

**Project Name:** Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD  
**Project Code:** DLR **Site ID:** 1607 **Observation ID:** 1  
**Agency Name:** QLD Department of Primary Industries

#### Site Information

<b>Desc. By:</b>	Rogers, Gary	<b>Locality:</b>	
<b>Date Desc.:</b>	02/02/93	<b>Elevation:</b>	No Data
<b>Map Ref.:</b>	Sheet No. : 8058 GPS	<b>Rainfall:</b>	No Data
<b>Northing/Long.:</b>	7795416 AMG zone: 55	<b>Runoff:</b>	Slow
<b>Easting/Lat.:</b>	367693 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>	No Data

#### Surface Soil Condition (dry):

#### Erosion:

#### Soil Classification

<b>Australian Soil Classification:</b>	<b>Mapping Unit:</b>	N/A
Haplic Mesotrophic Brown Kandosol Medium Non-gravelly Sandy Loamy Moderately deep	<b>Principal Profile Form:</b>	Gn2.42
<b>ASC Confidence:</b>	<b>Great Soil Group:</b>	No suitable group

No analytical data are available but confidence is fair.

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

**Vegetation:** Low Strata - Tussock grass, 0.26-0.5m, Sparse. \*Species includes - Eriachne species, Chrysopogon fallax, Digitaria  
Mid Strata - Tree, 1.01-3m, Sparse. \*Species includes - Melaleuca nervosa, Eucalyptus crebra, Eucalyptus polycarpa  
Tall Strata - Tree, 12.01-20m, Sparse. \*Species includes - Eucalyptus crebra, Eucalyptus papuana, Eucalyptus polycarpa

**Surface Coarse Fragments:** No surface coarse fragments

#### Profile Morphology

A11	0 - 0.05 m	Very dark greyish brown (10YR3/2-Moist); ; Clayey sand (Heavy); Massive grade of structure; Earthy fabric; Dry; Very weak consistence; 0-2%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , , Field pH 6 (Raupach, 0.03); Common, fine (1-2mm) roots; Clear change to -
A12	0.05 - 0.15 m	Brown (10YR4/3-Moist); ; Clayey sand (Heavy); Massive grade of structure; Earthy fabric; Dry; Weak consistence; 2-10%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; , Calcareous, , , , Gypseous, , , Field pH 6.5 (Raupach, 0.1); Common, fine (1-2mm) roots; Clear change to -
B21	0.15 - 0.4 m	Strong brown (7.5YR4/6-Moist); ; Clayey sand; Massive grade of structure; Earthy fabric; Dry; Weak consistence; 2-10%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , , , Gypseous, , , Field pH 6.5 (Raupach, 0.3); Common, very fine (0-1mm) roots; Gradual change to -
B22	0.4 - 0.55 m	Strong brown (7.5YR5/6-Moist); ; Sandy clay loam; Weak grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Dry; Weak consistence; 2-10%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Few (2 - 10 %), Ferromanganiferous, Medium (2 -6 mm), Nodules; , Calcareous, , , , Gypseous, , , Field pH 6.5 (Raupach, 0.5); Few, very fine (0-1mm) roots;

#### Morphological Notes

#### Observation Notes

#### Site Notes

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**Laboratory Test Results:**

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Exchangeable Na	CEC	ECEC	ESP
m		dS/m				Acidity Cmol (+)/kg			%
0 - 0.05			4B	1.3	0.33	0.03			
0.05 - 0.15	6.9A	0.04A	2.2B	0.68	0.25	0.03			
0.15 - 0.4	5.6C	0.03A							
	7A								
0.4 - 0.55	7.1A	0.02A	1.4B	0.73	0.28	0.03			

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk		Particle	Size	Analysis	
m	%	C	P	P	N	K	Density	GV	CS	FS	Silt	Clay
		%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.05		1.4A		0.025A	0.06A	0.63A			52A	34	4	10
0.05 - 0.15				0.018A	0.02A	0.58A			56A	29	4	11
0.15 - 0.4												
0.4 - 0.55				0.014A		0.68A			52A	27	2	19

[illegible]

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**Laboratory Analyses Completed for this profile**

10A1	Total sulfur - X-ray fluorescence
10B	Extractable sulfur(mg/kg) - Phosphate extractable sulfur
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 (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 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
17A1	Total potassium - X-ray fluorescence
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
4B2	pH of 1:5 soil/0.01M calcium chloride extract - following Method 4A1
5A1	Chloride - 1:5 soil/water extract, potentiometric titration
6A1	Organic carbon - Walkley and Black
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A1	Total phosphorus - X-ray fluorescence
P10_CF_C	Clay (%) - Coventry and Fett pipette method
P10_CF_CS	Coarse sand (%) - Coventry and Fett pipette method
P10_CF_FS	Fine sand (%) - Coventry and Fett pipette method
P10_CF_Z	Silt (%) - Coventry and Fett pipette method