

**Project Name:** LBV  
**Project Code:** LBV      **Site ID:** B51      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

#### Site Information

<b>Desc. By:</b>	C.H. Thompson	<b>Locality:</b>	
<b>Date Desc.:</b>	08/09/50	<b>Elevation:</b>	45 metres
<b>Map Ref.:</b>	Sheet No. : 8357 1:100000	<b>Rainfall:</b>	750
<b>Northing/Long.:</b>	147.333333333333	<b>Runoff:</b>	Slow
<b>Easting/Lat.:</b>	-20.0833333333333	<b>Drainage:</b>	Imperfectly drained

#### Geology

<b>ExposureType:</b>	Soil pit	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	CZA	<b>Substrate Material:</b>	Auger boring, 1.1 m deep,Porous, Unconsolidated material (unidentified)

#### Land Form

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

**Surface Soil Condition (dry):** Hardsetting

#### Erosion:

#### Soil Classification

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Calcic Mottled-Mesonatric Brown Sodosol		<b>Principal Profile Form:</b>	Dy3.43
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Solodic soil

No analytical data are available but confidence is fair.

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

**Vegetation:** Low Strata - Tussock grass, , Mid-dense. \*Species includes - None recorded  
Tall Strata - Tree, 6.01-12m, Very sparse. \*Species includes - Eucalyptus papuana, Eucalyptus polycarpa,  
Acacia farnesiana

**Surface Coarse Fragments:** 0-2%, cobbly, 60-200mm, ,

#### Profile Morphology

A1	0 - 0.06 m	Light brownish grey (10YR6/2-Moist); ; Loam; Massive grade of structure; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Weak consistence; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Nodules; Field pH 6.4 (pH meter); Clear change to -
A2	0.06 - 0.14 m	Light grey (10YR7/2-Moist); ; Loam; Massive grade of structure; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Weak consistence; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Nodules; Field pH 7.1 (pH meter); Sharp, Irregular change to -
B21	0.15 - 0.25 m	Brown (10YR5/3-Moist); , 10YR51; , 10YR41; Medium clay; Moderate grade of structure, 50-100 mm, Prismatic; Dry; Strong consistence; 0-2%, medium gravelly, 6-20mm, rounded, Gravel, coarse fragments; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Nodules; Field pH 7.9 (pH meter); Gradual change to -
B22	0.25 - 0.51 m	Dark grey (10YR4/1-Moist); , 10YR64; , 10YR42; Medium clay; Moderate grade of structure, 20-50 mm, Angular blocky; Dry; Strong consistence; 0-2%, medium gravelly, 6-20mm, rounded, Gravel, coarse fragments; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Nodules; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 9.3 (pH meter); Diffuse change to -
B3	0.56 - 0.86 m	Light yellowish brown (10YR6/4-Moist); , 2.5Y42; , 2.5Y62; Light clay; Weak grade of structure, 20-50 mm, Angular blocky; Moist; Firm consistence; 2-10%, medium gravelly, 6-20mm, rounded, Substrate material, coarse fragments; Few (2 - 10 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 9.2 (pH meter); Diffuse change to -
B3	0.86 - 1.09 m	Light brownish grey (2.5Y6/2-Moist); , 2.5Y42; , 2.5Y72; Light clay; Weak grade of structure, 20-50 mm, Angular blocky; Moist; Weak consistence; 2-10%, coarse gravelly, 20-60mm, rounded, Substrate material, coarse fragments; Few (2 - 10 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 9.5 (pH meter); Diffuse change to -
C	1.09 - 1.27 m	Light brownish grey (2.5Y6/2-Moist); , 2.5Y52; Light clay; Massive grade of structure; Moist; Weak consistence; 2-10%, coarse gravelly, 20-60mm, rounded, Gravel, coarse fragments; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules;

#### Morphological Notes

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**Observation Notes**

**Site Notes**

BURDEKIN VALLE

**Observation ID: 1**

**Laboratory Test Results:**

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.06	6.4H	0.02B								
0.06 - 0.14	7.1H	0.02B								
0.15 - 0.25	7.9H	0.04B								
0.25 - 0.51	9.3H	0.02B								
0.56 - 0.86	9.2H	0.03B								
0.86 - 1.09	9.5H	0.29B								

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**Laboratory Analyses Completed for this profile**

19B_NR	Calcium Carbonate (CaCO <sub>3</sub> ) - 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_GRAV	Gravel (%)
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