Project Name: EDEN BURNING STUDY AREA

Project Code: 1000638 Site ID: EDB\_SA51 Observation ID: 1

Agency Name: CSIRO Division of Soils (ACT)

**Site Information** 

Desc. By: P. Ryan Locality:

Elevation: Date Desc.: 07/09/87 260 metres Map Ref.: Sheet No.: 8823 1:25000 Rainfall: No Data Northing/Long.: 5877130 AMG zone: 55 Runoff: No Data 733540 Datum: AGD66 Poorly drained Easting/Lat.: Drainage:

Geology

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

**Land Form** 

Rel/Slope Class:No DataPattern Type:No DataMorph. Type:Open depression (vale)Relief:0 metresElem. Type:Drainage depressionSlope Category:No DataSlope:15 %Aspect:315 degrees

Surface Soil Condition (dry): Firm

**Erosion:** 

**Soil Classification** 

Australian Soil Classification:Mapping Unit:N/AN/APrincipal Profile Form:Uc2.23ASC Confidence:Great Soil Group:Humic gley

Confidence level not specified

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** 

A11 0 - 0.07 m Very dark grey (10YR3/1-Moist); ; Coarse sandy clay loam; Weak grade of structure, 5-10 mm, Polyhedral; Earthy fabric; Moist; Weak consistence; 10-20%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; Field pH 5 (Raupach); Many, fine (1-2mm) roots; Many, medium (2-5mm) roots; Many, coarse (>5mm) roots; Clear, Smooth change to -

A12 0.07 - 0.22 m Weak red (2.5YR5/2-Moist); ; Coarse sandy clay loam; Massive grade of structure; Earthy fabric;

Moist; Weak consistence; 10-20%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; Field pH 5.5 (Raupach); Few, medium (2-5mm) roots; Few, coarse (>5mm) roots;

Gradual, Smooth change to -

A21c 0.22 - 0.4 m Pale red (2.5YR6/2-Moist); ; Coarse sandy loam; Massive grade of structure; Sandy (grains

prominent) fabric; Moist; Weak consistence; 20-50%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; Field pH 6 (Raupach); Few, fine (1-2mm) roots; Few,

medium (2-5mm) roots; Gradual, Wavy change to -

A22 0.4 - 0.6 m Pale red (2.5YR7/2-Moist); , 10-20% , Distinct; Coarse sandy loam; Massive grade of structure;

Sandy (grains prominent) fabric; Wet; Weak consistence; 20-50%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; Field pH 5.5 (Raupach); Few, fine (1-2mm)

roots; Clear, Irregular change to -

B2 0.6 - 0.95 m Pale red (2.5YR7/2-Moist); , 20-50% , Distinct; Clayey coarse sand; Massive grade of structure;

Earthy fabric; Moist; Firm consistence; 20-50%, fine gravelly, 2-6mm, subangular, undisturbed, Quartz, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5

(Raupach); Few, medium (2-5mm) roots;

## **Morphological Notes**

### **Observation Notes**

Heath-Meleu. Scrub drainage flat. Collu-vial sand over in situ B horizon. Perch-ed water-table over B2 horizon. Rust coating adjacent to root in A horizons. A2 horizons dispersive.

#### **Site Notes**

DP64 - suspended drainage line

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# **Laboratory Test Results:**

<u> </u>		<del>,</del>								
Depth	рН	1:5 EC		hangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m		9		Cmol (				%
0 - 0.08	3.63I 4.64H		0.69F	0.38	0.14	0.09	0.58G			
0.3 - 0.38	3.84I 5.07H		0.07F	0.37	0.08	0.04	0.28G			
0.4 - 0.6	3.9I 5.17H		0.05F	0.46	0.1	0.03	0.29G			
0.6 - 0.95	3.83I 5.03H		0.03F	0.82	0.08	0.05	0.47G			
Depth m	CaCO3	Organic C %	Avail. P mg/kg	Total P %	Total N %	Tota K %	al Bulk Density Mg/m3		ticle Size CS FS	Analysis Silt Clay
•••	76	70	ilig/kg	76	70	70	Mg/III3		70	
0 - 0.08		3.47A		30F	<0.0			8		
0.3 - 0.38 0.4 - 0.6		0.39A 0.45A		9F 10F	<0.0 <0.0			17.1 28.8		
0.6 - 0.95		0.24A		7F	<0.0			22.2		
Depth	COLE				olumetric \			_	K sat	K unsat
m		Sat.	0.05 Bar		0.5 Bar g - m3/m	1 Bar 3	5 Bar 15	Bar	mm/h	mm/h
0 - 0.08 0.3 - 0.38										

0.4 - 0.6 0.6 - 0.95

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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

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 (%)