Project Name: **Regional**
Project Code: **REG** **Site ID:** **T223** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (QLD)**

Site Information

Desc. By: R.J. Coventry
Date Desc.: 29/10/73
Map Ref.: 1:100000
Northing/Long.: 145.027777777778
Easting/Lat.: -20.7694444444445
Locality: 63m east of Torrens Ck on Flinders H'way.
Elevation: No Data
Rainfall: 600
Runoff: No Data
Drainage: No Data

Geology

ExposureType: Existing vertical exposure
Geol. Ref.: No Data
Conf. Sub. is Parent. Mat.: No Data
Substrate Material: No Data

Land Form

Rel/Slope Class: No Data
Morph. Type: No Data
Elem. Type: No Data
Slope: 0 %
Pattern Type: No Data
Relief: No Data
Slope Category: No Data
Aspect: No Data

Surface Soil Condition (dry): N/A

Erosion:

Soil Classification

Australian Soil Classification:
Basic Regolithic Orthic Tenosol
ASC Confidence:
All necessary analytical data are available.
Mapping Unit: N/A
Principal Profile Form: Uc5.22
Great Soil Group: Earthy sand

Site Disturbance: Complete clearing. Pasture, native or improved, but never cultivated

Vegetation: Low Strata - Tussock grass, 0.26-0.5m, Sparse. *Species includes - Aristida leptopoda

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1	0 - 0.1 m	Brown (7.5YR4/4-Moist); Brown (10YR5/3-Dry); ; Loamy sand; Massive grade of structure; Dry; Very weak consistence; Many, fine (1-2mm) roots; Gradual change to -
A3	0.1 - 0.2 m	Reddish brown (5YR4/4-Moist); Yellowish red (5YR5/6-Dry); ; Loamy sand; Massive grade of structure; Dry; Very weak consistence;
A3	0.2 - 0.3 m	Reddish brown (5YR4/4-Moist); Yellowish red (5YR5/6-Dry); ; Loamy sand; Massive grade of structure; Dry; Very weak consistence;
A3	0.3 - 0.45 m	Yellowish red (5YR5/6-Moist); Yellowish red (5YR5/7-Dry); ; Loamy sand; Massive grade of structure; Dry; Very weak consistence; Diffuse change to -
A3	0.45 - 0.6 m	Yellowish red (5YR5/6-Moist); Yellowish red (5YR5/7-Dry); ; Loamy sand; Massive grade of structure; Dry; Very weak consistence; Diffuse change to -
B2w	0.6 - 0.75 m	Yellowish red (5YR4/6-Moist); Yellowish red (5YR5/7-Dry); ; Loamy sand (Heavy); Massive grade of structure; Dry; Weak consistence; 0-2%, rounded, Quartz, coarse fragments;
B2w	0.75 - 0.9 m	Yellowish red (5YR4/6-Moist); Yellowish red (5YR5/7-Dry); ; Loamy sand (Heavy); Massive grade of structure; Dry; Weak consistence; 0-2%, rounded, Quartz, coarse fragments;
B2w	0.9 - 1 m	Yellowish red (5YR4/6-Moist); Yellowish red (5YR5/7-Dry); ; Loamy sand (Heavy); Massive grade of structure; Dry; Weak consistence; 0-2%, rounded, Quartz, coarse fragments;
B2w	1 - 1.2 m	Yellowish red (5YR4/6-Moist); Yellowish red (5YR5/7-Dry); ; Loamy sand (Heavy); Massive grade of structure; Dry; Weak consistence; 0-2%, rounded, Quartz, coarse fragments;
B2w	1.2 - 1.35 m	Yellowish red (5YR4/6-Moist); Reddish yellow (5YR6/6-Dry); ; Sandy loam; Massive grade of structure; Dry; Very firm consistence; 0-2%, rounded, Quartz, coarse fragments;
B2w	1.35 - 1.5 m	Yellowish red (5YR4/6-Moist); Reddish yellow (5YR6/6-Dry); ; Sandy loam; Massive grade of structure; Dry; Very firm consistence; 0-2%, rounded, Quartz, coarse fragments;
B2w	1.5 - 1.65 m	Red (2.5YR4/6-Moist); Reddish yellow (5YR6/6-Dry); ; Sandy loam (Heavy); Massive grade of structure; Dry; Very firm consistence; 0-2%, rounded, Quartz, coarse fragments;
B2w	1.65 - 1.8 m	Red (2.5YR4/6-Moist); Reddish yellow (5YR6/6-Dry); ; Sandy loam (Heavy); Massive grade of structure; Dry; Very firm consistence; 0-2%, rounded, Quartz, coarse fragments;

Project Name: **Regional**
Project Code: **REG** **Site ID:** **T223** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (QLD)**

B2w	1.8 - 1.95 m	Red (2.5YR4/6-Moist); Reddish yellow (5YR6/6-Dry); ; Sandy loam (Heavy); Massive grade of structure; Dry; Very firm consistence; 0-2%, rounded, Quartz, coarse fragments; Gradual change to -
B2w	1.95 - 2.1 m	Red (2.5YR4/6-Moist); Reddish yellow (5YR6/6-Dry); ; Sandy loam (Heavy); Massive grade of structure; Dry; Very firm consistence; 0-2%, rounded, Quartz, coarse fragments; Gradual change to -
C1	2.1 - 2.25 m	Dark red (2.5YR3/6-Moist); ; Loamy sand (Heavy); Massive grade of structure; Dry; Strong consistence; 0-2%, coarse gravelly, 20-60mm, rounded, Quartz, coarse fragments;
C1	2.25 - 2.4 m	Red (2.5YR4/6-Moist); ; Loamy sand; Massive grade of structure; Dry; Weak consistence; 20-50%, coarse gravelly, 20-60mm, rounded, Quartz, coarse fragments; Clear change to -
C1	2.4 - 2.55 m	Red (2.5YR4/6-Moist); ; Loamy sand; Massive grade of structure; Dry; Weak consistence; 20-50%, coarse gravelly, 20-60mm, rounded, Quartz, coarse fragments; Clear change to -
C2	2.55 - 2.7 m	Red (2.5YR4/6-Moist); ; Sand; Massive grade of structure; Dry; Loose consistence; 20-50%, coarse gravelly, 20-60mm, rounded, Quartz, coarse fragments;
C2	2.7 - 2.9 m	Red (2.5YR4/6-Moist); ; Sand; Massive grade of structure; Dry; Loose consistence; 20-50%, coarse gravelly, 20-60mm, rounded, Quartz, coarse fragments;
C2	2.9 - 3.1 m	Red (2.5YR4/6-Moist); ; Sand; Massive grade of structure; Dry; Loose consistence; 20-50%, coarse gravelly, 20-60mm, rounded, Quartz, coarse fragments; Clear change to -
D	3.1 - 3.3 m	Dark red (2.5YR3/6-Moist); , 10YR64, 10-20% , 15-30mm, Prominent; , 10-20% , 15-30mm, Prominent; Sandy medium clay; Massive grade of structure; Dry; Very strong consistence;
	3.3 - 3.36 m	;
	3.36 - 3.52 m	;

Morphological Notes

Observation Notes

Site Notes

TORRENS CK.

Project Name: Regional
Project Code: REG **Site ID:** T223 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable Acidity	CEC	ECEC	ESP
			Ca	Mg	K	Na				
m		dS/m	Cmol (+)/kg							%
0 - 0.1	6.8A	0.029A	1.33H	0.41	0.22	0.02	0.13F	1.73A	2.1F	1.16
0.1 - 0.2	6.9A	0.018A								
0.2 - 0.3	7.1A	0.018A	1.01H	0.31	0.22	0.02	0.11F	1.16A	1.7F	1.72
0.3 - 0.45	7.3A	0.019A								
0.45 - 0.6	7.2A	0.017A								
0.6 - 0.75	7.1A	0.02A	0.71H	0.48	0.22	0.02	0.18F	1.06A	1.6F	1.89
0.75 - 0.9	7.3A	0.018A								
0.9 - 1	7.7A	0.022A								
1 - 1.2	7.8A	0.028A								
1.2 - 1.35	8A	0.027A	0.65H	0.4	0.86	0.03	0.22F	1.48A	2.2F	2.03
1.35 - 1.5	8.2A	0.035A								
1.5 - 1.65	8.3A	0.031A	0.73H	0.33	1.45	0.03	0.15F	1.75A	2.7F	1.71
1.65 - 1.8	7.7A	0.034A								
1.8 - 1.95	8.3A	0.024A								
1.95 - 2.1	8.2A	0.021A								
2.1 - 2.25		0.019A								
2.25 - 2.4		0.018A								
2.4 - 2.55		0.16A								
2.55 - 2.7	7.9A	0.16A								
2.7 - 2.9	8.1A	0.16A								
2.9 - 3.1	8.1A	0.16A								
3.1 - 3.3		0.16A								
3.3 - 3.36		0.16A								
3.36 - 3.52	8.6A	0.16A								

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis				
								GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3	%				
0 - 0.1		0.43D	24B	0.019A	0.022A	0.15A		0	31A	60	4	6
0.1 - 0.2		0.26D	21B		0.018A			0	29A	60	4	6
0.2 - 0.3		0.19D	21B	0.012A	0.018A	0.15A		0	29A	62	3	6
0.3 - 0.45								0	29A	62	4	6
0.45 - 0.6				0.012A		0.16A		0	29A	61	4	6
0.6 - 0.75								0	31A	59	4	6
0.75 - 0.9								0	31A	59	4	6
0.9 - 1								0	28A	60	6	7
1 - 1.2								0	23A	60	7	9
1.2 - 1.35				0.01A		0.21A		1	26A	57	7	10
1.35 - 1.5								1	26A	57	6	11
1.5 - 1.65								1	25A	60	5	11
1.65 - 1.8								1	26A	60	6	8
1.8 - 1.95								1	23A	63	6	8
1.95 - 2.1								1	30A	58	2	7
2.1 - 2.25								2	32A	56	5	7
2.25 - 2.4								29	37A	53	5	5
2.4 - 2.55								6	44A	47	3	6
2.55 - 2.7								18	51A	42	4	4
2.7 - 2.9								37	69A	25	3	3
2.9 - 3.1								32	64A	30	3	4
3.1 - 3.3								34	85A	11	1	3

Project Name: Regional
Project Code: REG **Site ID:** T223 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

3.3 - 3.36	3	32A	57	4	7
3.36 - 3.52	4	23A	57	5	15

Depth	COLE	Gravimetric/Volumetric Water Contents							K sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar		
m				g/g - m3/m3					mm/h	mm/h
0 - 0.1										
0.1 - 0.2										
0.2 - 0.3										
0.3 - 0.45										
0.45 - 0.6										
0.6 - 0.75										
0.75 - 0.9										
0.9 - 1										
1 - 1.2										
1.2 - 1.35										
1.35 - 1.5										
1.5 - 1.65										
1.65 - 1.8										
1.8 - 1.95										
1.95 - 2.1										
2.1 - 2.25										
2.25 - 2.4										
2.4 - 2.55										
2.55 - 2.7										
2.7 - 2.9										
2.9 - 3.1										
3.1 - 3.3										
3.3 - 3.36										
3.36 - 3.52										

Project Name: **Regional**
Project Code: **REG** **Site ID:** **T223** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (QLD)**

Laboratory Analyses Completed for this profile

10A1	Total sulfur - X-ray fluorescence
13C1_FE	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
15A2_CEC	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15E1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble
15E1_K	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_MG	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no 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
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A1	Total phosphorus - X-ray fluorescence
9G_BSES	Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)
MIN_EC	Exchange Capacity - Minerology
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 (%)
XRD_C_Hm	Hematite - X-Ray Diffraction
XRD_C_Il	Illite - X-Ray Diffraction
XRD_C_K2O	K2O - X-Ray Diffraction or Clay Fraction (air dry)
XRD_C_Ka	Kaolin - X-Ray Diffraction
XRD_C_Qz	Quartz - X-Ray Diffraction