Project Name: Regional

Project Code: REG Site ID: T199 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

**Site Information** 

Desc. By: R.F. Isbell Locality: 1.1KM north east of Tarzali Post Office along Hogans

Road:

Date Desc.: 760 metres 28/09/71 Elevation: Sheet No.: 8063 1:100000 Map Ref.: Rainfall: 2160 Northing/Long.: 145.6083333333333 Moderately rapid Runoff: Easting/Lat.: -17.1686111111111 Drainage: Moderately well drained

Geo<u>logy</u>

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

 Geol. Ref.:
 Cza
 Substrate Material:
 No Data

**Land Form** 

Rel/Slope Class:Undulating rises 9-30m 3-10%Pattern Type:Low hillsMorph. Type:RidgeRelief:61 metresElem. Type:HillcrestSlope Category:LevelSlope:0 %Aspect:No Data

Surface Soil Condition (dry): Firm

**Erosion:** 

**Soil Classification** 

Australian Soil Classification:Mapping Unit:N/AAcidic Dystrophic Red FerrosolPrincipal Profile Form:Gn3.11ASC Confidence:Great Soil Group:Krasnozem

Analytical data are incomplete but reasonable confidence.

Site Disturbance: Limited clearing, for example selective logging

Vegetation:

Surface Coarse Fragments: No surface coarse fragments

**Profile Morphology** 

A11	0 - 0.1 m	Dark reddish brown (2.5YR3/4-Moist); Dark red (2.5YR3/6-Dry); ; Clay loam; Strong grade of structure, 5-10 mm, Granular; Very firm consistence; 0-2%, coarse gravelly, 20-60mm, Quartz, coarse fragments; Many, medium (2-5mm) roots; Gradual change to -
A12	0.1 - 0.2 m	Dark red (2.5YR3/5-Moist); Dark red (2.5YR3/6-Dry); ; Clay loam; Moderate grade of structure, 2-5 mm, Granular; Very firm consistence; Common, fine (1-2mm) roots; Gradual change to -
B1	0.2 - 0.3 m	Dark red (2.5YR3/6-Moist); ; Clay loam (Heavy); Weak grade of structure, 5-10 mm, Angular blocky; Weak consistence; Few cutans, <10% of ped faces or walls coated; Few (2 - 10 %), Unidentified, , Tubules; Few, fine (1-2mm) roots; Diffuse change to -
B1	0.3 - 0.6 m	Dusky red (10R3/4-Moist); ; Clay loam (Heavy); Weak grade of structure, 5-10 mm, Angular blocky; Weak consistence; Few cutans, <10% of ped faces or walls coated; Few (2 - 10 %), Unidentified, , Tubules; Few, fine (1-2mm) roots; Diffuse change to -
B2	0.6 - 0.9 m	Dusky red (10R3/4-Moist); ; Light clay; Moderate grade of structure, 5-10 mm, Angular blocky; Weak consistence; Common cutans, 10-50% of ped faces or walls coated; Few (2 - 10 %), Argillaceous, , Nodules; Few
B2	0.9 - 1.2 m	Dusky red (10R3/4-Moist); ; Light clay; Moderate grade of structure, 5-10 mm, Angular blocky; Weak consistence; Common cutans, 10-50% of ped faces or walls coated; Few (2 - 10 %), Argillaceous, , Nodules; Diffuse change to -
B2	1.2 - 1.5 m	Dusky red (10R3/4-Moist); ; Light medium clay; Strong grade of structure, 5-10 mm, Angular blocky; Weak consistence; Very few (0 - 2 %), Argillaceous, , Nodules;
	1.5 - 1.8 m	Dusky red (10R3/4-Moist); ; Light medium clay; Strong grade of structure, 5-10 mm, Angular blocky; Weak consistence; Very few (0 - 2 %), Argillaceous, , Nodules; Gradual change to -
	1.8 - 2.1 m	Dark red (2.5YR3/5-Moist); ; Light medium clay; Strong grade of structure, 5-10 mm, Angular blocky; Weak consistence; Very few (0 - 2 %), Argillaceous, , Nodules;

## Morphological Notes Observation Notes

**Site Notes** 

TARZALI

Regional REG Site ID: T199 CSIRO Division of Soils (QLD) Observation ID: 1

Project Name: Project Code: Agency Name:

Regional
REG Site ID: T19
CSIRO Division of Soils (QLD) Site ID: T199 Observation ID: 1

Project Name: Project Code: Agency Name:

## **Laboratory Test Results:**

Depth	рН	1:5 EC		nangeable			xchangeable	CEC		ECEC	E	SP
m	m		Ca M dS/m		Mg K		Na Acidity Cmol (+)/kg				•	%
0 - 0.1	5.1A	0.089A	2.99B	1.31	0.25	0.22	1.48F			6.3F		
0.1 - 0.2	5A	0.059A		0.42	0.13	0.15						
0.2 - 0.3	4.8A	0.118A	-	0.18	0.08	0.14	0.72F			1.9F		
0.3 - 0.6	5A	0.052A	0.66B	0.04	0.01	0.12	0.24F			1.1F		
0.6 - 0.9	5.1A	0.02A										
0.9 - 1.2	5.2A	0.024A	0.13B	0.11	0.01	0.11	0.06F			0.4F		
1.2 - 1.5	5.2A	0.02A										
1.5 - 1.8	5.2A	0.023A	0.11B	0.01	0.11	0.13	0.04F			0.4F		
1.8 - 2.1	5.3A	0.02A										
Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Pa	article	Size	Analysis	
20,0		C	P	P	N	K	Density	G۷	CS	FS	Silt	
m	%	%	mg/kg	%	%	%	Mg/m3			%		•
0 - 0.1		4.18D		0.326A	0.44	5A 0.07	7A	<2	0A	8	23	64
0.1 - 0.2		3.56D		0.312A	0.34	8A 0.06	7A	0	2A	7	37	61
0.2 - 0.3		2.57D		0.305A	0.26	1A 0.06	SA .					
0.3 - 0.6		1.42D		0.307A	0.10	9A 0.05	7A	0	2A	8	35	60
0.6 - 0.9												
0.9 - 1.2		0.5D		0.229A	0.03	1A 0.07	7A	0	2A	7	27	71
1.2 - 1.5												
1.5 - 1.8		0.38D		0.237A	0.02	5A 0.10	4A	0	3A	5	14	83
1.8 - 2.1												
Depth	COLE		Grav	imetric/Vo	lumetric W	ater Cont	ents		Ks	at	K unsat	
•		Sat.	0.05 Bar	0.1 Bar 0.5 Bar		1 Bar	5 Bar 15	ar 15 Bar				
m				g/g	g - m3/m3	3			mm	/h	mm/h	

<sup>0 - 0.1</sup> 0.1 - 0.2 0.2 - 0.3 0.3 - 0.6 0.6 - 0.9 0.9 - 1.2 1.2 - 1.5 1.5 - 1.8 1.8 - 2.1

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## **Laboratory Analyses Completed for this profile**

10A1 Total sulfur - X-ray fluorescence

15A2\_CA Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, pretreatment for

soluble salts

15A2 K Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts 15A2\_MG Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts 15A2\_NA Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts

Exchange acidity (hydrogen and aluminium) - med per 100g of soil - By 1M KCl exch. acidity by 15G\_C

titration to pH 8.4

15J1 Effective CEC

17A1 Total potassium - X-ray fluorescence

2A1 Air-dry moisture content 3A1 EC of 1:5 soil/water extract pH of 1:5 soil/water suspension 4A1

Organic carbon (%) - Uncorrected Walkley and Black method 6A1\_UC

7A2 Total nitrogen - semimicro Kjeldahl, automated colour

Total phosphorus - X-ray fluorescence 9A1 Exchange Capacity - Minerology MIN\_EC

P10\_CF\_C Clay (%) - Coventry and Fett pipette method P10\_CF\_CS Coarse sand (%) - Coventry and Fett pipette method P10\_CF\_FS P10\_CF\_Z Fine sand (%) - Coventry and Fett pipette method Silt (%) - Coventry and Fett pipette method

P10\_GRAV Gravel (%)

XRD\_C\_Ch2 XRD\_C\_Gb Chloritized 2:1 minerals - X-Ray Diffraction

Gibbsite - X-Ray Diffraction Geothite - X-Ray Diffraction  $XRD\_C\_Gt$ XRD\_C\_Hm XRD\_C\_K2O Hematite - X-Ray Diffraction

K2O - X-Ray Diffraction or Clay Fraction (air dry)

XRD\_C\_Ka XRD\_C\_Mu Kaolin - X-Ray Diffraction Muscovite - X-Ray Diffraction