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

Site Information

Desc. By: M. DeCorte
Date Desc.: 17/04/90
Map Ref.: Sheet No. : 8158 GPS
Northing/Long.: 7817576 AMG zone: 55
Easting/Lat.: 429995 Datum: AGD66
Locality:
Elevation: 320 metres
Rainfall: No Data
Runoff: Slow
Drainage: Moderately well drained

Geology

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

Land Form

Rel/Slope Class: Level plain <9m <1%
Morph. Type: Flat
Elem. Type: Plain
Slope: 1 %
Pattern Type: Rises
Relief: No Data
Slope Category: Level
Aspect: 180 degrees

Surface Soil Condition (dry): Cracking, Self-mulching

Erosion:

Soil Classification

Australian Soil Classification:
Epicalcareous-Epihypersodic Self-Mulching Grey Vertosol Non-gravelly Clayey Medium Clayey Moderately deep

Mapping Unit: N/A
Principal Profile Form: Ug5.23

ASC Confidence:
Analytical data are incomplete but reasonable confidence.

Great Soil Group: Grey clay

Site Disturbance: Limited clearing, for example selective logging

Vegetation:
Low Strata - , , . *Species includes - Bothriochloa pertusa, Cenchrus ciliaris
Mid Strata - , , . *Species includes - Melaleuca bracteata, Acacia farnesiana
Tall Strata - Tree, 3.01-6m, Very sparse. *Species includes - Eucalyptus erythrophloia

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1	0 - 0.15 m	Very dark brown (10YR2/2-Moist); ; Light medium clay; Weak grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Very firm consistence; 0-2%, coarse gravelly, 20-60mm, subrounded, dispersed, Quartz, coarse fragments; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; , Gypseous, , ; Soil matrix is Very highly calcareous; Field pH 9.5 (Raupach, 0.02); Many, fine (1-2mm) roots; Gradual, Smooth change to -
B2	0.15 - 0.32 m	Very dark brown (10YR2/3-Moist); ; Medium clay; Moderate grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Very firm consistence; Few (2 - 10 %), Calcareous, Medium (2 -6 mm), Soft segregations; , Gypseous, , ; Soil matrix is Very highly calcareous; Field pH 9.5 (Raupach, 0.2); Many, fine (1-2mm) roots; Clear, Smooth change to -
B3k	0.32 - 0.52 m	Greyish brown (10YR5/2-Moist); ; Medium heavy clay; Weak grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Strong consistence; Many (20 - 50 %), Calcareous, Coarse (6 - 20 mm), Soft segregations; , Gypseous, , ; Soil matrix is Very highly calcareous; Field pH 9.5 (Raupach, 0.35); Many, fine (1-2mm) roots; Clear, Smooth change to -
BC	0.52 - 0.8 m	Pale brown (10YR6/3-Moist); Mottles, 5YR33, 10-20% , 5-15mm, Prominent; Mottles, 10-20% ; Sandy light clay; Massive grade of structure; Earthy fabric; Moist; Very firm consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Soft segregations; , Gypseous, , ; Soil matrix is Slightly calcareous; Field pH 9.5 (Raupach, 0.77); Abrupt, Smooth change to -
C	0.8 - 1 m	White (10YR8/1-Moist); ; Massive grade of structure; Earthy fabric; Moist; Firm consistence; Very many (50 - 100 %), Calcareous, Extremely coarse (> 60 mm), Soft segregations; , Gypseous, , ; Soil matrix is Very highly calcareous;

Morphological Notes

Observation Notes

Site Notes

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

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 - 0.15	1.1A		52B	3.1	0.35	1.1		51B		2.16
			50E	3	0.4	1.4				2.75
0.32 - 0.52	9.3A		22E	2.1	0.11	6.4		30B		21.33
			29.4J	6.6	0	6.1		36.9I		17.34
										20.33
										16.53

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 - 0.15												
0.32 - 0.52												

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 - 0.15									
0.32 - 0.52									

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

Laboratory Analyses Completed for this profile

10B	Extractable sulfur(mg/kg) - Phosphate extractable sulfur
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
15C1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_CEC	CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_K	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_MG	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_NA	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
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)
4A1	pH of 1:5 soil/water suspension