

**Project Name:** ESK  
**Project Code:** ESK      **Site ID:** H194      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (TAS)

#### Site Information

<b>Desc. By:</b>	K.D. Nicholls	<b>Locality:</b>	`Blenheim Farm` 4.85KM south of Longford (H.Smith owner):
<b>Date Desc.:</b>	29/01/60	<b>Elevation:</b>	161 metres
<b>Map Ref.:</b>		<b>Rainfall:</b>	630
<b>Northing/Long.:</b>	147.120277777778	<b>Runoff:</b>	Moderately rapid
<b>Easting/Lat.:</b>	-41.6444444444445	<b>Drainage:</b>	Moderately well drained

#### Geology

<b>Exposure Type:</b>	Soil pit	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	No Data	<b>Substrate Material:</b>	Clay

#### Land Form

<b>Rel/Slope Class:</b>	No Data	<b>Pattern Type:</b>	No Data
<b>Morph. Type:</b>	No Data	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	No Data	<b>Slope Category:</b>	No Data
<b>Slope:</b>	2 %	<b>Aspect:</b>	45 degrees

#### Surface Soil Condition (dry):

#### Erosion:

#### Soil Classification

<b>Australian Soil Classification:</b>	<b>Mapping Unit:</b>	N/A
Ferric Eutrophic Brown Chromosol	<b>Principal Profile Form:</b>	Dy3.41
<b>ASC Confidence:</b>	<b>Great Soil Group:</b>	Lateritic podzolic soil

All necessary analytical data are available.

**Site Disturbance:** Complete clearing. Pasture, native or improved, cultivated at some stage

#### Vegetation:

#### Surface Coarse Fragments:

#### Profile Morphology

A1	0 - 0.1 m	Dark brown (10YR3/3-Moist); Brown (10YR5/3-Dry); ; Loam (Heavy); Weak grade of structure, Granular; Dry; Very weak consistence; Many (20 - 50 %), Ferruginous, Medium (2 -6 mm), Concretions;
A1	0.1 - 0.16 m	Dark brown (10YR3/3-Moist); Brown (10YR5/3-Dry); ; 10YR56; Loam (Heavy); Weak grade of structure, Granular; Dry; Very weak consistence; Many (20 - 50 %), Ferruginous, Medium (2 -6 mm), Concretions; Clear change to -
A1A2b	0.16 - 0.19 m	Brown (10YR5/3-Moist); Very pale brown (10YR7/3-Dry); ; Heavy clay; Weak grade of structure, <2 mm, Subangular blocky; Dry; Very weak consistence; Very many (50 - 100 %), Ferruginous, Medium (2 -6 mm), Concretions; Sharp change to -
B	0.2 - 0.33 m	Strong brown (7.5YR5/8-Moist); ; 10R48; Heavy clay; Weak grade of structure, 20-50 mm, Prismatic; Moderately moist; Firm consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), ; Diffuse change to -
B	0.33 - 0.46 m	Strong brown (7.5YR5/6-Moist); ; 10R48; Heavy clay; Weak grade of structure, 20-50 mm, Angular blocky; Moist; Weak consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), ; Diffuse change to -
B	0.46 - 0.66 m	Strong brown (7.5YR5/6-Moist); ; 10R48; Heavy clay; Weak grade of structure, 20-50 mm, Angular blocky; Moist; Weak consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), ; Diffuse change to -
B	0.61 - 0.76 m	Strong brown (7.5YR5/6-Moist); ; 10R48; Heavy clay; Weak grade of structure, 20-50 mm, Angular blocky; Moist; Weak consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), ; Diffuse change to -
B	0.76 - 0.91 m	Strong brown (7.5YR5/6-Moist); ; 10R48; Heavy clay; Weak grade of structure, 20-50 mm, Angular blocky; Moist; Weak consistence; 2-10%, Gravel, coarse fragments;
	1.12 - 1.22 m	Strong brown (7.5YR5/6-Moist); ; 10R36; ; 2.5Y62; Heavy clay; Weak consistence; 2-10%, Gravel, coarse fragments;
	1.52 - 1.63 m	Dark red (10R3/6-Moist); ; 2.5Y62; ; 7.5YR56; Heavy clay; Common (10 - 20 %), Ferruginous, Very coarse (20 - 60 mm), Laminae;

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2.54 - 2.64 m    White (5Y8/1-Moist); , 10R36; , 7.5YR68; Heavy clay;

**Morphological Notes**

**Observation Notes**

10-16CM MANY WORM CASTS:122-163CM R MOTTLE IS SOFT IRONSTONE:20-33CM 7.5YR44 COATING TO PEDS:

**Site Notes**

LONGFORD

**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
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