**Project Name:** LBV
**Project Code:** LBV **Site ID:** B14 **Observation ID:** 1
**Agency Name:** CSIRO Division of Soils (QLD)

## Site Information

**Desc. By:** G.D. Hubble
**Date Desc.:** 13/10/48
**Map Ref.:** Sheet No. : 8358 1:100000
**Northing/Long.:** 147.233333333333
**Easting/Lat.:** -19.8333333333333
**Locality:**
**Elevation:** 20 metres
**Rainfall:** 800
**Runoff:** Moderately rapid
**Drainage:** Well drained

## Geology

**ExposureType:** Auger boring
**Geol. Ref.:** Cza
**Conf. Sub. is Parent. Mat.:** No Data
**Substrate Material:** Auger boring, 2 m deep,Porous, Unconsolidated material (unidentified)

## Land Form

**Rel/Slope Class:** Gently undulating plains <9m 1-3%
**Morph. Type:** No Data
**Elem. Type:** Levee
**Slope:** 0 %
**Pattern Type:** Alluvial plain
**Relief:** 2 metres
**Slope Category:** No Data
**Aspect:** No Data

## Surface Soil Condition (dry): Hardsetting

## Erosion:

## Soil Classification

**Australian Soil Classification:**
Bleached-Mottled Mesotrophic Yellow Kandosol
**ASC Confidence:**
All necessary analytical data are available.
**Mapping Unit:** N/A
**Principal Profile Form:** Dy2.72
**Great Soil Group:** No suitable group

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

## Vegetation:

Low Strata - Tussock grass, , Closed or dense. *Species includes - Heteropogon contortus
Mid Strata - Shrub, , . *Species includes - Planchonia careya
Tall Strata - Tree, 6.01-12m, Sparse. *Species includes - None Recorded

## Surface Coarse Fragments: No surface coarse fragments

## Profile Morphology

| | | |
|---|---|---|
| A1 | 0 - 0.2 m | Greyish brown (10YR5/2-Moist); ; Loamy fine sand; Massive grade of structure; Earthy fabric; Many (>5 per 100mm2) Fine (1-2mm) macropores, Dry; Very weak consistence; Field pH 6.9 (pH meter); Many, fine (1-2mm) roots; Diffuse change to - |
| A2 | 0.2 - 0.36 m | Pale brown (10YR6/3-Moist); , 10YR51; Fine sand; Massive grade of structure; Earthy fabric; Many (>5 per 100mm2) Fine (1-2mm) macropores, Dry; Very weak consistence; Field pH 6.8 (pH meter); Many, fine (1-2mm) roots; Diffuse change to - |
| A3 | 0.36 - 0.69 m | Light yellowish brown (10YR6/4-Moist); , 10YR51; Clayey fine sand; Massive grade of structure; Earthy fabric; Many (>5 per 100mm2) Fine (1-2mm) macropores, Dry; Very weak consistence; Field pH 6.9 (pH meter); Common, fine (1-2mm) roots; Diffuse change to - |
| A3 | 0.69 - 1.04 m | Light yellowish brown (10YR6/4-Moist); , 10YR51; Fine sand; Massive grade of structure; Earthy fabric; Few (<1 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Very weak consistence; Field pH 6.9 (pH meter); Few, fine (1-2mm) roots; Clear change to - |
| B2 | 1.07 - 1.42 m | Brownish yellow (10YR6/6-Moist); , 7.5YR54; Fine sandy clay loam; Massive grade of structure; Earthy fabric; Moderately moist; Weak consistence; Field pH 6.8 (pH meter); Diffuse change to - |
| B3 | 1.42 - 1.68 m | Brownish yellow (10YR6/6-Moist); , 7.5YR54; Fine sand; Massive grade of structure; Moist; Very weak consistence; Field pH 6.9 (pH meter); Diffuse change to - |
| B3 | 1.68 - 2.13 m | Brownish yellow (10YR6/6-Moist); , 7.5YR54; Fine sand; Massive grade of structure; Moist; Very weak consistence; Field pH 7.2 (pH meter); |

## Morphological Notes

## Observation Notes

## Site Notes

BURDEKIN VALLE

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## Laboratory Test Results:

| Depth | pH | 1:5 EC | Exchangeable Cations | | | | Exchangeable Acidity | CEC | ECEC | ESP |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ca | Mg | K | Na | | | | |
| m | | dS/m | Cmol (+)/kg | | | | | | | % |
| 0 - 0.2 | 6.9H | 0.01B | 4.4K | 1.2 | 0.42 | 0.13 | 1.9D | | 8E | |
| 0.2 - 0.36 | 6.8H | 0.01B | | | | | | | | |
| 0.36 - 0.69 | 6.9H | 0.01B | | | | | | | | |
| 0.69 - 1.04 | 6.9H | 0.01B | | | | | | | | |
| 1.07 - 1.42 | 6.8H | 0.01B | 6.1K | 2.6 | 0.32 | 0.21 | 1.6D | | 10.8E | |
| 1.42 - 1.68 | 6.9H | 0.01B | | | | | | | | |
| 1.68 - 2.13 | 7.2H | 0.01B | | | | | | | | |

| Depth | CaCO3 | Organic C | Avail. P | Total P | Total N | Total K | Bulk Density | Particle Size Analysis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | GV | CS | FS | Silt | Clay |
| m | % | % | mg/kg | % | % | % | Mg/m3 | | | % | | |
| 0 - 0.2 | | 0.73E | 91C | 0.027F | 0.05B | | | | 10C | 72 | 10 | 7 |
| 0.2 - 0.36 | | | | | 0.03B | | | | 8C | 71 | 9 | 9 |
| 0.36 - 0.69 | | | | | | | | | 10C | 62 | 12 | 13 |
| 0.69 - 1.04 | | | | | | | | | 11C | 65 | 11 | 12 |
| 1.07 - 1.42 | | | | | | | | | 10C | 62 | 8 | 17 |
| 1.42 - 1.68 | | | | | | | | | 10C | 66 | 8 | 14 |
| 1.68 - 2.13 | | | | | | | | | 4C | 67 | 9 | 17 |

| 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 |
| 0 - 0.2 | | | | | | | | | | |
| 0.2 - 0.36 | | | | | | | | | | |
| 0.36 - 0.69 | | | | | | | | | | |
| 0.69 - 1.04 | | | | | | | | | | |
| 1.07 - 1.42 | | | | | | | | | | |
| 1.42 - 1.68 | | | | | | | | | | |
| 1.68 - 2.13 | | | | | | | | | | |

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**Laboratory Analyses Completed for this profile**

| | |
|---|---|
| 15_NR | Sum of Ex. cations + Ex. acidity - Not recorded |
| 15_NR_CA | Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded |
| 15_NR_H | Hydrogen Cation - meq per 100g of soil - Not recorded |
| 15_NR_K | Exch. basic cations (K++) - meq per 100g of soil - Not recorded |
| 15_NR_MG | Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded |
| 15_NR_NA | Exch. basic cations (Na++) - meq per 100g of soil - Not recorded |
| 2_LOI | Loss on Ignition (%) |
| 2A1 | Air-dry moisture content |
| 3_NR | Electrical conductivity or soluble salts - Not recorded |
| 4_NR | pH of soil - Not recorded |
| 5_NR | Water soluble Chloride - Cl(%) - Not recordede |
| 6Z | Organic carbon (%) - Not recorded |
| 7_NR | Total nitrogen (%) - Not recorded |
| 9_NR | Available P (mg/kg) - Not recorded |
| 9A_NR | Total element - P(%) - Not recorded |
| P10_NR_C | Clay (%) - Not recorded |
| P10_NR_CS | Coarse sand (%) - Not recorded |
| P10_NR_FS | Fine sand (%) - Not recorded |
| P10_NR_Z | Silt (%) - Not recorded |