

**Project Name:** BB  
**Project Code:** BB      **Site ID:** B340      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

**Site Information**

|                        |                           |                   |                     |
|------------------------|---------------------------|-------------------|---------------------|
| <b>Desc. By:</b>       | G.D. Hubble               | <b>Locality:</b>  |                     |
| <b>Date Desc.:</b>     | 25/03/58                  | <b>Elevation:</b> | 15 metres           |
| <b>Map Ref.:</b>       | Sheet No. : 9543 1:100000 | <b>Rainfall:</b>  | 1067                |
| <b>Northing/Long.:</b> | 153.154166666667          | <b>Runoff:</b>    | Moderately rapid    |
| <b>Easting/Lat.:</b>   | -27.476388888889          | <b>Drainage:</b>  | Imperfectly drained |

**Geology**

|                      |          |                                    |                              |
|----------------------|----------|------------------------------------|------------------------------|
| <b>ExposureType:</b> | Soil pit | <b>Conf. Sub. is Parent. Mat.:</b> | No Data                      |
| <b>Geol. Ref.:</b>   | Tb       | <b>Substrate Material:</b>         | Soil pit, 0.61 m deep,Basalt |

**Land Form**

|                         |                              |                        |           |
|-------------------------|------------------------------|------------------------|-----------|
| <b>Rel/Slope Class:</b> | Undulating rises 9-30m 3-10% | <b>Pattern Type:</b>   | Rises     |
| <b>Morph. Type:</b>     | Lower-slope                  | <b>Relief:</b>         | 24 metres |
| <b>Elem. Type:</b>      | Hillslope                    | <b>Slope Category:</b> | No Data   |
| <b>Slope:</b>           | 0 %                          | <b>Aspect:</b>         | No Data   |

**Surface Soil Condition (dry):**

**Erosion:**

**Soil Classification**

|  |  |                                |              |
|--|--|--------------------------------|--------------|
| <b>Australian Soil Classification:</b> |  | <b>Mapping Unit:</b>           | N/A          |
| Haplic Epipedal Grey Vertosol          |  | <b>Principal Profile Form:</b> | Dy4.12       |
| <b>ASC Confidence:</b>                 |  | <b>Great Soil Group:</b>       | Prairie soil |

All necessary analytical data are available.

**Site Disturbance:** Complete clearing. Pasture, native or improved, but never cultivated

**Vegetation:**

Tall Strata - Tussock grass, , . \*Species includes - Digitaria didactyla

**Surface Coarse Fragments:** No surface coarse fragments

**Profile Morphology**

|     |               |   |
|-----|---------------|---|
| A11 | 0 - 0.1 m     | Very dark grey (10YR3/1-Moist); ; Light clay; Strong grade of structure, 2-5 mm, Granular; Moist; Weak consistence; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Field pH 5.8 (pH meter); Many, very fine (0-1mm) roots; Clear change to -   |
| A12 | 0.1 - 0.16 m  | Dark greyish brown (10YR4/2-Moist); ; Light clay; Strong grade of structure, 2-5 mm, Polyhedral; Moist; Weak consistence; Common (10 - 20 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules; Field pH 6.3 (pH meter); Common, very fine (0-1mm) roots; Clear change to -  |
| B21 | 0.18 - 0.32 m | Dark greyish brown (10YR4/2-Moist); ; Heavy clay; Moderate grade of structure, 20-50 mm, Prismatic; Moderate grade of structure, 20-50 mm, Prismatic; Moist; Moderately plastic; Normal plasticity; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Nodules; Field pH 6.7 (pH meter); Common, very fine (0-1mm) roots; Gradual change to - |
| B22 | 0.35 - 0.6 m  | Olive brown (2.5Y4/4-Moist); ; Heavy clay; Strong grade of structure, Lenticular; Moist; Moderately plastic; Normal plasticity; Field pH 8 (pH meter); Common, very fine (0-1mm) roots; Gradual change to -   |
| C   | 0.6 - 0.68 m  | Dark greyish brown (2.5Y4/2-Moist); , 5Y42, 10-20% , 0-5mm, Distinct; , 10-20% , 0-5mm, Distinct; Light clay (Light); Massive grade of structure; Field pH 8.7 (pH meter); Few, very fine (0-1mm) roots;  |

**Morphological Notes**

C Soft weathered rock:

**Observation Notes**

VERY SLIGHT DEVELOPMENT OF CRABHOLE TYPE MICRORELIEF:

**Site Notes**

MANLY

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| Depth       | pH   | 1:5 EC | Ca    | Exchangeable Mg | Cations K | Na          | Exchangeable Acidity | CEC   | ECEC | ESP  |
|-------------|------|--------|-------|-----------------|-----------|-------------|----------------------|-------|------|------|
| m           |      | dS/m   |       |                 |           | Cmol (+)/kg |                      |       |      | %    |
| 0 - 0.1     | 5.8H | 0.02C  | 5.9K  | 6.1             | 0.44      | 0.94        |                      | 27.3J |      | 3.44 |
| 0.1 - 0.16  | 6.3H | 0.02C  |       |                 |           |             |                      |       |      |      |
| 0.18 - 0.32 | 6.7H | 0.03C  |       |                 |           |             |                      |       |      |      |
| 0.35 - 0.6  | 8H   | 0.07C  | 11.9K | 30              | 0.04      | 3.3         |                      | 52.7J |      | 6.26 |
| 0.6 - 0.68  | 8.7H | 0.04C  |       |                 |           |             |                      |       |      |      |

| Depth       | CaCO3 | Organic | Avail. | Total  | Total | Total | Bulk    | Particle |     | Size | Analysis |      |
|-------------|-------|---------|--------|--------|-------|-------|---------|----------|-----|------|----------|------|
| m           | %     | C       | P      | P      | N     | K     | Density | GV       | CS  | FS   | Silt     | Clay |
|             |       | %       | mg/kg  | %      | %     | %     | Mg/m3   |          |     | %    |          |      |
| 0 - 0.1     |       | 3.83E   | 4C     | 0.023F | 0.27B |       |         | 1        | 15C | 25   | 27       | 27   |
|             |       | 3.01E   |        |        |       |       |         |          |     |      |          |      |
| 0.1 - 0.16  |       | 1.91E   |        |        |       |       |         | 24       | 21C | 24   | 25       | 26   |
| 0.18 - 0.32 |       | 1.4E    |        |        |       |       |         | 1        | 12C | 16   | 18       | 52   |
| 0.35 - 0.6  | 0.07C | 0.74E   |        |        |       |       |         | 0        | 4C  | 25   | 29       | 39   |
| 0.6 - 0.68  | 0.05C |         |        | 0.012F |       |       |         | 5        | 22C | 49   | 18       | 13   |

[illegible]

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**Laboratory Analyses Completed for this profile**

|           |  |
|-----------|--|
| 15_NR_CA  | Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded |
| 15_NR_CEC | CEC - 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 (CaCO3) - Not recorded                         |
| 2A1       | Air-dry moisture content   |
| 3A_TSS    | Electrical conductivity or soluble salts - Total soluble salts % |
| 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  |