

Project Name: MAR
Project Code: MAR **Site ID:** B308 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By:	C.H. Thompson	Locality:	
Date Desc.:	04/06/57	Elevation:	411 metres
Map Ref.:	Sheet No. : 7963 1:100000	Rainfall:	914
Northing/Long.:	145.466111111111	Runoff:	Moderately rapid
Easting/Lat.:	-17.0180555555556	Drainage:	Well drained

Geology

ExposureType:	Soil pit	Conf. Sub. is Parent. Mat.:	No Data
Geol. Ref.:	No Data	Substrate Material:	Auger boring, 2 m deep,Porous, Unconsolidated material (unidentified)

Land Form

Rel/Slope Class:	Gently undulating plains <9m 1-3%	Pattern Type:	Plain
Morph. Type:	No Data	Relief:	No Data
Elem. Type:	No Data	Slope Category:	No Data
Slope:	0 %	Aspect:	No Data

Surface Soil Condition (dry): Hardsetting

Erosion:

Soil Classification

Australian Soil Classification:		Mapping Unit:	N/A
Haplic Mesotrophic Red Chromosol		Principal Profile Form:	Dr2.62
ASC Confidence:		Great Soil Group:	Red earth
All necessary analytical data are available.			

Site Disturbance: Cultivation. Irrigated, past or present

Vegetation:

Tall Strata - Tussock grass, , . *Species includes - None Recorded

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

Ap	0 - 0.18 m	Reddish brown (5YR4/3-Moist); ; Loamy sand; Massive grade of structure; Dry; Firm consistence; Field pH 6.2 (pH meter); Sharp change to -
B1	0.18 - 0.28 m	Red (10R4/5-Moist); ; Sandy clay loam; Massive grade of structure; Dry; Firm consistence; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Nodules; Field pH 6.6 (pH meter); Gradual change to -
B21	0.28 - 0.58 m	Dark red (10R3/8-Moist); ; Sandy medium clay (Heavy); Weak grade of structure, 20-50 mm, Angular blocky; Moist; Weak consistence; 2-10%, fine gravelly, 2-6mm, Quartz, coarse fragments; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Field pH 6.9 (pH meter); Gradual change to -
B22	0.58 - 0.99 m	Dark red (10R3/8-Moist); ; Coarse sandy medium clay (Heavy); Weak grade of structure, 50-100 mm, Angular blocky; Moist; Weak consistence; 2-10%, fine gravelly, 2-6mm, Quartz, coarse fragments; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Field pH 7 (pH meter); Gradual change to -
B23	0.99 - 1.68 m	Dark red (10R3/8-Moist); ; Coarse sandy medium clay (Light); Massive grade of structure; Moist; Weak consistence; 2-10%, fine gravelly, 2-6mm, Quartz, coarse fragments; Very few (0 - 2 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Field pH 6.8 (pH meter); Gradual change to -
B31	1.68 - 2.29 m	Dark red (10R3/8-Moist); ; Coarse sandy medium clay (Light); Massive grade of structure; Moist; Weak consistence; 10-20%, medium gravelly, 6-20mm, Quartz, coarse fragments; Field pH 6.4 (pH meter);

Morphological Notes

Observation Notes

BROAD LOW BANK ON GENTLY UNDULATING PLAIN:

Site Notes

MAREEBA

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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				+	(+)/kg			%
0 - 0.18	6.2H	0.01C	1.5K	0.21	0.14	0.07		2.5J		2.80
0.18 - 0.28	6.6H	0.01C								
0.28 - 0.58	6.9H	0.01C	2.5K	0.69	0.49	0.05		6.1J		0.82
0.58 - 0.99	7H	0.01C								
0.99 - 1.68	6.8H	0.01C								
1.68 - 2.29	6.4H	0.01C								

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle		Size	Analysis	
m	%	C	P	P	N	K	Density	GV	CS	FS	Silt	Clay
		%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.18		0.6E	44C	0.015F	0.03B			2	41C	47	2	8
		0.37E										
0.18 - 0.28								1	33C	40	5	23
0.28 - 0.58				0.014F				1	27C	31	3	39
0.58 - 0.99												
0.99 - 1.68								3	28C	31	4	39
1.68 - 2.29								9	29C	28	6	38

[illegible]

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Laboratory Analyses Completed for this profile

15_NR_CA	Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded
15_NR_CEC	CEC - meq per 100g of soil - Not recorded
15_NR_K	Exch. basic cations (K++) - meq per 100g of soil - Not recorded
15_NR_MG	Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded
15_NR_NA	Exch. basic cations (Na++) - meq per 100g of soil - Not recorded
2A1	Air-dry moisture content
3A_TSS	Electrical conductivity or soluble salts - Total soluble salts %
4_NR	pH of soil - Not recorded
5_NR	Water soluble Chloride - Cl(%) - Not recorded
6Z	Organic carbon (%) - Not recorded
7_NR	Total nitrogen (%) - Not recorded
9_NR	Available P (mg/kg) - Not recorded
9A_NR	Total element - P(%) - Not recorded
P10_GRAV	Gravel (%)
P10_NR_C	Clay (%) - Not recorded
P10_NR_CS	Coarse sand (%) - Not recorded
P10_NR_FS	Fine sand (%) - Not recorded
P10_NR_Z	Silt (%) - Not recorded