

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** T562 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

Site Information

Desc. By: M.G. Cannon	Locality:
Date Desc.: 05/03/92	Elevation: 250 metres
Map Ref.: Sheet No. : 8256 GPS	Rainfall: No Data
Northing/Long.: 7682106 AMG zone: 55	Runoff: Slow
Easting/Lat.: 462025 Datum: AGD66	Drainage: Imperfectly drained

Geology

Exposure Type: No Data	Conf. Sub. is Parent. Mat.: No Data
Geol. Ref.: Tu	Substrate Material: Undisturbed soil core, 0.9 m deep, Sandstone

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: No Data

Surface Soil Condition (dry):

Erosion: 4 m5 m;

Soil Classification

Australian Soil Classification:	Mapping Unit: N/A
Hypocalcic Mesonatric Yellow Sodosol Thick Moderately gravelly Loamy Clayey Moderately deep	Principal Profile Form: Dy2.43
ASC Confidence:	Great Soil Group: Solodic soil
All necessary analytical data are available.	

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

Vegetation: Low Strata - Tussock grass, 0.26-0.5m, Sparse. *Species includes - Bothriochloa species, Aristida species, Chrysopogon

fallax Mid Strata - , , . *Species includes - None recorded

Tall Strata - Tree, 6.01-12m, Mid-dense. *Species includes - Acacia argyrodendron

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

Profile Morphology

A1j	0 - 0.05 m	Brown (10YR4/3-Moist); ; Sandy loam (Light); Massive grade of structure; Earthy fabric; Dry; Very weak consistence; , Calcareous, , ; , Gypseous, , ; Field pH 6 (Raupach, 0.02); Common, medium (2-5mm) roots; Clear change to -
A21j	0.05 - 0.2 m	Dark yellowish brown (10YR4/4-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; Dry; Very weak consistence; 2-10%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 5.8 (Raupach, 0.15); Common, medium (2-5mm) roots; Gradual change to -
A22e	0.2 - 0.36 m	Yellowish brown (10YR5/6-Moist); ; Clay loam, sandy; Massive grade of structure; Earthy fabric; Dry; Very weak consistence; 2-10%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 5.8 (Raupach, 0.3); Common, medium (2-5mm) roots; Clear change to -
B1	0.36 - 0.52 m	Brownish yellow (10YR6/8-Moist); ; Medium clay; Weak grade of structure, 5-10 mm, Angular blocky; Moderate grade of structure, 2-5 mm, Angular blocky; Earthy fabric; Dry; Firm consistence; 2-10%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , ; , Gypseous, , ; Field pH 7.8 (Raupach, 0.45); Few, fine (1-2mm) roots; Gradual change to -
B21	0.52 - 0.82 m	Olive yellow (2.5Y6/6-Moist); ; Medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Moderate grade of structure, 2-5 mm, Angular blocky; Smooth-ped fabric; Dry; Strong consistence; 10-20%, medium gravelly, 6-20mm, subrounded, dispersed, Quartzite, coarse fragments; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Nodules; , Calcareous, , ; , Gypseous, , ; Field pH 9.5 (Raupach, 0.7); Few, very fine (0-1mm) roots; Clear change to -
B22	0.82 - 0.86 m	Olive yellow (2.5Y6/6-Moist); Mottles, 2.5Y6/2, 10-20% , 5-15mm, Distinct; Mottles, 10-20% ; Medium clay; Moderate grade of structure, 5-10 mm, Angular blocky; Moderate grade of structure, 2-5 mm, Angular blocky; Smooth-ped fabric; Dry; Strong consistence; 0-2%, medium gravelly, 6-20mm, subrounded, dispersed, Quartzite, coarse fragments; Common (10 - 20 %), Manganiferous, Fine (0 - 2 mm), Nodules; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Soft segregations; , Gypseous, , ; Field pH 9.5 (Raupach, 0.86); Few, very fine (0-1mm) roots;

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD
Project Code: DLR **Site ID:** T562 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

Observation Notes

DLR1064; B HORIZON SLIGHTLY DISPERSIVE. THTRI ;

Site Notes

Morphological Notes

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** T562 **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	Acidity		
						Cmol (+)/kg			%
0 - 0.05	5.93A	0.01A	2.3B	0.7	0.47	0.08		6.7I	1.19
			1.73J	0.81	0.12	0.12			1.79
0.05 - 0.2	6.34A	0.02A	1.8J	1.21	0.1	0.08	8.1I	0.99	
0.2 - 0.36	7.19A	0.03A							
0.36 - 0.52	8.66A	0.11A	4B	5.7	0.38	2.4			
0.52 - 0.82	9.26A	0.26A	4.28J	4.74	0.1	1.39	11.4D	12.19	
							14.4I	9.69	

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		1B		0.023A	0.04A	0.564A						
0.05 - 0.2	0.1A	0.6B							34A	37	11	18
0.2 - 0.36												
0.36 - 0.52												
0.52 - 0.82		0.1B							19A	21	9	51

[illegible]

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** T562 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

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 ²⁺ ,Mg ²⁺ ,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
15D2_CEC	CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; automatic extractor
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)
17A1	Total potassium - X-ray fluorescence
19A1	Carbonates - rapid titration
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
5A1	Chloride - 1:5 soil/water extract, potentiometric titration
6B2	Total organic carbon - high frequency induction furnace, volumetric
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