

Project Name: Moora Wongan Hills land resources survey
Project Code: MRA **Site ID:** 0524 **Observation ID:** 1
Agency Name: Agriculture Western Australia

Site Information

Desc. By:	Mir Frahmand	Locality:	
Date Desc.:	07/03/97	Elevation:	No Data
Map Ref.:		Rainfall:	No Data
Northing/Long.:	6682771 AMG zone: 50	Runoff:	No Data
Easting/Lat.:	511641 Datum: AGD84	Drainage:	Imperfectly drained

Geology

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

Landform

Rel/Slope Class: Gently undulating plains <9m 1-3% **Pattern Type:** Rises

Morph. Type:	Mid-slope	Relief:	No Data
Elem. Type:	Hillslope	Slope Category:	No Data
Slope:	2 %	Aspect:	No Data

Surface Soil Condition Soft

Erosion

Soil Classification

Australian Soil Classification:		Mapping Unit:	N/A
Haplic Duric Red Kandosol		Principal Profile Form:	N/A
ASC Confidence:		Great Soil Group:	N/A
Confidence level not specified			

Site Disturbance

Vegetation

Surface Coarse Fragments

Profile Morphology

A1	0 - 0.1 m	Dark reddish brown (2.5YR3/4-Moist); ; Sandy loam; Moist; Field pH 5.8 (pH meter); Clear, Smooth
		change to -
A2t	0.1 - 0.3 m	Dark red (2.5YR3/6-Moist); ; Sandy clay loam; Weak grade of structure, Angular blocky; Moist; Field pH
		4.7 (pH meter); Gradual, Wavy change to -
B1	0.3 - 0.45 m	Dark red (2.5YR3/6-Moist); ; Sandy loam; Weak grade of structure, Angular blocky; Dry; Field pH 4.8 (pH
		meter); Gradual, Wavy change to -
B2	0.45 - 0.65 m	Dark reddish brown (2.5YR3/4-Moist); ; Sandy loam; Moderate grade of structure, Angular blocky; Dry;
		Field pH 5.4 (pH meter); Sharp, Irregular change to -
Cmk	0.65 - m	; Few (2 - 10 %), Calcareous, , Crystals; Manganiferous pan, Strongly cemented, Platy; Soil matrix is
		Very highly calcareous; Field pH 8.6 (pH meter);
	- m	; Calcrete, Strongly cemented, Platy;

Morphological Notes

Cmk Added LD TG April 2012

Observation Notes

Site Notes

Red loamy earth over pan

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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	Acidity				%
					Cmol (+)/kg				

0 - 0.1	5.4B 6.5H	5B	1.84A	0.56	0.1	0.54		3.04D
0.1 - 0.3	4.3B 5.5H	3B	1.73H	0.59	0.17	0.12	0.27J	2.61D
0.3 - 0.45	4.5B 6.2H	4B	1.48H	1.04	0.44	0.1	0.06J	3.06D
0.45 - 0.65	5.5B 6.8H	13B	3.57A	5.89	3.86	0.73		14.05D

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 - 0.1		0.67D		170B	0.055E			2.4
10.5								
0.1 - 0.3		0.29D						2.9
22.1								
0.3 - 0.45		0.16D						3.4
17.6								
0.45 - 0.65		0.09D						11.6
11.1								

Laboratory Analyses Completed for this profile

15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CMJR	Exchangeable bases (Ca/Mg ratio) - Not recorded
15_NR_MN	Exchangeable bases (Mn++) - meq per 100g of soil - Not recorded
15A1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
15A1_CEC	Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_K	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
15A1_MG	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
15A1_NA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
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_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15J_BASES	Sum of Bases
15L1_a	Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using
Sum of Cations	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
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
7A1	Total nitrogen - semimicro Kjeldahl, steam distillation
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)

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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)