Project Name: **Barossa Valley II, S.A.**
Project Code: **BA1** **Site ID:** **A41** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (SA)**

Site Information

Desc. By: K.H. Northcote
Date Desc.: 18/05/54
Map Ref.: Sheet No. : SI54-9 1:250000
Northing/Long.: 138.939444444445
Easting/Lat.: -34.5269444444445
Locality:
Elevation: No Data
Rainfall: 0
Runoff: Slow
Drainage: Very poorly drained

Geology

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

Land Form

Rel/Slope Class: Gently undulating plains <9m 1-3%
Morph. Type: Simple-slope
Elem. Type: Hillslope
Slope: 0 %
Pattern Type: Plateau
Relief: 0 metres
Slope Category: Very gently sloped
Aspect: No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:
Endocalcareous-Endohypersodic Self-Mulching Grey Vertosol
Mapping Unit: N/A
Principal Profile Form: Ug5.16
ASC Confidence:
All necessary analytical data are available.
Great Soil Group: Wiesenboden

Site Disturbance:

Vegetation:

Tall Strata - Sod grass, , . *Species includes - None Recorded

Surface Coarse Fragments:

Profile Morphology

A1	0 - 0.06 m	Black (10YR2/1-Moist); ; Medium clay; , Granular; 5-10 mm, Angular blocky; Loose consistence; Moderately plastic; Field pH 6.5 (pH meter); , fine (1-2mm) roots; Clear, Irregular change to -
A2	0.08 - 0.23 m	Black (10YR2/1-Moist); ; Medium clay; 20-50 mm, Angular blocky; Loose consistence; Moderately plastic; Field pH 6.5 (pH meter); Gradual change to -
B1	0.3 - 0.48 m	(N2/0-Moist); ; Medium clay; 50-100 mm, Angular blocky; Coarse, (10 - 20) mm crack; Very firm consistence; Moderately plastic; Field pH 6.5 (pH meter); Diffuse change to -
B1	0.48 - 0.61 m	Black (10YR2/1-Moist); , 10YR21; Medium clay; 50-100 mm, Angular blocky; Very firm consistence; Moderately plastic; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Concretions; Diffuse change to -
	0.61 - 0.89 m	Brown (10YR5/3-Moist); , 7.5YR54; , 10YR21; Medium clay; 50-100 mm, Angular blocky; Very firm consistence; Moderately plastic; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Field pH 9 (pH meter);
	1.22 - 1.68 m	; Medium clay; Very weak consistence; Very few (0 - 2 %), Calcareous, , Soft segregations;
	2.24 - 2.34 m	; Medium clay; Moderately plastic;
	3.33 - 3.53 m	; Sandy medium clay;

Morphological Notes

Observation Notes

Site Notes

BAROSSA LIGHT

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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 - 0.06	6.9A	0.026C	18.1F	5.3	1.7	0.44	5.4E			
0.08 - 0.23	7.4A	0.017C								
0.3 - 0.48	8.4A	0.027C	16.7F	9.1	0.8	2.6				
0.48 - 0.61	9.2D	0.095C								
0.61 - 0.89	9.5A	0.15C								
1.22 - 1.68	9.2A	0.54C								
2.24 - 2.34	8.9A	0.67C								
3.33 - 3.53	8.5A	0.58C								

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 - 0.06					0.27C							
0.08 - 0.23									7C	55	13	25
0.3 - 0.48	0.02A				0.06C				6C	46	9	37
0.48 - 0.61	1.7A								6C	38	9	41
0.61 - 0.89	9.9A											
1.22 - 1.68	8.4A											
2.24 - 2.34	1A											
3.33 - 3.53	0.05A								7C	33	6	53

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 - 0.06									
0.08 - 0.23									
0.3 - 0.48									
0.48 - 0.61									
0.61 - 0.89									
1.22 - 1.68									
2.24 - 2.34									
3.33 - 3.53									

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Laboratory Analyses Completed for this profile

10B_NR	Extractable sulfur(mg/kg) - Not recorded
12_NR_CU	Total element - Cu(mg/kg) - Not recorded
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
15G1_H	Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0
19A1	Carbonates - rapid titration
2_LOI	Loss on Ignition (%)
2A1	Air-dry moisture content
3A_TSS	Electrical conductivity or soluble salts - Total soluble salts %
4A1	pH of 1:5 soil/water suspension
4C1	pH of 1:5 soil/1M potassium chloride extract - direct
5A2	Chloride - 1:5 soil/water extract, automated colour
7_C_B	Total Nitrogen - method description not recorded
9H_NR	Posphate retention % - Not recorded
M1a	Sodium absorption ratio (SAR)
P10_NR_C	Clay (%) - Not recorded
P10_NR_CS	Coarse sand (%) - Not recorded
P10_NR_FS	Fine sand (%) - Not recorded
P10_NR_Z	Silt (%) - Not recorded