

**Project Name:** Moora Wongan Hills land resources survey  
**Project Code:** MRA **Site ID:** 0008 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

**Desc. By:** Mir Frahmmand  
**Date Desc.:** 03/03/95  
**Map Ref.:**  
**Northing/Long.:** 6588900 AMG zone: 50  
**Easting/Lat.:** 434600 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:** No Data  
**Slope:** 2 %  
**Pattern Type:** No Data  
**Relief:** No Data  
**Slope Category:** No Data  
**Aspect:** 135 degrees

#### Surface Soil Condition Soft

#### Erosion

#### Soil Classification

**Australian Soil Classification:** Eutrophic Hypernatric Yellow Sodosol  
**Mapping Unit:** N/A  
**Principal Profile Form:** N/A  
**ASC Confidence:** Confidence level not specified  
**Great Soil Group:** N/A

#### Site Disturbance

#### Vegetation

#### Surface Coarse Fragments

#### Profile Morphology

A1	0 - 0.1 m	Dark greyish brown (10YR4/2-Moist); ; Clayey sand; Single grain grade of structure, <2 mm; ; Dry;
		Water repellent; Field pH 5.8 (pH meter); Clear change to -
B1	0.1 - 0.3 m	Reddish yellow (7.5YR6/6-Moist); ; Light medium clay; Massive grade of structure; Dry;
	Field pH 4.8 (pH	meter); Diffuse change to -
B2t	0.3 - 0.7 m	Reddish yellow (7.5YR7/6-Moist); ; 2.5YR56; Medium clay; ; Polyhedral; Rough-ped
	fabric; Dry; Field pH	5.2 (pH meter); Diffuse change to -
B2t	0.7 - 1.1 m	Pale yellow (2.5Y8/3-Moist); ; 7.5YR58; Sandy clay loam; ; Polyhedral; Rough-ped fabric;
	Dry; Soil matrix	is Slightly calcareous; Field pH 8.8 (pH meter); Clear change to -
B2t	1.1 - 1.5 m	Pale yellow (2.5Y8/3-Moist); ; 7.5YR68; Sandy clay loam; ; Polyhedral; Rough-ped fabric;
	Dry; Soil matrix	is Slightly calcareous; Field pH 8.8 (pH meter);

#### Morphological Notes

A1 COARSE - MEDIUM  
 B1 MEDIUM - COURSE  
 B2t

#### Observation Notes

#### Site Notes

ROLL PIA, 4 & 44. BARRY JOHNSON FARM

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#### Laboratory Test Results:

Depth	pH	1:5 EC	Ca	Exchangeable Cations	Na	Exchangeable	CEC	ECEC	ESP
m		dS/m		Mg K	Cmol (+)/kg	Acidity			%

0 - 0.1	6B 6.9H	12B	1.89A	0.6	0.18	0.23			2.9D
0.1 - 0.3	4.5B 5.4H	24B	1.38H	2.06	0.19	1.04	0.15J		4.67D
0.3 - 0.7	6.7B 7.7H	47B	1.08A	3.88	0.47	3.53			8.96D
0.7 - 1.3	8B 8.8H	99B	0.76E	2.71	0.36	3.73		10B	7.56D 37.30

Depth	CaCO <sub>3</sub>	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis
m	%	%	mg/kg	%	%	%	Mg/m <sup>3</sup>	GV CS FS Silt
0 - 0.1 3.9		1.1D		100B	0.072E			4
0.1 - 0.3 42.9		0.51D		45B	0.028E			6.2
0.3 - 0.7 54.1		0.13D		31B	0.011E			13.2
0.7 - 1.3 27.9		0.07D		25B	0.005E			30.5

#### Laboratory Analyses Completed for this profile

15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CMR	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 salts
15A1_CEC	Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_K 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 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 salts
15A1_NA 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 salts
15C1_CA pretreatment for	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - alcoholic 1M ammonium chloride at pH 8.5, soluble salts
15C1_CEC	CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_K 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
15E1_AL	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_CA salts	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) 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 (Mn <sup>2+</sup> ) 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
15L1_a Sum of Cations	Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using and measured clay
15N1_a	Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC
15N1_b	Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations
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



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4B1	pH of 1:5 soil/0.01M calcium chloride extract - direct
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
7A1	Total nitrogen - semimicro Kjeldahl, steam distillation
9A3	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour
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)