Project Name: DER
Project Code: DER **Site ID:** H221 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (TAS)

Site Information

Desc. By:	G.M. Dimmock	**Locality:**	6.4KM south west of Richmond:
Date Desc.:	14/08/61	**Elevation:**	204 metres
Map Ref.:		**Rainfall:**	510
Northing/Long.:	147.380555555556	**Runoff:**	Rapid
Easting/Lat.:	-42.7722222222222	**Drainage:**	Imperfectly drained

Geology

ExposureType:	Soil pit	**Conf. Sub. is Parent. Mat.:**	No Data
Geol. Ref.:	PM	**Substrate Material:**	Soil pit, 0.58 m deep,Mudstone

Land Form

Rel/Slope Class:	No Data	**Pattern Type:**	No Data
Morph. Type:	No Data	**Relief:**	No Data
Elem. Type:	No Data	**Slope Category:**	Moderately inclined
Slope:	12.3 %	**Aspect:**	0 degrees

Surface Soil Condition (dry): Self-mulching

Erosion:

Soil Classification

Australian Soil Classification:
Acidic Paralithic Bleached Tenosol
ASC Confidence:
All necessary analytical data are available.

Mapping Unit: N/A
Principal Profile Form: Dy2.81
Great Soil Group: Grey-brown podzolic soil

Site Disturbance: No effective disturbance other than grazing by hoofed animals

Vegetation: Low Strata - , 0.26-0.5m, Sparse. *Species includes - None recorded
Mid Strata - Tree, , . *Species includes - Casuarina suberosa
Tall Strata - Tree, , . *Species includes - None Recorded

Surface Coarse Fragments: 20-50%, , angular, Mudstone

Profile Morphology

A11	0 - 0.05 m	Very dark brown (10YR2/2-Moist); Greyish brown (10YR5/2-Dry); ; Fine sandy loam; Weak grade of structure, <2 mm, Granular; Moderately moist; Very weak consistence; 2-10%, coarse gravelly, 20-60mm, angular, Mudstone, coarse fragments; Diffuse change to -
A12	0.05 - 0.08 m	Very dark brown (10YR2/2-Moist); Greyish brown (10YR5/2-Dry); ; Fine sandy loam; Weak grade of structure, <2 mm, Granular; Moderately moist; Very weak consistence; 10-20%, coarse gravelly, 20-60mm, Mudstone, coarse fragments; CommonClear change to -
A1A2	0.08 - 0.15 m	Very dark brown (10YR2/2-Moist); Greyish brown (10YR5/2-Dry); ; Fine sandy loam; Massive grade of structure; Moderately moist; Very weak consistence; 20-50%, coarse gravelly, 20-60mm, Mudstone, coarse fragments; Few
A2	0.18 - 0.33 m	Weak red (2.5YR5/2-Moist); Light grey (10YR7/1-Dry); ; Fine sand; Massive grade of structure; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Firm consistence; 20-50%, cobbly, 60-200mm, Mudstone, coarse fragments; Few
B2	0.41 - 0.56 m	Dark greyish brown (10YR4/2-Moist); ; Heavy clay; Massive grade of structure; Moderately moist; Very firm consistence; 10-20%, coarse gravelly, 20-60mm, Mudstone, coarse fragments;

Morphological Notes

Observation Notes

CLAY B HORIZON IS DISCONTINUOUS AND OCCURS IN CRACKS (50MM WIDE)BETWEENBLOCKS OF MUDSTONE:

Site Notes

HOBART

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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations Ca	Mg	K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.05	4.6A	0.054A	2.5H	1.9	0.56	0.39	24H 31.6E		36.9B	
0.05 - 0.08	4.6A	0.065A	1.1H	1.8	0.44	0.36	19.2H 26.8E		30.5B	
0.08 - 0.15	4.8A	0.057A								
0.18 - 0.33	5A	0.048A	0.33H	0.92	0.26	0.36	8.7H 11.2E		13.1B	
0.41 - 0.56	5.2A	0.054A	0.4H	4.7	0.53	0.78	17.8H 23.2E		29.6B	

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.05		6.65D		0.009D	0.281A			19	3B	27	44	13
0.05 - 0.08		4.8D		0.007D	0.2A			25	3B	27	50	13
0.08 - 0.15		3.45D			0.14A							
0.18 - 0.33		0.88D			0.036A			26	3D	22	55	20
0.41 - 0.56		0.91D			0.055A			21	2D	7	28	62

Depth	COLE	Gravimetric/Volumetric Water Contents Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar	K sat	K unsat
m		g/g - m3/m3							mm/h	mm/h
0 - 0.05										
0.05 - 0.08										
0.08 - 0.15										
0.18 - 0.33										
0.41 - 0.56										

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Laboratory Analyses Completed for this profile

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)
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
7A2	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