

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** 138 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

Site Information

Desc. By: M. DeCorte	Locality:
Date Desc.: 05/09/90	Elevation: 340 metres
Map Ref.: Sheet No. : 8056 GPS	Rainfall: No Data
Northing/Long.: 7719950 AMG zone: 55	Runoff: No runoff
Easting/Lat.: 354409 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: Level plain <9m <1%	Pattern Type: Alluvial plain
Morph. Type: Flat	Relief: No Data
Elem. Type: Plain	Slope Category: Level
Slope: 1 %	Aspect: 0 degrees

Surface Soil Condition (dry): Hardsetting

Erosion:

Soil Classification

Australian Soil Classification:	Mapping Unit: N/A
Sodic Eutrophic Brown Kandosol Medium Non-gravelly Loamy Clayey Very deep	Principal Profile Form: Gn2.43
ASC Confidence:	Great Soil Group: Yellow earth

Analytical data are incomplete but reasonable confidence.

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

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

Mid Strata - Tree, 1.01-3m, Isolated plants. *Species includes - Eucalyptus brownii, Acacia farnesiana

Tall Strata - Tree, 12.01-20m, Isolated plants. *Species includes - Eucalyptus brownii, Eucalyptus papuana, Eucalyptus crebra

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1	0 - 0.15 m	Very dark greyish brown (10YR3/2-Moist); ; Sandy loam; Massive grade of structure, Subangular blocky; Earthy fabric; Dry; Weak consistence; , Calcareous, , , , Gypseous, , ; Field pH 6.5 (Raupach, 0.05); Few, medium (2-5mm) roots; Clear, Smooth change to -
A3	0.15 - 0.3 m	Dark greyish brown (10YR4/2-Moist); ; Loamy sand; Massive grade of structure, Subangular blocky; Earthy fabric; Dry; Very weak consistence; 0-2%, coarse gravelly, 20-60mm, rounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , ; Field pH 7 (Raupach, 0.3); Common, fine (1-2mm) roots; Clear, Smooth change to -
B1	0.3 - 0.68 m	Brown (10YR4/3-Moist); ; Sandy loam; Weak grade of structure, 20-50 mm, Subangular blocky; Earthy fabric; Dry; Very weak consistence; Very few (0 - 2 %), Manganiferous, Medium (2 - 6 mm), Soft segregations; , Calcareous, , , , Gypseous, , ; Field pH 8 (Raupach, 0.6); Few, fine (1-2mm) roots; Gradual, Smooth change to -
B21	0.68 - 1.1 m	Brown (10YR4/3-Moist); Mottles, 7.5YR56, 0-2% , 0-5mm, Faint; Mottles, 0-2% ; Sandy clay loam; Weak grade of structure, 20-50 mm, Angular blocky; Earthy fabric; Moderately moist; Very weak consistence; , Calcareous, , , , Gypseous, , ; Field pH 8.5 (Raupach, 0.9); Few, very fine (0-1mm) roots; Clear, Smooth change to -
B22	1.1 - 1.7 m	Dark brown (10YR3/3-Moist); ; Sandy clay loam; Weak grade of structure, 20-50 mm, Subangular blocky; Earthy fabric; Moderately moist; Very weak consistence; , Calcareous, , , , Gypseous, , ; Field pH 9 (Raupach, 1.2); Few, very fine (0-1mm) roots; Abrupt, Smooth change to -
D1	1.7 - 2 m	Very dark greyish brown (10YR3/2-Moist); ; Fine sandy light clay; Strong grade of structure, 5-10 mm; Smooth-ped fabric; Moderately moist; Firm consistence; , Calcareous, , , , Gypseous, , ; Field pH 9.9 (Raupach, 1.8); Abrupt, Smooth change to -
D2	2 - 2.15 m	Brown (7.5YR4/4-Moist); Mottles, 7.5YR42, 2-10% , 0-5mm, Faint; Mottles, 7.5YR58, 2-10% ; Medium clay; Moderate grade of structure, 10-20 mm; Smooth-ped fabric; Moderately moist; Firm consistence; Very few (0 - 2 %), Calcareous, Medium (2 - 6 mm), Nodules; , Gypseous, , , ; Field pH 9.9 (Raupach, 2.1);

Morphological Notes

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD
Project Code: DLR Site ID: 138 Observation ID: 1
Agency Name: QLD Department of Primary Industries

Observation Notes

Site Notes

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** 138 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations			Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na Cmol (+)/kg	Acidity		%
0 - 0.15	6.5A		5.7B	1.9	0.65	0.21			
0.15 - 0.3	7.4A								
0.3 - 0.68	8.2A								
0.68 - 1.1	9.2A		2.2B	1.3	0.14	1.4		7B	20.00
			2.1E	1.5	0.13	1.2		4.7I	29.79
			2.9J	2	0.4	0.9			17.14
									25.53
									12.86
									19.15
1.1 - 1.7	9.7A		1.9B	1.8	0.11	5.7		9B	63.33
			1.9E	2.1	0.1	5.3			58.89
1.7 - 2	9.6A								
2 - 2.15	9.9A								

[illegible][illegible]

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** 138 **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
15C1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_CEC	CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_K	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_MG	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_NA	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, 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