Project Name: **Barossa Valley III, S.A.**
Project Code: **BA3** **Site ID:** **A65** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (SA)**

Site Information

Desc. By: K.H. Northcote
Locality: PASTURE: VINES: EROSION CONTROL NECESSARY: SOIL GENERALLY LESS FERTILETHAN ADJACENT RED BROWN EARTHS:
Date Desc.: 22/06/54
Elevation: No Data
Map Ref.:
Rainfall: 0
Northing/Long.: 138.909166666667
Runoff: Rapid
Easting/Lat.: -34.5330555555556
Drainage: Imperfectly 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: Alluvial plain
Morph. Type: Upper-slope
Relief: No Data
Elem. Type: Plain
Slope Category: Gently inclined
Slope: %
Aspect: No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:
Calcic Mottled-Mesonatric Brown Sodosol
ASC Confidence:
Analytical data are incomplete but reasonable confidence.

Mapping Unit: N/A
Principal Profile Form: Db2.33
Great Soil Group: Brown earth

Site Disturbance:

Vegetation:

Tall Strata - , , . *Species includes - Eucalyptus leucoxylon, Calotropis procera

Surface Coarse Fragments:

Profile Morphology

A1	0 - 0.11 m	Dark yellowish brown (10YR3/4-Moist); ; Loamy sand; Single grain grade of structure; 2-10%, coarse gravelly, 20-60mm, Quartz, coarse fragments; Field pH 6.5 (pH meter); Clear, Irregular change to -
B1	0.14 - 0.32 m	Brown (7.5YR4/4-Moist); , 10R34; Sandy medium clay; 20-50 mm, Angular blocky; , Prismatic; Field pH 7.5 (pH meter); Gradual change to -
B1	0.32 - 0.51 m	Brown (7.5YR4/4-Moist); , 5G61; , 7.5YR44; Sandy medium clay; 20-50 mm, Angular blocky; , Prismatic; Field pH 8 (pH meter); Clear, Irregular change to -
B	0.51 - 0.74 m	; Sandy medium clay; 20-50 mm, Angular blocky; , Prismatic;
	1.07 - 1.29 m	; Sandy medium clay;
	1.75 - 1.83 m	; Sandy medium clay;

Morphological Notes

Observation Notes

Site Notes

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 - 0.11	7.1A	0.016C	4.5F	2.2	0.39	0.56	2E			
0.14 - 0.32	8.2A	0.063C	11F	10.4	0.97	3.9				
0.32 - 0.51	9.3D	0.19C								
0.51 - 0.74	9.3A	0.29C								
1.07 - 1.29	9.3A	0.35C								
1.75 - 1.83	9.3A	0.37C								

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 - 0.11				0.018F	0.037C	2B		3	15C	70	3	13
0.14 - 0.32	0.04A			0.011F	0.059C			1	9C	41	1	48
0.32 - 0.51	2.8A											
0.51 - 0.74	8.4A											
1.07 - 1.29	4.3A											
1.75 - 1.83	18A											

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 - 0.11									
0.14 - 0.32									
0.32 - 0.51									
0.51 - 0.74									
1.07 - 1.29									
1.75 - 1.83									

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Laboratory Analyses Completed for this profile

10A_NR	Total element - S(%) - 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
17A_NR	Total element - K(%) - Not recorded
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
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
XRD_C_Il	Illite - X-Ray Diffraction
XRD_C_Ka	Kaolin - X-Ray Diffraction