

**Project Name:** REG  
**Project Code:** REG **Site ID:** T239 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (WA)

**Site Information**

<b>Desc. By:</b>	R.F. Isbell	<b>Locality:</b>	Approx 12KM north of New Mt. Elizabeth:50M south of SW corner of A. Holm grazing trial:
<b>Date Desc.:</b>	12/09/74	<b>Elevation:</b>	No Data
<b>Map Ref.:</b>	Sheet No. : 4165 1:100000	<b>Rainfall:</b>	760
<b>Northing/Long.:</b>	126.066666666667	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	-16.266666666667	<b>Drainage:</b>	No Data

**Geology**

<b>ExposureType:</b>	Auger boring	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	Qa	<b>Substrate Material:</b>	No Data

**Land Form**

<b>Rel/Slope Class:</b>	Gently undulating plains <9m 1-3%	<b>Pattern Type:</b>	Alluvial plain
<b>Morph. Type:</b>	Simple-slope	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	Plain	<b>Slope Category:</b>	Very gently sloped
<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
Haplic Mesotrophic Red Kandosol		<b>Principal Profile Form:</b>	Gn2.11
<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, 0.51-1m, Mid-dense. \*Species includes - None recorded  
Tall Strata - Tree, , . \*Species includes - None Recorded

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

**Profile Morphology**

A1	0 - 0.1 m	Dark reddish brown (2.5YR3/4-Moist); ; Sandy loam (Heavy); Massive grade of structure; Strong consistence; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Gradual change to -
B1	0.1 - 0.2 m	Dusky red (10R3/4-Moist); ; Sandy clay loam (Heavy); Massive grade of structure; Very firm consistence; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Gradual change to -
B1	0.2 - 0.3 m	Dusky red (10R3/4-Moist); ; Sandy clay loam; Massive grade of structure; Very firm consistence; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Gradual change to -
B2	0.3 - 0.6 m	Dusky red (10R3/4-Moist); ; Light medium clay; Massive grade of structure; Very firm consistence; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Gradual change to -
B2	0.6 - 0.9 m	Dark red (10R3/5-Moist); ; Light medium clay; Massive grade of structure; Earthy fabric; Very firm consistence; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Gradual change to -
B2	0.9 - 1.2 m	Dark red (10R3/5-Moist); ; Light medium clay; Massive grade of structure; Earthy fabric; Very firm consistence; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Gradual change to -
	1.2 - 1.5 m	Dark red (10R3/5-Moist); ; Light medium clay; Massive grade of structure; Very firm consistence; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Gradual change to -
	1.5 - 1.8 m	Dark red (10R3/5-Moist); ; Medium clay; Massive grade of structure; Very firm consistence; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Gradual change to -
	1.8 - 2.1 m	Dark red (10R3/5-Moist); ; Medium clay; Massive grade of structure; Very firm consistence; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules;

**Morphological Notes**

**Observation Notes**

**Site Notes**

NTH KIMBERLY

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**Laboratory Test Results:**

Depth	pH	1:5 EC	Exchangeable Cations			Exchangeable		CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na	Acidity			%
						Cmol	(+)/kg			
0 - 0.1	6.8A	<0.05A	2.4B	0.79	0.18	0.03	0.04F		3.4F	
0.1 - 0.2	6.6A	<0.05A								
0.2 - 0.3	6.6A	<0.05A	2.32B	0.87	0.21	0.01	0.04F		3.5F	
0.3 - 0.6	6.3A	<0.05A	3.51B	1.76	0.29	0.01	0.06F		5.6F	
0.6 - 0.9	5.9A	<0.05A	4.23B	1.79	0.24	0.02	0.04F		6.3F	
0.9 - 1.2	5.6A	<0.05A	3.17B	1.62	0.18	0.06	0.04F		5.1F	
1.8 - 2.1	6.6A	<0.05A	3.66B	3.39	0.15	0.06				

Depth m	CaCO3 %	Organic C %	Avail. P mg/kg	Total P %	Total N %	Total K %	Bulk Density Mg/m3	Particle		Size FS %	Analysis	
								GV	CS		Silt	Clay
0 - 0.1		0.37D	3A 2.4B	0.008A	0.032A	0.25A		<2	47A	35	7	11
0.1 - 0.2		0.16D	3A 0.5B	0.01A	0.019A	0.38A		<2	41A	23	4	34
0.2 - 0.3		0.26D	3A 2B	0.01A	0.029A	0.3A		<2	43A	32	5	20
0.3 - 0.6			1.5B	0.012A		0.42A		<2	25A	20	2	52
0.6 - 0.9			3A 1B	0.012A		0.43A		2	24A	17	4	55
0.9 - 1.2				0.014A		0.38A		2	24A	23	4	48
1.8 - 2.1				0.012A		0.45A		2	18A	18	85	55

[illegible]

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**Laboratory Analyses Completed for this profile**

10A1	Total sulfur - X-ray fluorescence
12_HF_CU	Total element - Cu(mg/kg) - HF/HClO <sub>4</sub> Digest
12_HF_ZN	Total element - Zn(mg/kg) - HF/HClO <sub>4</sub> Digest
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
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
5A2	Chloride - 1:5 soil/water extract, automated colour
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 <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 (%)