

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

#### Site Information

**Desc. By:** G.M. Dimmock **Locality:** 13CH W of Midland H' way at a pt. approx 37CH S of Broadmarsh t' off: 1.6KM SW of Brighton Military Camp:

**Date Desc.:** 06/02/58 **Elevation:** 61 metres  
**Map Ref.:** **Rainfall:** 510  
**Northing/Long.:** 147.243055555556 **Runoff:** Rapid  
**Easting/Lat.:** -42.709722222222 **Drainage:** Imperfectly drained

#### Geology

**ExposureType:** Soil pit **Conf. Sub. is Parent. Mat.:** No Data  
**Geol. Ref.:** BLd **Substrate Material:** Soil pit, 0.8 m deep, Dolerite

#### 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:** Moderately inclined  
**Slope:** 14.5 % **Aspect:** 90 degrees

#### Surface Soil Condition (dry):

#### Erosion:

#### Soil Classification

**Australian Soil Classification:** **Mapping Unit:** N/A  
 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:

#### Profile Morphology

A	0 - 0.02 m	Very dark grey (10YR3/1-Moist); ; Light clay; Moderate grade of structure, Granular; Moderately moist; Weak consistence; Abundant
A	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 -
B	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
B	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 -
BC	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 -
BC	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 -
C	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;

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0.76 - 0.81 m    Olive brown (2.5Y4/4-Moist); , 10YR8/3; 50-90%, Substrate material, coarse fragments; Very many (50 - 100 %), Calcareous, , Soft segregations;

**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

**Observation ID: 1**

[illegible]

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**Laboratory Analyses Completed for this profile**

15E1_CA	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) 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)
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
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