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

**Project Code:** Site ID: T522 Observation ID: 1

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

Site Information

Desc. By: M.G. Cannon Locality:

Date Desc.: Elevation: 09/12/91 386 metres Map Ref.: Sheet No.: 8157 GPS Rainfall: No Data Northing/Long.: 7749198 AMG zone: 55 Runoff: Rapid

436563 Datum: AGD66 Imperfectly drained Easting/Lat.: Drainage:

Geology

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

**Substrate Material:** Geol. Ref.: FOW Undisturbed soil core, 1.1 m deep, Rhyolite

Land Form

Rel/Slope Class: Undulating hills 90-300m 3-10% Pattern Type: Rises Morph. Type: Upper-slope Relief: No Data Elem. Type: Slope Category: Gently inclined Hillslope Aspect: 80 degrees Slope: 6 %

Surface Soil Condition (dry): Hardsetting

Erosion: 1 m,20 m; **Soil Classification** 

Australian Soil Classification: Mapping Unit: N/A Eutrophic Subnatric Brown Sodosol Medium Moderately **Principal Profile Form:** Dv2.33

gravelly Loamy Clayey Deep

**ASC Confidence:** No suitable **Great Soil Group:** 

Analytical data are incomplete but reasonable confidence.

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

**Vegetation:** Low Strata - , , . \*Species includes - Chrysopogon fallax, Bothriochloa species, Heteropogon contortus

Mid Strata - Tree, 1.01-3m, Sparse. \*Species includes - Eucalyptus brownii, Eucalyptus crebra

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

papuana

Surface Coarse Fragments: 20-50%, coarse gravelly, 20-60mm, angular tabular, Rhyolite

**Profile Morphology** 

A11 0 - 0.03 m Brown (7.5YR4/2-Moist); ; Sandy loam (Heavy); Moderate grade of structure, 2-5 mm, Platy; Earthy fabric; Dry; Very weak consistence; 20-50%, medium gravelly, 6-20mm, angular, dispersed, Quartzite, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 7 (Raupach,

0.03); Few, very fine (0-1mm) roots; Abrupt, Wavy change to -

A2j 0.03 - 0.27 m Brown (7.5YR5/4-Moist); ; Sandy loam (Heavy); Massive grade of structure; Earthy fabric; Dry;

Very weak consistence, 50-90%, medium gravelly, 6-20mm, angular, dispersed, Quartzite, coarse fragments; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , ;

, Gypseous, , ; Field pH 6.5 (Raupach, 0.1); Clear, Wavy change to -

B11 0.27 - 0.47 m

Strong brown (7.5YR5/6-Moist); ; Light medium clay; Massive grade of structure; Earthy fabric; Dry; Very weak consistence; 50-90%, medium gravelly, 6-20mm, angular, dispersed, Quartzite, coarse fragments; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , ;

, Gypseous, , ; Field pH 6.5 (Raupach, 0.4); Gradual, Wavy change to

Yellowish brown (10YR5/6-Moist); Mottles, 2.5YR48, 2-10%, 5-15mm, Distinct; Mottles, 2-10% B12 0.47 - 0.75 m

; Medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Dry; Firm consistence; 50-90%, medium gravelly, 6-20mm, angular, dispersed, Quartzite, coarse fragments; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , ; ,

Gypseous, , ; Field pH 6.5 (Raupach, 0.6); Clear, Wavy change to -

B2 0.75 - 1.05 m Yellowish brown (10YR5/8-Moist); ; Medium clay; Strong grade of structure, 50-100 mm,

Prismatic; Strong grade of structure, 10-20 mm, Subangular blocky; Smooth-ped fabric; Dry; Strong consistence; 2-10%, fine gravelly, 2-6mm, subrounded, dispersed, Quartzite, coarse fragments; Many cutans, >50% of ped faces or walls coated, distinct; Few (2 - 10 %) Manganiferous, Medium (2 -6 mm), Nodules, , Calcareous, , , , Gypseous, , ; Field pH 8.5

(Raupach, 0.85);

## **Morphological Notes**

# **Observation Notes**

B2 CLAY DOES NOT DISPERSE IN DISTILLED WATER - DISPERSED AFTER 2HRS. A1->B11 HAS 20MM - 80MM RHYOLITE? GRAVELS. /OTHER GRASSES - ARISTIDA SPP, DICANTHIUM SPP. DLR1028

### **Site Notes**

Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD DLR Site ID: T522 Observation ID: 1 QLD Department of Primary Industries

Project Name: Project Code: Agency Name:

Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD DLR Site ID: T522 Observation ID: 1

Project Name: Project Code: Agency Name: DLR Site ID: T522
QLD Department of Primary Industries

# **Laboratory Test Results:**

рН	1:5 EC	Excl									
			nangeable Mg	Cations K	Na	Exchangeable Acidity	CEC		ECEC		ESP
	dS/m		9	Cmol (+)/kg							%
6.85A		2.64J	0.55 1.79	0.55 0.14	0.16 0.02		5.21				3.08 0.38
6.72A 6.83A	0.01A 0.01A	_	0.26 0.14 3.47	0.26 0.14 0.02	0.15 0.26 0.07		6.51				4.00 1.08
6.89A 7.65A	0.02A 0.03A		0.37 8.29	0.37 0.02	0.48 0.3		13.9D 13.6I	1			2.16 2.21
CaCO3	Organic	Avail.	Total	Total N						-	
%	%	mg/kg	%	%		Mg/m3	٠,	00	%	Oiit	Olay
								15A	44	22	19
								23A	31	15	30
								7A	18	11	64
COLE	Sat.						Bar	K sa	at	K unsa	ıt
	34	512 <b>2 W</b>				3.		mm/	/h	mm/h	
	6.72A 6.83A 6.89A 7.65A CaCO3	6.85A 0.02A 6.72A 0.01A 6.83A 0.01A 6.89A 0.02A 7.65A 0.03A  CaCO3 Organic C %	dS/m  6.85A	dS/m  6.85A	dS/m  6.85A	dS/m         Cmol (           6.85A         0.02A         2.8B         0.55         0.55         0.16           2.64J         1.79         0.14         0.02         6.72A         0.01A         1.5B         0.26         0.26         0.15         6.83A         0.01A         1.7B         0.14         0.14         0.26         1.81J         3.47         0.02         0.07         6.89A         0.02A         2.1B         0.37         0.37         0.48         7.65A         0.03A         2.29J         8.29         0.02         0.3           CaCO3         Organic         Avail.         Total         Total         Total         Total           %         %         %         %         %	6.85A	6.85A	6.85A	6.85A	6.85A

<sup>0 - 0.03</sup> 0.03 - 0.27 0.27 - 0.47 0.47 - 0.75 0.75 - 1.05

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

Project Code: DLR Site ID: T522 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
15A2\_MG
15A2\_MG
15A2\_NA
15D2\_CEC
15F1\_CA
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
Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; automatic extractor
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)

3A1 EC of 1:5 soil/water extract 4A1 pH of 1:5 soil/water suspension

P10\_CF\_C
P10\_CF\_CS
Clay (%) - Coventry and Fett pipette method
Coarse sand (%) - Coventry and Fett pipette method
P10\_CF\_S
P10\_CF\_Z
Clay (%) - Coventry and Fett pipette method
Fine sand (%) - Coventry and Fett pipette method
Silt (%) - Coventry and Fett pipette method