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

Project Code: DLR Site ID: 539 Observation ID: 1

Agency Name: QLD Department of Primary Industries

Site Information

Desc. By: M.G. Cannon Locality:

Date Desc.:19/06/91Elevation:No DataMap Ref.:Sheet No.: 8157 GPSRainfall:No DataNorthing/Long.:7785812 AMG zone: 55Runoff:Very slow

Easting/Lat.: 414411 Datum: AGD66 Drainage: Moderately well drained

Geology

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

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

rock (unidentified)

**Land Form** 

 Rel/Slope Class:
 Level plain <9m <1%</th>
 Pattern Type:
 Plain

 Morph. Type:
 Crest
 Relief:
 No Data

 Elem. Type:
 Plain
 Slope Category:
 Level

 Slope:
 1 %
 Aspect:
 No Data

Surface Soil Condition (dry): Hardsetting

**Erosion:** 

**Soil Classification** 

Australian Soil Classification:Mapping Unit:N/AEpicalcareous Epipedal Red Vertosol Non-gravelly MediumPrincipal Profile Form:Ug5.37

fine Very fine Deep

ASC Confidence: Great Soil Group: Red clay

All necessary analytical data are available.

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

Vegetation: Low Strata - , , . \*Species includes - Bothriochloa pertusa, Enneapogon species, Sporobolus species

Mid Strata - Tree, 3.01-6m, Sparse. \*Species includes - Eremophila mitchellii, Terminalia oblongata, Lysiphillum

carronii

Tall Strata - Tree, 12.01-20m, Very sparse. \*Species includes - Acacia harpophylla, Eucalyptus brownii

#### **Surface Coarse Fragments:**

## **Profile Morphology**

A1 0 - 0.05 m Dark reddish brown (5YR3/3-Moist); ; Light clay; Strong grade of structure, 2-5 mm, Subangular blocky; Smooth-ped fabric; Dry; Weak consistence; , Calcareous, , ; , Gypseous, , ; Field pH 7.5

(Raupach, 0.05);

B21 0.05 - 0.45 m Dark reddish brown (5YR3/4-Moist); ; Medium clay; Strong grade of structure, 50-100 mm,

Angular blocky; Strong grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Moderately moist; Strong consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Few (2 - 10 %), Calcareous, Medium (2 -6 mm), Soft segregations; , Gypseous, , ; Soil matrix is Moderately

calcareous; Field pH 9.5 (Raupach, 0.3);

B22k 0.45 - 0.8 m Dark reddish brown (5YR3/4-Moist); ; Medium clay; Moderate grade of structure, 5-10 mm,

Subangular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Common (10 - 20 %), Calcareous, Medium (2 -6 mm), Soft segregations; , Gypseous, , ; Soil matrix is Highly calcareous; Field pH 9.5 (Raupach, 0.6);

BC 0.8 - 1.2 m Yellowish red (5YR5/6-Moist); , 7.5YR58; Light medium clay; Strong grade of structure, 5-10

mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; Common cutans, 10-50% of ped faces or walls coated, distinct; Few (2 - 10%), Manganiferous, Medium (2 -6 mm), Soft segregations; Very many (50 - 100%), Calcareous, Medium (2 -6 mm), Soft segregations; ; Soil matrix is Highly calcareous; Field pH 9.5 (Raupach, 0.9);

C 1.2 - 1.5 m ; Clay loam; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric;

Moderately moist; Weak consistence; Common (10 - 20 %), Manganiferous, Medium (2 -6 mm),

Soft segregations; , Calcareous, , ; , Gypseous, , ; Field pH 9.5 (Raupach, 1.5);

### **Morphological Notes**

**Observation Notes** 

**Site Notes** 

Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD DLR Site ID: 539 Observation ID: 1 **Project Name:** 

Project Code: Agency Name: DLR Site ID: 539
QLD Department of Primary Industries

# **Laboratory Test Results:**

Laboratory		_								
Depth	рН	1:5 EC		nangeable	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m	Ca i	Иg	K.	Cmol (+				%
0 - 0.05 0.05 - 0.45 0.45 - 0.8 0.8 - 1.2 1.2 - 1.5	6.8A 8.6A 8.7A 8.7A 8.3A		9.7B 13.6J 16B	6.8 12.2 11	0.45 0.2 0.19	0.37 1.7 4.3		27.71		6.14
Depth m	CaCO3	Organic C %	Avail. P mg/kg	Total P %	Total N %	Total K %	I Bulk Density Mg/m3	Particle GV CS	Size FS %	Analysis Silt Clay
0 - 0.05 0.05 - 0.45 0.45 - 0.8 0.8 - 1.2 1.2 - 1.5										
Depth	COLE		Gravimetric/Volumetric Water Contents K sat K unsat							K unsat
m		Sat.	0.05 Bar		0.5 Bar /g - m3/m	1 Bar 3	5 Bar 15 I		m/h	mm/h

0 - 0.05 0.05 - 0.45 0.45 - 0.8 0.8 - 1.2 1.2 - 1.5

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

Project Code: DLR Site ID: 539 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 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