

Project Name: Barossa Valley II, S.A.
Project Code: BA1 **Site ID:** A55 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (SA)

Site Information

Desc. By:	C.B. Wells	Locality:	VITICULTURE + HORTICULTURE + CEREAL CROPPING: SEALING OF SURFACE RENDERS LANDSCAPE LIABLE TO WATER EROSION:
Date Desc.:	27/05/54	Elevation:	No Data
Map Ref.:		Rainfall:	0
Northing/Long.:	138.924166666667	Runoff:	Moderately rapid
Easting/Lat.:	-34.5033333333334	Drainage:	Well drained

Geology

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

Land Form

Rel/Slope Class:	No Data	Pattern Type:	No Data
Morph. Type:	Upper-slope	Relief:	No Data
Elem. Type:	Hillslope	Slope Category:	Gently inclined
Slope:	%	Aspect:	No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:	Mapping Unit:	N/A
Vertic Calcic Red Chromosol	Principal Profile Form:	Dr2.33
ASC Confidence:	Great Soil Group:	Red-brown earth
Analytical data are incomplete but reasonable confidence.		

Site Disturbance:

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A1	0 - 0.14 m	Dark reddish brown (5YR3/3-Moist); ; Sandy loam; Weak grade of structure, Granular; Firm consistence; Field pH 6.5 (pH meter); , fine (1-2mm) roots; Gradual change to -
A2	0.14 - 0.19 m	; Sandy loam; , Platy; Firm consistence; Field pH 6.5 (pH meter); , fine (1-2mm) roots; Abrupt change to -
B1	0.19 - 0.41 m	Dark red (2.5YR3/6-Moist); ; Medium clay; Strong grade of structure, 20-50 mm, Angular blocky; Moderate grade of structure, 100-200 mm, Prismatic; Firm consistence; Field pH 6.5 (pH meter); Many, medium (2-5mm) roots; Gradual change to -
B2	0.41 - 0.51 m	; Medium clay; Strong grade of structure, 20-50 mm, Angular blocky; Moderate grade of structure, 100-200 mm, Prismatic; Firm consistence; Very few (0 - 2 %), Calcareous, , Soft segregations; Field pH 7 (pH meter); Abrupt, Irregular change to -
B	0.51 - 0.71 m	; Medium clay; Moderate grade of structure, 2-5 mm, Angular blocky; Strong grade of structure, 20-50 mm, Prismatic; Firm consistence; 2-10%, fine gravelly, 2-6mm, Schist, coarse fragments; Common (10 - 20 %), Calcareous, Coarse (6 - 20 mm), Concretions; Field pH 8 (pH meter);
BC	1.47 - 1.57 m	; Medium clay; Few (2 - 10 %), Calcareous, Medium (2 -6 mm), Concretions;

Morphological Notes

Observation Notes

Site Notes

BAROSSA LIGHT

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Laboratory Test Results:

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				cmol (+)/kg				%
0 - 0.14	7A	0.009C	3.5F	0.9	4.5	0.08	1.9E			
0.14 - 0.19	7.3A	0.009C			0.5					
0.19 - 0.41	6.9A	0.012C	15F	4.9	25	0.53	7.2E			
					1.6					
0.41 - 0.51	7.4A	0.015C								
0.51 - 0.71	8.6A	0.058C								
1.47 - 1.57	8.8A	0.061C								

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle GV	Particle CS	Size FS	Analysis Silt	Analysis Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.14				0.014F	0.049C			5	11C	68	11	11
0.14 - 0.19								3	8C	56	12	23
0.19 - 0.41				0.017F	0.095C			2	2C	22	3	74
0.41 - 0.51												
0.51 - 0.71	4.3A											
1.47 - 1.57	3.1A							8	6C	49	6	38

[illegible]

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Laboratory Analyses Completed for this profile

15_NR_K	Exch. basic cations (K++) - meq per 100g of soil - 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
5A2	Chloride - 1:5 soil/water extract, automated colour
7_C_B	Total Nitrogen - method description not recorded
9A_NR	Total element - P(%) - Not recorded
P10_GRAV	Gravel (%)
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