Project Name: **Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD**
Project Code: **DLR** **Site ID:** **T517** **Observation ID:** **1**
Agency Name: **QLD Department of Primary Industries**

Site Information

Desc. By: M.G. Cannon
Date Desc.: 05/12/91
Map Ref.: Sheet No. : 8157 GPS
Northing/Long.: 7776547 AMG zone: 55
Easting/Lat.: 440645 Datum: AGD66
Locality:
Elevation: 282 metres
Rainfall: No Data
Runoff: Slow
Drainage: Moderately well drained

Geology

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

Land Form

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

Surface Soil Condition (dry): Soft

Erosion:

Soil Classification

Australian Soil Classification:
Haplic Eutrophic Grey Dermosol Thick Non-gravelly Loamy Clayey Very deep
Mapping Unit: N/A
Principal Profile Form: Gn3.92
ASC Confidence:
All necessary analytical data are available.
Great Soil Group: No suitable

Site Disturbance: No effective disturbance other than grazing by hoofed animals

Vegetation: Low Strata - Tussock grass, <0.25m, Mid-dense. *Species includes - Bothriochloa bladhii, Urochloa pullans, Cyperus

Mid Strata - Tree, 1.01-3m, Sparse. *Species includes - Eucalyptus tessellaris, Ziziphus mauritiana

Tall Strata - Tree, 6.01-12m, Sparse. *Species includes - Eucalyptus tessellaris

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1	0 - 0.1 m	Brownish yellow (10YR6/6-Moist); ; Clayey fine sand; Weak grade of structure, 10-20 mm, Platy; Earthy fabric; Moderately moist; Very weak consistence; , Calcareous, , ; , Gypseous, , ; Field pH 8.5 (Raupach, 0.05); Few, fine (1-2mm) roots; Abrupt change to -
2A11b	0.1 - 0.3 m	Dark brown (10YR3/3-Moist); ; Loamy fine sand; Massive grade of structure, Prismatic; Earthy fabric; Dry; Very weak consistence; , Calcareous, , ; , Gypseous, , ; Field pH 6.5 (Raupach, 0.2); Few, fine (1-2mm) roots; Diffuse change to -
2A12b	0.3 - 0.5 m	Very dark grey (10YR3/1-Moist); ; Fine sandy loam; Moderate grade of structure, 20-50 mm, Prismatic; Moderate grade of structure, 10-20 mm, Subangular blocky; Earthy fabric; Dry; Weak consistence; , Calcareous, , ; , Gypseous, , ; Field pH 7 (Raupach, 0.4); Few, fine (1-2mm) roots; Diffuse change to -
2A3b	0.5 - 0.75 m	Very dark greyish brown (10YR3/2-Moist); ; Silty clay loam (Light); Weak grade of structure, 20-50 mm, Prismatic; Weak grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Dry; Very firm consistence; , Calcareous, , ; , Gypseous, , ; Field pH 7 (Raupach, 0.6); Few, very fine (0-1mm) roots; Diffuse, Wavy change to -
2B1eb	0.75 - 1 m	Greyish brown (10YR5/2-Moist); ; Fine sandy clay loam (Light); Moderate grade of structure, 10-20 mm, Prismatic; Moderate grade of structure, 5-10 mm, Subangular blocky; Rough-ped fabric; Dry; Very firm consistence; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Soft segregations; , Calcareous, , ; , Gypseous, , ; Field pH 7.5 (Raupach, 0.8); Few, very fine (0-1mm) roots; Diffuse change to -
2B21b	1 - 1.3 m	Grey (10YR5/1-Moist); ; Silty medium clay; Strong grade of structure, 20-50 mm, Prismatic; Strong grade of structure, 10-20 mm, Prismatic; Smooth-ped fabric; Dry; Very firm consistence; Few (2 - 10 %), Ferromanganiferous, Fine (0 - 2 mm), Soft segregations; , Calcareous, , ; , Gypseous, , ; Field pH 7.5 (Raupach, 1.2); Few, very fine (0-1mm) roots; Diffuse change to -
2B22b	1.3 - 1.6 m	Dark greyish brown (2.5Y4/2-Moist); ; Silty medium clay; Strong grade of structure, 20-50 mm, Prismatic; Strong grade of structure, 10-20 mm, Prismatic; Smooth-ped fabric; Dry; Very strong consistence; Few (2 - 10 %), Ferromanganiferous, Fine (0 - 2 mm), Soft segregations; , Calcareous, , ; , Gypseous, , ; Field pH 8 (Raupach, 1.5); Diffuse change to -

Project Name: **Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD**
Project Code: **DLR** **Site ID:** **T517** **Observation ID:** **1**
Agency Name: **QLD Department of Primary Industries**

2B23b	1.6 - 1.9 m	Dark grey (2.5Y4/1-Moist); ; Silty medium clay; Strong grade of structure, 20-50 mm, Prismatic; Strong grade of structure, 10-20 mm, Prismatic; Smooth-ped fabric; Common cutans, 10-50% of ped faces or walls coated, distinct; , Calcareous, , ; , Gypseous, , ; Field pH 8 (Raupach, 1.7); Diffuse change to -

Morphological Notes

Observation Notes

DLR1023

Site Notes

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD
Project Code: DLR **Site ID:** T517 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable	CEC	ECEC	ESP
			Ca	Mg	K	Na	Acidity			
m		dS/m	Cmol (+)/kg							%
0 - 0.1	7.25A	0.05A	6.2B	4.1	0.56	0.19		7.2I		2.64
			5.65J	3.39	0.19	0.05				0.69
0.1 - 0.3	6.69A	0.04A	4.3J	1.94	0.44	0.02		5I		0.40
0.3 - 0.5	6.86A	0.03A	4.5B	2.4	1.3	0.25				
0.5 - 0.75	6.89A	0.02A	7.6B	3.2	1	0.18		9.4I		1.91
			7.34J	2.47	0.35	0.02				0.21
0.75 - 1	7.49A	0.02A								
1 - 1.3	7.57A	0.02A	10.1J	5.58	0.34	0.06		15.6D		0.38
								18I		0.33
1.3 - 1.6	7.79A	0.02A								
1.6 - 1.9	8.2A	0.03A	12.7J	7.01	0.3	0.14		21.5I		0.65

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		0.7B		0.04A	0.03A	1.41A			1A	82	7	10
0.1 - 0.3		0.8B							25A	60	6	9
0.3 - 0.5												
0.5 - 0.75				0.052A		1.61A			17A	52	14	17
0.75 - 1												
1 - 1.3									3A	51	17	29
1.3 - 1.6												
1.6 - 1.9									2A	45	19	34

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 - 0.3									
0.3 - 0.5									
0.5 - 0.75									
0.75 - 1									
1 - 1.3									
1.3 - 1.6									
1.6 - 1.9									

Project Name: **Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD**
Project Code: **DLR** **Site ID:** **T517** **Observation ID:** **1**
Agency Name: **QLD Department of Primary Industries**

Laboratory Analyses Completed for this profile

10A1	Total sulfur - X-ray fluorescence
10B	Extractable sulfur(mg/kg) - Phosphate extractable sulfur
12A1_CU	DTPA - extractable copper, zinc, manganese and iron
12A1_FE	DTPA - extractable copper, zinc, manganese and iron
12A1_MN	DTPA - extractable copper, zinc, manganese and iron
12A1_ZN	DTPA - extractable copper, zinc, manganese and iron
13A1_FE	Oxalate-extractable iron
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
15D2_CEC	CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; automatic extractor
15F1_CA	Exchangeable bases by 0.01M silver-thiourea (AgTU)+, no pretreatment for soluble salts
15F1_K	Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts
15F1_MG	Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts
15F1_NA	Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts
15F3	CEC by 0.01M silver-thiourea (AgTU)+
15N1	Exchangeable sodium percentage (ESP)
17A1	Total potassium - X-ray fluorescence
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
6B2	Total organic carbon - high frequency induction furnace, volumetric
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A1	Total phosphorus - X-ray fluorescence
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