

**Project Name:** Regional  
**Project Code:** REG **Site ID:** T105 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

**Site Information**

<b>Desc. By:</b>	G.G. Murtha	<b>Locality:</b>	8KM south of Black River on Hervey's Range Road:46M west of road and before fence line:
<b>Date Desc.:</b>	14/10/69	<b>Elevation:</b>	45 metres
<b>Map Ref.:</b>	Sheet No. : 8259 1:100000	<b>Rainfall:</b>	1020
<b>Northing/Long.:</b>	146.583333333333	<b>Runoff:</b>	Slow
<b>Easting/Lat.:</b>	-19.316666666667	<b>Drainage:</b>	No Data

**Geology**

<b>ExposureType:</b>	Undisturbed soil core	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	QA	<b>Substrate Material:</b>	Undisturbed soil core, Unconsolidated material (unidentified)

**Land Form**

<b>Rel/Slope Class:</b>	Level plain <9m <1%	<b>Pattern Type:</b>	Alluvial plain
<b>Morph. Type:</b>	Flat	<b>Relief:</b>	0 metres
<b>Elem. Type:</b>	Plain	<b>Slope Category:</b>	Level
<b>Slope:</b>	0 %	<b>Aspect:</b>	No Data

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

**Erosion:**

**Soil Classification**

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Sodic Eutrophic Red Dermosol		<b>Principal Profile Form:</b>	GN3.14
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Red podzolic soil
Analytical data are incomplete but reasonable confidence.			

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

**Vegetation:** Low Strata - Tussock grass, 0.51-1m, Mid-dense. \*Species includes - None recorded  
Tall Strata - Tree, 12.01-20m, Very sparse. \*Species includes - Eucalyptus polycarpa, Eucalyptus alba, Eucalyptus drepanophylla

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

**Profile Morphology**

A1	0 - 0.1 m	Dark brown (7.5YR3/2-Moist); Brown (7.5YR4/2-Dry); ; Sandy loam (Heavy); Massive grade of structure; Many (>5 per 100mm2) Fine (1-2mm) macropores, Dry; Firm consistence; Gradual change to -
A2	0.1 - 0.2 m	Brown (7.5YR4/2-Moist); Brown (7.5YR5/4-Dry); ; Loam; Massive grade of structure; Many (>5 per 100mm2) Fine (1-2mm) macropores, Dry; Firm consistence; Gradual change to -
B1	0.2 - 0.3 m	Dark reddish brown (5YR3/3-Moist); Reddish brown (5YR4/4-Dry); ; Clay loam; Moderate grade of structure, <2 mm, Angular blocky; Massive grade of structure; Dry; Very firm consistence; 0-2%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments;
B1	0.3 - 0.4 m	Dark reddish brown (5YR3/3-Moist); Reddish brown (5YR4/4-Dry); ; Clay loam; Moderate grade of structure, <2 mm, Angular blocky; Massive grade of structure; Dry; Very firm consistence; 0-2%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Gradual change to -
B2	0.4 - 0.6 m	Dark red (2.5YR3/6-Moist); ; Medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Dry; Very strong consistence;
B2	0.6 - 0.7 m	Dark red (2.5YR3/6-Moist); ; Medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Dry; Very strong consistence; Gradual change to -
BC	0.7 - 0.9 m	Dark reddish brown (5YR3/4-Moist); ; Sandy medium clay; Strong grade of structure, <2 mm, Angular blocky; Dry; Strong consistence; 2-10%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments;
BC	0.9 - 1.2 m	Dark reddish brown (5YR3/4-Moist); ; Sandy clay loam; Massive grade of structure; Dry; Very firm consistence; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Gradual change to -
D	1.2 - 1.5 m	Reddish brown (5YR4/4-Moist); ; Fine sandy medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Dry; Very firm consistence; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments;

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D	1.5 - 1.8 m	Reddish brown (5YR4/4-Moist); ; Fine sandy medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Dry; Very firm consistence; 10-20%, coarse gravelly, 20-60mm, rounded, Gravel, coarse fragments;
D	1.8 - 2.1 m	Reddish brown (5YR4/4-Moist); ; Fine sandy medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Dry; Very firm consistence; 10-20%, coarse gravelly, 20-60mm, rounded, Gravel, coarse fragments;

**Morphological Notes**

**Observation Notes**

**Site Notes**

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**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	6.4A	0.068A								
0.1 - 0.2	6.4A	0.026A								
0.2 - 0.3	6.4A	0.026A								
0.3 - 0.4	6.1A	0.032A								
0.4 - 0.6	6.1A	0.035A	5.9B	2.7	0.3	0.26		3.8C		6.84
0.6 - 0.7	6.2A	0.029A								
0.7 - 0.9	6.3A	0.029A								
0.9 - 1.2	6.6A	0.023A								
1.2 - 1.5	6.7A	0.017A								
1.5 - 1.8	6.7A	0.023A								
1.8 - 2.1	6.9A	0.026A								

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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