**Project Name:** **New Farm Forest**
**Project Code:** **NFF** **Site ID:** **EDWD** **Observation ID:** **1**
**Agency Name:** **CSIRO Division of Soils (SA)**

## Site Information

**Desc. By:** I. Hollingsworth
**Date Desc.:** 27/02/97
**Map Ref.:** Sheet No. : 7022 1:100000
**Northing/Long.:** 5835642 AMG zone: 54
**Easting/Lat.:** 465529 Datum: AGD66
**Locality:**
**Elevation:** 120 metres
**Rainfall:** No Data
**Runoff:** Moderately rapid
**Drainage:** Moderately well drained

## Geology

**ExposureType:** Auger boring
**Geol. Ref.:** Qpv
**Conf. Sub. is Parent. Mat.:** No Data
**Substrate Material:** Auger boring, 0.5 m deep,Porous, Basalt

## Land Form

**Rel/Slope Class:** Undulating rises 9-30m 3-10%
**Morph. Type:** Simple-slope
**Elem. Type:** Hillslope
**Slope:** 5 %
**Pattern Type:** Caldera
**Relief:** 20 metres
**Slope Category:** Gently inclined
**Aspect:** 90 degrees

## Surface Soil Condition (dry): Soft

## Erosion:

## Soil Classification

**Australian Soil Classification:**
Melanic Petroferric Black Chromosol Thick Non-gravelly Loamy Clayey Moderately deep
**Mapping Unit:** N/A
**Principal Profile Form:** N/A

**ASC Confidence:**
No analytical data are available but confidence is fair.
**Great Soil Group:** N/A

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

## Vegetation:

Tall Strata - Tree, 6.01-12m, Closed or dense. *Species includes - Eucalyptus globulus

## Surface Coarse Fragments: No surface coarse fragments

## Profile Morphology

| | | |
|---|---|---|
| A1 | 0 - 0.3 m | Black (7.5YR2/0-Moist); , 0-0% ; Loam; Moderate grade of structure, <2 mm, Subangular blocky; Rough-ped fabric; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Dry; Slightly plastic; Normal plasticity; Non-sticky; Field pH 5 (Raupach); Many, fine (1-2mm) roots; Abrupt, Smooth change to - |
| B21 | 0.3 - 0.4 m | Very dark grey (7.5YR3/0-Moist); , 0-0% ; Light clay; Moderate grade of structure, <2 mm, Subangular blocky; Rough-ped fabric; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Dry; Very plastic; Normal plasticity; Moderately sticky; Common cutans, 10-50% of ped faces or walls coated, distinct; Field pH 7 (Raupach); Many, fine (1-2mm) roots; Clear, Smooth change |
| B22 | 0.4 - 0.5 m | Black (7.5YR2/0-Moist); , 0-0% ; Medium clay; Strong grade of structure, <2 mm, Subangular blocky; Rough-ped fabric; Few (<1 per 100mm2) Fine (1-2mm) macropores, Dry; Very plastic; Normal plasticity; Very sticky; Common cutans, 10-50% of ped faces or walls coated, distinct; Field pH 7 (Raupach); Common, fine (1-2mm) roots; Clear, Smooth change to - |
| BC | 0.5 - 0.6 m | Dark brown (7.5YR3/2-Moist); , 0-0% ; Medium heavy clay; Strong grade of structure, <2 mm, Subangular blocky; Rough-ped fabric; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Very plastic; Normal plasticity; Very sticky; 10-20%, medium gravelly, 6-20mm, rounded, Ferricrete, coarse fragments; Few cutans, <10% of ped faces or walls coated, distinct; Many (20 - 50 %), Ferromanganiferous, Medium (2 -6 mm), Concretions; Field pH 7 (Raupach); Common, fine (1-2mm) roots; Clear, Smooth change to - |
| BC2 | 0.6 - 0.7 m | Dark reddish brown (5YR3/2-Moist); , 0-0% ; Sandy medium clay; Moderate grade of structure, <2 mm, Subangular blocky; Rough-ped fabric; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Moderately plastic; Normal plasticity; Slightly sticky; 20-50%, medium gravelly, 6-20mm, rounded, dispersed, Ferricrete, coarse fragments; Very many (50 - 100 %), Ferromanganiferous, Medium (2 -6 mm), Concretions; Field pH 7.5 (Raupach); Few, fine (1-2mm) roots; Clear, Smooth change to - |

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| | | |
|---|---|---|
| BC3 | 0.7 - 0.8 m | Greyish brown (10YR5/2-Moist); , 0-0% ; Sandy medium clay; Moderate grade of structure, 2-5 mm, Subangular blocky; Rough-ped fabric; Few (<1 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Very plastic; Normal plasticity; Moderately sticky; 50-90%, medium gravelly, 6-20mm, rounded, dispersed, Ferricrete, coarse fragments; Common cutans, 10-50% of ped faces or walls coated, distinct; Many (20 - 50 %), Ferromanganiferous, Medium (2 -6 mm), Concretions; Densipan, Weakly cemented, Continuous, Nodular; Field pH 7.5 (Raupach); Few, fine (1-2mm) roots; Clear, Smooth change to - |
| C | 0.8 - 1 m | Greyish brown (10YR5/2-Moist); , 0-0% ; Sandy light clay; Massive grade of structure; Rough-ped fabric; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Dry; Very plastic; Normal plasticity; Moderately sticky; 50-90%, medium gravelly, 6-20mm, rounded, dispersed, Ferricrete, coarse fragments; 2-10%, medium gravelly, 6-20mm, rounded, dispersed, Quartz, coarse fragments; Few cutans, <10% of ped faces or walls coated, distinct; Very many (50 - 100 %), Ferromanganiferous, Medium (2 -6 mm), Concretions; Densipan, Weakly cemented, Continuous, Nodular; Field pH 7 (Raupach); Few, fine (1-2mm) roots; Clear, Smooth change to - |
| D | 1 - 1.1 m | Greyish brown (10YR5/2-Moist); , 0-0% ; Sandy light clay; Earthy fabric; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Dry; Very plastic; Normal plasticity; Very sticky; 50-90%, medium gravelly, 6-20mm, rounded, dispersed, Ferricrete, coarse fragments; 20-50%, medium gravelly, 6-20mm, rounded, dispersed, Limestone, coarse fragments; Field pH 7 (Raupach); |

## Morphological Notes

## Observation Notes

Black Volcanic Soils, Melanic, Petroferric, Black Chromosol, thick, non-gravelly, loamy, clayey, moderate

## Site Notes

MT EDWARD, SE SOUTH AUSTRALIA, POOR GLOBULS GROWTH, Black Volcanic Soils, Melanic, Petroferric, Black Chromosol, thick, non-gravelly, loamy, clayey, moderate.

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## Laboratory Test Results:

| Depth | pH | 1:5 EC | Exchangeable Cations | | | | Exchangeable | CEC | ECEC | ESP |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ca | Mg | K | Na | Acidity | | | |
| m | | dS/m | Cmol (+)/kg | | | | | | | % |

| Depth | CaCO3 | Organic | Avail. | Total | Total | Total | Bulk | Particle Size Analysis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | P | P | N | K | Density | GV | CS | FS | Silt | Clay |
| m | % | % | mg/kg | % | % | % | Mg/m3 | | | % | | |

| 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 | | g/g - m3/m3 | | | | | | | mm/h | mm/h |

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**Laboratory Analyses Completed for this profile**