Project Name: MAR
Project Code: MAR **Site ID:** B309 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By:	C.H. Thompson	**Locality:**	
Date Desc.:	05/06/57	**Elevation:**	418 metres
Map Ref.:	Sheet No. : 7963 1:100000	**Rainfall:**	914
Northing/Long.:	145.472222222222	**Runoff:**	Moderately rapid
Easting/Lat.:	-17.0202777777778	**Drainage:**	Moderately 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:	No Data	**Pattern Type:**	Plain
Morph. Type:	No Data	**Relief:**	No Data
Elem. Type:	Footslope	**Slope Category:**	No Data
Slope:	4.4 %	**Aspect:**	No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:
Haplic Mesotrophic Red Chromosol
ASC Confidence:
All necessary analytical data are available.

Mapping Unit: N/A
Principal Profile Form: Dr2.61
Great Soil Group: Red earth

Site Disturbance: No effective disturbance other than grazing by hoofed animals

Vegetation: Low Strata - Tussock grass, , . *Species includes - None recorded
Mid Strata - Tree, 3.01-6m, . *Species includes - Grevillea glauca, Planchonia careya
Tall Strata - Tree, 12.01-20m, Mid-dense. *Species includes - Eucalyptus polycarpa, Eucalyptus leptophleba

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1	0 - 0.18 m	Reddish brown (5YR5/4-Dry); ; Loamy fine sand; Massive grade of structure; Dry; Weak consistence; Very few (0 - 2 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Field pH 6.1 (pH meter); Gradual change to -
A2	0.18 - 0.36 m	Red (2.5YR5/6-Moist); ; Loamy fine sand; Massive grade of structure; Dry; Weak consistence; Very few (0 - 2 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Field pH 6.3 (pH meter); Diffuse change to -
B1	0.36 - 0.51 m	Red (2.5YR4/8-Moist); ; Fine sandy loam; Massive grade of structure; Moderately moist; Weak consistence; Very few (0 - 2 %), Manganiferous, Coarse (6 - 20 mm), Nodules; Field pH 6.2 (pH meter); Diffuse change to -
B21	0.51 - 0.81 m	Red (10R4/8-Moist); ; Fine sandy medium clay; Massive grade of structure; Moderately moist; Weak consistence; 0-2%, fine gravelly, 2-6mm, Quartz, coarse fragments; Few (2 - 10 %), Manganiferous, Coarse (6 - 20 mm), Nodules; Field pH 6.5 (pH meter); Diffuse change to -
B22	0.81 - 1.17 m	Red (10R4/6-Moist); ; Fine sandy medium clay; Massive grade of structure; Moderately moist; Firm consistence; 2-10%, fine gravelly, 2-6mm, Quartz, coarse fragments; Few (2 - 10 %), Manganiferous, Coarse (6 - 20 mm), Nodules; Field pH 5.8 (pH meter); Diffuse change to -
B23	1.17 - 1.83 m	Red (2.5YR4/8-Moist); ; Fine sandy medium clay; Massive grade of structure; Moderately moist; Weak consistence; Common (10 - 20 %), Manganiferous, Coarse (6 - 20 mm), Nodules; Field pH 5.9 (pH meter); Diffuse change to -
B31	1.88 - 2.29 m	Red (2.5YR4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Moderately moist; Weak consistence; Very few (0 - 2 %), Manganiferous, Coarse (6 - 20 mm), Nodules; Field pH 5.9 (pH meter);

Morphological Notes

Observation Notes

Site Notes

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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations Ca	Mg	K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m	Cmol (+)/kg							%
0 - 0.18	6.1H	0.01C	1.2K	0.22	0.06	0.03		2.6J		1.15
0.18 - 0.36	6.3H	0.01C								
0.36 - 0.51	6.2H	0.01C	0.77K	0.52	0.1	0.06		2.3J		2.61
0.51 - 0.81	6.5H	0.01C								
0.81 - 1.17	5.8H	0.01C	1.2K	1.4	0.28	0.07		5J		1.40
1.17 - 1.83	5.9H	0.01C								
1.88 - 2.29	5.9H	0.01C	0.62K	1.4	0.08	0.05		3.6J		1.39

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.18		0.52E	6C	0.008F	0.03B			1	17C	74	4	5
		0.38E										
0.18 - 0.36		0.12E						1	14C	74	3	8
0.36 - 0.51		0.12E			0.02B			1	14C	68	3	16
0.51 - 0.81		0.07E						2	12C	52	2	36
0.81 - 1.17		0.04E		0.014F	0.02B			3	11C	51	2	37
1.17 - 1.83												
1.88 - 2.29								1	12C	58	4	28

Depth	COLE	Gravimetric/Volumetric Water Contents Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar	K sat	K unsat
m		g/g - m3/m3							mm/h	mm/h
0 - 0.18										
0.18 - 0.36										
0.36 - 0.51										
0.51 - 0.81										
0.81 - 1.17										
1.17 - 1.83										
1.88 - 2.29										

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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 recordede
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