Project Name: Soils of the MonartoTown Site

Project Code: Observation ID: 1 Monarto Site ID: A1171

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

Site Information

Desc. Bv: Malcolm J. Wright Locality:

Date Desc.: Elevation: 21/11/75 No Data Map Ref.: 1:50000 Rainfall: No Data Northing/Long.: 6112400 AMG zone: 54 Runoff: No Data Easting/Lat.: 330110 Datum: AGD66 Drainage: No Data

Geology

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

Land Form

Rel/Slope Class: No Data Pattern Type: No Data Morph. Type: No Data Relief: No Data Elem. Type: Slope Category: No Data No Data Aspect: No Data Slope:

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification: N/A Mapping Unit: Principal Profile Form: Dr2.33 ASC Confidence: **Great Soil Group:** N/A

Confidence level not specified

Site Disturbance:

Vegetation:

Surface Coarse Fragments:

Profile Morphology

0 - 0.1 m Reddish brown (5YR4/3-Moist); ; Loamy sand; Massive grade of structure; Dry; Very weak consistence; 0-2%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Field pH 6.5 (Raupach); Clear change to -Α2 0.1 - 0.2 m Dark reddish grey (5YR4/2-Moist); , 5YR73; Loamy sand; Massive grade of structure; Dry; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Field pH 6.5 (Raupach); Sharp change to -Red (2.5YR4/6-Moist); ; Sandy clay; , Angular blocky; , Columnar; Dry; Strong consistence; Field AB 0.2 - 0.3 m pH 7 (Raupach); Red (2.5YR4/6-Moist); ; Sandy clay; , Angular blocky; Moderate grade of structure, 50-100 mm, B2t 0.3 - 0.4 m Prismatic; Dry; Strong consistence; Common (10 - 20 %), Calcareous, , ; Field pH 7.5 (Raupach); Clear change to -Reddish yellow (7.5YR6/6-Moist); , 5YR78; Clay loam; Massive grade of structure; Weak grade B2tk 0.4 - 0.5 m of structure, Platy; Dry; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Common (10 - 20 %), Calcareous, , Soft segregations; Field pH 8.5 (Raupach): C1k 0.5 - 0.6 m Reddish yellow (7.5YR6/6-Moist); , 5YR78; Sandy clay loam; Massive grade of structure; Weak grade of structure, Platy; Dry; Very firm consistence; Common (10 - 20 %), Calcareous, , ; Field pH 9 (Raupach); C1k 0.6 - 0.7 m Reddish yellow (7.5YR6/6-Moist); , 5YR78; Sandy clay loam; Massive grade of structure; Weak

C2k Reddish yellow (7.5YR6/6-Moist); , 10YR52; Clay loam; Massive grade of structure; , Platy; $0.7 - 0.8 \, \text{m}$ Very firm consistence; 20-50%, medium gravelly, 6-20mm, Schist, coarse fragments; Many (20

- 50 %), Calcareous, , ; Field pH 9 (Raupach);

C2k 0.8 - 0.9 m Reddish yellow (7.5YR6/6-Moist); , 10YR52, 0-2%; Silty loam; Massive grade of structure; ,

Platy; Very firm consistence; Many (20 - 50 %), Calcareous, , Concretions; Field pH 9

coarse fragments; Common (10 - 20 %), Calcareous, , ; Field pH 9 (Raupach);

grade of structure, Platy: Dry: Very firm consistence: 0-2%, medium grayelly, 6-20mm, Schist,

(Raupach): Gradual change to -

0.9 - 1.2 m Rock

Morphological Notes

Soils of the MonartoTown Site **Project Name:**

Project Code: Agency Name: Monarto Site ID: A1171 Observation ID: 1

CSIRO Division of Soils (SA)

This horizon tongues into clay below causing irregularities in the boundary at 10cm. Very sandy at top. Many sand filled burrows. SC texture is uncertain.

AΒ

B2t

B2tk

SC texture is uncertain.

Mainly semi-hard lime. Some pockets of clay from above persist.

60% semi-hard lime. 40% weathering schist. C2k C2k 50/50 % weathering schist and carbonate matrix.

2R Mainly weathering schist.

Observation Notes

Site Notes

Project Name: Project Code: Agency Name: Soils of the MonartoTown Site

Monarto Site ID: A1171 CSIRO Division of Soils (SA) Observation ID: 1

Laboratory Test Results:

<u>Laboratory Test Results:</u>												
Depth	pН	1:5 EC		hangeable Mg	Cations K	Na	Exchangeable Acidity	CEC		ECEC	I	ESP
m		dS/m	Ou .	9	.`	Cmol (+)						%
0 - 0.1 0.1 - 0.2	7.5A	0.06A	1.8K	0.6	0.84	0.03		5J			(0.60
0.2 - 0.3 0.3 - 0.4 0.4 - 0.5	8A 8.9A	0.06A 0.11A		5.4 6.4	1.2 1.3	0.65 0.83		22J 27J				2.95 3.07
0.5 - 0.6 0.6 - 0.7 0.7 - 0.8 0.8 - 0.9	9.1A	0.12A	16.8K	7	0.89	0.65		20J			3	3.25
0.8 - 0.9 0.9 - 1.2												
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density		ticle CS	Size FS	Analysis Silt	
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.1 0.1 - 0.2	<0.1C								81	47	8	1
0.2 - 0.3 0.3 - 0.4 0.4 - 0.5 0.5 - 0.6	<0.1C 19C								2I 5I	25 17	2 5	32 32
0.6 - 0.7 0.7 - 0.8 0.8 - 0.9 0.9 - 1.2	20C								111	17	11	20
Depth	COLE		Grav	Gravimetric/Volumetric Water Contents					K sa	at	K unsa	t
m		Sat.	0.05 Bar	0.1 Bar 0.5 Bar g/g - m3/m				I5 Bar	mm	/h mm/h		
0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.4 0.4 - 0.5 0.5 - 0.6 0.6 - 0.7 0.7 - 0.8 0.8 - 0.9 0.9 - 1.2												

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Laboratory Analyses Completed for this profile

15_NR_CA Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded

15_NR_CEC CEC - meq per 100g of soil - Not recorded

15_NR_K Exch. basic cations (K++) - meq per 100g of soil - Not recorded 15_NR_MG Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded Exch. basic cations (Na++) - meq per 100g of soil - Not recorded

19B_NR Calcium Carbonate (CaCO3) - Not recorded

2_LOI Loss on Ignition (%)
2A1 Air-dry moisture content
3A1 EC of 1:5 soil/water extract
4A1 pH of 1:5 soil/water suspension

5_NR Water soluble Chloride - Cl(%) - Not recordede

P10_NR_C
P10_NR_FS
P10_NR_FS
P10_NR_S
P10_NR_Z
P