

**Project Name:** Bencubbin land resources survey (Merredin North)  
**Project Code:** MDN **Site ID:** 0326 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

**Desc. By:** John Wagnon  
**Date Desc.:** 08/08/91  
**Map Ref.:**  
**Northing/Long.:** 6563836 AMG zone: 50  
**Easting/Lat.:** 559802 Datum: AGD84  
**Locality:**  
**Elevation:** No Data  
**Rainfall:** No Data  
**Runoff:** No Data  
**Drainage:** No Data

#### Geology

**ExposureType:** Soil pit  
**Geol. Ref.:** No Data  
**Conf. Sub. is Parent. Mat.:** No Data  
**Substrate Material:** No Data

#### Landform

**Rel/Slope Class:** No Data  
**Morph. Type:** Lower-slope  
**Elem. Type:** Footslope  
**Slope:** 1 %  
**Pattern Type:** Peneplain  
**Relief:** No Data  
**Slope Category:** No Data  
**Aspect:** 90 degrees

#### Surface Soil Condition

#### Erosion

#### Soil Classification

**Australian Soil Classification:** Mesotrophic Mottled-Subnatric Red Sodosol  
**ASC Confidence:** Analytical data are incomplete but reasonable confidence.  
**Mapping Unit:** N/A  
**Principal Profile Form:** Dy5.72  
**Great Soil Group:** N/A

#### Site Disturbance

#### Vegetation

#### Surface Coarse Fragments

#### Profile Morphology

A1 0 - 0.12 m Greyish brown (10YR5/2-Moist); ; Sand; Massive grade of structure; Smooth-ped fabric; Moderately moist; Field pH 6 (pH meter); Many, very fine (0-1mm) roots; Sharp, Wavy change to -  
 A2 0.12 - 0.55 m Very pale brown (10YR7/4-Moist); Mottles, 5YR78, 0-2% , 0-5mm, Faint; Sand; Massive grade of structure; Smooth-ped fabric; Moderately moist; Field pH 7.5 (pH meter); Few, very fine (0-1mm) roots; Sharp, Wavy change to -  
 B2 0.55 - 0.75 m Reddish yellow (5YR7/8-Moist); Mottles, 10R48, 20-50% , 5-15mm, Distinct; Light clay; Massive grade of structure; Smooth-ped fabric; Moderately moist; Field pH 7 (pH meter); Few, very fine (0-1mm) roots;

B22 0.75 - m ;

#### Morphological Notes

A1 2% CLAY  
 A2 1% CLAY  
 B2 40% CLAY

#### Observation Notes

#### Site Notes

Rob McAndrew-paddock 1

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#### Laboratory Test Results:

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0.03 - 0.08	4.6B	4B	1.3H	0.23	0.03	0.08	0.26J		1.64D	

0.3 - 0.35	5.5H 6B	2B	0.57H	0.17	0.02	<0.02	<0.02J	0.77D
0.6 - 0.7	6.6H 5.2B 6.4H	6B	1.38H	3.1	0.15	0.83	<0.02J	5.46D

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis
m	%	Clay %	mg/kg	%	%	%	Mg/m3	GV CS FS Silt %
0.03 - 0.08		0.98D		85B				3.2
7.6								
0.3 - 0.35		0.14D		24B				2.9
4								
0.6 - 0.7		0.08D		30B				2.4
37.7								

#### Laboratory Analyses Completed for this profile

15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CM	Exchangeable bases (Ca/Mg ratio) - Not recorded
15E1_AL	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble salts
15E1_K	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_MG	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_MN	Exchangeable bases (Mn2+) by compulsive exchange, no pretreatment for soluble salts
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15J_BASES	Sum of Bases
15N1_b	Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations
18A1_NR	Bicarbonate-extractable potassium (not recorded)
3_NR	Electrical conductivity or soluble salts - Not recorded
4_NR	pH of soil - Not recorded
4B_AL_NR	Aluminium in 1:5 soil/0.01M calcium chloride extract - method not recorded
4B1	pH of 1:5 soil/0.01M calcium chloride extract - direct
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
9A3	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour
9B_NR	Bicarbonate-extractable phosphorus (not recorded)
9H1	Anion storage capacity
P10_1m2m	1000 to 2000u particle size analysis, (method not recorded)
P10_20_75	20 to 75u particle size analysis, (method not recorded)
P10_75_106	75 to 106u particle size analysis, (method not recorded)
P10_NR_C	Clay (%) - Not recorded
P10_NR_Saa	Sand (%) - Not recorded arithmetic difference, auto generated
P10_NR_Z	Silt (%) - Not recorded
P10106_150	106 to 150u particle size analysis, (method not recorded)
P10150_180	150 to 180u particle size analysis, (method not recorded)
P10180_300	180 to 300u particle size analysis, (method not recorded)
P10300_600	300 to 600u particle size analysis, (method not recorded)
P106001000	600 to 1000u particle size analysis, (method not recorded)