Project Name: Regional

Project Code: REG Site ID: T375 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By: M.G. Cannon Locality:

 Date Desc.:
 23/11/83
 Elevation:
 10 metres

 Map Ref.:
 Sheet No.: 8061
 1:100000
 Rainfall:
 2250

<u>Geology</u>

ExposureType: Undisturbed soil core Conf. Sub. is Parent. Mat.: No Data

Geol. Ref.: QA Substrate Material: Unconsolidated material (unidentified)

Land Form

Rel/Slope Class:Level plain <9m <1%</th>Pattern Type:Alluvial plainMorph. Type:FlatRelief:2 metresElem. Type:PlainSlope Category:LevelSlope:0 %Aspect:No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:Mapping Unit:N/AMelanic-Mottled Mesotrophic Yellow DermosolPrincipal Profile Form:Uf6.31

ASC Confidence: Great Soil Group: No suitable group

All necessary analytical data are available.

<u>Site Disturbance:</u> No effective disturbance other than grazing by hoofed animals

Vegetation:

Mid Strata - Tree, 3.01-6m, Sparse. *Species includes - Planchonia careya

Tall Strata - Tree, 20.01-35m, Mid-dense. *Species includes - Eucalyptus tereticornis, Eucalyptus tessellaris

Surface Coarse Fragments:

Profile Morpholo							
A1	0 - 0.1 m						

Very dark grey (10YR3/1-Moist); Mottles, 0-0%; Mottles, 0-0%; Light medium clay; Strong grade of structure, 5-10 mm, Cast; Smooth-ped fabric; Moderately moist; Weak consistence; Common,

fine (1-2mm) roots;

A1 0.1 - 0.2 m Very dark grey (10YR3/1-Moist); Mottles, 0-0%; Mottles, 0-0%; Light medium clay; Strong grade of structure, 5-10 mm, Cast; Smooth-ped fabric; Moderately moist; Weak consistence; Common,

fine (1-2mm) roots; Gradual, Wavy change to -

A3 0.2 - 0.3 m Dark greyish brown (10YR4/2-Moist); Mottles, 0-0%; Mottles, 0-0%; Medium clay (Light); Strong grade of structure, 5-10 mm, Cast; Smooth-ped fabric; Moderately moist; Weak consistence;

Common, fine (1-2mm) roots;

A3 0.3 - 0.4 m Dark greyish brown (10YR4/2-Moist); Mottles, 0-0%; Mottles, 0-0%; Medium clay (Light); Strong grade of structure, 5-10 mm, Cast; Smooth-ped fabric; Moderately moist; Weak consistence;

Common, fine (1-2mm) roots; Diffuse, Wavy change to -

B21 0.4 - 0.6 m Brownish yellow (10YR6/6-Moist); Mottles, 0-0%; Mottles, 0-0%; Medium clay; Strong grade of structure, 2-5 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Weak consistence;

Common, fine (1-2mm) roots;

B21 0.6 - 0.75 m Brownish yellow (10YR6/6-Moist); Mottles, 0-0%; Mottles, 0-0%; Medium clay; Strong grade of

structure, 2-5 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Weak consistence;

Common, fine (1-2mm) roots; Diffuse, Wavy change to -

B22 0.75 - 0.9 m Yellow (10YR7/6-Moist); Mottles, 10YR74, 10-20%, 5-15mm, Faint; Mottles, 2.5YR48, 10-20%,

5-15mm, Faint; Medium clay; Strong grade of structure, 2-5 mm, Subangular blocky; Smooth-ped

fabric; Moderately moist; Firm consistence; Common, fine (1-2mm) roots;

B22 0.9 - 1.2 m Yellow (10YR7/6-Moist); Mottles, 10YR74, 10-20%, 5-15mm, Faint; Mottles, 2.5YR48, 10-20%,

5-15mm, Faint; Medium clay; Strong grade of structure, 2-5 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Firm consistence; Common, fine (1-2mm) roots; Clear, Wavy change

to -

Project	Name: Code: / Name:	Regional REG Site ID: T375 Observation ID: 1 CSIRO Division of Soils (QLD)
D1	1.2 - 1.5 m	Very pale brown (10YR7/4-Moist); Mottles, 10YR68, 20-50%, 15-30mm, Prominent; Mottles, 20-50%, 15-30mm, Prominent; Sandy loam; Massive grade of structure; Earthy fabric; Dry; Weak consistence; Clear, Wavy change to -
D2	1.5 - 1.8 m	Light grey (10YR7/2-Moist); Mottles, 10YR68, 10-20%, 15-30mm, Distinct; Mottles, 10-20%, 15-30mm, Distinct; Clayey sand; Single grain grade of structure; Sandy (grains prominent) fabric; Dry; Very weak consistence; Clear, Wavy change to -
D3	1.8 - 2 m	White (10YR8/1-Moist); Mottles, 10YR68, 2-10%, 5-15mm, Distinct; Mottles, 2-10%, 5-15mm, Distinct; Sandy loam; Weak grade of structure, 50-100 mm, Columnar; Earthy fabric; Dry; Weak consistence;

Morphological Notes

Observation Notes
VERY WEAK COLUMAR 18-20CM COARSE SANDY D HORIZON AT BASE OF PROFILE:

Site Notes

Regional REG Site ID: T375 CSIRO Division of Soils (QLD) Observation ID: 1

Project Name: Project Code: Agency Name:

Depth	рН	1:5 EC		nangeable			Exchangeable	CEC	EC	EC	ES	SP
m		dS/m	ca I	Иg	K	Na Cmol (+	Acidity)/kg				%	
0 - 0.1	6.1A	0.095A	9.9H	3	0.51	0.04	0.08F	13.9 <i>A</i> 24.10		3.5F	0.2 0.1	
0.1 - 0.2 0.2 - 0.3	6A 6A	0.039A 0.025A	3.63H	1.66	0.31	0.04	0.4F	6.1A 14C	6	6F	0.6	
0.3 - 0.4 0.4 - 0.6	5.9A 5.6A	0.023A 0.021A	0.96H	0.71	0.19	0.03	1.07F	3.3A 6.1C		3F	0.9	
0.6 - 0.75 0.75 - 0.9	5.7A 6A	0.016A 0.01A	1.2H	0.9	0.14	0.1	0.4F	3A 4.7C		.7F	3.3 2.1	
0.9 - 1.2 1.2 - 1.5	6A 6A	0.011A 0.011A	0.82H	0.97	0.07	0.04	0.45F	2.7A 4.1C		.4F	1.4 0.9	
1.5 - 1.8 1.8 - 2	6.2A 6.2A	0.008A 0.009A										
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Par GV	ticle Si		alysis Silt C	lav
m	%	%	mg/kg	%	%	%	Mg/m3	٠,		%	J O.	luy
0 - 0.1		3.98C	13B	0.045A	0.27	7A 2.7	2A	0	9A	30	27	34
0.1 - 0.2 0.2 - 0.3		1.59C	4B	0.029A	0.09	9A 2.5	4A	0	10A 9A	28 29	30 30	32 32
0.3 - 0.4 0.4 - 0.6		0.34C	2B	0.007A		2.9	6A	0 1	10A 11A	32 34	27 26	31 29
0.6 - 0.75 0.75 - 0.9		0.17C						1 0	14A 11A	31 32	24 25	31 32
0.9 - 1.2 1.2 - 1.5		0.12C	3B	0.007A		2.9	2A	0 0	10A 25A	37 43	21 11	32 20
1.5 - 1.8 1.8 - 2								3 1	30A 31A	49 39	7 14	14 16
Depth COLE Gravimetric/Volumetric Water Contents K sat K unsat												
m	-	Sat.	0.05 Bar	0.1 Bar	0.5 Bar g - m3/m3	1 Bar		Bar	mm/h		nm/h	

0 - 0.1

0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.4 0.4 - 0.6 0.6 - 0.75 0.75 - 0.9 0.9 - 1.2 1.2 - 1.5 1.5 - 1.8 1.8 - 2

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Laboratory Analyses Completed for this profile

10A1 Total sulfur - X-ray fluorescence 12_HF_CU Total element - Cu(mg/kg) - HF/HClO4 Digest 12_HF_FE Total element - Fe(%) - HF/HClO4 Digest

12_HF_FE Total element - Fe(%) - HF/HClO4 Digest
12_HF_MN Total element - Mn(mg/kg) - HF/HClO4 Digest
12_HF_ZN Total element - Zn(mg/kg) - HF/HClO4 Digest

13C1_FE Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon

15A2_CEC Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts 15D1_CEC CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment

15E1_CA

Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble 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

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titration to pH 8.4

15J1 Effective CEC

17A1 Total potassium - X-ray fluorescence

3A1 EC of 1:5 soil/water extract 4A1 pH of 1:5 soil/water suspension

5A2 Chloride - 1:5 soil/water extract, automated colour

6B3 Total organic carbon - high frequency induction furnace, infrared

7A2 Total nitrogen - semimicro Kjeldahl , automated colour

9A1 Total phosphorus - X-ray fluorescence

9G_BSES Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)

9H1 Phosphate retention

P10_CF_C
P10_CF_CS
Clay (%) - Coventry and Fett pipette method
Coarse sand (%) - Coventry and Fett pipette method
P10_CF_FS
Fine sand (%) - Coventry and Fett pipette method
Silt (%) - Coventry and Fett pipette method

P10_GRAV Gravel (%)