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

Project Code: DLR Site ID: T508 Observation ID: 1

Agency Name: QLD Department of Primary Industries

Site Information

Desc. By: M.G. Cannon Locality:

Date Desc.: Elevation: 04/12/91 221 metres Map Ref.: Sheet No.: 8257 GPS Rainfall: No Data Northing/Long.: 7745384 AMG zone: 55 Runoff: Slow 491276 Datum: AGD66 Well drained Easting/Lat.: Drainage:

Geology

ExposureType: No Data Conf. Sub. is Parent. Mat.: No Data

Geol. Ref.: Odr Substrate Material: Undisturbed soil core, No Data

Land Form

Rel/Slope Class: Gently undulating plains <9m 1- Pattern Type: Rises

3%

 Morph. Type:
 Flat
 Relief:
 No Data

 Elem. Type:
 Plain
 Slope Category:
 Level

 Slope:
 1 %
 Aspect:
 160 degrees

Surface Soil Condition (dry): Soft

Erosion: 1 m,20 m; Soil Classification

Australian Soil Classification:Mapping Unit:N/ABasic Paralithic Orthic Tenosol Medium Non-gravelly SandyPrincipal Profile Form:Uc5.11

Sandy Moderately deep

ASC Confidence: Great Soil Group: Earthy sand

All necessary analytical data are available.

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

Vegetation: Low Strata - Tussock grass, <0.25m, Sparse. *Species includes - Heteropogon contortus, Aristida species,

Cyperus

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

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

Eucalyptus brownii

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A11 0 - 0.06 m Dark brown (10YR3/3-Moist); ; Loamy sand; Massive grade of structure; Sandy (grains prominent) fabric; Moderately moist; Loose consistence; 2-10%, fine gravelly, 2-6mm,

subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 6.5

(Raupach, 0.05); Few, fine (1-2mm) roots; Clear, Smooth change to -

A12 0.06 - 0.18 m Brown (10YR4/3-Moist);; Loamy coarse sand; Massive grade of structure; Earthy fabric;

Moderately moist; Very weak consistence; 2-10%, fine gravelly, 2-6mm, subrounded,

dispersed, Quartz, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 6.5 (Raupach,

0.1); Few, fine (1-2mm) roots; Gradual, Wavy change to -

B1 0.18 - 0.47 m Strong brown (7.5YR4/6-Moist); Coarse sand; Massive grade of structure; Earthy fabric; Dry;

Very weak consistence; 2-10%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 6.5 (Raupach, 0.4); Few, fine (1-2mm)

roots; Diffuse, Wavy change to -

B2 0.47 - 0.9 m Strong brown (7.5YR5/6-Moist); ; Clayey coarse sand; Massive grade of structure; Earthy

fabric; Dry; Weak consistence; 20-50%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 7 (Raupach, 0.7); Few, fine (1-2mm)

Morphological Notes

Observation Notes

SURFACE HORIZON WATER REPELLANT./FLANNELWEEDS, CROTALARIA SPECIES. DLR 1014;

Site Notes

Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD DLR Site ID: T508 Observation ID: 1 QLD Department of Primary Industries

Project Name: Project Code: Agency Name:

Laboratory Test Results:

Laboratory Test Results.												
Depth	рН	1:5 EC		nangeable ⁄lg	Cations K	Na	Exchangeable Acidity	CEC	EC	EC	E	ESP
m		dS/m	Ou i	"9		Cmol (-					•	%
0 - 0.06	6.35A	0.15A	4.7B 3.92J	1.3 0.83	1.2 0.22	0.43 0.02		61				7.17 0.33
0.06 - 0.18 0.18 - 0.47	6.51A 6.65A	0.06A 0.01A	2.72J 1.7B	0.71 0.64	0.18 0.91	0.02 0.44		3.41				.59
0.47 - 0.9	6.34A	0.08A	1.35J	0.48	0.06	0.02		3.1D 1.6l).65 .25
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	K	Density		CS F	S	Analysis Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3		(%		
0 - 0.06 0.06 - 0.18 0.18 - 0.47		2.1B 0.7B		0.027A	0.0	9A 2.6	3A			20 21	10 11	6 7
0.47 - 0.9		0.1B							61A	25	6	8
Depth	COLE	Gravimetric/Volumetric Water Contents Sat. 0.05 Bar 0.1 Bar 0.5 Bar 1 Bar 5 Bar 15 Bar							K sat		K unsat	:
m		Jui.	o.co Bai		g - m3/m		0 Dai 10	5 4.	mm/h		mm/h	

0 - 0.06 0.06 - 0.18 0.18 - 0.47 0.47 - 0.9 **Project Name:** Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD

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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 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 15F1_MG Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts 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)+ Exchangeable sodium percentage (ESP) 15N1 17A1 Total potassium - X-ray fluorescence 3A1 EC of 1:5 soil/water extract 4A1 pH of 1:5 soil/water suspension

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

6B2 Total organic carbon - high frequency induction furnace, volumetric

Total nitrogen - semimicro Kjeldahl, automated colour 7A2

Total phosphorus - X-ray fluorescence 9A1 P10_CF_C Clay (%) - Coventry and Fett pipette method P10_CF_CS P10_CF_FS P10_CF_Z Coarse sand (%) - Coventry and Fett pipette method Fine sand (%) - Coventry and Fett pipette method

Silt (%) - Coventry and Fett pipette method