

**Project Name:** Moora Wongan Hills land resources survey  
**Project Code:** MRA **Site ID:** 0011 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

**Desc. By:** Mir Frahmmand  
**Date Desc.:** 03/03/95  
**Map Ref.:**  
**Northing/Long.:** 6592650 AMG zone: 50  
**Easting/Lat.:** 438350 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:** Mid-slope  
**Elem. Type:** Hillslope  
**Slope:** 2 %  
**Pattern Type:** No Data  
**Relief:** No Data  
**Slope Category:** No Data  
**Aspect:** 135 degrees

#### Surface Soil Condition Hardsetting

#### Erosion

#### Soil Classification

**Australian Soil Classification:**  
 Sodic Mesotrophic Grey Kandosol  
**ASC Confidence:**  
 Confidence level not specified  
**Mapping Unit:** N/A  
**Principal Profile Form:** N/A  
**Great Soil Group:** N/A

#### Site Disturbance

#### Vegetation

#### Surface Coarse Fragments

#### Profile Morphology

A1 0 - 0.05 m Dark grey (10YR4/1-Moist); ; Sandy loam; ; ; Dry; Field pH 6.8 (pH meter); Clear change to -  
 B2t 0.05 - 0.3 m Greyish brown (10YR5/2-Moist); ; Clay loam; Massive grade of structure; Dry; Field pH 7.5 (pH meter);  
 Diffuse change to -  
 B21t 0.3 - 0.6 m Greyish brown (10YR5/2-Moist); ; Medium clay; Dry; Field pH 7.8 (pH meter); Diffuse change to -  
 B22tc 0.6 - 0.9 m Light grey (10YR7/2-Moist); ; 5YR46; Medium clay; Massive grade of structure; Dry; 50-90%, angular,  
 Ironstone, coarse fragments; Field pH 6.1 (pH meter); Diffuse change to -  
 B23t 0.9 - 1 m Very pale brown (10YR7/4-Moist); ; Medium clay; Massive grade of structure; Dry;

#### Morphological Notes

B2t Disp  
 B21t Disp

#### Observation Notes

#### Site Notes

Surface cracking 2mm wide. side of pit cracking but sealed on the top. Column block Lenticular

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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				Na Cmol (+)/kg				%
0 - 0.05	5.5B 6.1H	24B	5.42H	2.45	0.48	0.34	0.02J		8.69D	
0.05 - 0.3	6B 7H	12B	4.46A	3.4	0.22	0.74			8.82D	
0.3 - 0.6	5.7B	19B	1.7A	3.65	0.36	1.61			7.32D	

0.6 - 0.9	6.8H 4.5B 5.4H	28B	1.09H	3.43	0.43	1.88	0.11J	6.83D
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Depth	CaCO <sub>3</sub>	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	Particle GV	Size CS	Analysis FS	Silt
m	%	%	mg/kg	%	%	%	Mg/m <sup>3</sup>			%	
0 - 0.05 17.2		2.15D		200B	0.113E						10.4
0.05 - 0.3 30		1.35D		99B	0.053E						8.2
0.3 - 0.6 46.2		0.36D		58B	0.025E						8.1
0.6 - 0.9 53.2		0.29D		65B	0.019E						10.5

#### 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
15A1_CA for soluble	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 1M ammonium chloride at pH 7.0, no pretreatment
15A1_CEC	salts
15A1_K for soluble	Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_MG for soluble	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 1M ammonium chloride at pH 7.0, no pretreatment
15A1_NA for soluble	salts
15E1_AL	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 1M ammonium chloride at pH 7.0, no pretreatment
15E1_CA salts	salts
15E1_K	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_MG	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) by compulsive exchange, no pretreatment for soluble
15E1_MN	salts
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15J_BASES	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15L1_a	Sum of Bases
Sum of Cations	Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using
15N1_a	and measured clay
15N1_b	Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC
3_NR	Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations
4_NR	Electrical conductivity or soluble salts - Not recorded
4B_AL_NR	pH of soil - Not recorded
4B1	Aluminium in 1:5 soil/0.01M calcium chloride extract - method not recorded
6A1_UC	pH of 1:5 soil/0.01M calcium chloride extract - direct
7A1	Organic carbon (%) - Uncorrected Walkley and Black method
9A3	Total nitrogen - semimicro Kjeldahl, steam distillation
9H1	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour
P10_1m2m	Anion storage capacity
P10_20_75	1000 to 2000u particle size analysis, (method not recorded)
P10_75_106	20 to 75u particle size analysis, (method not recorded)
	75 to 106u particle size analysis, (method not recorded)

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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)