**Project Name:** MEA

**Project Code:** Observation ID: 1 MEA Site ID: H197

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

**Site Information** 

Desc. By: K.D. Nicholls Locality: 1.6KM west of Deloraine property "Westhorpe":1.4KM

north from the joining two fence lines south of Mole

Date Desc.: 13/05/60 Flevation: 274 metres Map Ref.: Rainfall: 990 Northing/Long.: 146.6375 Runoff: Slow

-41.519444444445 Drainage: Moderately well drained Easting/Lat.:

**Geology** 

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

**Land Form** 

Rel/Slope Class: Rolling hills 90-300m 10-32% Pattern Type: Hills Morph. Type: No Data Relief: No Data Elem. Type: Hillslope Slope Category: No Data Aspect: No Data Slope: 0 %

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification:** N/A Mapping Unit: Haplic Eutrophic Red Ferrosol **Principal Profile Form:** Gn4.12 **ASC Confidence: Great Soil Group:** Krasnozem

Analytical data are incomplete but reasonable confidence.

Site Disturbance: Cultivation. Rainfed

Vegetation:

**Surface Coarse Fragments:** 

**Profile Morphology** 

0 - 0.1 m Dusky red (2.5YR3/2-Moist); ; Loam; Moderate grade of structure, <2 mm, Granular; Moist; Very weak consistence; 10-20%, Gravel, coarse fragments; Few (2 - 10 %), Unidentified, Fine (0 - 2 mm), Concretions; Diffuse change to -0.1 - 0.18 m Dusky red (2.5YR3/2-Moist); Loam (Heavy); Moderate grade of structure, <2 mm, Granular; Very weak consistence; 2-10%, Gravel, coarse fragments; Few (2 - 10 %), Unidentified, Fine (0 - 2 mm). Concretions: Clear change to -R Dark reddish brown (2.5YR3/4-Moist); ; Clay loam; Moderate grade of structure, <2 mm, Granular; 0.2 - 0.3 m Moist; Weak consistence; 2-10%, Gravel, coarse fragments; Few (2 - 10 %), Unidentified, Fine (0 - 2 mm), Concretions; Diffuse change to -0.3 - 0.43 m Dark red (2.5YR3/5-Moist); ; Clay loam (Heavy); Moderate grade of structure, <2 mm, Granular; Weak consistence: 20-50%, Gravel, coarse fragments; Few (2 - 10 %), Unidentified, Fine (0 - 2 mm), Concretions; Diffuse change to -Dark red (2.5YR3/5-Moist); ; Clay loam (Heavy); Weak grade of structure, <2 mm, Granular; Weak 0.43 - 0.56 m consistence; 2-10%, Gravel, coarse fragments; Few (2 - 10 %), Unidentified, Fine (0 - 2 mm), Concretions; Clear change to -0.56 - 0.71 m Dark red (2.5YR3/6-Moist); ; Heavy clay; Weak grade of structure, <2 mm, Subangular blocky;

Weak consistence; 2-10%, Gravel, coarse fragments; Very few (0 - 2 %), Unidentified, Fine (0 - 2

mm), Concretions; Diffuse change to -

Dark red (2.5YR3/6-Moist); ; Heavy clay; Weak grade of structure, <2 mm, Subangular blocky; 0.71 - 0.84 m

Weak consistence; 2-10%, Gravel, coarse fragments; Very few (0 - 2%), Unidentified, Fine (0 - 2

mm), Concretions; Diffuse change to -

Dark red (2.5YR3/6-Moist); ; Heavy clay; Weak grade of structure, <2 mm, Subangular blocky; 0.84 - 0.96 m

Weak consistence; Very few (0 - 2%), Unidentified, Fine (0 - 2 mm), Concretions;

0.96 - 1.06 m

**Morphological Notes** 

Soil only between continuous floaters:

**Observation Notes** 

Project Name: MEA
Project Code: MEA Site ID: H197
Agency Name: CSIRO Division of Soils (TAS) Observation ID: 1

CONCRETIONS ARE BLACK:BASALT FLOATERS (PLATY <600MM) THROUGHOUT PROFILE:

Site Notes QUAMBY

Project Name: MEA
Project Code: MEA Site ID: H19
Agency Name: CSIRO Division of Soils (TAS) Site ID: H197 Observation ID: 1

Depth	pH	1:5 EC	Excl	nangeable	Cations	E	xchangeable	CEC	E	CEC	Е	SP
m	<b>P</b>			/lg	K	Na Cmol (+)	Acidity					<b>%</b>
0 - 0.1	6A	0.14A	18.3H	0.11	1.4	0.12	13H 30.5E		5	50.4B		
0.1 - 0.18	5.9A	0.077A	15.3H	0.34	0.84	0.12	13.5H 29.1E		4	15.7B		
0.2 - 0.3	6.1A	0.054A										
0.3 - 0.43	6.3A	0.042A	9.9H	8	0.6	0.14	5H 13E		3	31.6B		
0.43 - 0.56	6.2A	0.033A										
0.56 - 0.71	6.5A	0.024A										
0.71 - 0.84	6.4A	0.021A	8.2H	3	0.67	0.16	3.8H 11.3E		2	23.3B		
0.84 - 0.96	6.7A	0.024A										
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Pa GV	rticle S	Size A FS	nalysis Silt	
m	%	%	mg/kg	%	%	%	Mg/m3			%		- · · · · ·
0 - 0.1		7.2D		0.109		-		12	10B	27	16	34
0.1 - 0.18 0.2 - 0.3		5.5D 2.2D		0.101	0.3 0.14	-		7	9B	29	18	33
0.3 - 0.43		1.5D		0.0720				25	11B	30	17	38
0.43 - 0.56		0.98D			0.06	68A						
0.56 - 0.71								_				
0.71 - 0.84								2	4B	13	12	68
0.84 - 0.96												
Depth										K unsat		
m		Sat.	0.05 Bar		0.5 Bar g - m3/m	1 Bar 3	5 Bar 15 I	Bar	mm/h	1	mm/h	

0 - 0.1 0.1 - 0.18 0.2 - 0.3

0.3 - 0.43 0.43 - 0.56

0.56 - 0.71 0.71 - 0.84 0.84 - 0.96

Project Name: MEA

Project Code: MEA Site ID: H197 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

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

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
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 (%) P10A1\_C Clay (%) - Pipette

P10A1\_CS Coarse sand (%) - Pipette
P10A1\_FS Fine sand (%) - Pipette
P10A1\_Z Silt (%) - Pipette