Project Name: Bencubbin land resources survey (Merredin North)

MDN Observation ID: 1 **Project Code:** Site ID: 0332

Agency Name: Agriculture Western Australia

Site Information

Desc. By: Gerard Grealish Locality:

Date Desc.: 09/08/91 Elevation: No Data Map Ref.: Rainfall: No Data

Northing/Long.: 6566554 AMG zone: 50 Runoff: No Data Easting/Lat.: 561067 Datum: AGD84 Drainage: No Data

Geology

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

Landform

Rel/Slope Class: No Data Pattern Type: Peneplain Mid-slope Relief. No Data Morph. Type: Elem. Type: Hillslope **Slope Category:** No Data Slope: 0 % Aspect: 90 degrees

Surface Soil Condition

Erosion

Soil Classification

Australian Soil Classification: Mapping Unit: N/A Vertic Pedal Calcic Calcarosol **Principal Profile Form:** Uq5.22 ASC Confidence: **Great Soil Group:** N/A

Analytical data are incomplete but reasonable confidence.

Site Disturbance

Vegetation

Surface Coarse Fragments

Profile Morphology

Α1 0 - 0.15 m Brown (7.5YR4/2-Moist); ; Medium clay; Strong grade of structure, 20-50 mm, Subangular

blocky;

Smooth-ped fabric; Dry; Very firm consistence; Field pH 8.5 (pH meter); Abundant, very

fine (0-1mm)

roots; Gradual, Smooth change to -

B21 0.15 - 0.4 m

Angular blocky;

Brown (7.5YR5/2-Moist); ; Medium heavy clay; Strong grade of structure, 20-50 mm,

Smooth-ped fabric; Dry; Strong consistence; Field pH 9.5 (pH meter); Many, very fine (0-

1mm) roots;

Diffuse change to -

B22 0.4 - 0.6 m

Angular blocky;

Brown (7.5YR5/4-Moist); ; Medium heavy clay; Strong grade of structure, 20-50 mm,

Smooth-ped fabric; Dry; Rigid consistence; 20-50%, Quartz, coarse fragments; Field pH

9.5 (pH meter);

Common, very fine (0-1mm) roots;

Morphological Notes

50% CLAY

B21 **GRITTY--ANGULAR QUARTZ FRAGMENTS**

B22 ANGULAR QUARTZ FRAGMENTS

Observation Notes

Site Notes

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Laboratory Test Results:

Exchangeable Cations Depth 1:5 EC Exchangeable CEC **ECEC** ESP Ca Mg Κ Na Acidity m dS/m Cmol (+)/kg % 0.01 - 0.057.6B 15B 15.06E 3.04 1.56 0.19 22B 19.85D 0.86 8.2H

0.2 - 0.25	7.8B	23B	14.16E	6.04	0.34	0.71	25B	21.25D	2.84
0.5 - 0.5	8.4H 8.1B 8.7H	34B	9.15E	7.83	0.24	1.92	22B	19.14D	8.73

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	GV	Particle CS	Size FS	Analysis Silt
m	%	Clay %	mg/kg	%	%	%	Mg/m3			%	
0.01 - 0.05 31.6	<2C	0.23D		56B							17.3
0.2 - 0.25 40.1	<2C	0.32D		74B							12.9
0.5 - 0.5 42.1	2C	0.23D		56B							9.2

Laboratory Analyses Completed for this profile

15_NR_BSa 15_NR_CMR 15C1_CA pretreatment for	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available Exchangeable bases (Ca/Mg ratio) - Not recorded Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5, soluble salts
15C1_CEC 15C1_K soluble salts	CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15C1_MG soluble salts	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15C1_NA soluble salts	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15J_BASES 15L1_a Sum of Cations	Sum of Bases Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using
15N1_a 15N1_b 18A1_NR 19B_NR 3_NR 4_NR 4B1 6A1_UC 9A3 9B_NR 9H1 P10_1m2m P10_20_75 P10_75_106 P10_NR_C P10_NR_C P10_NR_Saa P10_NR_Z P10106_150 P10150_180 P10180_300 P10300_600 P106001000	and measured clay Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations Bicarbonate-extractable potassium (not recorded) Calcium Carbonate (CaCO3) - Not recorded Electrical conductivity or soluble salts - Not recorded pH of soil - Not recorded pH of 1:5 soil/0.01M calcium chloride extract - direct Organic carbon (%) - Uncorrected Walkley and Black method Total Phosphorus (ppm) - semimicro kjeldahl, automated colour Bicarbonate-extractable phosphorus (not recorded) Anion storage capacity 1000 to 2000u particle size analysis, (method not recorded) 20 to 75u particle size analysis, (method not recorded) Clay (%) - Not recorded Sand (%) - Not recorded Sand (%) - Not recorded arithmetic difference, auto generated Silt (%) - Not recorded 106 to 150u particle size analysis, (method not recorded) 150 to 180u particle size analysis, (method not recorded) 180 to 300u particle size analysis, (method not recorded) 300 to 600u particle size analysis, (method not recorded) 600 to 1000u particle size analysis, (method not recorded)