Project Name: MAR

Project Code: MAR Site ID: B313 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By:C.H. ThompsonLocality:Date Desc.:06/06/57Elevation:

 Map Ref.:
 Sheet No.: 7963
 1:100000
 Rainfall:
 914

 Northing/Long.:
 145.466388888889
 Runoff:
 Slow

Easting/Lat.: -17.0161111111111 Drainage: Imperfectly drained

<u>Geology</u>

ExposureType: Soil pit Conf. Sub. is Parent. Mat.: No Data

Geol. Ref.: No Data Substrate Material: Auger boring, 2 m deep, Unconsolidated

material (unidentified)

412 metres

Land Form

Rel/Slope Class: Gently undulating plains <9m Pattern Type: Plain

1-3%

Morph. Type:No DataRelief:No DataElem. Type:No DataSlope Category:No DataSlope:0 %Aspect:No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:Mapping Unit:N/ABleached-Magnesic Chomosolic Redoxic HydrosolPrincipal Profile Form:Dy3.81

ASC Confidence: Great Soil Group: Gleyed podzolic

Analytical data are incomplete but reasonable confidence. soil

Site Disturbance:

Vegetation: Low Strata - Tussock grass, , . *Species includes - None recorded

Mid Strata - Tree, , . *Species includes - Petalostigma pubescens, Erthrophleum chlorostachys

Tall Strata - Tree, 12.01-20m, Sparse. *Species includes - Eucalyptus polycarpa, Eucalyptus leptophleba

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1 0 - 0.09 m Very dark grey (10YR3/1-Moist); ; Loamy sand; Massive grade of structure; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Weak consistence; 2-10%, fine gravelly, 2-6mm, Quartz, coarse fragments; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Nodules;

Field pH 5.3 (pH meter); Clear change to -

A21 0.09 - 0.2 m Pale brown (10YR6/3-Moist); White (10YR8/2-Dry); ; Loamy sand; Massive grade of structure;

Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Weak consistence; 2-10%, fine gravelly, 2-6mm, Quartz, coarse fragments; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm),

Nodules; Field pH 5.2 (pH meter); Gradual change to -

A22 0.2 - 0.38 m Light yellowish brown (2.5Y6/4-Moist); ; Sandy loam; Massive grade of structure; Many (>5 per

100mm2) Very fine (0.075-1mm) macropores, Dry; Weak consistence; 2-10%, fine gravelly, 2-6mm, Quartz, coarse fragments; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Nodules;

Field pH 5.1 (pH meter); Clear change to -

B1 0.38 - 0.58 m Light yellowish brown (2.5Y6/4-Moist); , 10YR78; , 2.5YR48; Sandy clay loam; Massive grade of

structure; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; 2-10%. fine gravelly. 2-6mm, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous,

Fine (0 - 2 mm), Nodules; Field pH 5.3 (pH meter); Gradual change to -

B2 0.61 - 0.97 m Light yellowish brown (2.5Y6/4-Moist); , 2.5Y71; Sandy medium clay; Massive grade of structure;

Dry; Firm consistence; Many (20 - 50 %), Ferromanganiferous, Medium (2 -6 mm), Nodules;

Field pH 5.8 (pH meter); Gradual change to -

B3 0.97 - 1.14 m Light grey (5Y7/1-Moist); , 2.5YR53; Massive grade of structure; Dry; Rigid consistence; 50-90%,

fine gravelly, 2-6mm, Quartz, coarse fragments; Other pans; Field pH 5.8 (pH meter);

Morphological Notes

Observation Notes

Site Notes

MAREEBA

Project Name: Project Code: Agency Name: MAR

MAR Site ID: B3°
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Project Name: MAR
Project Code: MAR Site ID: B31
Agency Name: CSIRO Division of Soils (QLD) Site ID: B313 Observation ID: 1

Laboratory Test Results:

Depth	рН	1:5 EC		hangeable	Cations		Exchangeable	CEC		ECEC		ESP
m		dS/m	Ca I	Mg	K	Na Cmol (+	Acidity -)/kg					%
0 - 0.09 0.09 - 0.2	5.3H 5.2H	0.01B 0.01B	0.2K	0.1	0.06	0		2.7	J			0.00
0.2 - 0.38 0.38 - 0.58	5.1H 5.3H	0.01B 0.01B	0.31K 0.1K	0.34 1.1	0.08 0.08	0.01 0.01		3.5. 3.9.				0.29 0.26
0.61 - 0.97	5.8H	0.01B	0.1K 0.05K	1.5	0.08	0.01		3.3				3.94
0.97 - 1.14	5.8H	0.01B										
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Tota K	I Bulk Density	Pa GV	rticle CS	Size FS	Analysi Silt	
m	%	%	mg/kg	%	%	%	Mg/m3	GV	03	%	Siit	Ciay
0 - 0.09		0.42E	2C	0.006F	0.0	3B		3	52C	-	4	5
0.09 - 0.2		0.19E						3	41C	_		7
0.2 - 0.38		0.405		0.011F				4	39C			16
0.38 - 0.58		0.19E 0.16E		0.019F				9	40C	29	3	28
0.61 - 0.97		0.08E	2C	0.005F	•			46	45C	26	4	26
0.97 - 1.14								59	38C	17	4	42
Depth	COLE	COLE Gravimetric/Volumetric Water Contents								at	K unsa	t
m		Sat.	0.05 Bar	0.1 Bar q/o	0.5 Bar a - m3/m	1 Bar 3	5 Bar 1	5 Bar	mm	/h	mm/h	

0 - 0.09

0 - 0.09 0.09 - 0.2 0.2 - 0.38 0.38 - 0.58 0.61 - 0.97 0.97 - 1.14

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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_KExch. basic cations (K++) - meq per 100g of soil - Not recorded15_NR_MGExch. basic cations (Mg++) - meq per 100g of soil - Not recorded15_NR_NAExch. basic cations (Na++) - meq per 100g of soil - Not recorded

2A1 Air-dry moisture content

3_NR Electrical conductivity or soluble salts - Not recorded

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
P10_NR_CS
Clay (%) - Not recorded
Coarse sand (%) - Not recorded
P10_NR_FS
P10_NR_Z
Fine sand (%) - Not recorded
Silt (%) - Not recorded