

**Project Name:** Warren Reservoir Catchment Survey  
**Project Code:** WRN **Site ID:** 316 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (SA)

#### Site Information

|                        |                      |                   |                |
|------------------------|----------------------|-------------------|----------------|
| <b>Desc. By:</b>       | I. Hollingsworth     | <b>Locality:</b>  |                |
| <b>Date Desc.:</b>     | 09/08/91             | <b>Elevation:</b> | 419 metres     |
| <b>Map Ref.:</b>       | 1:10000              | <b>Rainfall:</b>  | No Data        |
| <b>Northing/Long.:</b> | 6159480 AMG zone: 54 | <b>Runoff:</b>    | Very slow      |
| <b>Easting/Lat.:</b>   | 315170 Datum: AGD66  | <b>Drainage:</b>  | Poorly drained |

#### Geology

|                      |              |                                    |                   |
|----------------------|--------------|------------------------------------|-------------------|
| <b>ExposureType:</b> | Auger boring | <b>Conf. Sub. is Parent. Mat.:</b> | No Data           |
| <b>Geol. Ref.:</b>   | No Data      | <b>Substrate Material:</b>         | 3 m deep, No Data |

#### Land Form

|                         |                                      |                        |             |
|-------------------------|--------------------------------------|------------------------|-------------|
| <b>Rel/Slope Class:</b> | Gently undulating plains <9m<br>1-3% | <b>Pattern Type:</b>   | Plain       |
| <b>Morph. Type:</b>     | Flat                                 | <b>Relief:</b>         | 9 metres    |
| <b>Elem. Type:</b>      | Plain                                | <b>Slope Category:</b> | No Data     |
| <b>Slope:</b>           | 0.5 %                                | <b>Aspect:</b>         | 120 degrees |

#### Surface Soil Condition (dry):

#### Erosion:

#### Soil Classification

|  |  |                                |                      |
|--|--|--------------------------------|----------------------|
| <b>Australian Soil Classification:</b> |  | <b>Mapping Unit:</b>           | N/A                  |
| Hydrosol                               |  | <b>Principal Profile Form:</b> | Dd4.11               |
| <b>ASC Confidence:</b>                 |  | <b>Great Soil Group:</b>       | Gleyed podzolic soil |
| Confidence level not specified         |  |                                |                      |

#### Site Disturbance:

#### Vegetation:

#### Surface Coarse Fragments:

#### Profile Morphology

|     |             |  |
|-----|-------------|--|
| A11 | 0 - 0.1 m   | Very dark grey (10YR3/1-Moist); , 0-0% ; Silty loam; Moderate grade of structure, 2-5 mm, Granular; Earthy fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Field pH 5.5 (Raupach, 0.05); Many, very fine (0-1mm) roots;         |
| A12 | 0.1 - 0.2 m | Very dark grey (10YR3/1-Moist); , 0-0% ; Silty loam; Moderate grade of structure, 2-5 mm, Granular; Earthy fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Field pH 5.5 (Raupach, 0.15); Many, very fine (0-1mm) roots;         |
| A12 | 0.2 - 0.3 m | Very dark grey (2.5Y3/0-Moist); , 0-0% ; Silty loam; Massive grade of structure; Earthy fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Field pH 5.5 (Raupach, 0.25); Many, very fine (0-1mm) roots;                            |
| A12 | 0.3 - 0.5 m | Very dark grey (2.5Y3/0-Moist); , 0-2% , Faint; Silty loam; Massive grade of structure; Earthy fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Field pH 5.5 (Raupach, 0.4); Common, very fine (0-1mm) roots;                    |
| A12 | 0.5 - 0.8 m | Very dark grey (2.5Y3/0-Moist); , 0-2% , Faint; Silty loam; Massive grade of structure; Earthy fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Field pH 6.5 (Raupach, 0.65); Common, very fine (0-1mm) roots; Clear change to - |
| Bt  | 0.8 - 1 m   | Very dark grey (2.5Y3/0-Moist); , 0-2% , Faint; Medium clay; Massive grade of structure; Earthy fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Field pH 6.5 (Raupach, 0.95); Few, very fine (0-1mm) roots;                         |

#### Morphological Notes

#### Observation Notes

#### Site Notes

Project Name: Warren Reservoir Catchment Survey

Project Code: WRN

Agency Name: CSIRO Division of Soils (SA)

Site ID: 316

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 |      |     |
|       |    |        |                      |    |   | Cmol (+)/kg  |         |      | %   |

| 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   |          |    | %    |          |      |

| Depth | COLE | Gravimetric/Volumetric Water Contents |          |         |         |       |       | K sat | K unsat |
|-------|------|---------------------------------------|----------|---------|---------|-------|-------|-------|---------|
|       |      | Sat.                                  | 0.05 Bar | 0.1 Bar | 0.5 Bar | 1 Bar | 5 Bar |       |         |
| m     |      |                                       |          |         | g/g -   | m3/m3 |       | mm/h  | mm/h    |

Project Name: Warren Reservoir Catchment Survey  
Project Code: WRN Site ID: 316  
Agency Name: CSIRO Division of Soils (SA)

Observation ID: 1

Laboratory Analyses Completed for this profile