LAK **Project Name:**

Project Code: LAK Site ID: H51 Observation ID: 1

Agency Name: CSIRO Division of Soils (TAS)

Site Information

Locality: C.G. Stephens 3.2km SSE of Conara Junction:

Desc. By: Date Desc.: Elevation: 23/01/53 192 metres Map Ref.: Sheet No.: 8314 1:100000 Rainfall: 560 Northing/Long.: 147.45 Runoff: Very slow Easting/Lat.: -41.85 Drainage: Poorly drained

Geology

ExposureType: Conf. Sub. is Parent. Mat.: No Data Soil pit

Geol. Ref.: **Substrate Material:** No Data Unconsolidated material (unidentified)

Land Form

Rel/Slope Class: No Data Pattern Type: Alluvial plain Morph. Type: Elem. Type: Flat Relief: No Data Plain Slope Category: No Data Aspect: Slope: 0 % 0 degrees

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification: Mapping Unit: N/A Haplic Pedal Aquic Vertosol **Principal Profile Form:** Uq5.17 **ASC Confidence: Great Soil Group:** Wiesenboden

All necessary analytical data are available.

Site Disturbance: Complete clearing. Pasture, native or improved, cultivated at some stage

Vegetation: Low Strata - Tussock grass, 0.26-0.5m, Mid-dense. *Species includes - Danthonia species

Bluish grey (5B5/1-Moist); , 2.5Y64; Sandy medium clay;

Surface Coarse Fragments:

Profile Morphology

 $\Omega = \Omega \Omega \Omega m$

0 - 0.08 m	(N3/0-Moist);; Heavy clay; 10-20 mm; Very strong consistence; Diffuse change to -
0.08 - 0.25 m	(N2/0-Moist); ; Heavy clay; Weak grade of structure, 50-100 mm, Prismatic; Weak grade of structure, 20-50 mm, Angular blocky; Very firm consistence; Slightly plastic; Normal plasticity; Diffuse change to -
0.25 - 0.38 m	(N2/0-Moist); ; Heavy clay; Weak grade of structure, 50-100 mm, Prismatic; Weak grade of structure, 20-50 mm, Angular blocky; Slightly plastic; Normal plasticity; Very few (0 - 2 %), Gypseous, Coarse (6 - 20 mm), Concretions; Diffuse change to -
0.38 - 0.53 m	Black (5Y2/1-Moist); , 5Y51; Heavy clay; 20-50 mm, Subangular blocky; Slightly plastic; Normal plasticity; Slightly sticky; 0-2%, Gravel, coarse fragments; Diffuse change to -
0.53 - 0.64 m	Very dark grey (5Y3/1-Moist); , 5Y51; Heavy clay; 20-50 mm, Subangular blocky; Slightly plastic; Normal plasticity; Slightly sticky; 10-20%, Gravel, coarse fragments; Diffuse change to -
0.64 - 0.76 m	Very dark greyish brown (2.5Y3/2-Moist); ; Heavy clay; Massive grade of structure; Slightly plastic; Normal plasticity; Slightly sticky; 2-10%, Gravel, coarse fragments; Diffuse change to -
0.76 - 0.94 m	Very dark greyish brown (2.5Y3/2-Moist); ; Heavy clay; Massive grade of structure; Slightly plastic; Normal plasticity; Slightly sticky; 2-10%, Gravel, coarse fragments; Diffuse change to -
1.14 - 1.3 m	Light brownish grey (2.5Y6/2-Moist); , 2.5Y64; Medium heavy clay; Diffuse change to -

(N3/0-Moiet): Heavy clay: 10-20 mm; Very strong consistence: Diffuse change to

Morphological Notes

2.36 - 2.44 m

Observation Notes

114-130CM POCKETS OF SANDY CLAY:

Site Notes

SOMERSET

Project Name: LAK
Project Code: LAK Site ID: H5
Agency Name: CSIRO Division of Soils (TAS) Site ID: H51 Observation ID: 1

Laboratory Test Results:

Depth	рН	1:5 EC		hangeable Vig	Cations K	Na	Exchangeable	CEC		ECEC	E	SP
m		dS/m	Ca i	vig	N.	Cmol (Acidity +)/kg				•	%
0 - 0.08	6.6A		26.1H	45	1.25	4.1	6.8H 14.4E			90.9B		
0.08 - 0.25	7.2A		25.5H	55.1	0.98	5.3	6.9E			94.8B		
0.25 - 0.38	8.4A		20.5H	52.1	0.48	9				82.1B		
0.38 - 0.53	8.8A											
0.53 - 0.64	8.7A											
0.64 - 0.76	8.7A											
0.76 - 0.94	8.7A		6.7H	29.6	0.2	6.2				42.7B		
1.14 - 1.3	8.6A											
2.36 - 2.44	7.8A											
Depth	CaCO3	Organic	Avail.	Total	Total	Tota			article	-	Analysis	
	0/	C	Р	P	N	K		G۷	CS	FS %	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.08		6.11D		0.018D	0.64	5A		0	2B	7	10	70
0.08 - 0.25		2.45D			0.28	32A		0	<1B	6	5	81
0.25 - 0.38	0.17A	1.46D		0.008D	0.16	3A		0	<1B	4	2	90
0.38 - 0.53	7.5A	1.02D			0.10	2A						
0.53 - 0.64	10.5A	-			0.06	-						
0.64 - 0.76	1.8A	-			0.03	-						
0.76 - 0.94	0.38A				0.02			5	6B	29	12	53
1.14 - 1.3	0.19A				0.01	1A						
2.36 - 2.44	<0.1A											
Depth	Depth COLE Gravimetric/Volumetric Water Contents								K sat		K unsat	
m		Sat.	0.05 Bar	0.1 Bar α/α	0.5 Bar g - m3/m3	1 Bar	5 Bar 15	Bar	mm	/h	mm/h	
•••				9/3	,	-						

0 - 0.08 0.08 - 0.25 0.25 - 0.38

0.23 - 0.38 0.38 - 0.53 0.53 - 0.64 0.64 - 0.76

0.76 - 0.94 1.14 - 1.3 2.36 - 2.44

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Laboratory Analyses Completed for this profile

15E1_CA

Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble 15E1_K

Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts

Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts

Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts

15G_C_H1
Exchangeable hydrogen - meq per 100g of soil - Hydrogen By back titration of A or B
Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0
Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations and exch. (Hydrogen)

19A1 Carbonates - rapid titration
2_LOI Loss on Ignition (%)
2A1 Air-dry moisture content
4A1 pH of 1:5 soil/water suspension

5A2 Chloride - 1:5 soil/water extract, automated colour

6A1_UC Organic carbon (%) - Uncorrected Walkley and Black method Total nitrogen - semimicro Kjeldahl , automated colour

9A_HCL Total element - P(%) - By boiling HCl

P10_GRAV Gravel (%) P10A1_C Clay (%) - Pipette

P10A1_CS Coarse sand (%) - Pipette
P10A1_FS Fine sand (%) - Pipette
P10A1_Z Silt (%) - Pipette
XRD_C_Ka Kaolin - X-Ray Diffraction
XRD_C_Qz Quartz - X-Ray Diffraction
XRD_C_St Smectite - X-Ray Diffraction