Project Name: **EDEN BURNING STUDY AREA**
Project Code: **1000638** **Site ID:** **EDB_SA29** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (ACT)**

Site Information

Desc. By: P. Ryan
Date Desc.: 21/07/87
Map Ref.: Sheet No. : 8823 1:25000
Northing/Long.: 5877280 AMG zone: 55
Easting/Lat.: 735670 Datum: AGD66
Locality:
Elevation: 280 metres
Rainfall: No Data
Runoff: No Data
Drainage: Well drained

Geology

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

Land Form

Rel/Slope Class: No Data
Morph. Type: Mid-slope
Elem. Type: Hillslope
Slope: 8 %
Pattern Type: No Data
Relief: 0 metres
Slope Category: No Data
Aspect: 180 degrees

Surface Soil Condition (dry): Loose

Erosion:

Soil Classification

Australian Soil Classification:
N/A
ASC Confidence:
Confidence level not specified
Mapping Unit: N/A
Principal Profile Form: Gn1.31
Great Soil Group: Yellow podzolic soil

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

Vegetation:

Surface Coarse Fragments: 10-20%, fine gravelly, 2-6mm, subangular, Quartz; 10-20%, cobbly, 60-200mm, subangular, Quartz

Profile Morphology

O1	0 - 0.02 m	Organic Layer; ; Coarse sandy loam; Moist; Clear, Irregular change to -
A1	0.02 - 0.22 m	Very dark grey (10YR3/1-Moist); ; Coarse sandy clay loam; Weak grade of structure, 2-5 mm, Granular; Earthy fabric; Wet; Weak consistence; 10-20%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; 10-20%, coarse gravelly, 20-60mm, subangular, dispersed, coarse fragments; Field pH 4 (Raupach); Many, fine (1-2mm) roots; Many, medium (2-5mm) roots; Many, coarse (>5mm) roots; Clear, Smooth change to -
A2s	0.22 - 0.32 m	Greyish brown (10YR5/2-Moist); ; Coarse sandy clay loam; Weak grade of structure, 2-5 mm, Polyhedral; Earthy fabric; Wet; Weak consistence; 10-20%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Field pH 3.5 (Raupach); Common, fine (1-2mm) roots; Common, medium (2-5mm) roots; Common, coarse (>5mm) roots; Gradual, Wavy change to -
B21h	0.32 - 0.45 m	Yellowish brown (10YR5/8-Moist); ; Coarse sandy clay loam; Moderate grade of structure, 5-10 mm, Polyhedral; Rough-ped fabric; Wet; Firm consistence; 10-20%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Few cutans, <10% of ped faces or walls coated, distinct; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Soft segregations; Few (2 - 10 %), Ferruginous, Very coarse (20 - 60 mm), Soft segregations; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Few (2 - 10 %), Ferruginous, Very coarse (20 - 60 mm), Nodules; , Organic (humified), , ; Field pH 4.5 (Raupach); Common, medium (2-5mm) roots; Common, coarse (>5mm) roots; Diffuse, Wavy change to -
B22	0.45 - 0.62 m	Yellowish brown (10YR5/8-Moist); ; Coarse sandy clay loam; Weak grade of structure, 5-10 mm, Polyhedral; Earthy fabric; Wet; Weak consistence; 10-20%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Field pH 5.5 (Raupach); Few, fine (1-2mm) roots; Few, coarse (>5mm) roots; Clear, Wavy change to -
B23	0.62 - 0.92 m	Brownish yellow (10YR6/6-Moist); ; Massive grade of structure; Sandy (grains prominent) fabric; Moist; Weak consistence; 10-20%, fine gravelly, 2-6mm, subangular, reoriented, coarse fragments; Field pH 5.5 (Raupach); Few, coarse (>5mm) roots;
C	0.92 - 1.12 m	; Massive grade of structure; Sandy (grains prominent) fabric; Very firm consistence; 50-90%, undisturbed, coarse fragments;

Morphological Notes

A2s Humic straining in B21 is sporadic - onemajor patch adjacent to root. Colour is 5YR 4/8, darker where kinoo has extrudedseveral small Fe nodules. CONT. IN L4 NOTES...

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B21h	Dominant ped size also 10-20mm.	L3 CONT... DOM. PED SIZE ALSO 10-20MM. ALSO 'OTHER' PED COATING - ORGANIC. SOFT & HARD NODULES.

Observation Notes

Site process also transportational. Sitealong S-N spur. Crest to the north.

Site Notes

DP34

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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable	CEC	ECEC	ESP
			Ca	Mg	K	Na	Acidity			
m		dS/m	Cmol (+)/kg							%
0.02 - 0.1	2.85I 3.77H		1.8F	1.48	0.25	0.22	2.11G			
0.22 - 0.32	3.31I 4.13H		0.07F	0.2	0.14	0.1	2.51G			
0.32 - 0.4	3.62I 4.33H		0.07F	0.13	0.17	0.07	3.19G			
0.62 - 0.92	4.04I 5.44H		0.03F	1.88	0.49	0.13	0.56G			

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis				
								GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0.02 - 0.1		10.3A		40F	<0.01E			23.3				
0.22 - 0.32		2.42A		13F	<0.01E			20.6				
0.32 - 0.4		1.87A		11F	<0.01E			29.5				
0.62 - 0.92		0.77A		14F	<0.01E			32.8				

Depth	COLE	Gravimetric/Volumetric Water Contents						K sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar		
m		g/g - m3/m3						mm/h	mm/h
0.02 - 0.1									
0.22 - 0.32									
0.32 - 0.4									
0.62 - 0.92									

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Laboratory Analyses Completed for this profile

15D1_CA	Exchangeable bases (Ca2+,Mg2+,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
2A1	Air-dry moisture content
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 (%)