

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** 66 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

Site Information

Desc. By: M. DeCorte	Locality:
Date Desc.: 25/07/90	Elevation: 280 metres
Map Ref.: Sheet No. : 8158 GPS	Rainfall: No Data
Northing/Long.: 7803114 AMG zone: 55	Runoff: No runoff
Easting/Lat.: 396463 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: Plain
Morph. Type: Flat	Relief: No Data
Elem. Type: Plain	Slope Category: Level
Slope: 1 %	Aspect: 70 degrees

Surface Soil Condition (dry): Hardsetting, Cracking

Erosion:

Soil Classification

Australian Soil Classification:	Mapping Unit: N/A
Epicalcareous-Endohypersodic Crustly Black Vertosol	Principal Profile Form: Ug5.16
Moderately gravelly Medium fine Very fine Very deep	
ASC Confidence:	Great Soil Group: Black earth

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 ewartiana, Ophiurus exaltatus

Mid Strata - Tree, 1.01-3m, Very sparse. *Species includes - Eucalyptus brownii, Lysiphillum carronii, Acacia farnesiana

Tall Strata - Tree, 3.01-6m, Very sparse. *Species includes - Eucalyptus brownii

Surface Coarse Fragments: 20-50%, fine gravelly, 2-6mm, subrounded, Quartz

Profile Morphology

A11	0 - 0.02 m	Very dark grey (10YR3/1-Moist); ; Medium heavy clay; Massive grade of structure; Smooth-ped fabric; Dry; Firm consistence; 20-50%, fine gravelly, 2-6mm, rounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , , Abrupt, Smooth change to -
A12	0.02 - 0.08 m	Very dark grey (10YR3/1-Moist); ; Medium heavy clay; Strong grade of structure, <2 mm, Granular; Smooth-ped fabric; Moderately moist; Firm consistence; 20-50%, fine gravelly, 2-6mm, rounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , , Field pH 6 (Raupach, 0.05); Abrupt, Smooth change to -
A2	0.08 - 0.1 m	Very dark grey (10YR3/1-Moist); ; Medium heavy clay; Strong grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; 20-50%, fine gravelly, 2-6mm, rounded, dispersed, Quartz, coarse fragments; , Calcareous, , , , Gypseous, , , Abrupt, Smooth change to -
B21k	0.1 - 0.9 m	Very dark grey (10YR3/1-Moist); ; Medium heavy clay; Strong grade of structure, 50-100 mm, Angular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; 20-50%, fine gravelly, 2-6mm, rounded, dispersed, Quartz, coarse fragments; Common (10 - 20 %), Calcareous, Medium (2 -6 mm), Nodules; , Gypseous, , , Field pH 9 (Raupach, 0.6); Gradual, Smooth change to -
B22	0.9 - 1.3 m	Light brownish grey (10YR6/2-Moist); ; Medium heavy clay; Strong grade of structure, 10-20 mm, Angular blocky; Strong grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; 20-50%, fine gravelly, 2-6mm, rounded, dispersed, Quartz, coarse fragments; Common cutans, 10-50% of ped faces or walls coated, prominent; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; , Gypseous, , , Field pH 9 (Raupach, 1.2); Abrupt, Smooth change to -
B23c	1.3 - 1.5 m	Greyish brown (10YR5/2-Moist); ; Medium heavy clay; Strong grade of structure, 50-100 mm, Lenticular; Strong grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; 20-50%, fine gravelly, 2-6mm, rounded, dispersed, Quartz, coarse fragments; Many cutans, >50% of ped faces or walls coated, distinct; Many (20 - 50 %), Manganiferous, Extremely coarse (> 60 mm), Veins; , Calcareous, , , , Gypseous, , , Field pH 6.5 (Raupach, 1.5); Abrupt, Smooth change to -

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrypmle Shire, QLD
Project Code: DLR **Site ID:** 66 **Observation ID:** 1
Agency Name: QLD Department of Primary Industries

B24 1.5 - 2.1 m Greyish brown (10YR5/2-Moist); ; Medium heavy clay; Strong grade of structure, 50-100 mm, Lenticular; Smooth-ped fabric; Moderately moist; Very firm consistence; 0-2%, fine gravelly, 2-6mm, rounded, dispersed, Quartz, coarse fragments; Many cutans, >50% of ped faces or walls coated, distinct; , Calcareous, , , , Gypseous, , , Field pH 6 (Raupach, 1.8);

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: 66 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				
0.02 - 0.08	6.9A		11B	9.9	0.54	1.1		24B		4.58
			10E	8.2	0.56	1				4.17
0.1 - 0.9	8.3A		14E	11	0.27	4.7		31B		15.16
			14.8J	11.4	0.2	2.6		31I		8.39
0.9 - 1.3	7.6A		8.8B	8.9	0.25	4.9		23B		21.30
			10E	9	0.33	4.3				18.70
1.3 - 1.5	6.7A									
1.5 - 2.1	5.7A		8.8J	7.9	0.2	2.7		20.7I		13.04

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle	Size	Analysis
m	%	C	P	P	N	K	Density	GV	CS	Silt
		%	mg/kg	%	%	%	Mg/m3		FS	Clay
									%	
0.02 - 0.08										
0.1 - 0.9										
0.9 - 1.3										
1.3 - 1.5										
1.5 - 2.1										

Depth	COLE	Gravimetric/Volumetric Water Contents						K sat	K unsat
m		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar	
					g/g -	m3/m3			mm/h
									mm/h

0.02 - 0.08
 0.1 - 0.9
 0.9 - 1.3
 1.3 - 1.5
 1.5 - 2.1

Project Name: Preliminary Assessment and Survey of Land Degradation in the Dalrymple Shire, QLD
Project Code: DLR **Site ID:** 66 **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