Project Name: **Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD**
Project Code: **DLR** **Site ID:** **T525** **Observation ID:** **1**
Agency Name: **QLD Department of Primary Industries**

Site Information

Desc. By: M.G. Cannon
Date Desc.: 10/12/91
Map Ref.: Sheet No. : 8257 GPS
Northing/Long.: 7759192 AMG zone: 55
Easting/Lat.: 469684 Datum: AGD66
Locality:
Elevation: 230 metres
Rainfall: No Data
Runoff: Slow
Drainage: Imperfectly drained

Geology

ExposureType: No Data
Geol. Ref.: O-Dr
Conf. Sub. is Parent. Mat.: No Data
Substrate Material: Undisturbed soil core, 0.7 m deep,Granite

Land Form

Rel/Slope Class: Undulating low hills 30-90m 3-10%
Morph. Type: Upper-slope
Elem. Type: Hillslope
Slope: 5 %
Pattern Type: Low hills
Relief: No Data
Slope Category: Gently inclined
Aspect: 300 degrees

Surface Soil Condition (dry): Soft

Erosion: 2 m2 m;2 m,10 m;

Soil Classification

Australian Soil Classification:
Haplic Lithocalcic Brown Chromosol Thick Moderately gravelly Sandy Clayey Moderately deep
Mapping Unit: N/A
Principal Profile Form: Db3.63
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, 0.26-0.5m, Sparse. *Species includes - Bothriochloa pertusa, Heteropogon contortus,

Aristida species Mid Strata - , , . *Species includes - None recorded

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

Surface Coarse Fragments: 20-50%, fine gravelly, 2-6mm, angular, Quartz

Profile Morphology

A11	0 - 0.06 m	Dark brown (10YR3/3-Moist); ; Loamy coarse sand; Massive grade of structure; Earthy fabric; Dry; Weak consistence; , Calcareous, , ; , Gypseous, , ; Field pH 7 (Raupach, 0.05); Few, very fine (0-1mm) roots; Clear, Wavy change to -
A12	0.06 - 0.16 m	Dark greyish brown (10YR4/2-Moist); ; Coarse sandy loam (Light); Massive grade of structure; Earthy fabric; Dry; Weak consistence; , Calcareous, , ; , Gypseous, , ; Field pH 7.5 (Raupach, 0.1); Few, very fine (0-1mm) roots; Gradual, Wavy change to -
A2	0.16 - 0.33 m	Yellowish brown (10YR5/4-Moist); ; Coarse sandy loam (Heavy); Massive grade of structure; Earthy fabric; Dry; Weak consistence; 2-10%, fine gravelly, 2-6mm, angular, dispersed, Granite, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 7.5 (Raupach, 0.2); Few, very fine (0-1mm) roots; Clear, Wavy change to -
B2	0.33 - 0.46 m	Brown (7.5YR4/4-Moist); ; Medium clay; Massive grade of structure; Earthy fabric; Dry; Very firm consistence; 2-10%, fine gravelly, 2-6mm, angular, dispersed, Granite, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 8 (Raupach, 0.4); Few, coarse (>5mm) roots; Diffuse, Wavy change to -
BC	0.46 - 0.66 m	Brown (7.5YR4/4-Moist); ; Medium clay; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Dry; Firm consistence; 10-20%, fine gravelly, 2-6mm, angular, dispersed, Granite, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 8 (Raupach, 0.6); Clear, Wavy change to -
BC	0.66 - 0.77 m	; Earthy fabric; Dry; 50-90%, fine gravelly, 2-6mm, angular, dispersed, Granite, coarse fragments; Very many (50 - 100 %), Calcareous, Extremely coarse (> 60 mm), Concretions; , Gypseous, , ; Calcrete, Moderately cemented, Continuous, Platy; Field pH 9.5 (Raupach, 0.7); Clear, Wavy change to -
C	0.77 - 1 m	; Earthy fabric; Dry; 20-50%, fine gravelly, 2-6mm, angular, dispersed, Granite, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 9.5 (Raupach, 0.9);

Morphological Notes

Observation Notes

Project Name: **Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD**
Project Code: **DLR** **Site ID:** **T525** **Observation ID:** **1**
Agency Name: **QLD Department of Primary Industries**

DLR1031

Site Notes

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD
Project Code: DLR **Site ID:** T525 **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 - 0.06	6.52A	0.04A	3.9B	1.3	0.76	0.24		6I		4.00
			3.98J	0.97	0.49	0.02				0.33
0.06 - 0.16	6.63A	0.03A	3.56J	1.03	0.37	0.02		5.9I		0.34
0.16 - 0.33	6.6A	0.03A								
0.33 - 0.46	7.47A	0.03A	11.4J	3.47	0.11	0.02		13.2D		0.15
								15.9I		0.13
0.46 - 0.66	8.31A	0.07A	19B	4.4	0.5	0.24				
0.66 - 0.77	8.79A	0.09A								
0.77 - 1	9.07A	0.05A	11.3J	1.17	0.11	0.02		9.9I		0.20

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 - 0.06		0.8B		0.03A	0.02A	2.16A			54A	28	9	9
0.06 - 0.16		0.5B							56A	26	10	8
0.16 - 0.33												
0.33 - 0.46									45A	20	11	23
0.46 - 0.66												
0.66 - 0.77												
0.77 - 1									71A	11	9	9

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 - 0.06									
0.06 - 0.16									
0.16 - 0.33									
0.33 - 0.46									
0.46 - 0.66									
0.66 - 0.77									
0.77 - 1									

Project Name: **Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD**
Project Code: **DLR** **Site ID:** **T525** **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
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