

Project Name: Regional
Project Code: REG **Site ID:** T104 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By: G.G. Murtha **Locality:** .4KM west of Scrubby Creek on old Hervey's Range Beef Road:
Date Desc.: 14/10/69 **Elevation:** 46 metres
Map Ref.: Sheet No. : 8259 1:100000 **Rainfall:** 1020
Northing/Long.: 146.566666666667 **Runoff:** Slow
Easting/Lat.: -19.316666666667 **Drainage:** Poorly drained

Geology

ExposureType: Undisturbed soil core **Conf. Sub. is Parent. Mat.:** No Data
Geol. Ref.: QA **Substrate Material:** Undisturbed soil core, Detrital sedimentary rock (unidentified)

Land Form

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

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification: Mapping Unit: N/A
 Hypocalcic Subnatric Grey Sodosol **Principal Profile Form:** Dy3.43
ASC Confidence: **Great Soil Group:** Solodic 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 - Heteropogon contortus, Stylosanthes humilis
 Tall Strata - Tree, 12.01-20m, Very sparse. *Species includes - Eucalyptus drepanophylla, Eucalyptus alba, Eucalyptus papuana

Surface Coarse Fragments:

Profile Morphology

A1	0 - 0.08 m	Very dark greyish brown (10YR3/2-Moist); Greyish brown (10YR5/2-Dry); ; Sandy loam (Heavy); Massive grade of structure; Dry; Firm consistence; Few (2 - 10 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Gradual change to -
A2	0.08 - 0.17 m	Light grey (10YR7/2-Dry); , 10YR32; Sandy loam (Heavy); Massive grade of structure; Many (>5 per 100mm ²) Fine (1-2mm) macropores, Dry; Very firm consistence; Few (2 - 10 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Abrupt change to -
B21	0.17 - 0.3 m	Dark grey (10YR4/1-Moist); , 10YR43, 10-20% , 0-5mm, Faint; , 10-20% , 0-5mm, Faint; Heavy clay; Moderate grade of structure, Columnar; Strong grade of structure, 5-10 mm, Angular blocky; Dry; Rigid consistence; 2-10%, fine gravelly, 2-6mm, Granite, coarse fragments; Few (2 - 10 %), Ferromanganiferous, Medium (2 - 6 mm), Nodules;
B21	0.3 - 0.37 m	Dark grey (10YR4/1-Moist); , 10YR43, 10-20% , 0-5mm, Faint; , 10-20% , 0-5mm, Faint; Heavy clay; Moderate grade of structure, Columnar; Strong grade of structure, 5-10 mm, Angular blocky; Dry; Rigid consistence; 2-10%, fine gravelly, 2-6mm, Granite, coarse fragments; Few (2 - 10 %), Ferromanganiferous, Medium (2 - 6 mm), Nodules; Gradual change to -
	0.37 - 0.53 m	Greyish brown (2.5Y5/2-Moist); , 2.5Y56; Sandy medium clay; Strong grade of structure, 5-10 mm, Angular blocky; Strong consistence; Very few (0 - 2 %), Ferromanganiferous, Medium (2 - 6 mm), Nodules; Abrupt change to -
	0.53 - 0.6 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Angular blocky; Very firm consistence; Very few (0 - 2 %), Calcareous, Coarse (6 - 20 mm), Concretions;
	0.6 - 0.9 m	Dark grey (5Y4/1-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Angular blocky; Very firm consistence; Very few (0 - 2 %), Calcareous, Coarse (6 - 20 mm), Concretions; Gradual change to -
	0.9 - 1.2 m	Very dark grey (5Y3/1-Moist); ; Heavy clay; Moderate grade of structure, 10-20 mm, Angular blocky; Firm consistence; 10-20%, fine gravelly, 2-6mm, reoriented, Granite, coarse fragments; Gradual change to -

Project Name: Regional
Project Code: REG **Site ID:** T104 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

	1.2 - 1.35 m	Very dark grey (5Y3/1-Moist); ; Heavy clay; Moderate grade of structure, 10-20 mm, Angular blocky; Firm consistence; 10-20%, fine gravelly, 2-6mm, reoriented, Granite, coarse fragments; Clear change to -
	1.35 - 1.5 m	Dark greyish brown (2.5Y4/2-Moist); ; Heavy clay; Strong grade of structure, 10-20 mm, Angular blocky; Very firm consistence; 10-20%, fine gravelly, 2-6mm, reoriented, Quartz, coarse fragments; Very few (0 - 2 %), Calcareous, Coarse (6 - 20 mm), Concretions;
	1.5 - 1.8 m	Dark greyish brown (2.5Y4/2-Moist); ; Heavy clay; Strong grade of structure, 10-20 mm, Angular blocky; Very firm consistence; 10-20%, fine gravelly, 2-6mm, reoriented, Quartz, coarse fragments; Very few (0 - 2 %), Calcareous, Coarse (6 - 20 mm), Concretions; Diffuse change to -
	1.8 - 2.1 m	Greyish brown (2.5Y5/2-Moist); , 10YR41, 10-20% , 15-30mm, Faint; , 10-20% , 15-30mm, Faint; Medium clay (Light); Strong grade of structure, 10-20 mm, Angular blocky; Very firm consistence; 20-50%, fine gravelly, 2-6mm, Quartz, coarse fragments; Very few (0 - 2 %), Calcareous, Coarse (6 - 20 mm), Concretions;
	2.1 - 2.5 m	Greyish brown (2.5Y5/2-Moist); ; Medium clay (Light); Strong grade of structure, 5-10 mm, Angular blocky; Strong consistence; 20-50%, Quartz, coarse fragments;
BC	2.5 - 2.9 m	Greyish brown (2.5Y5/2-Moist); ; Sandy medium clay; Massive grade of structure; Moderately moist; Weak consistence; 2-10%, fine gravelly, 2-6mm, Granite, coarse fragments;
C	2.9 - 3.1 m	Brown (10YR5/3-Moist); ; Sand; Massive grade of structure; Moist; Very weak consistence; 2-10%, coarse gravelly, 20-60mm, rounded, Granite, coarse fragments;

Morphological Notes

Observation Notes

Site Notes

HERVEY'S RANGE

Project Name: Regional
Project Code: REG Site ID: T104 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 - 0.08	5.9A	0.047A								
0.08 - 0.17	6.3A	0.041A								
0.17 - 0.3	6.5A	0.059A	16.7B	2.8	0.21	2		25.8C		7.75
0.3 - 0.37	6.8A	0.059A								
0.37 - 0.53	7A	0.092A								
0.53 - 0.6	7.4A	0.196A								
0.6 - 0.9	8.1A	0.52A								
0.9 - 1.2	8.1A	0.52A								
1.2 - 1.35	8A	0.389A								
1.35 - 1.5	7.9A	0.413A								
1.5 - 1.8	8.1A	0.476A								
1.8 - 2.1	8A	0.291A								
2.1 - 2.5	8.1A	0.252A								
2.5 - 2.9	8A	0.181A								
2.9 - 3.1	7.9A	0.119A								

[illegible][illegible]

Project Name: Regional
Project Code: REG **Site ID:** T104 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

1.5 - 1.8
1.8 - 2.1
2.1 - 2.5
2.5 - 2.9
2.9 - 3.1

Project Name: Regional
Project Code: REG **Site ID:** T104 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Laboratory Analyses Completed for this profile

15A2_CA	Exchangeable bases (Ca ²⁺ ,Mg ²⁺ ,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
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
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A1	Total phosphorus - X-ray fluorescence
9B_9C	Available P (mg/kg) - Bicarbonate P - 0.5M NaHCO ₃ extractable
9G_BSES	Available P (mg/kg) - Acid P - 0.005M H ₂ SO ₄ (BSES)