Project Name: Regional

Project Code: REG Site ID: T231 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

Site Information

R.J. Coventry Locality: 8.7km east of Torrens Creek.

Desc. By: Date Desc.: Elevation: 06/12/77 No Data Sheet No.: 7956 1:100000 Map Ref.: Rainfall: 600 Northing/Long.: 145.10694444444 Runoff: No Data No Data Easting/Lat.: -20.75 Drainage:

Geology

ExposureType: No Data Conf. Sub. is Parent. Mat.: No Data Geol. Ref.: Substrate Material: Sandstone No Data

Land Form

Rel/Slope Class: Gently undulating rises 9-30m Pattern Type: Plain

1-3%

Crest Morph. Type: Relief: 20 metres Slope Category: Gently inclined Elem. Type: Hillslope Slope: 0 % Aspect: No Data

Surface Soil Condition (dry): N/A

Erosion:

Soil Classification

Australian Soil Classification: Mapping Unit: N/A Uc5.22 Basic Regolithic Orthic Tenosol **Principal Profile Form: ASC Confidence: Great Soil Group:** Earthy sand

All necessary analytical data are available.

Site Disturbance:

Vegetation:

Surface Coarse Fragments:

<u>Profil</u>	e Morphology	
A11	0 - 0.1 m	Dark reddish brown (5YR3/3-Moist); ; Loamy sand; Massive grade of structure; Earthy fabric; Gradual change to -
A12	0.1 - 0.2 m	Dark red (2.5YR3/6-Moist); ; Loamy sand (Light); Massive grade of structure; Earthy fabric; Diffuse change to -
А3	0.2 - 0.3 m	Dark red (10R3/6-Moist); ; Loamy sand; Massive grade of structure; Earthy fabric; Diffuse change to -
А3	0.3 - 0.45 m	Dark red (10R3/6-Moist); ; Loamy sand; Massive grade of structure; Earthy fabric; Diffuse change to -
B1	0.45 - 0.6 m	Red (10R4/7-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; Diffuse change to -
B21	0.6 - 0.75 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -
B21	0.75 - 0.9 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -
B21	0.9 - 1.05 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -
B21	1.05 - 1.2 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -
B21	1.2 - 1.35 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -
B21	1.35 - 1.6 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -
B21	1.6 - 1.7 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -
B21	1.7 - 1.8 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -

Project Code: RE	gional :G Site ID: T231 Observation ID: 1 :IRO Division of Soils (QLD)							
B21 1.8 - 1.95 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -							
B21 1.95 - 2.1 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Diffuse change to -							
B22 2.1 - 2.25 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Concretions; Clear change to -							
B22 2.25 - 2.4 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Concretions; Clear change to -							
B22 2.4 - 2.55 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Concretions; Clear change to -							
B22 2.55 - 2.7 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Concretions; Clear change to -							
C 2.7 - 2.8 m	Red (10R4/8-Moist); , 5YR58; , 2.5Y76; Sand; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments;							
C 2.7 - 2.9 m	Red (10R4/8-Moist); ; Sand; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments;							
Morphological Notes Observation Notes								

Observation Notes Site Notes
TORRENS CREEK

Regional REG Site ID: T231 CSIRO Division of Soils (QLD) Observation ID: 1

Project Name: Project Code: Agency Name:

Laboratory											
Depth	рН	1:5 EC		hangeable			Exchangeable	CEC	EC	EC	ESP
m		dS/m	Ca	Mg	K	Na Cmol (+	Acidity -)/kg				%
0 - 0.1	6.2A	0.009A	1.88H	0.56	0.1	0.02	0.22F	2.05A 2.9C		8F	0.98 0.69
0.1 - 0.2	6.5A	0.01A									
0.2 - 0.3	6.4A		0.61H	0.51	0.07	0.02	0.18F	1.694	1.	4F	1.18
0.3 - 0.45	6A	0.008A									
0.45 - 0.6	6A	0.008A		0.54	0.00	0.00	0.005	4 4 4		4 =	4 40
0.6 - 0.75	5.8A		0.09H	0.54	0.08	0.02	0.39F	1.4A 1C	1.	1F	1.43 2.00
0.75 - 0.9 0.9 - 1.05	5.5A 5.2A	0.01A 0.01A									
1.05 - 1.2	5.7A	0.00A									
1.2 - 1.35	5.7A		<0.02H	0.79	0.04	0.02	0.26F	1.25A 1.1C	1.	1F	1.60 1.82
1.35 - 1.6	6A	0.004A									
1.6 - 1.7	6A	0.007A									
1.7 - 1.8	6A	0.007A									
1.8 - 1.95	6.2A		<0.02H	0.88	0.04	0.02	0.28F	1.45A 0.9C		2F	1.38 2.22
1.95 - 2.1	6.2A	0.005A									
2.1 - 2.25		0.005A									
2.25 - 2.4		0.004A					=			. –	
2.4 - 2.55	5.6A		<0.02H	0.92	0.04	0.02	0.12F	1.24A 1C	1.	1F	1.61 2.00
2.55 - 2.7	6 1 1	0.005A									
2.7 - 2.8	6.1A										
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Tota K	I Bulk Density	Par GV	ticle Siz	•	is Clay
m	%	%	mg/kg	%	%	%	Mg/m3		9	o o	-
0 - 0.1 0.1 - 0.2		0.45D 0.29D	5B 9B	0.006	A 0.01 0.01	16A 0.0 16A	5A	1 2	45A 59A	42 3 30 2	
0.2 - 0.3 0.3 - 0.45		0.2D	3B	0.004	A 0.01	19A 0.0	14A	2	53A	34 2	
0.45 - 0.6				0.005		0.0	- 4	2	49A	37 2	
0.6 - 0.75				0.005	4	0.0	5A	2	43A	40 3	
0.75 - 0.9								2	43A	39 3 42 3	
0.9 - 1.05 1.05 - 1.2				0.005/	٨	0.0	14.Λ	2 3	40A 39A	42 3 43 3	
1.05 - 1.2				0.005	٦.	0.0	14A	3	39A 40A	43 3	
1.35 - 1.6								5 5	40A 42A	42 2	
1.6 - 1.7								9	37A	49 3	
1.7 - 1.8								9	49A	36 3	_
1.8 - 1.95								17	40A	42 2	
1.95 - 2.1								27	39A	45 3	
2.1 - 2.25								42	38A	44 3	
2.25 - 2.4								40	46A	37 3	
2.4 - 2.55								26	75A	14 2	
2.55 - 2.7								33	53A	35 3	
2.7 - 2.8								0	35A	57 4	
Depth	COLE		Grav	vimetric/Vo	olumetric V	Vater Con	ntents		K sat	K uns	at

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0.05 Bar 0.1 Bar 0.5 Bar 1 Bar g/g - m3/m3 Sat. 5 Bar 15 Bar m mm/h

mm/h

0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.45 0.45 - 0.6 0.45 - 0.6 0.6 - 0.75 0.75 - 0.9 0.9 - 1.05 1.05 - 1.2 1.2 - 1.35 1.2 - 1.35 1.35 - 1.6 1.6 - 1.7 1.7 - 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 - 2.8 **Project Name:** Regional

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Laboratory Analyses Completed for this profile

10A1 Total sulfur - X-ray fluorescence

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

15A2_CEC 15D1_CEC Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach

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

Effective CEC 15J1

17A1 Total potassium - X-ray fluorescence

3A1 EC of 1:5 soil/water extract pH of 1:5 soil/water suspension 4A1

6A1_UC Organic carbon (%) - Uncorrected Walkley and Black method 7A2 Total nitrogen - semimicro Kjeldahl, automated colour

9A1

Total phosphorus - X-ray fluorescence Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES) 9G_BSES

P10_CF_C Clay (%) - Coventry and Fett pipette method

P10_CF_CS P10_CF_FS P10_CF_Z Coarse sand (%) - Coventry and Fett pipette method Fine sand (%) - Coventry and Fett pipette method Silt (%) - Coventry and Fett pipette method

P10_GRAV Gravel (%)