Project Name: LON

Project Code: LON Site ID: H15 Observation ID: 1

Agency Name: CSIRO Division of Soils (TAS)

Site Information

Desc. By: K.D. Nicholls Locality: 8.1km WNW of Longford and 4.8km SSE of Carrick:

Easting/Lat.: -41.566666666667 Drainage: Moderately well drained

<u>Geology</u>

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

Geol. Ref.: No Data Substrate Material: Unconsolidated material (unidentified)

Land Form

Rel/Slope Class:Undulating plains <9m 3-10%</th>Pattern Type:DunefieldMorph. Type:Upper-slopeRelief:6 metresElem. Type:LunetteSlope Category:No DataSlope:0 %Aspect:No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:Mapping Unit:N/AAcidic Regolithic Orthic TenosolPrincipal Profile Form:Uc4.2ASC Confidence:Great Soil Group:Earthy sand

All necessary analytical data are available.

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

Vegetation: Low Strata - Fern, 0.26-0.5m, Closed or dense. *Species includes - Pteridium esculentum

Tall Strata - Tree, 6.01-12m, Very sparse. *Species includes - None Recorded

Surface Coarse Fragments:

Profile Morphology						
A1	0 - 0.1 m					

Brown (7.5YR5/2-Moist); ; Sand; Single grain grade of structure; Very weak consistence; Diffuse

change to -

A1A2 0.1 - 0.25 m Brown (7.5YR5/4-Moist); ; Sand; Single grain grade of structure; Very weak consistence;

CommonDiffuse change to -

0.25 - 0.51 m Yellowish red (5YR4/6-Moist); ; Sand (Heavy); Single grain grade of structure; Weak

consistence; Diffuse change to -

0.51 - 0.63 m Strong brown (7.5YR5/6-Moist); ; Sand (Heavy); Single grain grade of structure; Weak

consistence; Diffuse change to -

0.63 - 0.91 m Yellowish brown (10YR5/7-Moist); ; Sand; Single grain grade of structure; Weak consistence;

Diffuse change to -

 $1.02 - 1.07 \ m \qquad \text{Light brownish grey (10YR6/2-Moist); , 10YR56; Clayey sand; Single grain grade of structure;} \\$

Sharp, Wavy change to -

1.07 - 1.08 m Brownish yellow (10YR6/8-Moist); ; Clayey sand; Silcrete, Strongly cemented, Massive; Sharp,

Wavy change to -

1.08 - 1.22 m Strong brown (7.5YR5/8-Moist); ; Clayey sand; Silcrete, Moderately cemented, Platy;

2.29 - 2.41 m Yellowish brown (10YR5/4-Moist); , 10YR71; Sand; 0-2%, Gravel, coarse fragments;

Morphological Notes

Observation Notes

122-170CM <10% FE CONCRETIONS <12MM:251-320CM PROBABLY LATERITIC B HORIZON OF KAOLINITIC CLAY:WILMORE SERIES.

Site Notes

WESTMORLAND

Project Name: LON
Project Code: LON Site ID: H1:
Agency Name: CSIRO Division of Soils (TAS) Site ID: H15 Observation ID: 1

Laboratory	/ Test F	Results:

Depth	рН	1:5 EC		nangeable	Cations K	Na E	exchangeable Acidity	CEC	E	CEC	E	SP
m		dS/m	Ca i	Mg K		Cmol (+)/kg					%	, 0
0 - 0.1	5.3A		1.9H	1	0.19	0.11	4.7H 7.5E		1	0.7B		
0.1 - 0.25	5.4A											
0.25 - 0.51	5.5A											
0.51 - 0.63	5.5A											
0.63 - 0.91	6.1A											
1.02 - 1.07	5.6A		0.4H	0.9	0.07	0.13	2.54H 4.5E			6B		
1.07 - 1.08	5.2A											
1.08 - 1.22	5.5A											
2.29 - 2.41	4.7A				2							
Depth	CaCO3	Organic	Avail.	Total	Total	Total			rticle S			
m	%	C %	P mg/kg	P %	N %	K %	Density Mg/m3	GV		FS %	Silt C	Clay
0 - 0.1		1.5D		0.009[0.1	6Δ		0	22B	68	5	5
0.1 - 0.25		0.9D		0.0051				Ū	220	00	Ū	U
0.25 - 0.51		0.3D		0.0001	0.04	-						
0.51 - 0.63		0.3D			0.02							
0.63 - 0.91		0.00			0.02	-0/1						
1.02 - 1.07		0.3D		0.004	0.03	84A		0	13B	63	8	15
1.07 - 1.08		0.2D		0.005[0	17B	58	10	14
1.08 - 1.22		0.22		0.0001	0.02			Ŭ	.,,	00		
2.29 - 2.41								1	19B	62	5	15
Depth COLE Gravimetric/Volumetric Water Contents K sat K unsat												
m		Sat.	0.05 Bar		0.5 Bar g - m3/m	1 Bar 3	5 Bar 15 B	Bar	mm/h		mm/h	

^{0 - 0.1} 0.1 - 0.25 0.25 - 0.51 0.51 - 0.63 0.63 - 0.91

^{1.02 - 1.07} 1.07 - 1.08 1.08 - 1.22 2.29 - 2.41

Project Name: LON

Project Code: LON Site ID: H15 Observation ID: 1

Agency Name: CSIRO Division of Soils (TAS)

Laboratory Analyses Completed for this profile

12_HCL_FE Total element - Fe(%) - Total acid(HCl) extractable Fe

13C1_FE Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon 15_NR_K Exch. basic cations (K++) - meg per 100g of soil - Not recorded

Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts 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 Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0 Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations and exch. (Hydrogen) Loss on Ignition (%)

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 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