DER Project Name:

Project Code: Site ID: H245 Observation ID: 1 DER

Agency Name: CSIRO Division of Soils (TAS)

Site Information

Roadside quarry about 4.6M deep near summit of Mt.Rumney on propertY "Actn" Desc. By: G.M. Dimmock Locality:

Date Desc.: 09/05/62 Elevation: 145 metres Map Ref.: Northing/Long.: Rainfall: 550 147.45 Runoff: Rapid

Easting/Lat.: -42.8625 Drainage: Moderately well drained

Geology

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

Land Form

Rel/Slope Class: No Data Pattern Type: No Data Relief: No Data Morph. Type: No Data Slope Category: Elem. Type: No Data No Data Aspect: 45 degrees Slope: 31.5 %

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification: Mapping Unit: N/A Gn3.13 Haplic Eutrophic Red Chromosol Principal Profile Form:

ASC Confidence: Great Soil Group: Non-calcic brown

All necessary analytical data are available.

<u>Site Disturbance:</u> No effective disturbance other than grazing by hoofed animals Vegetation: Low Strata - Tussock grass, , . *Species includes - None recorded

Tall Strata - Tree, , . *Species includes - Eucalyptus viminalis

Surface Coarse Fragments: 20-50%, cobbly, 60-200mm, , Dolerite

Profile Morphology

A	0 - 0.05 m	Dark reddish brown (5YR2/3-Moist); ; Loam; Weak grade of structure, <2 mm, Granular; Moist; Very weak consistence; 2-10%, cobbly, 60-200mm, Dolerite, coarse fragments; Abundant, fine (1-2mm) roots; Clear, Smooth change to -
A	0.05 - 0.15 m	Dark reddish brown (5YR3/3-Moist); ; Clay loam; Weak grade of structure, <2 mm, Granular; Moist; Very weak consistence; 10-20%, coarse gravelly, 20-60mm, Dolerite, coarse fragments; Common, fine (1-2mm) roots; Abrupt, Smooth change to -
В	0.15 - 0.29 m	Dark reddish brown (5YR3/3-Moist); ; Heavy clay; Weak grade of structure, 20-50 mm, Angular blocky; Moderately moist; Very strong consistence; 0-2%, medium gravelly, 6-20mm, Dolerite, coarse fragments; Few, coarse (>5mm) roots; Diffuse change to -
В	0.19 - 0.41 m	Dark reddish brown (5YR3/3-Moist); ; Heavy clay; Weak grade of structure, 20-50 mm, Prismatic; Dry; Rigid consistence; 10-20%, medium gravelly, 6-20mm, Dolerite, coarse fragments; Few, fine (1-2mm) roots; Gradual change to -
ВС	0.41 - 0.56 m	Dark reddish brown (5YR3/3-Moist); ; Heavy clay; Weak grade of structure, 20-50 mm, Prismatic; Dry; Rigid consistence; 20-50%, medium gravelly, 6-20mm, Dolerite, coarse fragments; Few, fine (1-2mm) roots; Diffuse change to -
ВС	0.56 - 0.71 m	Dark reddish brown (5YR3/3-Moist); , 5YR58; , 7.5YR58; Heavy clay; Massive grade of structure; Dry; Very strong consistence; 10-20%, cobbly, 60-200mm, rounded, Dolerite, coarse fragments; FewDiffuse change to -
С	0.71 - 0.91 m	Dark reddish brown (5YR3/3-Moist); , 5YR58; , 5YR81; Massive grade of structure; Moderately moist; Very firm consistence; 20-50%, cobbly, 60-200mm, rounded, Dolerite, coarse fragments;

Morphological Notes

Observation Notes

56-71CM CLAY WITH GRITTY DECOMPOSED DR:71-91CM DECOMPOSED DR WITH GRITTY CLAY:

Site Notes

HOBART

Project Name: DER
Project Code: DER Site ID: H2
Agency Name: CSIRO Division of Soils (TAS) H245 Observation ID: 1

Project Name: DER
Project Code: DER Site ID: H245
Agency Name: CSIRO Division of Soils (TAS) Observation ID: 1

Laboratory Test Results:

Laboratory Test Results.													
Depth	рН	1:5 EC		hangeable			Exchangeable	CEC	E	CEC	E	SP	
m		dS/m	a	Mg	K	Na Cmol (Acidity					%	
""		us/III				Cilioi (+ <i>)</i> /kg					/0	
0 - 0.05	6A	0.068A	13.4H	3.6	2.1	0.31	9.5H		3	86.6B			
0.05 - 0.15	6.4A	0.054A	13.5H	3.9	2	0.33	17.2E 8.3H		3	34.2B			
0.15 - 0.29	6.8A	0.048A	15.4H	5.9	1.8	0.3	14.5E 3.1H			31B			
0.19 - 0.41	7.2A	0.048A	15.7H	7	2	0.34	7.6E 6.3E		3	31.3B			
0.41 - 0.56	7.5A	0.039A	15.9H	7.7	2	0.36	4.8E		30.8B				
0.56 - 0.71	7.8A	0.033A	13.4H	6.8	1.4	0.34	3.7E		25.6B				
0.71 - 0.91	8.1A	0.021A	11.6H	8	0.46	0.42							
Depth	CaCO3	Organic	Avail.	Total	Total	Tota	al Bulk	Pa	rticle S	Size A	nalysis		
•		Č	Р	Р	N	K	Density	G۷	cs	FS	-	Clay	
m	%	%	mg/kg	%	%	%	Mg/m3			%		-	
0 - 0.05		5.06D		0.032	0.39	96A		10	15B	36	18	22	
0.05 - 0.15		3.36D		0.028				9	16B	37	20	21	
0.15 - 0.29		1.94D		0.016		-		3	11D	34	16	37	
0.19 - 0.41		1.48D			0.12	26A		9	12D	27	15	45	
0.41 - 0.56								4	19D	25	15	40	
0.56 - 0.71								17	31B	24	17	25	
0.71 - 0.91								20	44B	24	16	15	
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				a/c	g - m3/m	3			mm/h	1	mm/h		

0 - 0.05 0.05 - 0.15 0.15 - 0.29 0.19 - 0.41 0.41 - 0.56 0.56 - 0.71 0.71 - 0.91

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CSIRO Division of Soils (TAS) Agency Name:

Laboratory Analyses Completed for this profile

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

13C1_FE Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon

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

2_LOI Loss on Ignition (%) 2A1 Air-dry moisture content 3A1 EC of 1:5 soil/water extract pH of 1:5 soil/water suspension 4A1

5A2 Chloride - 1:5 soil/water extract, automated colour

6A1_UC Organic carbon (%) - Uncorrected Walkley and Black method Total nitrogen - semimicro Kjeldahl , automated colour 7A2

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

P10_GRAV Gravel (%)

Clay (%) - Plummet balance P10_PB_C P10_PB_CS P10_PB_FS Coarse sand (%) - Plummet balance Fine sand (%) - Plummet balance

Silt (%) - Plummet balance Clay (%) - Pipette P10_PB_Z P10A1_C

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