Project Name: $T\Delta M$

Observation ID: 1 **Project Code:** TAM Site ID: H262

CSIRO Division of Soils (TAS) Agency Name:

Site Information

Desc. By: G.M. Dimmock Locality: 2.0KM N of Glengarry:12M from paddock fence opposite PMG steel pole 34(bearing 237degrees):

> Elevation: 88 metres Rainfall: 1010

Map Ref.: Northing/Long.: 146.8633333 Runoff: Moderately rapid Easting/Lat.: Imperfectly drained -41.32333333 Drainage:

Geology

Date Desc.:

ExposureType: Conf. Sub. is Parent. Mat.: Soil pit No Data Geol. Ref.: No Data **Substrate Material:** Mudstone

Land Form

Rel/Slope Class: Gently undulating plains <9m Pattern Type: Plain

1-3%

08/04/64

No Data Morph. Type: Relief: No Data Plain Slope Category: Gently inclined Elem. Type: Slope: 3.5 % Aspect: 270 degrees

Surface Soil Condition (dry): Self-mulching

Erosion:

Soil Classification

Australian Soil Classification: N/A **Mapping Unit:** Bleached-Mottled Dystrophic Brown Kurosol **Principal Profile Form:** Dy3.81

ASC Confidence: Great Soil Group: Yellow podzolic soil

All necessary analytical data are available.

Site Disturbance: Limited clearing, for example selective logging

Vegetation: Low Strata - Fern, , Sparse. *Species includes - None recorded

Mid Strata - Tree, , . *Species includes - None recorded Tall Strata - Tree, , . *Species includes - None Recorded

Surface Coarse Fragments: 2-10%, , rounded, Gravel

Profile Morphology

B23

0.51 - 0.69 m

A11 0 - 0.025 m Very dark grey (10YR3/1-Moist); ; Sandy loam; Massive grade of structure; Moist; Weak consistence; 0-2%, coarse gravelly, 20-60mm, rounded, Quartz, coarse fragments; Common,

fine (1-2mm) roots; Diffuse change to -

A12 0.025 - 0.08 m Very dark grey (10YR3/1-Moist); ; Fine sandy loam; Weak grade of structure, 2-5 mm, Subangular

blocky; Moist; Weak consistence; 2-10%, coarse gravelly, 20-60mm, rounded, Gravel, coarse

fragments; Common, coarse (>5mm) roots; Clear change to -

Grey (10YR5/1-Moist); ; Fine sandy loam; Massive grade of structure; Moderately moist; 50-90%, A2 0.08 - 0.14 m

coarse gravelly, 20-60mm, rounded, Gravel, coarse fragments; , Weakly cemented, Massive;

FewGradual. Irregular change to -

A3B1 0.16 - 0.23 m Light brownish grey (10YR6/2-Moist); , 10YR54; Fine sandy clay loam; Massive grade of

structure; Fine, (0 - 5) mm crack; Moderately moist; 2-10%, coarse gravelly, 20-60mm, rounded,

Gravel, coarse fragments; , Weakly cemented, Massive; FewGradual change to -

Yellowish brown (10YR5/6-Moist); , 5YR56; , 2.5Y54; Heavy clay; Weak grade of structure, 50-B21 0.23 - 0.36 m

100 mm, Subangular blocky; Moderately moist; Weak consistence; 0-2%, coarse gravelly, 20-

60mm, rounded, Gravel, coarse fragments; Few, fine (1-2mm) roots; Diffuse change to -

B22 0.36 - 0.51 m Yellowish brown (10YR5/6-Moist); , 5YR56; , 2.5Y54; Heavy clay; Massive grade of structure;

Moderately moist, Weak consistence; Diffuse change to -

Light olive brown (2.5Y5/4-Moist); , 10YR56; , 5YR56; Heavy clay; Massive grade of structure; Moderately moist; Weak consistence; Diffuse change to -

Light olive brown (2.5Y5/4-Moist); , 10YR56; , 2.5YR48; Heavy clay; Massive grade of structure; BC 0.69 - 0.84 m

Moderately moist; Weak consistence, 2-10%, coarse gravelly, 20-60mm, Mudstone, coarse

fragments: Diffuse change to -

ВС Yellowish brown (10YR5/6-Moist); , 10YR51; , 5YR56; Massive grade of structure; Moderately 0.84 - 1.04 m

moist; Weak consistence; 20-50%, coarse gravelly, 20-60mm, Mudstone, coarse fragments;

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1.14 - 1.42 m ; Clear change to -

Morphological Notes

YB+YR+W soft decomposing mudstone with fenestella:

Observation Notes

PROMINENT DB/ORGANIC COATINGS COMMON AT 23CM TO FEW AT 84CM:2.5-8CM <10% <6MM CHARCOAL ALSO:>51CM W`D MU INCREASING:

Site Notes

QUAMBY

Project Name: TAM
Project Code: TAM Site ID: H2
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Laboratory Test Results:

Depth	pН	1:5 EC		hangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	E	ECEC	E	SP
m		dS/m	Ja	wig	K	Cmol (+					%	6
0 - 0.025 0.025 - 0.08	4.3A 4.6A	0.063A 0.092A	5.5H 4H	2.2 1.9	0.36 0.2	0.25 0.36	30.3E 25.4E			38.6B 31.9B		
0.08 - 0.14 0.16 - 0.23	4.7A 4.9A	0.027A 0.024A										
0.23 - 0.36 0.36 - 0.51	5A 5.1A	0.021A 0.021A		0.28	0.13	0.11	15.4E			16.2B		
0.51 - 0.69 0.69 - 0.84	5.2A 5.3A	0.024A 0.021A		1.1	0.16	0.17	19.2E			20.7B		
0.84 - 1.04	5.2A	0.027A	0.08H	1.2	0.12	0.22	20.7E		2	22.3B		
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Pa GV	rticle :	Size A FS	nalysis Silt (Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.025		8.73D		0.011D	-	-		<1	7B	35	37	9
0.025 - 0.08		5.54D		0.007D				<1	7B	37	40	9
0.08 - 0.14 0.16 - 0.23		2.21D 0.72D			0.05 0.02							
0.23 - 0.36 0.36 - 0.51								<1	4D	21	33	39
0.51 - 0.69 0.69 - 0.84								0	2D	16	28	50
0.84 - 1.04								1	5D	19	26	47
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		Sat.	0.05 Bar		0.5 Bar g - m3/m3	1 Bar 3	5 Bar 15	вar	mm/l	h	mm/h	

0 - 0.025

0.025 - 0.08 0.08 - 0.14 0.16 - 0.23 0.23 - 0.36

0.23 - 0.36 0.36 - 0.51 0.51 - 0.69 0.69 - 0.84 0.84 - 1.04

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Laboratory Analyses Completed for this profile

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

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

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

15G1_H Hydrogen Cation - meq per 100g of soil - 1M KCI Exch. Acidity By titration to pH 8.0 Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations and exch. (Hydrogen)

2_LOI Loss on Ignition (%)
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 Total nitrogen - semimicro Kjeldahl , automated colour

9A_HCL Total element - P(%) - By boiling HCl

P10_GRAV Gravel (%)

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

P10A1_C Clay (%) - Pipette
P10A1_CS Coarse sand (%) - Pipette
P10A1_FS Fine sand (%) - Pipette
P10A1_Z Silt (%) - Pipette

XRD_C_Ch
XRD_C_II
XRD_C_Ka
XRD_C_Ka
XRD_C_Qz
XRD_C_Vm

Chlorite - X-Ray Diffraction
Illite - X-Ray Diffraction
Kaolin - X-Ray Diffraction
Quartz - X-Ray Diffraction
Vermiculte - X-Ray Diffraction