

**Project Name:** Regional  
**Project Code:** REG **Site ID:** T392 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

**Site Information**

<b>Desc. By:</b>	M.D. Laffan	<b>Locality:</b>	
<b>Date Desc.:</b>	03/05/84	<b>Elevation:</b>	720 metres
<b>Map Ref.:</b>	Sheet No. : 8063 1:100000	<b>Rainfall:</b>	1400
<b>Northing/Long.:</b>	145.574444444444	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	-17.2833333333333	<b>Drainage:</b>	Well drained

**Geology**

<b>ExposureType:</b>	Existing vertical exposure	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	CZA	<b>Substrate Material:</b>	Basalt

**Land Form**

<b>Rel/Slope Class:</b>	Undulating rises 9-30m 3-10%	<b>Pattern Type:</b>	No Data
<b>Morph. Type:</b>	Crest	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	Summit surface	<b>Slope Category:</b>	No Data
<b>Slope:</b>	6 %	<b>Aspect:</b>	90 degrees

**Surface Soil Condition (dry):**

**Erosion:**

**Soil Classification**

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Haplic Eutrophic Red Kandosol		<b>Principal Profile Form:</b>	Um6.33
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Krasnozem
All necessary analytical data are available.			

**Site Disturbance:** No effective disturbance. Natural

**Vegetation:**

**Surface Coarse Fragments:** 10-20%, stony, 200-600mm, subrounded, Sand

**Profile Morphology**

A1	0 - 0.1 m	Dark reddish brown (5YR3/2-Moist); Mottles; Mottles; Clay loam (Heavy); Weak grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Weak consistence; 10-20%, stony, 200-600mm, subrounded, undisturbed, Sand, coarse fragments; Common, medium (2-5mm) roots; Gradual change to -
B2	0.1 - 0.2 m	Dark reddish brown (5YR3/3-Moist); Mottles; Mottles; Clay loam (Heavy); Weak grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Weak consistence; 10-20%, stony, 200-600mm, subrounded, undisturbed, Sand, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Common, medium (2-5mm) roots;
B2	0.2 - 0.3 m	Dark reddish brown (5YR3/3-Moist); Mottles; Mottles; Clay loam (Heavy); Weak grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Weak consistence; 10-20%, stony, 200-600mm, subrounded, undisturbed, Sand, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Common, medium (2-5mm) roots;
B2	0.3 - 0.5 m	Dark reddish brown (5YR3/3-Moist); Mottles; Mottles; Clay loam (Heavy); Weak grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Weak consistence; 10-20%, stony, 200-600mm, subrounded, undisturbed, Sand, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Common, medium (2-5mm) roots;
B2	0.5 - 0.6 m	Dark reddish brown (5YR3/3-Moist); Mottles; Mottles; Clay loam (Heavy); Weak grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Weak consistence; 10-20%, stony, 200-600mm, subrounded, undisturbed, Sand, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Common, medium (2-5mm) roots; Diffuse change to -
BC	0.6 - 0.8 m	Dark reddish brown (5YR3/3-Moist); Mottles; Mottles; Clay loam; Weak grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Weak consistence; 50-90%, stony, 200-600mm, subrounded, undisturbed, Sand, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Common, medium (2-5mm) roots; Gradual change to -
C	0.8 - 0.9 m	;

**Morphological Notes**

C Parent material weakly weathered basalt:

**Observation Notes**

**Site Notes**

**Project Name:** Regional  
**Project Code:** REG      **Site ID:** T392      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

Project Name: Regional  
Project Code: REG Site ID: T392 Observation ID: 1  
Agency Name: CSIRO Division of Soils (QLD)

**Laboratory Test Results:**

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				cmol (+)/kg				%
0 - 0.1	5.6D 6.6A	0.084A	15.5H	3.1	1.5	0.04	0.11F	8.2A 32C	20.3F	0.49 0.13
0.1 - 0.2	6.5A	0.034A								
0.2 - 0.3	5.2D 6.6A	0.021A	6.98H	1.12	1.45	0.09	0.06F	8.2A	9.7F	1.10
0.3 - 0.5	5.2D 6.6A	0.017A	6.37H	1.56	1.47	0.07	0.1F	7.1A 19C	9.6F	0.99 0.37
0.5 - 0.6	6.7A	0.016A								
0.6 - 0.8	5.1D 6.8A	0.018A	5.61H	1.65	2.09	0.12	0.09F	6.9A 18C	9.6F	1.74 0.67

Depth m	CaCO3	Organic	Avail.	Total	Total	Total	Bulk Density Mg/m3	Particle		Size FS %	Analysis	
	%	C %	P mg/kg	P %	N %	K %		GV	CS		Silt	Clay
0 - 0.1		4.06C	100B	0.43A	0.28A	0.78A		14	5A	13	30	52
0.1 - 0.2		1.69C										
0.2 - 0.3		1.07C	42B					17	9A	14	29	48
0.3 - 0.5		0.95C		0.36A		0.6A		7	8A	13	30	49
0.5 - 0.6												
0.6 - 0.8				0.28A		0.84A		4	15A	17	40	28

[illegible]

**Project Name:** Regional  
**Project Code:** REG **Site ID:** T392 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

**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_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
15E1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble
15E1_K	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
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15G_C	Exchange acidity (hydrogen and aluminium) - meq per 100g of soil - By 1M KCl exch. acidity by 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
4A1	pH of 1:5 soil/water suspension
4C1	pH of 1:5 soil/1M potassium chloride extract - direct
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	Clay (%) - Coventry and Fett pipette method
P10_CF_CS	Coarse sand (%) - Coventry and Fett pipette method
P10_CF_FS	Fine sand (%) - Coventry and Fett pipette method
P10_CF_Z	Silt (%) - Coventry and Fett pipette method
P10_GRAV	Gravel (%)