Project Name: **Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD**
Project Code: **DLR** **Site ID:** **1606** **Observation ID:** **1**
Agency Name: **QLD Department of Primary Industries**

Site Information

Desc. By:	Rogers, Gary	**Locality:**	
Date Desc.:	02/02/93	**Elevation:**	No Data
Map Ref.:	Sheet No. : 8058 GPS	**Rainfall:**	No Data
Northing/Long.:	7791056 AMG zone: 55	**Runoff:**	Moderately rapid
Easting/Lat.:	359333 Datum: AGD66	**Drainage:**	Well drained

Geology

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

Land Form

Rel/Slope Class:	Gently undulating plains <9m 1-3%	**Pattern Type:**	Plain
Morph. Type:	Flat	**Relief:**	No Data
Elem. Type:	Plain	**Slope Category:**	Very gently sloped
Slope:	2 %	**Aspect:**	No Data

Surface Soil Condition (dry): Hardsetting

Erosion:

Soil Classification

Australian Soil Classification:
Ferric Mesotrophic Yellow Kandosol Medium Non-gravelly Sandy Loamy Shallow

Mapping Unit: N/A
Principal Profile Form: Gn2.82

ASC Confidence:
All necessary analytical data are available.

Great Soil Group: Grey earth

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

Vegetation: Low Strata - Tussock grass, 0.26-0.5m, Sparse. *Species includes - Chrysopogon fallax, Phynchelytrum repens, Themeda triandra Mid Strata - Tree, 1.01-3m, Sparse. *Species includes - Eucalyptus crebra, Petalostigma pubescens

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

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A11	0 - 0.07 m	Very dark greyish brown (10YR3/2-Moist); ; Sandy loam (Light); Massive grade of structure; Earthy fabric; Dry; Weak consistence; 0-2%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Few (2 - 10 %), Ferromanganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , ; , Gypseous, , ; Field pH 6 (Raupach, 0.05); Common, fine (1-2mm) roots; Clear change to -
A12	0.07 - 0.2 m	Dark greyish brown (10YR4/2-Moist); ; Clayey sand; Massive grade of structure; Earthy fabric; Dry; Weak consistence; 0-2%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Common (10 - 20 %), Ferromanganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , ; , Gypseous, , ; Field pH 6 (Raupach, 0.15); Common, fine (1-2mm) roots; Gradual change to -
B1	0.2 - 0.35 m	Brown (10YR5/3-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; Dry; Weak consistence; 0-2%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Many (20 - 50 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules; , Calcareous, , ; , Gypseous, , ; Field pH 6 (Raupach, 0.3); Few, fine (1-2mm) roots; Gradual change to -
B2	0.35 - 0.45 m	Light yellowish brown (10YR6/4-Moist); ; Sandy clay loam; Massive grade of structure; Earthy fabric; Dry; Weak consistence; 0-2%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Very many (50 - 100 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules; , Calcareous, , ; , Gypseous, , ; Field pH 6 (Raupach, 0.4); Few, very fine (0-1mm) roots;

Morphological Notes

Observation Notes

Site Notes

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Project Code: DLR **Site ID:** 1606 **Observation ID:** 1
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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 - 0.07	6.6A	0.04A	2.5B	0.65	0.25	0.04				
0.07 - 0.2	5.2C 6.7A	0.03A								
0.2 - 0.35	5.2C 6.2A	0.02A	1.4B	0.51	0.12	0.04				
0.35 - 0.45	5.3C 6.4A	0.02A								

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 - 0.07		0.7A		0.02A	0.03A	0.21A			53A	32	6	9
0.07 - 0.2												
0.2 - 0.35				0.015A		0.21A			47A	33	4	16
0.35 - 0.45												

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 - 0.07									
0.07 - 0.2									
0.2 - 0.35									
0.35 - 0.45									

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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
17A1	Total potassium - X-ray fluorescence
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
4B2	pH of 1:5 soil/0.01M calcium chloride extract - following Method 4A1
5A1	Chloride - 1:5 soil/water extract, potentiometric titration
6A1	Organic carbon - Walkley and Black
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