Project Name: DER

Project Code: Site ID: H173 Observation ID: 1 DER

Agency Name: CSIRO Division of Soils (TAS)

Site Information

13CH W of Midland H`way at a pt. approx 37CH S of Broadmarsh t`off:1.6KM SW of Brighton Military Camp: Desc. By: G.M. Dimmock Locality:

06/02/58 Date Desc.: Elevation: 61 metres Map Ref.: Rainfall: 510 Northing/Long.: 147.24305555556 Runoff: Rapid

-42.709722222222 Imperfectly drained Easting/Lat.: Drainage:

Geology

ExposureType: Soil pit Conf. Sub. is Parent. Mat.: No Data

Geol. Ref.: **Substrate Material:** BLd Soil pit, 0.8 m deep, Dolerite

Land Form

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

Moderately inclined Elem. Type: Hillslope Slope Category: Slope: 14.5 % Aspect: 90 degrees

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification: N/A **Mapping Unit:** Haplic Self-Mulching Black Vertosol **Principal Profile Form:** Db3.13 **ASC Confidence: Great Soil Group:** Black earth

All necessary analytical data are available.

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

Vegetation: Low Strata - Tussock grass, 0.51-1m, Mid-dense. *Species includes - None recorded

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

Tall Strata - Tree, 6.01-12m, Very sparse. *Species includes - Eucalyptus viminalis, Acacia species

Surface Coarse Fragments:

	e Morphology	,
A	0 - 0.02 m	Very dark grey (10YR3/1-Moist); ; Light clay; Moderate grade of structure, Granular; Moderately moist; Weak consistence; Abundant
Α	0.02 - 0.1 m	Very dark grey (10YR3/1-Moist); ; Heavy clay; Weak grade of structure, Granular; Moderately moist; Weak consistence; 2-10%, coarse gravelly, 20-60mm, Dolerite, coarse fragments; Many
AB	0.1 - 0.18 m	Black (10YR2/1-Moist); ; Heavy clay; Weak grade of structure, 20-50 mm, Granular; Moderately moist; Weak consistence; 2-10%, cobbly, 60-200mm, Dolerite, coarse fragments; CommonDiffuse change to -
В	0.18 - 0.29 m	Black (10YR2/1-Moist); ; Heavy clay; Moderate grade of structure, 20-50 mm, Angular blocky; Moderately moist; Very firm consistence; 0-2%, medium gravelly, 6-20mm, Gravel, coarse fragments; Few
В	0.29 - 0.41 m	Black (10YR2/1-Moist); ; Heavy clay; Moderate grade of structure, 50-100 mm, Angular blocky; Moderately moist; Very firm consistence; 0-2%, coarse gravelly, 20-60mm, Gravel, coarse fragments; FewSharp change to -
ВС	0.41 - 0.48 m	Black (10YR2/1-Moist); , 2.5Y32; Heavy clay; Weak grade of structure, 20-50 mm, Angular blocky; Moderately moist; Very firm consistence; 2-10%, coarse gravelly, 20-60mm, Gravel, coarse fragments; FewDiffuse change to -
ВС	0.48 - 0.58 m	Black (2.5Y2/1-Moist); ; Heavy clay; Weak grade of structure, 20-50 mm, Angular blocky; Moderately moist; Very firm consistence; 10-20%, cobbly, 60-200mm, Gravel, coarse fragments; FewSharp change to -
С	0.58 - 0.66 m	Reddish brown (5YR4/3-Moist); ; Heavy clay; Massive grade of structure; Moderately moist; Very firm consistence; 50-90%, cobbly, 60-200mm, Gravel, coarse fragments; Very few (0 - 2 %), Calcareous, , Soft segregations; Sharp change to -
	0.66 - 0.76 m	Very pale brown (10YR8/3-Moist); , 2.5Y44; 50-90%, Substrate material, coarse fragments; Very

many (50 - 100 %), Calcareous, , Soft segregations;

Project Name: DER

Project Code: Agency Name: DER Site ID: H173 Observation ID: 1

CSIRO Division of Soils (TAS)

Olive brown (2.5Y4/4-Moist); , 10YR83; 50-90%, Substrate material, coarse fragments; Very many (50 - 100 %), Calcareous, , Soft segregations; 0.76 - 0.81 m

Morphological Notes

Observation Notes

>41CM W`D DR INCREASING:66-76CM SOFT FREE CARBONATES WITH LUMPS OF W`D DR:76-81CM W`D DR AND SOFT CARBONATES:

Site Notes

BRIGHTON

Project Name: DER
Project Code: DER Site ID: H173
Agency Name: CSIRO Division of Soils (TAS) Observation ID: 1

<u>Laboratory Test Results:</u>													
Depth	pН	1:5 EC		hangeable Mg	Cations K	E Na	xchangeable Acidity	CEC	Е	CEC	ES	SP.	
m		dS/m		9		Cmol (+)					%		
0 - 0.02	6.3A	0.092A	24.9H	12.7	0.99	0.38	9H		5	6.1B			
0.02 - 0.1	6.5A	0.08A	23.8H	14	0.36	0.57	17.1E 6.4H 12.9E		5	1.6B			
0.1 - 0.18	6.7A	0.071A											
0.18 - 0.29	7.2A	A80.0	27.5H	20.6	0.3	1.4	7.9E		5	7.7B			
0.29 - 0.41	7.6A	0.09A	28.9H	25.2	0.28	1.7	5E		6	1.1B			
0.41 - 0.48	8A	0.11A											
0.48 - 0.58	8.2A	0.131A	28.4H	27.9	0.29	2							
0.58 - 0.66													
0.66 - 0.76	8.9A	0.369A											
0.76 - 0.81	9A	0.313A											
0.70 0.01	0, (0.010/1											
Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk		rticle S				
		С	P	Р	N	K	Density	G۷	CS	FS	Silt C	lay	
m	%	%	mg/kg	%	%	%	Mg/m3			%			
0 - 0.02		8.3D		0.02D	0.53	39Δ		0	5B	28	20	34	
0.02 - 0.1		5.8D		0.02D				0	6B	31	18	36	
0.1 - 0.18		4.1D		0.0132	0.31			U	OD	51	10	50	
0.18 - 0.29		2.6D		0.013				5	6D	26	10	60	
0.29 - 0.41		1.7D		0.0070				7	7D	22	6	65	
0.41 - 0.48	<0.25A	1.7D 1.4D		0.007 L	0.11			,	70	22	U	03	
0.48 - 0.58	0.25A	1.4D 1.3D			0.1			12	10D	21	5	63	
0.58 - 0.66	0.23A	1.30			0.1	IA		12	100	21	3	03	
0.66 - 0.76	26A	0.98D			0.03	201							
0.76 - 0.76	26A 7A	0.96D			0.03	OOA							
0.76 - 0.61	7.4												
Depth	th COLE Gravimetric/Volumetric Wat				Vater Cont	ents		K sat	ŀ	(unsat			
	•				1 Bar	5 Bar 15 E	3ar						
m				g/s	g - m3/m	3			mm/h	l	mm/h		
0 - 0.02 0.02 - 0.1 0.1 - 0.18													

0.1 - 0.18 0.18 - 0.29 0.29 - 0.41 0.41 - 0.48 0.48 - 0.58 0.58 - 0.66 0.66 - 0.76 0.76 - 0.81

Project Name: DER

Project Code: DER Site ID: H173 Observation ID: 1

Agency Name: CSIRO Division of Soils (TAS)

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

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

19A1 Carbonates - rapid titration 2_LOI Loss on Ignition (%)

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