

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** T540 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

Site Information

Desc. By: M.G. Cannon	Locality:
Date Desc.: 12/12/91	Elevation: 240 metres
Map Ref.: Sheet No. : 8156 GPS	Rainfall: No Data
Northing/Long.: 7709088 AMG zone: 55	Runoff: Slow
Easting/Lat.: 411554 Datum: AGD66	Drainage: Imperfectly drained

Geology

ExposureType: No Data	Conf. Sub. is Parent. Mat.: No Data
Geol. Ref.: Tf	Substrate Material: Undisturbed soil core, 1.9 m deep, Siltstone

Land Form

Rel/Slope Class: Level plain <9m <1%	Pattern Type: Plain
Morph. Type: Flat	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/A
Eutrophic Mottled-Mesonatric Brown Sodosol Medium Non-gravelly Loamy Clayey 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, <0.25m, Sparse. *Species includes - Dichanthium species, Sporobolus species, Cyperus species

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

Tall Strata - Tree, 3.01-6m, Mid-dense. *Species includes - Acacia argyrodendron, Eucalyptus brownii

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A11	0 - 0.05 m	Dark brown (7.5YR3/3-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; Dry; Very weak consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , ; Field pH 6 (Raupach, 0.03); Common, fine (1-2mm) roots; Clear, Wavy change to -
A12	0.05 - 0.18 m	Dark reddish brown (5YR3/4-Moist); ; Sandy clay loam; Massive grade of structure; Earthy fabric; Dry; Weak consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , ; Field pH 6.5 (Raupach, 0.1); Common, very fine (0-1mm) roots; Clear, Wavy change to -
A2e	0.18 - 0.22 m	Reddish brown (5YR4/3-Moist); ; Sandy clay loam; Massive grade of structure; Earthy fabric; Dry; Loose consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , ; Field pH 7 (Raupach, 0.22); Few, very fine (0-1mm) roots; Abrupt, Tongued change to -
B1	0.22 - 0.27 m	Strong brown (7.5YR4/6-Moist); ; Light medium clay; Massive grade of structure; Smooth-ped fabric; Dry; Firm consistence; 2-10%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , ; Field pH 7.3 (Raupach, 0.25); Few, very fine (0-1mm) roots; Abrupt, Wavy change to -
B21	0.27 - 0.48 m	Brown (7.5YR5/4-Moist); ; Light medium clay; Moderate grade of structure, 20-50 mm, Subangular blocky; Moderate grade of structure, 10-20 mm, Subangular blocky; Smooth-ped fabric; Dry; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , ; Field pH 8 (Raupach, 0.4); Few, very fine (0-1mm) roots; Abrupt, Wavy change to -
B22	0.48 - 0.74 m	Yellowish red (5YR4/6-Moist); ; Medium clay; Moderate grade of structure, 20-50 mm, Subangular blocky; Moderate grade of structure, 10-20 mm, Subangular blocky; Smooth-ped fabric; Dry; Very firm consistence; 2-10%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , ; Field pH 9.5 (Raupach, 0.7); Few, very fine (0-1mm) roots; Gradual, Wavy change to -

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** T540 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

B23	0.74 - 1 m	Pale red (2.5YR6/2-Moist); Substrate influence, 10R36, 20-50% , 30-mm, Prominent; Substrate influence, 20-50% ; Light medium clay; Strong grade of structure, 50-100 mm, Angular blocky; Strong grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Dry; Strong consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , , ; Field pH 6.5 (Raupach, 0.9); Few, very fine (0-1mm) roots;
B23	1 - 1.34 m	Substrate influence, 20-50% , 30-mm, Prominent; Substrate influence, 20-50% ; Light medium clay; Strong grade of structure, 20-50 mm, Angular blocky; Strong grade of structure, 5-10 mm, Angular blocky; Smooth-ped fabric; Dry; Strong consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , , ; Field pH 5.5 (Raupach, 1.2); Few, very fine (0-1mm) roots; Diffuse, Wavy change to -
BC1	1.34 - 1.56 m	Substrate influence, 20-50% , 30-mm, Prominent; Substrate influence, 20-50% ; Light medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Strong grade of structure, 2-5 mm, Angular blocky; Smooth-ped fabric; Dry; Strong consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , , ; Field pH 5.5 (Raupach, 1.4); Few, very fine (0-1mm) roots; Diffuse, Wavy change to -
BC2	1.56 - 1.95 m	Substrate influence, 20-50% , 30-mm, Prominent; Substrate influence, 20-50% ; Light medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Strong grade of structure, 2-5 mm, Angular blocky; Smooth-ped fabric; Dry; Strong consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , , ; Field pH 5.5 (Raupach, 1.9); Few, very fine (0-1mm) roots;

Morphological Notes

Observation Notes

LOWER B HORIZON DISPERSES IN WATER. 156-160CM IS COURSE AND DENSE; DLR1046.

Site Notes

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** T540 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

Laboratory Test Results:

[illegible]

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** T540 **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
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