

**Project Name:** Regional  
**Project Code:** REG **Site ID:** T192 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

#### Site Information

<b>Desc. By:</b>	G.G. Murtha	<b>Locality:</b>	2.2KM from eastern boundary of cultivation paddock:
<b>Date Desc.:</b>	25/11/70	<b>Elevation:</b>	60 metres
<b>Map Ref.:</b>	Sheet No. : 8259 1:100000	<b>Rainfall:</b>	890
<b>Northing/Long.:</b>	146.65	<b>Runoff:</b>	Moderately rapid
<b>Easting/Lat.:</b>	-19.483333333333	<b>Drainage:</b>	Moderately well drained

#### Geology

<b>ExposureType:</b>	Undisturbed soil core	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	Cpb	<b>Substrate Material:</b>	Undisturbed soil core, 1.5 m deep, Granite

#### Land Form

<b>Rel/Slope Class:</b>	Undulating rises 9-30m 3-10%	<b>Pattern Type:</b>	Rises
<b>Morph. Type:</b>	Mid-slope	<b>Relief:</b>	31 metres
<b>Elem. Type:</b>	Hillslope	<b>Slope Category:</b>	Gently inclined
<b>Slope:</b>	5.2 %	<b>Aspect:</b>	No Data

**Surface Soil Condition (dry):** Firm

#### Erosion:

#### Soil Classification

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Bleached Mesotrophic Red Kandosol		<b>Principal Profile Form:</b>	Gn2.04
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Red earth

All necessary analytical data are available.

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

**Vegetation:** Low Strata - Tussock grass, 0.26-0.5m, Sparse. \*Species includes - Aristida species, Heteropogon contortus  
Mid Strata - Tree, 1.01-3m, Very sparse. \*Species includes - Planchonia careya, Panicum species  
Tall Strata - Tree, 6.01-12m, Very sparse. \*Species includes - Eucalyptus polycarpa, Eucalyptus alba

**Surface Coarse Fragments:** No surface coarse fragments

#### Profile Morphology

A11	0 - 0.1 m	Dark greyish brown (10YR4/2-Moist); ; Loamy sand; Massive grade of structure; Moist; Very weak consistence; 2-10%, Quartz, coarse fragments;
A12	0.1 - 0.2 m	Greyish brown (10YR5/2-Moist); ; Loamy sand; Massive grade of structure; Moist; Very weak consistence; 2-10%, Quartz, coarse fragments; Gradual change to -
A2	0.2 - 0.3 m	Light brown (7.5YR6/4-Moist); Pink (7.5YR8/4-Dry); ; Sand; Massive grade of structure; Moist; Very weak consistence; 2-10%, Quartz, coarse fragments;
A2	0.3 - 0.6 m	Light brown (7.5YR6/4-Moist); Pink (7.5YR8/4-Dry); ; Sand; Massive grade of structure; Moist; Very weak consistence; 10-20%, Quartz, coarse fragments; Diffuse change to -
B1	0.6 - 0.75 m	Red (2.5YR4/6-Moist); ; Sandy loam (Heavy); Massive grade of structure; Earthy fabric; Moderately moist; Firm consistence; 10-20%, Quartz, coarse fragments;
B2	0.75 - 0.9 m	Red (2.5YR4/8-Moist); ; Sandy clay loam; Massive grade of structure; Earthy fabric; Moderately moist; Firm consistence; 20-50%, fine gravelly, 2-6mm, Quartz, coarse fragments;
B2	0.9 - 1.2 m	Red (2.5YR4/8-Moist); ; Sandy clay loam; Massive grade of structure; Earthy fabric; Moderately moist; Firm consistence; 10-20%, Quartz, coarse fragments;
BC	1.2 - 1.5 m	Red (2.5YR4/8-Moist); , 10YR54; Clayey sand; Massive grade of structure; Many (>5 per 100mm2) Fine (1-2mm) macropores, Dry; Rigid consistence; 10-20%, Quartz, coarse fragments;

#### Morphological Notes

BC Very hard weathered granite:

#### Observation Notes

20-30CM SOME VERY STRONGLY BLEACHED PATCHES:10-20CM MIXTURE OF A1 & A2 MATERIAL:

#### Site Notes

TOWNSVILLE



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**Laboratory Test Results:**

Depth m	pH	1:5 EC	Exchangeable Cations			Exchangeable	CEC	ECEC	ESP
		dS/m	Ca	Mg	K	Na Cmol (+)/kg			
0 - 0.1	6A	0.017A	1.4B	0.6	0.13	0.12		2.4C	5.00
0.1 - 0.2	6A	0.014A							
0.2 - 0.3	5.9A	0.023A							
0.3 - 0.6	6A	0.014A	0.4B	0.3	0.03	0.12		0.4C	30.00
0.6 - 0.75	6.1A	0.02A							
0.75 - 0.9	6A	0.026A	0.6B	1.6	0.21	0.14		3.2C	4.38
0.9 - 1.2	6.1A	0.017A							
1.2 - 1.5	6A	0.014A							

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**Laboratory Analyses Completed for this profile**

15A2_CA	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 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
15D1_CEC	CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach
2A1	Air-dry moisture content
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
9B_9C	Available P (mg/kg) - Bicarbonate P - 0.5M NaHCO <sub>3</sub> extractable
9G_BSES	Available P (mg/kg) - Acid P - 0.005M H <sub>2</sub> SO <sub>4</sub> (BSES)
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 (%)