Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD

Project Code: DLR Site ID: T580 Observation ID: 1

Agency Name: QLD Department of Primary Industries

Site Information

Desc. By: M.G. Cannon Locality:

Date Desc.: Elevation: 18/08/93 No Data Map Ref.: Sheet No.: 7958 GPS Rainfall: No Data Northing/Long.: 7805450 AMG zone: 55 Runoff: No Data 311033 Datum: AGD66 Easting/Lat.: Drainage: No Data

<u>Geology</u>

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- Pattern Type: Plain

3%

Morph. Type:FlatRelief:No DataElem. Type:PlainSlope Category:LevelSlope:1 %Aspect:No Data

Surface Soil Condition (dry): Hardsetting, Surface crust

Erosion:

Soil Classification

Australian Soil Classification:Mapping Unit:N/AManganic Eutrophic Brown Ferrosol Thick Non-gravelly Clay-Principal Profile Form:Gn3.22

loamy Clayey Moderately deep

ASC Confidence: Great Soil Group: Xanthozem

Analytical data are incomplete but reasonable confidence.

<u>Site Disturbance:</u> No effective disturbance other than grazing by hoofed animals

Vegetation: Low Strata - Tussock grass, 0.26-0.5m, Very sparse. *Species includes - Unknown species, Unknown species,

Unknown species Mid Strata - Tree, 3.01-6m, Sparse. *Species includes - Eucalyptus crebra

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

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A11 0 - 0.01 m Very dark brown (10YR2/2-Moist); ; Clay loam; Weak grade of structure, <2 mm, Platy; Weak grade of structure, <2 mm, Lenticular; Dry; Weak consistence; , Calcareous, , ; , Gypseous, , ;

Field pH 6.5 (Raupach, 0); Clear change to -

A12 0.01 - 0.17 m Dark brown (7.5YR3/3-Moist); ; Clay loam; Massive grade of structure; Moderate grade of

structure, <2 mm, Polyhedral; Dry; Weak consistence; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , ; , Gypseous, , ; Field pH 5.8 (Raupach, 0.1); Gradual

change to -

A3 0.17 - 0.31 m Dark reddish brown (5YR3/4-Moist); ; Clay loam (Heavy); Moderate grade of structure, 10-20

mm, Subangular blocky; Moderate grade of structure, <2 mm, Polyhedral; Dry; Weak consistence; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , ; ,

Gypseous, , ; Field pH 6 (Raupach, 0.25); Gradual change to -

B1 0.31 - 0.55 m Brown (7.5YR4/4-Moist); ; Light clay; Strong grade of structure, 10-20 mm, Subangular blocky;

Strong grade of structure, 2-5 mm, Polyhedral; Dry; Weak consistence; Common (10 - 20 %), Manganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , ; , Gypseous, , ; Field pH 6.5

(Raupach, 0.5); Gradual change to -

B2c 0.55 - 0.86 m Yellowish brown (10YR5/8-Moist); ; Light medium clay; Strong grade of structure, 5-10 mm,

Polyhedral; Strong grade of structure, 2-5 mm, Polyhedral; Dry; Weak consistence; Many (20 - 50 %), Manganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , ; , Gypseous, , ; Field pH 7

(Raupach, 0.7);

Morphological Notes

Observation Notes

Site Notes

Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD DLR Site ID: T580 Observation ID: 1 QLD Department of Primary Industries

Project Name: Project Code: Agency Name:

Laboratory Test Results:

Laboratory rest results.												
Depth	pН	1:5 EC		hangeable Vig	e Cations K	E Na	xchangeable Acidity	CEC		ECEC		ESP
m		dS/m				Cmol (+)	/kg					%
0 - 0.01	5.2C 6.6A	0.06A	11B	3.7	1.4	0.06						
0.01 - 0.17	5.4C 6.6A	0.06A	9.1B	3	1.4	0.05						
0.17 - 0.31	5.3C 6.6A	0.05A										
0.31 - 0.55	5.6C 6.6A	0.04A										
0.55 - 0.85	6C 6.8A	0.03A	6.1B	2.6	0.83							
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Pa GV	rticle CS	Size FS	Analysi Silt	s Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.01		1.7A		0.324		0.42/			25A	16	23	36
0.01 - 0.17 0.17 - 0.31 0.31 - 0.55		0.65A		0.289	4	0.4A	\		22A	15	20	43
0.55 - 0.85		0.21A							21A	7	11	62
Depth	COLE		Gravimetric/Volumetric Water Contents K sat K unsat									ıt
m		Sat.	0.05 Bar	0.1 Bar g	0.5 Bar /g - m3/m	1 Bar 3	5 Bar 15	Bar	mm/	/h	mm/h	
0 - 0.01												

^{0.01 - 0.17} 0.17 - 0.31 0.31 - 0.55 0.55 - 0.85

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Agency Name: **QLD Department of Primary Industries**

Laboratory Analyses Completed for this profile

10A1 Total sulfur - X-ray fluorescence Extractable sulfur(mg/kg) - Phosphate extractable sulfur 10B 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 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

17A1 Total potassium - X-ray fluorescence 3A1 EC of 1:5 soil/water extract pH of 1:5 soil/water suspension 4A1

pH of 1:5 soil/0.01M calcium chloride extract - following Method 4A1 4B2

5A1 Chloride - 1:5 soil/water extract, potentiometric titration 6A1

Organic carbon - Walkley and Black Total phosphorus - X-ray fluorescence 9A1 P10_CF_C Clay (%) - Coventry and Fett pipette method P10_CF_CS P10_CF_FS Coarse sand (%) - Coventry and Fett pipette method Fine sand (%) - Coventry and Fett pipette method

P10_CF_Z Silt (%) - Coventry and Fett pipette method