ; Medium clay; Moderately plastic; Normal plasticity; Common (10 - 20 %), Ferruginous, , Concretions;

Morphological Notes

Observation Notes

124-208CM B1 CONCRETIONS ALSO:KINBURN SERIES:

Site Notes

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WESTBURY

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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 - 0.08	6A		10H	11	1.06	1.02	14.3H 24.3E		47.7B	
0.08 - 0.18	6A							33.5C		
0.18 - 0.34	5.9A		7.2H	12	0.37	1.5	12.7H 24.5E		43.6B	
0.36 - 0.52	5.7A							20.5C		
0.55 - 0.63	5.1A		3.5H	10.1	0.15	1.1	6.5H 12E		26.9B	
0.63 - 0.75	4.9A									
0.82 - 0.94	4.8A							16.5C		
0.94 - 1.07	4.8A									
1.24 - 1.35	4.6A									
1.55 - 1.65	4.5A									
1.98 - 2.08	4.7A									

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 - 0.08		4.1D		0.067D	0.415A			5	2B	5	16	66
0.08 - 0.18		3.4D			0.381A							
0.18 - 0.34		2.2D		0.058D	0.298A			10	6B	5	17	67
0.36 - 0.52		1.3D			0.157A							
0.55 - 0.63		0.8D		0.04D	0.132A			18	11B	6	17	63
0.63 - 0.75								28				
0.82 - 0.94		0.3D			0.057A							
0.94 - 1.07												
1.24 - 1.35												
1.55 - 1.65												
1.98 - 2.08												

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 - 0.08									
0.08 - 0.18									
0.18 - 0.34									
0.36 - 0.52									
0.55 - 0.63									
0.63 - 0.75									
0.82 - 0.94									
0.94 - 1.07									
1.24 - 1.35									
1.55 - 1.65									
1.98 - 2.08									

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Laboratory Analyses Completed for this profile

15D1_CEC	CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach
15E1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble
15E1_K	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_MG	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15G_C_H1	Exchangeable hydrogen - meq per 100g of soil - Hydrogen By back titration of A or B
15G1_H	Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0
15J_H	Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations and exch. (Hydrogen)
2_LOI	Loss on Ignition (%)
2A1	Air-dry moisture content
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
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A_HCL	Total element - P(%) - By boiling HCl
P10_GRAV	Gravel (%)
P10A1_C	Clay (%) - Pipette
P10A1_CS	Coarse sand (%) - Pipette
P10A1_FS	Fine sand (%) - Pipette
P10A1_Z	Silt (%) - Pipette