

**Project Name:** STM  
**Project Code:** STM **Site ID:** H50 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (TAS)

**Site Information**

<b>Desc. By:</b>	C.G. Stephens	<b>Locality:</b>	
<b>Date Desc.:</b>	22/01/53	<b>Elevation:</b>	244 metres
<b>Map Ref.:</b>	Sheet No. : 8514 1:100000	<b>Rainfall:</b>	790
<b>Northing/Long.:</b>	148.033333333333	<b>Runoff:</b>	Slow
<b>Easting/Lat.:</b>	-41.566666666667	<b>Drainage:</b>	Imperfectly drained

**Geology**

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

**Land Form**

<b>Rel/Slope Class:</b>	No Data	<b>Pattern Type:</b>	Alluvial plain
<b>Morph. Type:</b>	Flat	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	Plain	<b>Slope Category:</b>	No Data
<b>Slope:</b>	0 %	<b>Aspect:</b>	0 degrees

**Surface Soil Condition (dry):**

**Erosion:**

**Soil Classification**

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Haplic Pedal Aquic Vertosol		<b>Principal Profile Form:</b>	Ug5.15
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Humic gley
All necessary analytical data are available.			

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

**Vegetation:** Low Strata - Sod grass, <0.25m, Closed or dense. \*Species includes - None recorded

**Surface Coarse Fragments:**

**Profile Morphology**

A1	0 - 0.1 m	Black (10YR2/1-Moist); ; Heavy clay; 20-50 mm, Angular blocky; Very strong consistence; 0-2%, medium gravelly, 6-20mm, rounded, Gravel, coarse fragments; Diffuse change to -
A	0.1 - 0.23 m	Black (10YR2/1-Moist); ; Heavy clay; 20-50 mm, Angular blocky; Very strong consistence; 0-2%, medium gravelly, 6-20mm, rounded, Gravel, coarse fragments; Diffuse change to -
A	0.24 - 0.36 m	Black (10YR2/1-Moist); ; Heavy clay; Firm consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Concretions; Diffuse change to -
A/B	0.36 - 0.48 m	Black (10YR2/1-Moist); , 5Y32; Heavy clay; Moist; Moderately plastic; Normal plasticity; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Concretions; Diffuse change to -
B	0.48 - 0.58 m	Black (10YR2/1-Moist); , 5Y52; , 5Y32; Heavy clay; , Prismatic; Fine, (0 - 5) mm crack; Moist; Moderately plastic; Normal plasticity; Few (2 - 10 %), Ferruginous, Medium (2 -6 mm), Concretions; Diffuse change to -
B/C	0.61 - 0.81 m	Olive grey (5Y5/2-Moist); , 10YR56; Heavy clay; , Prismatic; Fine, (0 - 5) mm crack; Moist; Weak consistence; 0-2%, Gravel, coarse fragments; Diffuse change to -
C	0.84 - 1.07 m	Yellowish brown (10YR5/6-Moist); , 5Y62; Heavy clay; Wet; 50-90%, Gravel, coarse fragments;

**Morphological Notes**

**Observation Notes**

>117CM ON GRAVEL:48-107CM SLIGHT DIFFUSE LIME:24-48CM STRUCTURE IRREGULAR LUMPY WITH IRREGULAR CLEAVAGE PLANES:

**Site Notes**

CORNWALL

**Observation ID: 1**

**Laboratory Test Results:**

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol	(+)/kg			%
0 - 0.1	5.9A		35.7H	10.9	0.59	0.47	10.2H 19.4E		67.76B	
0.1 - 0.23	6.2A									
0.24 - 0.36	6.9A		32.8H	13	0.38	0.58	4.7E		51.11B	
0.36 - 0.48	7.7A									
0.48 - 0.58	7.8A		24.3H	7	0.2	0.6	1.1E		33.2B	
0.61 - 0.81	8.3A									
0.84 - 1.07	8.3A		17.2K	3.8	0.12	0.8			22B	

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle		Size	Analysis	
m	%	C	P	P	N	K	Density	GV	CS	FS	Silt	Clay
		%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.1		6.05F 4.4D		0.016D	0.541A			1	3B	12	21	54
0.1 - 0.23		4F 2.83D			0.38A							
0.24 - 0.36		1.7F 1.14D		0.006D	0.154A			0	4B	18	17	57
0.36 - 0.48												
0.48 - 0.58		0.51F 0.37D			0.056A			0	11B	30	16	43
0.61 - 0.81	0.5A											
0.84 - 1.07								49	26B	25	14	30

[illegible]

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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_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
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)
19A1	Carbonates - rapid titration
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
6_DC	Organic carbon (%) - Dry combustion
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