**WQA Project Name:** 

**Project Code:** WQA Site ID: B598 Observation ID: 1

Agency Name: **CSIRO** Division of Soils (QLD)

**Site Information** 

Locality: G.D. Hubble

Desc. By: Date Desc.: Elevation: 01/09/69 87 metres Sheet No.: 6848 1:100000 Map Ref.: Rainfall: 203 Northing/Long.: 139.68888888888 Runoff: Rapid Easting/Lat.: -24.505555555556 Drainage: Well drained

Geology

ExposureType: Conf. Sub. is Parent. Mat.: No Data Auger boring

Geol. Ref.: **Substrate Material:** Auger boring, 1 m deep, No Data Kw

**Land Form** 

Rel/Slope Class: Undulating plains <9m 3-10% Pattern Type: Plain Morph. Type: Elem. Type: No Data Relief: No Data Plain **Slope Category:** No Data No Data Slope: 0 % Aspect:

Surface Soil Condition (dry): Surface crust

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification:** Mapping Unit: N/A Eutrophic Pedaric Red Sodosol Principal Profile Form: Dr1.33 **ASC Confidence: Great Soil Group:** Desert loam

All necessary analytical data are available.

Site Disturbance:

Vegetation:

Surface Coarse Fragments: 90-100%, medium gravelly, 6-20mm, , Gravel

**Profile Morphology** 

| A1 0 - 0.04 m Brown (7.5YR5/4-Moist); Pink (7.5YR7/4-Dry); Fine sandy loam; Massive grade of structure; Dry; Weak consistence; 50-90%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Sharp change to -  B21 0.04 - 0.1 m Yellowish red (5YR5/5-Moist); Light medium clay; Strong grade of structure, 5-10 mm, Polyhedral; Dry; Very weak consistence; Moderately plastic; Subplastic; 0-2%, medium grave |      |
|---|------|
|   | lly, |
| 6-20mm, Substrate material, coarse fragments;   |      |
| B21 0.1 - 0.2 m Yellowish red (5YR5/5-Moist); ; Light medium clay; Strong grade of structure, 5-10 mm, Polyhedral; Dry; Very weak consistence; Moderately plastic; Subplastic;  |      |
| B21 0.2 - 0.3 m Yellowish red (5YR5/5-Moist); ; Light medium clay; Strong grade of structure, 5-10 mm, Polyhedral; Dry; Very weak consistence; Moderately plastic; Subplastic; Gradual change to -  |      |
| B22 0.3 - 0.5 m Reddish yellow (7.5YR6/6-Dry); ; Light medium clay; Moderate grade of structure, Polyhedral; Dry; Very weak consistence; Moderately plastic; Subplastic;  |      |
| B22 0.5 - 0.6 m Brownish yellow (10YR6/6-Dry); ; Light medium clay; Moderate grade of structure, Polyhedral Dry; Very weak consistence; Moderately plastic; Subplastic; Very few (0 - 2 %), Gypseous, , Crystals;   | ;    |
| B22 0.6 - 0.75 m Brownish yellow (10YR6/6-Dry); ; Light medium clay; Moderate grade of structure, Polyhedral Dry; Weak consistence; Moderately plastic; Subplastic; Very few (0 - 2 %), Gypseous, , Crystals; Gradual change to -   | ;    |
| C 0.75 - 0.9 m Yellowish brown (10YR5/6-Dry); , 10YR81, 20-50% , 5-15mm, Distinct; , 10YR66, 20-50% , 5-15mm, Distinct; Silty light clay; Massive grade of structure; Dry; Weak consistence; Moderated plastic; Subplastic; Common (10 - 20 %), Gypseous, , Crystals;   |      |
| 0.9 - 1.2 m Yellowish brown (10YR5/6-Dry); , 10YR81, 20-50% , 5-15mm, Distinct; , 10YR66, 20-50% , 5-15mm, Distinct; Silty medium clay; Massive grade of structure; Weak consistence; Few (2 - 10%), Gypseous, , Crystals;  |      |
| 1.2 - 1.5 m Yellowish brown (10YR5/6-Dry); , 10YR81, 20-50% , 5-15mm, Distinct; , 10YR66, 20-50% , 5-15mm, Distinct; Silty medium clay; Massive grade of structure; Weak consistence; Few (2 - 10%), Gypseous, , Crystals;  |      |

## **Morphological Notes**

## **Observation Notes**

Project Name: WQA
Project Code: WQA Site ID: B59
Agency Name: CSIRO Division of Soils (QLD) B598 Observation ID: 1

NO VEGETATION OCCURS AT SITE:PATCHES OF BLEACH AT BASE OF A1 HORIZON:BELOW 75CM MATERIAL LOOKS LIKE WEATHERED SILTY MUDSTONE:

Site Notes

CLUNY

Project Name: Project Code: Agency Name: WQA

WQA Site ID: B59 CSIRO Division of Soils (QLD) B598 Observation ID: 1

## **Laboratory Test Results:**

| Laboratory                           | Test Re      | <u>suits:</u>   |  |                  |              |           |            |                 |        |            |             |                   |          |
|--------------------------------------|--------------|-----------------|--|------------------|--------------|-----------|------------|-----------------|--------|------------|-------------|-------------------|----------|
| Depth                                | рН           | 1:5 EC          |  | hangeable<br>Mg  | Cations<br>K | Na        |            | nangeabl        | e CEC  | E          | CEC         | E                 | SP       |
| m                                    |              | dS/m            |  | -                |              | Cmol (    | +)/kg      | •               |        |            |             | %                 | •        |
| 0 - 0.03<br>0.03 - 0.1               | 7.6H<br>7.5H | 0.023B<br>0.38B | 3K   | 1.6              | 0.41         | 0.95      |            | 2.4D            |        |            |             |                   |          |
| 0.1 - 0.2<br>0.2 - 0.3               | 7.6H<br>7.4H | 0.84B<br>1.3B   | 10.2K  | 6.8              | 0.6          | 6.8       |            | 0D              |        |            |             |                   |          |
| 0.3 - 0.5<br>0.5 - 0.6               | 7.2H<br>7.4H | 2.1B<br>5.4B    |  |                  |              |           |            |                 |        |            |             |                   |          |
| 0.6 - 0.75                           | 7.6H         | 5.4B            |  |                  |              |           |            |                 |        |            |             |                   |          |
| 0.75 - 0.9<br>0.9 - 1.2              | 7.8H<br>7.7H | 14B<br>10B      |  |                  |              |           |            |                 |        |            |             |                   |          |
| 1.2 - 1.5                            | 7.7H         | 7.2B            |  |                  |              |           |            |                 |        |            |             |                   |          |
| Depth                                | CaCO3        | Organic<br>C    | Avail.<br>P  | Total<br>P       | Total<br>N   | Tota<br>K |            | Bulk<br>Density |        |            | ize A<br>FS | nalysis<br>Silt C | `lav     |
| m                                    | %            | %               | mg/kg  | %                | %            | %         |            | Mg/m3           |        |            | %           | Jiii C            | nay      |
| 0 - 0.03<br>0.03 - 0.1               |              | 0.06E<br>0.13E  | 23B<br>43B   | 0.027F<br>0.037F |              |           | 54B<br>88B |                 |        | 17C<br>10C | 65<br>44    | 9<br>5            | 10<br>40 |
| 0.1 - 0.2<br>0.2 - 0.3               |              | 0.1E<br>0.08E   | 51B  | 0.031F<br>0.032F | 0.02<br>0.01 | 6B 0.     | 75B<br>71B |                 |        | 9C<br>9C   | 46<br>46    | 6<br>6            | 37<br>37 |
| 0.2 0.5<br>0.3 - 0.5<br>0.5 - 0.6    |              | 0.11E<br>0.04E  | 310  | 0.037F<br>0.042F | 0.01<br>0.01 | 9B 0.     | 72B<br>68B |                 |        | 7C<br>5C   | 41<br>33    | 6<br>11           | 44<br>45 |
| 0.6 - 0.75                           | 0.040        | 0.04E           | COD  | 0.038F           | 0.01         | 4B 0.0    | 67B        |                 |        | 5C         | 29          | 15                | 45       |
| 0.75 - 0.9<br>0.9 - 1.2              | 0.04C        | 0.02E           | 60B<br>5B  | 0.03F<br>0.023F  |              | 7B 0.     | .5B<br>57B |                 |        |            |             |                   |          |
| 1.2 - 1.5                            |              | 0.02E           |  | 0.021F           | 0.01         | 4B 0.     | 59B        |                 |        |            |             |                   |          |
| Depth                                | COLE         | Sat.            | Gravimetric/Volumetric Water Contents<br>0.05 Bar 0.1 Bar 0.5 Bar 1 Bar 5 Bar 15 B |                  |              |           |            |                 | 15 Bar | K sat      | ŀ           | K unsat           |          |
| m                                    |              | Jai.            | 0.03 Bai   |                  | - m3/m3      |           |            | о Баі           | 13 Bai | mm/h       |             | mm/h              |          |
| 0 - 0.03<br>0.03 - 0.1               |              |                 |  |                  |              |           |            |                 |        |            |             |                   |          |
| 0.03 - 0.1<br>0.1 - 0.2<br>0.2 - 0.3 |              |                 |  |                  |              |           |            |                 |        |            |             |                   |          |
| 0.3 - 0.5                            |              |                 |  |                  |              |           |            |                 |        |            |             |                   |          |
| 0.5 - 0.6<br>0.6 - 0.75              |              |                 |  |                  |              |           |            |                 |        |            |             |                   |          |
| 0.75 - 0.9<br>0.9 - 1.2              |              |                 |  |                  |              |           |            |                 |        |            |             |                   |          |
| 1.2 - 1.5                            |              |                 |  |                  |              |           |            |                 |        |            |             |                   |          |

Project Name: WQA

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## **Laboratory Analyses Completed for this profile**

10A NR Total element - S(%) - 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
15\_NR\_MG
15\_NR\_MG
15\_NR\_NA
Exch. basic cations (K++) - meq per 100g of soil - Not recorded
Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded
Exch. basic cations (Na++) - meq per 100g of soil - Not recorded

17A\_NR Total element - K(%) - Not recorded

19B\_NR Calcium Carbonate (CaCO3) - Not recorded

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
9A\_NR Total element - P(%) - Not recorded

9G\_BSES Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES) P10\_NR\_C Clay (%) - Not recorded

P10\_NR\_C
P10\_NR\_CS
Clay (%) - Not recorded
Coarse sand (%) - Not recorded
P10\_NR\_FS
Fine sand (%) - Not recorded

P10\_NR\_Z Silt (%) - Not recorded XRD\_C\_II Illite - X-Ray Diffraction

XRD\_C\_Mm Montmorillonite - X-Ray Diffraction

XRD\_C\_Qz Quartz - X-Ray Diffraction