

**Project Name:** Moora Wongan Hills land resources survey  
**Project Code:** MRA **Site ID:** 0007 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

<b>Desc. By:</b>	Mir Frahmmand	<b>Locality:</b>	
<b>Date Desc.:</b>	03/03/95	<b>Elevation:</b>	No Data
<b>Map Ref.:</b>		<b>Rainfall:</b>	No Data
<b>Northing/Long.:</b>	6588400 AMG zone: 50	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	436300 Datum: AGD84	<b>Drainage:</b>	No Data

#### Geology

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

#### Landform

<b>Rel/Slope Class:</b>	No Data	<b>Pattern Type:</b>	No Data
<b>Morph. Type:</b>	Mid-slope	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	Hillslope	<b>Slope Category:</b>	No Data
<b>Slope:</b>	2 %	<b>Aspect:</b>	315 degrees

#### Surface Soil Condition

#### Erosion

#### Soil Classification

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Sodic Eutrophic Brown Kandosol		<b>Principal Profile Form:</b>	N/A
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	N/A
Confidence level not specified			

#### Site Disturbance

#### Vegetation

#### Surface Coarse Fragments

#### Profile Morphology

A1	0 - 0.05 m	Dark brown (7.5YR3/4-Moist); ; Loamy sand; 2-5 mm, ; Dry; Very weak consistence; Field pH 5.5 (pH meter); Diffuse change to -
A2	0.05 - 0.1 m	Brown (7.5YR4/3-Moist); ; Sandy loam; 2-5 mm, ; Dry; Very weak consistence; Field pH 4.4 (pH meter); Clear change to -
B1t	0.1 - 0.35 m	Dark brown (7.5YR3/3-Moist); ; Clay loam; Massive grade of structure; Dry; Very firm consistence; Field pH 6.1 (pH meter);
B2t	0.35 - 0.65 m	Brown (7.5YR4/4-Moist); ; Light medium clay; Massive grade of structure, Polyhedral; Rough-ped fabric; Dry; Very firm consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Soil matrix is Highly calcareous; Field pH 7 (pH meter);
B22t	0.65 - 1.15 m	Brown (7.5YR5/4-Moist); , 7.5YR68, 10-20% , Prominent; Light medium clay; Smooth-ped fabric; Dry; Firm consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Soil matrix is Highly calcareous; Field pH 7.5 (pH meter);
B2w	1.15 - 1.6 m	Brown (7.5YR5/4-Moist); , 10YR66, 10-20% ; Silty clay loam; , Polyhedral; Rough-ped fabric; Dry; Firm consistence; Field pH 8.1 (pH meter);

#### Morphological Notes

A1	k-m
A2	k-m
B2t	FDK
B22t	FDK

#### Observation Notes

#### Site Notes

Roll;Pia 3+34. Veneer of Qz grains on soil surface

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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 - 0.05	4.6B 5.3H	20B	2.65H	0.81	0.42	0.2	0.28J		4.08D	
0.05 - 0.1	5B 5.4H	63B	4.56H	2.93	0.22	0.63	0.06J		8.34D	
0.1 - 0.3	6.2B 6.7H	80B	4.93A	5.64	0.52	1.74			12.83D	

Depth	CaCO3	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis
m	%	%	mg/kg	%	%	%	Mg/m3	GV CS FS Silt
0 - 0.05 7.9		0.96D		280B	0.054E			7.1
0.05 - 0.1 16.3		0.88D		180B	0.046E			8.6
0.1 - 0.3 31.9		0.42D		85B	0.028E			7

#### 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	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_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
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
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
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

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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)