**Project Name: Botanic Gardens Annex, S.A.** 

Observation ID: 1 **Project Code: BGA** Site ID: A950

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

Site Information

Desc. By: Malcolm J. Wright Locality:

Date Desc.: Elevation: 01/06/65 640 metres Map Ref.: Rainfall: 0 Northing/Long.: 138.71666667 Runoff: Verv rapid Easting/Lat.: -34.98333333333333 Drainage: Rapidly drained

Geology

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

**Land Form** 

Rel/Slope Class: Rolling hills 90-300m 10-32% Pattern Type: Hills Morph. Type: Simple-slope Relief: 122 metres Elem. Type: Slope Category: No Data Hillslope Aspect: No Data Slope: 0 %

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

Australian Soil Classification: N/A Mapping Unit: Sodic Dystrophic Brown Kandosol Principal Profile Form: N/A

ASC Confidence: **Great Soil Group:** Yellow podzolic

No analytical data are available but confidence is fair. soil

Site Disturbance: Complete clearing. Pasture, native or improved, but never cultivated

Vegetation:

Surface Coarse Fragments:

**Profile Morphology** 

0 - 0.08 m Very dark grey (10YR3/1-Moist): Clayey sand (Fibric): Massive grade of structure: Weak consistence; 10-20%, coarse gravelly, 20-60mm, Gravel, coarse fragments; Many, fine (1-

2mm) roots;

Dark grey (10YR4/1-Moist); ; Clayey sand; Massive grade of structure; Weak consistence; 10-0.08 - 0.2 m

20%, stony, 200-600mm, Gravel, coarse fragments; Many, coarse (>5mm) roots; Diffuse

change to -

Light brownish grey (10YR6/2-Moist); ; Sand; Massive grade of structure; 20-50%, cobbly, 60-0.25 - 0.43 m

200mm, Gravel, coarse fragments; Diffuse change to

Brown (10YR5/3-Moist); ; Sandy loam; Massive grade of structure; 20-50%, coarse gravelly, 0.43 - 0.53 m

20-60mm, Gravel, coarse fragments; Sharp change to -

0.53 - 0.68 m Strong brown (7.5YR5/6-Moist): Clay loam, coarse sandy; Massive grade of structure; Very

firm consistence; 2-10%, medium gravelly, 6-20mm, Gravel, coarse fragments; Diffuse change

0.68 - 0.88 m ; Clay loam; Weak grade of structure, Angular blocky; 2-5 mm, Angular blocky; Very weak

consistence; Moderately plastic; 0-2%, coarse gravelly, 20-60mm, Gravel, coarse fragments;

Diffuse change to -

; Massive grade of structure; Very weak consistence; 0-2%, Gravel, coarse fragments; 0.88 - 1.27 m

1.32 - 1.42 m ; Very weak consistence;

1.42 - 1.52 m

**Morphological Notes** 

becoming N.P.

**Observation Notes** 

132-142CM LITTLE WEATHERED QUARTZITE:

**Site Notes** 

MT LOFTY

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## **Laboratory Test Results:**

Depth	рН	1:5 EC		hangeable				angeable	CEC		ECEC	E	SP
m		dS/m	a	Mg	K	Na Cmol (		cidity				,	%
0 - 0.08	5.6H	0.009C	3.4K	1.5	0.14	0.23		9.4D					
0.08 - 0.2	5.1H	0.005C	0.9K	0.78	0.06	0.18		6.4D					
0.25 - 0.43	5.4H	0.004C											
0.43 - 0.53	4.8H	0.006C											
0.53 - 0.68	5.8H	0.009C	0.6K	0.2	0.23	0.32		12D					
0.68 - 0.88	5.7H	0.008C											
0.88 - 1.27	5.3H	0.008C											
1.32 - 1.42	5.1H	0.007C											
1.42 - 1.52													
Depth	CaCO3	Organic	Avail.	Total	Total	Tota		Bulk				Analysis	
m	%	C %	P mg/kg	P %	N %	K %		Density Mg/m3	GV	cs	FS %	Silt	Clay
0 - 0.08				0.004F	0.08	31B 0.0	38B		8	56C	31	7	3
0.08 - 0.2									6	61C	29	7	3
0.25 - 0.43													
0.43 - 0.53													
0.53 - 0.68				0.006F	0.03	34B 0.0	18B			43C	27	14	15
0.68 - 0.88													
0.88 - 1.27				0.009F	-	0.3	34B			23C	12	9	54
1.32 - 1.42				0.003F	-	0.0	)47B						
1.42 - 1.52													
Depth	COLE		Grav	vimetric/Vo	lumetric V	Vater Co	ntents	<b>S</b>		K sa	nt	K unsat	:
•		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5	Bar 15	Bar				

Depth	COLE	Gravimetric/Volumetric Water Contents								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 - 0.08 0.08 - 0.2

0.08 - 0.2 0.25 - 0.43 0.43 - 0.53 0.53 - 0.68 0.68 - 0.88 0.88 - 1.27 1.32 - 1.42 1.42 - 1.52

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## **Laboratory Analyses Completed for this profile**

Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded Hydrogen Cation - meq per 100g of soil - Not recorded 15\_NR\_CA

15\_NR\_H

15\_NR\_K Exch. basic cations (K++) - med per 100g of soil - Not recorded Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded Exch. basic cations (Na++) - meq per 100g of soil - Not recorded 15 NR MG 15\_NR\_NA

17A\_NR Total element - K(%) - Not recorded

2 LOI Loss on Ignition (%) Air-dry moisture content 2A1

3A\_TSS Electrical conductivity or soluble salts - Total soluble salts %

4\_NR pH of soil - Not recorded

Water soluble Chloride - Cl(%) - Not recordede

5\_NR 7\_NR Total nitrogen (%) - Not recorded
Total element - P(%) - Not recorded 9A\_NR

P10\_GRAV Gravel (%)

Clay (%) - Not recorded Coarse sand (%) - Not recorded P10\_NR\_C P10\_NR\_CS Fine sand (%) - Not recorded P10\_NR\_FS P10\_NR\_Z Silt (%) - Not recorded