

**Project Name:** Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD  
**Project Code:** DLR **Site ID:** 78 **Observation ID:** 1  
**Agency Name:** QLD Department of Primary Industries

#### Site Information

<b>Desc. By:</b>	M. DeCorte	<b>Locality:</b>	
<b>Date Desc.:</b>	26/07/90	<b>Elevation:</b>	335 metres
<b>Map Ref.:</b>	Sheet No. : 8057 GPS	<b>Rainfall:</b>	No Data
<b>Northing/Long.:</b>	7737435 AMG zone: 55	<b>Runoff:</b>	Very slow
<b>Easting/Lat.:</b>	367447 Datum: AGD66	<b>Drainage:</b>	Moderately well drained

#### Geology

<b>ExposureType:</b>	No Data	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	No Data	<b>Substrate Material:</b>	No Data

#### Land Form

<b>Rel/Slope Class:</b>	Level plain <9m <1%	<b>Pattern Type:</b>	Plain
<b>Morph. Type:</b>	Flat	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	Plain	<b>Slope Category:</b>	Level
<b>Slope:</b>	1 %	<b>Aspect:</b>	210 degrees

**Surface Soil Condition (dry):** Hardsetting, Surface crust

#### Erosion:

#### Soil Classification

<b>Australian Soil Classification:</b>	Sodic Mesotrophic Brown Kandosol Thin Gravelly Clay-loamy Clayey Deep	<b>Mapping Unit:</b>	N/A
		<b>Principal Profile Form:</b>	Gn2.22
<b>ASC Confidence:</b>	Analytical data are incomplete but reasonable confidence.		
		<b>Great Soil Group:</b>	Yellow earth

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

**Vegetation:** Low Strata - Tussock grass, 0.51-1m, Sparse. \*Species includes - Chrysopogon fallax, Aristida species  
 Mid Strata - Tree, 3.01-6m, Sparse. \*Species includes - Planchonia careya, Eucalyptus melanophloia, Acacia species

Tall Strata - Tree, 6.01-12m, Mid-dense. \*Species includes - Eucalyptus melanophloia, Acacia species

**Surface Coarse Fragments:** 10-20%, medium gravelly, 6-20mm, angular, Quartz

#### Profile Morphology

A1	0 - 0.05 m	Dark brown (10YR3/3-Moist); ; Fine sandy clay loam (Heavy); Massive grade of structure; Earthy fabric; Dry; Firm consistence; 2-10%, medium gravelly, 6-20mm, angular, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , ; Field pH 5.5 (Raupach, 0.05); Few, fine (1-2mm) roots; Abrupt, Smooth change to -
B1	0.05 - 0.45 m	Yellowish brown (10YR5/8-Moist); ; Light clay; Weak grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Weak consistence; 0-2%, medium gravelly, 6-20mm, angular, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , ; Field pH 5.8 (Raupach, 0.3); Common, fine (1-2mm) roots; Clear, Smooth change to -
B21	0.45 - 0.8 m	Yellowish brown (10YR5/8-Moist); ; Light medium clay; Weak grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Moist; Weak consistence; , Calcareous, , , , Gypseous, , ; Field pH 6.8 (Raupach, 0.6); Common, fine (1-2mm) roots; Abrupt, Smooth change to -
2Dc	0.8 - 1.2 m	Light olive brown (2.5Y5/4-Moist); Mottles, 10YR58, 10-20% , 0-5mm, Faint; Mottles, 10-20% ; Medium heavy clay; Moderate grade of structure, 50-100 mm, Angular blocky; Smooth-ped fabric; Moist; Very firm consistence; Many (20 - 50 %), Ferruginous, Medium (2 -6 mm), Soft segregations; , Calcareous, , , , Gypseous, , ; Field pH 7.2 (Raupach, 0.9);

#### Morphological Notes

#### Observation Notes

#### Site Notes

**Project Name:** Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD  
**Project Code:** DLR                      **Site ID:** 78                      **Observation ID:** 1  
**Agency Name:** QLD Department of Primary Industries

**Laboratory Test Results:**

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol	(+)/kg			%
0 - 0.05	5.8A		1.6B	1.6	0.28	0.05				
0.05 - 0.45	6A									
0.45 - 0.8	6.9A		1.5B	3.2	0.07	0.59		7.9I		7.47
			1.4J	3.1	0.1	0.6				7.59
0.8 - 1.2	7.2A		1.3B	6	0.1	1.9		12B		15.83
			1.2E	5.8	0.09	1.8				15.00

[illegible][illegible]

**Project Name:** Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD  
**Project Code:** DLR                      **Site ID:** 78                      **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