1968 ISSS Congress Tour **Project Name:**

Project Code: Site ID: A972 Observation ID: 1 IS5

Agency Name: **CSIRO Division of Soils (SA)**

Site Information

Desc. By: Date Desc.: G. Blackburn Locality: **VEGETATION - PASTURE**

Elevation: 07/05/66 60 metres Sheet No.: SJ54-6 Map Ref.: 1:250000 Rainfall: 660

Northing/Long.: 140.78333333 Runoff: Moderately rapid Easting/Lat.: -37.83333333 Drainage: Well drained

Geology

ExposureType: No Data Conf. Sub. is Parent. Mat.: No Data Geol. Ref.: **Substrate Material:** Basalt No Data

Land Form

Rel/Slope Class: No Data Pattern Type: Beach ridge plain Morph. Type: Elem. Type: Ridge Relief: 15 metres Beach ridge **Slope Category:** No Data No Data Slope: 0 % Aspect:

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification: Mapping Unit: N/A Melanic Calcic Black Dermosol Principal Profile Form: N/A **ASC Confidence: Great Soil Group:** Chernozem

No analytical data are available but confidence is fair.

<u>Site Disturbance:</u> No effective disturbance other than grazing by hoofed animals

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Vegetation:

Surface Coarse Fragments:

Profile Morp	oho	loav
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0 - 0.1 m	Black (10YR2/1-Moist); ; Loam; , Granular; Very weak consistence; 0-2%, medium gravelly, 6-20mm, Igneous rock (unidentified), coarse fragments; Many, fine (1-2mm) roots;
0.1 - 0.2 m	Very dark brown (10YR2/2-Moist); ; Loam; , Granular; Very weak consistence; 0-2%, medium gravelly, 6-20mm, Igneous rock (unidentified), coarse fragments; Many, fine (1-2mm) roots;
0.2 - 0.3 m	Very dark brown (10YR2/2-Moist); ; Loam; , Granular; , Columnar; Very weak consistence; 0-2%, medium gravelly, 6-20mm, Igneous rock (unidentified), coarse fragments; Many, fine (1-2mm) roots;
0.3 - 0.45 m	Very dark brown (10YR2/2-Moist); ; Loam; , Granular; , Columnar; Very weak consistence; 2-10%, medium gravelly, 6-20mm, Igneous rock (unidentified), coarse fragments; Common, fine (1-2mm) roots; Gradual change to -
0.45 - 0.6 m	Very dark greyish brown (10YR3/2-Moist); ; Loam; Massive grade of structure, Granular; Very weak consistence; 10-20%, medium gravelly, 6-20mm, Igneous rock (unidentified), coarse fragments; Few, fine (1-2mm) roots; Gradual change to -
0.6 - 0.75 m	Dark greyish brown (10YR4/2-Moist); ; Loam; Massive grade of structure, Granular; Very weak consistence; 2-10%, medium gravelly, 6-20mm, Gravel, coarse fragments; Few (2 - 10 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Few, fine (1-2mm) roots; Gradual change to -
0.75 - 0.9 m	Dark greyish brown (10YR4/2-Moist); ; Loam; , Angular blocky; Very firm consistence; 2-10%, medium gravelly, 6-20mm, Gravel, coarse fragments; Few, fine (1-2mm) roots;

Morphological Notes

Observation Notes

SUBSTRATE MATERIAL ALSO CONTAINS SOME LIMESTONE

Site Notes

MT GAMBIE

1968 ISSS Congress Tour IS5 Site ID: A CSIRO Division of Soils (SA) A972 Observation ID: 1

Project Name: Project Code: Agency Name:

Laboratory Test Results:

Laboratory	Test Res	<u>suits:</u>											
Depth	рН	1:5 EC		hangeable		NI-		nangeable	CEC	E	CEC	E	SP
m		dS/m	Ca	Mg	К	Na Acidity Cmol (+)/kg							ó
0 - 0.1	6.2J 7.5A	0.351A	33B	4.6	3.1	0.7	5		113	J		0.	66
0.1 - 0.2	5.4J 7.1A	0.205A	26B	3.7	3.5	1							
0.2 - 0.3	5.7J 7.4A	0.141A											
0.3 - 0.45	5.9J 7.7A	0.103A		2.8	1	8.0	6		74J	ı		1.	16
0.45 - 0.6	6.1J 7.9A	0.103A											
0.6 - 0.75	5.5J 8.3A	0.122A		2.8	0.15	0.4			64J			0.	75
0.75 - 0.9	6.7J 8.4A	0.097A	19B	2.8	0.14	0.3	55						
Depth		Organic C	Avail. P	Total P	Total N		Total K	Bulk Density	Pa GV	rticle S	Size <i>A</i> FS	Analysis Silt C	lay
m	%	%	mg/kg	%	%		%	Mg/m3			%		
0 - 0.1 0.1 - 0.2 0.2 - 0.3	0.89C 0.04C	6.4A 5.23A	141A 60A	0.23A 0.22A	0.6 0.4		0.86A 0.97A	0.90 1.00	2 5	23C 26C	32 31	19 16	21 21
0.3 - 0.45 0.45 - 0.6	0.03C	2.79A	23A	0.15A	0.2	7B	0.77A	1.30	7	30C	37	14	17
0.6 - 0.75 0.75 - 0.9	26C 38C	0.814A 0.523A	12A 7A	0.11A 0.1A	0.07	73B	0.65A 0.58A		12 7	23C 19C	25 21	10 9	14 9
Depth	COLE		Grav	vimetric/Vo	lumetric V	Vater	Content	s		K sat	t	K unsat	
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar		Bar 5	Bar 1	5 Bar		_		
m				g/g	g - m3/m	3				mm/h	1	mm/h	
0 - 0.1				0.32C					0.1C				
0.1 - 0.2 0.2 - 0.3				0.36C				(0.17C				
0.3 - 0.45 0.45 - 0.6 0.6 - 0.75 0.75 - 0.9				0.34C					0.2C				

Project Name: 1968 ISSS Congress Tour

Site ID: Observation ID: 1 **Project Code:** IS5 A972

CSIRO Division of Soils (SA) Agency Name:

Laboratory Analyses Completed for this profile

10A1 Total sulfur - X-ray fluorescence

15_NR_CEC CEC - meq per 100g of soil - Not recorded

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 Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts 15A2_NA

Total potassium - X-ray fluorescence 17A1 19B_NR Calcium Carbonate (CaCO3) - Not recorded

2 LOI Loss on Ignition (%) Air-dry moisture content 2A1 3A1 EC of 1:5 soil/water extract 4A1 pH of 1:5 soil/water suspension

pH of soil - pH of 1:2.5 Soil/0.1M CaCl2 suspension Chloride - 1:5 soil/water extract, automated colour 4B_C_2.5 5A2

6A1 Organic carbon - Walkley and Black Total nitrogen (%) - Not recorded
Total phosphorus - X-ray fluorescence 7 NR 9A1

9B_9C Available P (mg/kg) - Bicarbonate P - 0.5M NaHCO3 extractable

MIN_NR_K2O Kaolin minerals P10_GRAV Gravel (%)

P10_NR_C Clay (%) - Not recorded Coarse sand (%) - Not recorded P10_NR_CS P10_NR_FS Fine sand (%) - Not recorded P10_NR_Z Silt (%) - Not recorded P3A_NR Bulk density - Not recorded

P3B_VL_01 0.1 BAR Moisture m3/m3 - Volumetric using suction plate P3B_VL_15 XRD_C_II 15 BAR Moisture m3/m3 - Volumetric using pressure plate

Illite - X-Ray Diffraction

Interstratified clay minerals - X-Ray Diffraction XRD_C_Is

XRD_C_Ka XRD_C_Qz Kaolin - X-Ray Diffraction Quartz - X-Ray Diffraction