Project Name: LON

Project Code: LON Site ID: H28 Observation ID: 1

Agency Name: CSIRO Division of Soils (TAS)

**Site Information** 

Desc. By: J.K. Taylor Locality: On property Raeburn: 4.8km NNE of Perth and 5.7km

NW of Evandale:

 Date Desc.:
 22/01/52
 Elevation:
 183 metres

 Map Ref.:
 Sheet No.: 8314
 1:100000
 Rainfall:
 700

 Northing/Long.:
 147.2
 Runoff:
 Slow

Geology

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

 Geol. Ref.:
 No Data
 Substrate Material:
 Basalt

**Land Form** 

Rel/Slope Class:No DataPattern Type:No DataMorph. Type:No DataRelief:No DataElem. Type:No DataSlope Category:No DataSlope:0 %Aspect:No Data

Surface Soil Condition (dry): Surface crust, Hardsetting

**Erosion:** 

**Soil Classification** 

Australian Soil Classification:Mapping Unit:N/AHaplic Epipedal Black VertosolPrincipal Profile Form:Gn3.42ASC Confidence:Great Soil Group:Prairie soil

All necessary analytical data are available.

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

Vegetation:

#### **Surface Coarse Fragments:**

### **Profile Morphology**

0 - 0.1 m

0 0.11111	coarse fragments; Diffuse change to -
0.1 - 0.28 m	Very dark greyish brown (10YR3/2-Moist); ; Medium clay; Weak grade of structure, Granular; Very weak consistence; Diffuse change to - $$
0.28 - 0.36 m	Very dark brown (10YR2/2-Moist); ; Medium clay; Moderate grade of structure, Granular; Firm consistence; Sharp change to -
0.38 - 0.61 n	Very dark brown (10YR2/2-Moist); ; Medium clay; Strong grade of structure, 100-200 mm, Columnar; Strong grade of structure, 20-50 mm, Angular blocky; Fine, (0 - 5) mm crack; Very firm consistence; Diffuse change to -
0.61 - 0.74 n	Olive grey (5Y5/2-Moist); , 10YR52; Medium clay; Strong grade of structure, 100-200 mm, Columnar; Strong grade of structure, 20-50 mm, Angular blocky; Fine, (0 - 5) mm crack; Very firm consistence; 0-2%, Gravel, coarse fragments; Sharp change to -
0.74 - 0.94 m	Olive grey (5Y5/2-Moist); , 10YR52; , 10YR56; Medium clay; , Angular blocky; 2-10%, Basalt,

. 10YR32: Clay loam: Weak grade of structure, Granular: Very strong consistence: 0-2%, Gravel,

0.94 - 1.12 m Olive grey (5Y5/2-Moist); , 10YR52; Medium clay; 20-50%, Basalt, coarse fragments;

# **Morphological Notes**

### **Observation Notes**

>112CM ON DECOMPOSING BASALT:EVANDALE SERIES:STRONG VERTICLE CRACKING FROM 38CM.

coarse fragments; Diffuse change to -

### **Site Notes**

**CORNWALL** 

Project Name: LON
Project Code: LON Site ID: H2
Agency Name: CSIRO Division of Soils (TAS) H28 Observation ID: 1

# **Laboratory Test Results:**

Depth	рН	1:5 EC		hangeable Cations Mg K			Exchangeable	CEC	E	CEC	E	SP
m		dS/m	Са			Na Acidity Cmol (+)/kg					9	6
0 - 0.1	6.4A		35.1H	13.2	0.89	0.38	8H 16.6E		(	66.4B		
0.1 - 0.28	6.5A											
0.28 - 0.36	6.4A		18.1H	14.9	0.42	0.6	8.2H 16.1E		4	49.1B		
0.38 - 0.61	6.4A											
0.61 - 0.74	6.7A		24H	19.8	0.43	0.82	5.8H 14.5E		ţ	59.5B		
0.74 - 0.94	7A											
0.94 - 1.12	7.4A											
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K			article :			
m	%	%	mg/kg	%	%	%	Density Mg/m3	GV	CS	FS %	Silt (	Jiay
0 - 0.1		3.6D		0.085	0.35	54A		1	3B	22	31	38
0.1 - 0.28		2.8D		0.047	0.2	7A		0	3B	21	32	39
0.28 - 0.36		2.1D		0.065	-			0	1B	20	28	43
0.38 - 0.61 0.61 - 0.74		1.1D 0.9D		0.064	0.10 0.10			1	2B	14	15	67
0.74 - 0.94		0.5D		0.0041	0.10			ı	20	14	13	01
0.94 - 1.12		0.4D			0.05	-						
Depth	COLE	.E Gravimetric/Volumetric Water Contents K sat K unsat										
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar 15	Bar				

<sup>0 - 0.1</sup> 0.1 - 0.28 0.28 - 0.36 0.38 - 0.61 0.61 - 0.74 0.74 - 0.94 0.94 - 1.12

LON **Project Name:** 

**Project Code:** LON Site ID: H28 Observation ID: 1

Agency Name: **CSIRO Division of Soils (TAS)** 

#### **Laboratory Analyses Completed for this profile**

15E1\_CA Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble 15E1\_K 15E1\_MG 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 15E1\_NA Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts

Exchangeable hydrogen - meq per 100g of soil - Hydrogen By back titration of A or B 15G\_C\_H1 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) 15G1\_H 15J\_H

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 HCI

P10\_GRAV Gravel (%) Clay (%) - Pipette P10A1\_C P10A1\_CS Coarse sand (%) - Pipette P10A1\_FS Fine sand (%) - Pipette P10A1\_Z Silt (%) - Pipette

XRD\_C\_ls XRD\_C\_Ka Interstratified clay minerals - X-Ray Diffraction

Kaolin - X-Ray Diffraction XRD\_C\_Qz Quartz - X-Ray Diffraction