Project Name: Regional

Project Code: REG Site ID: T136 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By: R.F. Isbell Locality: 3.5KM east of north line crossing road at homestead

site:.2KM east of bend in road:

Date Desc.: 17/07/70 Elevation: No Data 1680 Map Ref.: Sheet No.: 7474 1:100000 Rainfall: Northing/Long.: 142.6 Runoff: Rapid Easting/Lat.: -11.73333333333333 Drainage: Well drained

Geology

ExposureType: Undisturbed soil core Conf. Sub. is Parent. Mat.: No Data Geol. Ref.: Jkb Substrate Material: No Data

Land Form

Rel/Slope Class: Rolling rises 9-30m 10-32% Pattern Type: Rises Relief: 24 metres Morph. Type: Mid-slope Slope Category: Elem. Type: Hillslope No Data 0 % Aspect: 180 degrees Slope:

Surface Soil Condition (dry): Firm

Erosion:

Soil Classification

Australian Soil Classification:Mapping Unit:N/AMottled Dystrophic Red KandosolPrincipal Profile Form:Gn2.44ASC Confidence:Great Soil Group:Red earth

All necessary analytical data are available.

<u>Site Disturbance:</u> No effective disturbance other than grazing by hoofed animals

Vegetation: Low Strata - Tussock grass, 0.26-0.5m, Very sparse. *Species includes - None recorded

Mid Strata - Sedge, 1.01-3m, Very sparse. *Species includes - Xanthorrhoea johnsonii Tall Strata - Heath shrub, 1.01-3m, Mid-dense. *Species includes - Grevillea glauca

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

1.10	me worphology	
A1	0 - 0.1 m	Dark brown (7.5YR3/4-Moist); Brown (7.5YR5/4-Dry); ; Loamy sand; Weak grade of structure, 10-20 mm, Angular blocky; Dry; Very firm consistence; Few, fine (1-2mm) roots; Gradual change to -
A2	0.1 - 0.2 m	Yellowish red (5YR4/8-Moist); Yellowish red (5YR4/8-Dry); ; Loamy sand; Weak grade of structure, 10-20 mm, Angular blocky; Dry; Very firm consistence; Gradual change to -
B1	0.2 - 0.3 m	Red (2.5YR4/8-Moist); Red (2.5YR5/8-Dry); , 10YR68, 0-2% , 5-15mm, Distinct; , 0-2% , 5-15mm, Distinct; Sandy loam; Massive grade of structure; Dry; Very firm consistence; Gradual change to -
B1	0.3 - 0.4 m	Red (2.5YR4/8-Moist); Red (2.5YR5/8-Dry); , 10YR68, 2-10% , 5-15mm, Distinct; , 2-10% , 5-15mm, Distinct; Sandy loam; Massive grade of structure; Dry; Very firm consistence; Gradual change to -
B1	0.4 - 0.5 m	Red (2.5YR4/8-Moist); , 10YR68, 2-10% , 5-15mm, Distinct; , 2-10% , 5-15mm, Distinct; Sandy loam; Massive grade of structure; Dry; Very firm consistence; Gradual change to -
B1	0.5 - 0.6 m	Red (2.5YR4/8-Moist); , 10YR68, 10-20% , 5-15mm, Distinct; , 10-20% , 5-15mm, Distinct; Sandy loam; Massive grade of structure; Moderately moist; Very weak consistence; Gradual change to -
B1	0.6 - 0.75 m	Red (2.5YR4/8-Moist); , 10YR68, 2-10% , 5-15mm, Distinct; , 2-10% , 5-15mm, Distinct; Sandy loam; Massive grade of structure; Moderately moist; Very weak consistence; Gradual change to -
B1	0.75 - 0.9 m	Red (10R4/8-Moist); , 10YR68, 10-20% , 5-15mm, Distinct; , 10-20% , 5-15mm, Distinct; Sandy loam (Heavy); Massive grade of structure; Moderately moist; Weak consistence; Gradual change to -
B21	0.9 - 1.2 m	Red (10R4/8-Moist); , 10YR68, 10-20% , 15-30mm, Distinct; , 10-20% , 15-30mm, Distinct; Sandy clay loam (Light); Massive grade of structure; Moderately moist; Weak consistence; Gradual change to -

Projec	t Code: RE	gional :G Site ID: T136 Observation ID: 1 :IRO Division of Soils (QLD)									
B21	1.2 - 1.35 m	Red (10R4/8-Moist); , 10YR68, 10-20% , 15-30mm, Distinct; , 10-20% , 15-30mm, Distinct; Sandy clay loam; Massive grade of structure; Moderately moist; Weak consistence; Gradual change to -									
B22	1.35 - 1.5 m	Red (10R4/8-Moist); , 10YR68, 10-20% , 15-30mm, Distinct; , 2.5YR68, 10-20% , 15-30mm, Distinct; Light clay; Massive grade of structure; Moderately moist; Weak consistence; Gradual change to -									
B22	1.5 - 1.8 m	Red (10R4/8-Moist); , 2.5YR68, 10-20% , 15-30mm, Distinct; , 10YR68, 10-20% , 15-30mm, Distinct; Light clay; Massive grade of structure; Moderately moist; Weak consistence; Gradual change to -									
B22	1.8 - 2.1 m	Red (10R4/8-Moist); , 2.5YR68, 2-10% , 15-30mm, Distinct; , 10YR68, 2-10% , 15-30mm, Distinct; Light clay; Massive grade of structure; Moderately moist; Very firm consistence; Gradual change to -									
	2.1 - 2.4 m	Red (10R4/8-Moist); , 10YR68, 2-10% , 5-15mm, Distinct; , 2-10% , 5-15mm, Distinct; Sandy clay loam; Massive grade of structure; Weak consistence; Few (2 - 10 %), Argillaceous, , Nodules; Gradual change to -									
	2.4 - 2.7 m	Red (10R4/8-Moist); , 10YR68, 2-10% , 15-30mm, Distinct; , 2-10% , 15-30mm, Distinct; Light clay; Massive grade of structure; Weak consistence; Common (10 - 20 %), Argillaceous, , Nodules; Gradual change to -									
	2.7 - 3 m	Red (10R4/8-Moist); , 10YR68, 2-10% , 15-30mm, Distinct; , 2-10% , 15-30mm, Distinct; Light clay; Massive grade of structure; Very weak consistence; Few (2 - 10 %), Argillaceous, , Nodules; Gradual change to -									
	3 - 3.3 m	Red (10R4/8-Moist); , 10YR68, 2-10% , 15-30mm, Distinct; , 2-10% , 15-30mm, Distinct; Light clay; Massive grade of structure; Very weak consistence; Gradual change to -									
	3.3 - 3.6 m	Red (10R4/8-Moist); , 10YR68, 2-10% , 15-30mm, Distinct; , 2-10% , 15-30mm, Distinct; Light medium clay; Massive grade of structure; Very weak consistence; Gradual change to -									
	3.6 - 3.9 m	Red (10R4/8-Moist); , 10YR68, 2-10% , 15-30mm, Distinct; , 2-10% , 15-30mm, Distinct; Light medium clay; Massive grade of structure; Very weak consistence; Gradual change to -									
	3.9 - 4.2 m	Dark red (10R3/8-Moist); , 10YR68, 0-2% , 15-30mm, Distinct; , 0-2% , 15-30mm, Distinct; Sandy medium clay; Massive grade of structure; Very weak consistence; Gradual change to -									

Morphological Notes

Observation Notes
50-135CM ELONGATE MOTTLING HORIZONTALLY:

Site Notes

HEATHLANDS

Observation ID: 1

Project Name: Project Code: Agency Name: Regional REG Site ID: T136 CSIRO Division of Soils (QLD)

Laboratory	1031110												
Depth	рН	1:5 EC		kchangeable			Exchange		3	ECEC	E	SP	
m		dS/m	Са	Mg	K	Na Cmol (Acidit +)/kg	у			•	%	
0 - 0.1 0.1 - 0.2	5.7A 5.6A	0.032 <i>A</i>	A 0.09B	0.18	0.09	0.07	2.3	3F 1.	5C	2.7F	4	.67	
0.1 - 0.2	5.8A		A 0.04B	0.1	0.11	0.05	2.1	15 1	1C	2.4F	/	.55	
0.2 - 0.3	5.9A	0.020		0.1	0.11	0.03	۷.		10	2.41	-		
0.4 - 0.5	6A	0.023/ 0.02A											
0.5 - 0.6	5.9A		A 0.04B	0.11	0.08	0.07	1	F 0.	7C	1.3F	10	0.00	
0.6 - 0.75	5.9A	0.02A		• • • • • • • • • • • • • • • • • • • •	0.00	0.0.	• •				•		
0.75 - 0.9	5.8A	0.026											
0.9 - 1.2	5.6A	0.032	0.04B	0.27	0.1	0.06	2	F 0.	5C	2.5F	1:	2.00	
1.2 - 1.35	5.7A	0.026											
1.35 - 1.5	5.6A	0.032	A										
1.5 - 1.8	5.6A	0.032	4										
1.8 - 2.1	5.9A	0.017	4 0.04B	0.39	0.05	0.07	1.8	BF 0.6	SC	2.4F	1	1.67	
2.1 - 2.4	5.8A	0.023											
2.4 - 2.7	5.8A	0.026											
2.7 - 3	5.7A	0.029											
3 - 3.3	5.5A	0.023											
3.3 - 3.6	5.6A	0.023											
3.6 - 3.9	5.7A	0.029	4										
3.9 - 4.2													
5	0.000			T. (1)	T.4.1					0.			
Depth	CaCO3	Organic C	Avail P	. Total P	Total N	Tota K		ulk I nsity GV	Particle CS	Size /	Analysis Silt		
m	%	%	mg/k		%	%		m3	CS	%	Siit	Ciay	
	,,,			3			9			, ,			
0 - 0.1		0.73D	<2A	0.004A	0.05	5A 0.0	02A	0	25A	63	1	11	
• • • • • • • • • • • • • • • • • • • •		•	<2E					_			-		
0.1 - 0.2								0	23A	63	1	13	
0.2 - 0.3		0.37D	<2A	0.004A	0.03	3A 0.	02A	0	24A	60	1	15	
			<2E	3									
0.3 - 0.4													
0.4 - 0.5													
0.5 - 0.6		0.1D	<2E	0.004A	<0.0	1A 0.	02A	0	23A	60	1	16	
0.6 - 0.75													
0.75 - 0.9			0.5				004		25A		1	19	
0.9 - 1.2			<2E	0.007A		0.0	02A	0			1	32	
1.2 - 1.35								0			1	35	
1.35 - 1.5 1.5 - 1.8								0	20A	41	1	38	
1.8 - 1.6			<2E	0.007A		0.1	03A	0	21A	. 38	2	39	
2.1 - 2.4			\ZL	0.007A		0.	USA	U	217	. 30	2	39	
2.4 - 2.7								0	28A	. 38	1	34	
2.7 - 3								O	207	. 00		04	
3 - 3.3													
3.3 - 3.6								0	20A	45	1	34	
3.6 - 3.9													
3.9 - 4.2													
Depth	COLE	C-4					ater Contents 1 Bar 5 Bar		K s	at	K unsat		
m		Sat.	0.05 Ba	r 0.1 Bar g/g	0.5 Bar g - m3/m3	1 Bar	1 Bar 5 Bar		mm	mm/h		mm/h	
				5.									

Project Name:

Regional
REG Site ID: T13
CSIRO Division of Soils (QLD) Site ID: T136 Observation ID: 1

Project Code: Agency Name:

0 - 0.1 0.1 - 0.2 0.2 - 0.3

0.3 - 0.4 0.4 - 0.5

0.4 - 0.5 0.5 - 0.6 0.6 - 0.75 0.75 - 0.9

0.9 - 1.2 1.2 - 1.35

1.2 - 1.35 1.35 - 1.5 1.5 - 1.8 1.8 - 2.1 2.1 - 2.4 2.4 - 2.7

3 - 3.3 3.3 - 3.6 3.6 - 3.9

3.9 - 4.2

Project Name: Regional

Observation ID: 1 **Project Code:** REG Site ID: T136

CSIRO Division of Soils (QLD) Agency Name:

Laboratory Analyses Completed for this profile

10A1 Total sulfur - X-ray fluorescence

Total element - Cu(mg/kg) - HF/HClO4 Digest 12_HF_CU 12_HF_FE 12_HF_MN Total element - Fe(%) - HF/HClO4 Digest Total element - Mn(mg/kg) - HF/HCIO4 Digest Total element - Zn(mg/kg) - HF/HClO4 Digest 12_HF_ZN

13C1_AL Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon 13C1_FE Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon

15A2_CA Exchangeable bases (Ca2+,Mg2+,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

15G_C Exchange acidity (hydrogen and aluminium) - meq per 100g of soil - By 1M KCl exch. acidity by

titration to pH 8.4

Effective CEC 15J1

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

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 NaHCO3 extractable

Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES) 9G_BSES

MIN_EC **Exchange Capacity - Minerology**

P10 CF C Clay (%) - Coventry and Fett pipette method P10_CF_CS P10_CF_FS Coarse sand (%) - Coventry and Fett pipette method Fine sand (%) - Coventry and Fett pipette method P10 CF Z Silt (%) - Coventry and Fett pipette method

P10_GRAV Gravel (%)

Geothite - X-Ray Diffraction XRD_C_Gt

K2O - X-Ray Diffraction or Clay Fraction (air dry)

XRD_C_K2O XRD_C_Ka XRD_C_Qz Kaolin - X-Ray Diffraction Quartz - X-Ray Diffraction