

Project Name: EDEN BURNING STUDY AREA
Project Code: 1000638 **Site ID:** EDB_SA60 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By:	P. Ryan	Locality:	
Date Desc.:	10/09/87	Elevation:	240 metres
Map Ref.:	Sheet No. : 8823 1:25000	Rainfall:	No Data
Northing/Long.:	5878000 AMG zone: 55	Runoff:	No Data
Easting/Lat.:	732340 Datum: AGD66	Drainage:	Imperfectly drained

Geology

ExposureType:	Soil pit	Conf. Sub. is Parent. Mat.:	No Data
Geol. Ref.:	Dgwa	Substrate Material:	Sand

Land Form

Rel/Slope Class:	No Data	Pattern Type:	No Data
Morph. Type:	Lower-slope	Relief:	0 metres
Elem. Type:	Footslope	Slope Category:	No Data
Slope:	8 %	Aspect:	0 degrees

Surface Soil Condition (dry): Soft

Erosion:

Soil Classification

Australian Soil Classification:	N/A	Mapping Unit:	N/A
ASC Confidence:	Confidence level not specified	Principal Profile Form:	Dy5.81
		Great Soil Group:	Humic gley

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

Vegetation:

Surface Coarse Fragments: 10-20%, fine gravelly, 2-6mm, subangular, Quartz

Profile Morphology

A1	0 - 0.15 m	Black (10YR2/1-Moist); ; Clay loam; Moderate grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Moist; Firm consistence; 10-20%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; Field pH 4 (Raupach); Abundant, fine (1-2mm) roots; Many, medium (2-5mm) roots; Many, coarse (>5mm) roots;
A1	0.15 - 0.3 m	Black (10YR2/1-Moist); ; Clay loam; Moderate grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Moist; Firm consistence; 10-20%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; Field pH 4.5 (Raupach); Abundant, fine (1-2mm) roots; Many, medium (2-5mm) roots; Many, coarse (>5mm) roots; Abrupt, Wavy change to -
A2c	0.3 - 0.5 m	Light grey (2.5Y7/2-Moist); ; Coarse sandy clay loam; Massive grade of structure; Earthy fabric; Moist; 20-50%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5.5 (Raupach); Few, fine (1-2mm) roots; Gradual, Irregular change to -
B1	0.5 - 0.67 m	Light yellowish brown (10YR6/4-Moist); , 10-20% , Distinct; Coarse sandy clay; Massive grade of structure; Earthy fabric; Moist; 20-50%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5.5 (Raupach); Few, fine (1-2mm) roots; Gradual, Irregular change to -
B2	0.67 - 1.1 m	Brownish yellow (10YR6/8-Moist); , 20-50% , Distinct; Light medium clay; Massive grade of structure; Sandy (grains prominent) fabric; Moist; 20-50%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5 (Raupach); Common, fine (1-2mm) roots; Common, medium (2-5mm) roots;

Morphological Notes

A1	Casts common.	
A1	Casts common.	Fine sand fraction.
B2	Coarse sand fraction.	

Observation Notes

Thick humic A horizon over pallid A2 & B1 hor. B2 is being degraded, patchy yellow hue remain. Root channels with

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Site Notes

DP6 - edge of Melauca Swamp.

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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 - 0.08	3.13I 4H		0.64F	1.03	0.22	0.16	3.29G			
0.3 - 0.38	4.04I 4.66H		0.04F	0.18	0.09	0.04	0.92G			
0.5 - 0.67	4.2I 4.74H		0.02F	0.47	0.18	0.04	1.72G			
0.67 - 1.1	3.95I 4.76H		0.03F	0.92	0.22	0.07	2.25G			

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle GV	Size CS	Analysis FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		

0 - 0.08		5.67A		64.8F	<0.01E			6.8	52.5F	24.3	19.3	3.9
0.3 - 0.38		0.75A		12.4F	<0.01E			12.5	57.1F	17.4	16.2	9.3
0.5 - 0.67		0.86A		14.5F	<0.01E			35	58.3F	17	7.7	17
0.67 - 1.1		0.72A		8F	<0.01E			17.1	50.2F	17	12	20.8

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

0 - 0.08					
0.3 - 0.38					
0.5 - 0.67					
0.67 - 1.1					

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Laboratory Analyses Completed for this profile

15D1_CA	Exchangeable bases (Ca ²⁺ ,Mg ²⁺ ,Na ⁺ ,K ⁺) - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach
15D1_K	Exchangeable bases and CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach
15D1_MG	Exchangeable bases and CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach
15D1_NA	Exchangeable bases and CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach
15G_C_AL2	Exchangeable aluminium - meq per 100g of soil - Aluminium By KCl extraction and detremination By AAS
4A_C_1	pH of soil - pH of 1:1 soil/water suspension
4C_C_1	pH of 1:1 soil/1M potassium chloride suspension
6A1	Organic carbon - Walkley and Black
7A1	Total nitrogen - semimicro Kjeldahl, steam distillation
9A_NR	Total element - P(%) - Not recorded
P10_GRAV	Gravel (%)
P10_HYD_C	Clay (%) - Hydrometer Method
P10_HYD_CS	Coarse Sand (%) - Hydrometer Method
P10_HYD_FS	Fine Sand (%) - Hydrometer Method
P10_HYD_Z	Silt (%) - Hydrometer Method