Project Name: BRUCEDALE/LADYSMITH/GRIGGWARD - Soil Landscape Modelling

Project Code: Wagga SLM Site ID: LS36 Observation ID: 1

Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By: McKane, Dermot Locality:

Date Desc.: Elevation: 15/07/93 232 metres Map Ref.: Sheet No.: 8327 DGPS Rainfall: No Data Northing/Long.: 6101467 AMG zone: 55 Runoff: Moderately rapid Easting/Lat.: 543347 Datum: AGD66 Moderately well drained Drainage:

<u>Geology</u>

ExposureType: Undisturbed soil core Conf. Sub. is Parent. Mat.: No Data Geol. Ref.: No Data Substrate Material: Quartz

Land Form

Rel/Slope Class:No DataPattern Type:No DataMorph. Type:No DataRelief:No DataElem. Type:No DataSlope Category:No DataSlope:7 %Aspect:180 degrees

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:Mapping Unit:N/ABleached-Mottled Mesotrophic Yellow Chromosol MediumPrincipal Profile Form:N/A

Non-gravelly Loamy Clayey Very deep

ASC Confidence: Great Soil Group: N/A

Confidence level not specified

Site Disturbance:

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A1 0 - 0.04 m Brown (10YR4/3-Moist); ; Fine sandy loam; Massive grade of structure; Earthy fabric; Dry; Weak consistence; Field pH 6 (Raupach); Few, very fine (0-1mm) roots;

weak consistence; Field pH 6 (Raupach); Few, very fine (0-1mm) roots;

A2 0.04 - 0.27 m Strong brown (7.5YR5/6-Moist); Reddish yellow (7.5YR7/5-Dry); ; Loamy fine sand; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Weak consistence; 0-2%, fine gravelly 2-6mm, subappular, dispersed, coarse fragments; Field pH 5.5 (Raupach); Few year

gravelly, 2-6mm, subangular, dispersed, coarse fragments; Field pH 5.5 (Raupach); Few, very

fine (0-1mm) roots;

B1 0.27 - 0.57 m Yellowish red (5YR5/8-Moist); ; Light clay; Massive grade of structure; Earthy fabric; Common

(1-5 per 100mm2) Fine (1-2mm) macropores, Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; 0-2%, fine gravelly, 2-6mm, subangular, dispersed, coarse

fragments; Field pH 6 (Raupach); Few, very fine (0-1mm) roots;

B21 0.57 - 1.16 m Brownish yellow (10YR6/8-Moist); Mottles, 10-20%, Prominent; Light clay; Moderate grade of

structure, 2-5 mm, Subangular blocky; Smooth-ped fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; 2-10%, fine gravelly, 2-6mm, subrounded,

dispersed, coarse fragments; Field pH 6 (Raupach);

B22 1.16 - 2 m Brownish yellow (10YR6/6-Moist); Mottles, 20-50%, Prominent; Mottles, 10-20%, Distinct;

Medium clay; Moderate grade of structure, 2-5 mm, Subangular blocky; Smooth-ped fabric; Dry; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, coarse fragments;

Field pH 7 (Raupach);

Morphological Notes

Observation Notes

Site Notes

S. CLARKE, SAMARRA

Project Name: Project Code: Agency Name: BRUCEDALE/LADYSMITH/GRIGGWARD - Soil Landscape Modelling Wagga_SLM Site ID: LS36 Observation ID: 1

Wagga_SLM Site ID: LS36 CSIRO Division of Soils (ACT)

Laboratory Test Results:

| Depth | рН | 1:5 EC | | hangeable Vig | Cations K | Na | Exchangeable Acidity | CEC | | ECEC | E | SP | |
|-------------|-------|---|-------------|------------------|--------------|-----------|-------------------------|----------|----------|-----------|------------------|-------|--|
| m | | dS/m | Ca i | vig | N. | Cmol (| • | | | | • | % | |
| 0 - 0.04 | 5.65A | 0.217A | 2.1J | 0.94 | 0.92 | 0.13 | | 6.4 | l | | 2 | 2.03 | |
| 0.04 - 0.27 | 4.75A | 0.076A | 0.27J | 0.12 | 0.14 | 0.03 | | 2.2 | l | | 1 | .36 | |
| 0.27 - 0.57 | 5.77A | 0.027A | 2.7J | 2 | 0.25 | 0.1 | | 7.1 | l | | 1 | .41 | |
| 0.57 - 1.16 | 6.21A | 0.03A | 1.8J | 4.4 | 0.16 | 0.33 | | 8.8 | | | 3 | 3.75 | |
| 1.16 - 2 | 7.69A | 0.049A | 2.5J | 7.8 | 0.21 | 2 | | 14.4 | 14.41 | | | 13.89 | |
| Depth | CaCO3 | Organic C | Avail. P | Total P | Total N | Tota K | Density | P: GV | GV CS FS | | Analysis Silt | | |
| m | % | % | mg/kg | % | % | % | Mg/m3 | | | % | | | |
| 0 - 0.04 | | 2.82C | | | | | | | 821 | | 4 | 14 | |
| 0.04 - 0.27 | | 0.24C | | | | | | | 801 | | 14 | 6 | |
| 0.27 - 0.57 | | 0.35C | | | | | | | 501 | | 12 | 38 | |
| 0.57 - 1.16 | | 0.13C | | | | | | | 501 | | 12 | 38 | |
| 1.16 - 2 | | 0.08C | | | | | | | 391 | | 11 | 50 | |
| | | | | | | | | | | | | | |
| Depth | COLE | Gravimetric/Volumetric Water Contents | | | | | | | Ks | at | K unsat | : | |
| m | | Sat. 0.05 Bar 0.1 Bar 0.5 Bar 1 Bar 5 Bar 15 Bar g/g - m3/m3 | | | | | | | mm | mm/h mm/h | | | |

0 - 0.04

0 - 0.04 0.04 - 0.27 0.27 - 0.57 0.57 - 1.16 1.16 - 2

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Laboratory Analyses Completed for this profile

15F1_CA Exchangeable bases by 0.01M silver-thiourea (AgTU)+, no pretreatment for soluble salts

15F1_K Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts 15F1_MG Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts 15F1_NA Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts 15F3 CEC by 0.01M silver-thiourea (AgTU)+

15F3 CEC by 0.01M silver-thiourea (AgTU)+
15L1 Base saturation percentage (BSP)
15N1 Exchangeable sodium percentage (ESP)

3A1 EC of 1:5 soil/water extract 4A1 pH of 1:5 soil/water suspension

6B3 Total organic carbon - high frequency induction furnace, infrared

P10_NR_C Clay (%) - Not recorded P10_NR_S Sand (%) - Not recorded P10_NR_Z Silt (%) - Not recorded