

Project Name: LBV
Project Code: LBV **Site ID:** B3 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

| | | | |
|------------------------|------------------------------|-------------------|---------------------|
| Desc. By: | G.D. Hubble | Locality: | |
| Date Desc.: | 01/10/48 | Elevation: | 19 metres |
| Map Ref.: | Sheet No. : 8358 1:100000 | Rainfall: | 800 |
| Northing/Long.: | 147.216666666667 | Runoff: | Very slow |
| Easting/Lat.: | -19.780555555556 | Drainage: | Imperfectly drained |

Geology

| | | | |
|-----------------------|----------|------------------------------------|--|
| Exposure Type: | Soil pit | Conf. Sub. is Parent. Mat.: | No Data |
| Geol. Ref.: | Cza | Substrate Material: | Auger boring, 1.5 m deep, Porous, Unconsolidated material (unidentified) |

Land Form

| | | | |
|-------------------------|---------------------|------------------------|----------------|
| Rel/Slope Class: | Level plain <9m <1% | Pattern Type: | Alluvial plain |
| Morph. Type: | No Data | Relief: | No Data |
| Elem. Type: | Drainage depression | Slope Category: | No Data |
| Slope: | 0 % | Aspect: | No Data |

Surface Soil Condition (dry): Hardsetting

Erosion:

Soil Classification

| | | | |
|--|--|--------------------------------|--------------|
| Australian Soil Classification: | | Mapping Unit: | N/A |
| Eutrophic Subnatric Grey Sodosol | | Principal Profile Form: | Dy2.43 |
| ASC Confidence: | | Great Soil Group: | Solodic soil |
| All necessary analytical data are available. | | | |

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

Vegetation:

Tall Strata - Tree, 6.01-12m, Very sparse. *Species includes - None Recorded

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

| | | |
|-----|---------------|--|
| A1 | 0 - 0.15 m | Dark grey (10YR4/1-Moist); ; Loam; Massive grade of structure; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Dry; Weak consistence; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Concretions; Field pH 6.2 (pH meter); Diffuse change to - |
| A2 | 0.15 - 0.23 m | Light grey (10YR7/2-Moist); ; Fine sandy loam (Heavy); Massive grade of structure; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Dry; Weak consistence; Common (10 - 20 %), Manganiferous, Medium (2 -6 mm), Concretions; Field pH 6.6 (pH meter); Clear, Irregular change to - |
| B21 | 0.25 - 0.41 m | Greyish brown (2.5Y5/2-Moist); ; Medium clay; Moderate grade of structure, 20-50 mm, Angular blocky; Dry; Strong consistence; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Concretions; Field pH 7.7 (pH meter); Diffuse change to - |
| B22 | 0.41 - 0.56 m | Greyish brown (2.5Y5/2-Moist); ; Medium clay; Moderate grade of structure, 20-50 mm, Angular blocky; Dry; Strong consistence; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Concretions; Field pH 8.7 (pH meter); Diffuse change to - |
| B23 | 0.56 - 0.66 m | Light brownish grey (2.5Y6/2-Moist); ; Light clay; Moderate grade of structure, 20-50 mm, Angular blocky; Dry; Strong consistence; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Concretions; Field pH 9 (pH meter); Diffuse change to - |
| B24 | 0.69 - 0.91 m | Brown (10YR4/3-Moist); ; Light medium clay; Weak grade of structure, 20-50 mm, Angular blocky; Moderately moist; Strong consistence; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Concretions; Field pH 8.8 (pH meter); Diffuse change to - |
| BC | 0.97 - 1.32 m | Greyish brown (10YR5/2-Moist); ; Light medium clay; Weak grade of structure, 20-50 mm, Angular blocky; Moderately moist; Strong consistence; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Concretions; Field pH 8.8 (pH meter); |

Morphological Notes

Observation Notes

Site Notes

BURDEKIN VALLE

Observation ID: 1

Laboratory Test Results:

| Depth | pH | 1:5 EC | Exchangeable Cations | | | Exchangeable | CEC | ECEC | ESP |
|-------------|------|--------|----------------------|------|------|--------------|---------|-------|-----|
| m | | dS/m | Ca | Mg | K | Na | Acidity | | % |
| | | | | | | | (+)/kg | | |
| 0 - 0.15 | 6.2H | 0.007B | 3.8K | 1.9 | 0.36 | 0.09 | 3.7D | | |
| 0.15 - 0.23 | 6.6H | 0.006B | | | | | | 9.8E | |
| 0.25 - 0.41 | 7.7H | 0.02B | 11.5K | 10.2 | 0.2 | 1.64 | 2.6D | 26.1E | |
| 0.41 - 0.56 | 8.7H | 0.037B | | | | | | | |
| 0.56 - 0.66 | 9H | 0.058B | 8.6K | 5.9 | 0.18 | 1.3 | | 15.9E | |
| 0.69 - 0.91 | 8.8H | 0.09B | | | | | | | |
| 0.97 - 1.32 | 8.8H | 0.041B | | | | | | | |

| Depth m | CaCO3 | Organic C | Avail. P | Total P | Total N | Total K | Bulk Density Mg/m3 | Particle | | Size | Analysis | |
|-------------|-------|--------------|-------------|------------|------------|------------|--------------------------|----------|-----|---------|----------|------|
| | % | % | mg/kg | % | % | % | | GV | CS | FS % | Silt | Clay |
| 0 - 0.15 | | 0.73E | 8C | 0.014F | 0.055B | | | | 4D | 52 | 29 | 13 |
| 0.15 - 0.23 | | | | | 0.029B | | | | 4D | 52 | 34 | 12 |
| 0.25 - 0.41 | | 0.5E | | | 0.044B | | | | 4D | 37 | 20 | 38 |
| 0.41 - 0.56 | 0.03C | | | | | | | | 6D | 43 | 22 | 31 |
| 0.56 - 0.66 | 0.12C | | | | | | | | 6D | 46 | 16 | 29 |
| 0.69 - 0.91 | 0.24C | | | | | | | | 4D | 39 | 16 | 43 |
| 0.97 - 1.32 | 0.04C | | | | | | | | 12D | 28 | 29 | 32 |

[illegible]

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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 |
| 19B_NR | Calcium Carbonate (CaCO ₃) - 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 recorded |
| 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_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 |