Project Name: EDEN BURNING STUDY AREA

Project Code: 1000638 Site ID: EDB_SA59 Observation ID: 1

Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By: P. Ryan Locality:

 Date Desc.:
 01/09/87
 Elevation:
 280 metres

 Map Ref.:
 Sheet No.: 8823
 1:25000
 Rainfall:
 No Data

 Northing/Long.:
 5877940 AMG zone: 55
 Runoff:
 No Data

Easting/Lat.: 735420 Datum: AGD66 Drainage: Imperfectly drained

<u>Geology</u>

ExposureType: Soil pit Conf. Sub. is Parent. Mat.: No Data
Geol. Ref.: No Data 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:5 %Aspect:270 degrees

Surface Soil Condition (dry): Firm

Erosion: Partial, Minor (gully)

Soil Classification

Australian Soil Classification:Mapping Unit:N/AN/APrincipal Profile Form:Gn1.84ASC 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: 50-90%, fine gravelly, 2-6mm, subangular, Quartz; No surface coarse fragments

Profile Morphology

A11 0 - 0.15 m ; Coarse sandy clay loam; Moderate grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Moist; Weak consistence; 50-90%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse

fragments; 50-90%, medium gravelly, 6-20mm, subangular, dispersed, Quartz, coarse fragments; 50-90%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; 50-90%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; Field pH 5.5 (Raupach); Many, coarse (>5mm) roots; Many, medium (2-5mm) roots; Many, fine (1-2mm)

roots; Many, very fine (0-1mm) roots; Gradual, Wavy change to -

A12 0.15 - 0.4 m Very dark grey (10YR3/1-Moist); Clay loam; Moderate grade of structure, 10-20 mm, Polyhedral;

Rough-ped fabric; Moist; Firm consistence; 50-90%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; 50-90%, medium gravelly, 6-20mm, subangular,

dispersed, Quartz, coarse fragments; 50-90%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; Field pH 5.5 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-

2mm) roots; Gradual, Irregular change to -

A13 0.4 - 0.53 m Dark greyish brown (10YR4/2-Moist); ; Coarse sandy clay loam; Moderate grade of structure, 20-

50 mm, Subangular blocky; Rough-ped fabric; Moist; Firm consistence; 50-90%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; 50-90%, medium gravelly, 6-20mm, subangular, dispersed, Quartz, coarse fragments; 50-90%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5.5 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Clear,

Irregular change to -

A2 0.53 - 0.72 m Greyish brown (10YR5/2-Moist); ; Coarse sandy clay loam; Weak grade of structure, 20-50 mm,

Subangular blocky; Earthy fabric; Moist; Firm consistence; 50-90%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; 50-90%, medium gravelly, 6-20mm, subangular, dispersed, Quartz, coarse fragments; 50-90%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5.5 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots;

Gradual, Wavy change to -

B2 0.72 - 1.05 m Light yellowish brown (10YR6/4-Moist); , 20-50% , Distinct; , 10-20% , Faint; Coarse sandy clay

loam; Massive grade of structure; Sandy (grains prominent) fabric; Moist; Very firm consistence; 50-90%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; 50-90%, medium gravelly, 6-20mm, subangular, dispersed, Quartz, coarse fragments; 50-90%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; Field pH 5 (Raupach); Few, fine

(1-2mm) roots; Clear, Wavy change to -

Morphological Notes

Project Name: EDEN BURNING STUDY AREA

Observation ID: 1 1000638 Site ID: EDB_SA59

Project Code: Agency Name: **CSIRO** Division of Soils (ACT)

Moist Munsell = 2.5YR 2/0.

A12 Coarse sand fraction.

Observation Notes

Flat bottom of drainage line. Thick A horizon (70cm) over pallid yellow B hor-izon. A horizon colours are varigated. Charcoal occurs in bands, one at 38cm.

Site Notes

DP107 - dry drainage line - convex

Project Name: EDEN BURNING STUDY AREA
Project Code: 1000638 Site ID: EDB_SA59
Agency Name: CSIRO Division of Soils (ACT) Observation ID: 1

Laboratory Test Results:

Laboratory	16311/6	Suits.								
Depth	рН	1:5 EC		hangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m		9		Cmol (%
0 - 0.08	4.1I 5.25H		1.3F	3.23	0.41	0.15	0.74G			
0.3 - 0.38	3.88I 5.03H		0.61F	2.21	0.26	0.21	1.04G			
0.53 - 0.72	3.87I 5.23H		0.28F	1.17	0.16	0.13	0.73G			
0.72 - 1.05	3.73I 5.41H		0.18F	1.15	0.15	0.1	0.58G			
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Tota K		Pa GV	rticle Size	Analysis Silt Clay
m	%	%	mg/kg	%	%	%	Mg/m3		%	
0 - 0.08 0.3 - 0.38 0.53 - 0.72 0.72 - 1.05		6.21A 2.58A 0.17A 0.78A		69F 37.6F 19.5F 8.7F	<0.0 <0.0 <0.0 <0.0)1E)1E		27.7 21.9 29.4 12.7		
Depth	COLE		Grav	Gravimetric/Volumetric Water Contents					K sat	K unsat
m		Sat.	0.05 Bar	0.1 Bar g/	0.5 Bar /g - m3/m	1 Bar 13	5 Bar 15	5 Bar	mm/h	mm/h

0 - 0.08 0.3 - 0.38 0.53 - 0.72 0.72 - 1.05 Project Name: EDEN BURNING STUDY AREA

Project Code: 1000638 Site ID: EDB_SA59 Observation ID: 1

Agency Name: CSIRO Division of Soils (ACT)

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 (%)