Project Name: Eyre Peninsula Soil Survey

Project Code: EP Site ID: A1218 Observation ID: 1

Agency Name: CSIRO Division of Soils (SA)

Site Information

Desc. By: Malcolm J. Wright Locality: East of Poochera township.

Date Desc.: Elevation: 18/10/83 No Data Map Ref.: 1:100000 Rainfall: No Data Northing/Long.: 134.96666667 Runoff: Rapid Easting/Lat.: -32.71666667 Drainage: Well drained

<u>Geology</u>

ExposureType: Soil pit 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:
 No Data
 Relief:
 No Data

 Elem. Type:
 No Data
 Slope Category:
 No Data

 Slope:
 %
 Aspect:
 No Data

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

Australian Soil Classification:Mapping Unit:N/AN/APrincipal Profile Form:Uc1.33

ASC Confidence: Great Soil Group: Calcareous sand

Confidence level not specified

Site Disturbance:

Vegetation:

**Surface Coarse Fragments:** 

**Profile Morphology** 

0 - 0.15 m Dark brown (7.5YR3/2-Moist); Brown (7.5YR5/4-Dry); ; Loamy sand; Massive grade of structure; Weak consistence; Few (2 - 10 %), Calcareous, , Soft segregations; Very few (0 - 2

%), Calcareous, , Concretions; Clear change to -

0.15 - 0.3 m Dark brown (7.5YR3/4-Moist); Brown (7.5YR5/4-Dry); ; Loamy sand; Massive grade of structure; Weak consistence; Few (2 - 10 %), Calcareous, , Soft segregations; Few (2 - 10 %),

Structure, weak consistence, rew (2 - 10 %), Calcareous, , Soft segregations, rew (2 - 10 %),

Calcareous, , Concretions; Clear change to -

0.3 - 0.5 m Brown (7.5YR4/4-Moist); Brown (7.5YR5/4-Dry); ; Loamy sand; Massive grade of structure;

Single grain grade of structure; Loose consistence; Common (10 - 20 %), Calcareous, , Soft

segregations; Common (10 - 20 %), Calcareous, , Concretions; Diffuse change to -

0.3 - 0.5 m Brown (7.5YR4/4-Moist); Brown (7.5YR5/4-Dry); ; Loamy sand; Massive grade of structure;

Single grain grade of structure; Weak consistence; Common (10 - 20 %), Calcareous, , Soft segregations; Common (10 - 20 %), Calcareous, , Concretions; Diffuse change to -

segregations, Common (10 - 20 %), Calcareous, , Concretions, Diliuse change to -

0.5 - 0.7 m Brown (7.5YR4/4-Moist); Brown (7.5YR5/4-Dry); ; Loamy sand; Massive grade of structure;

Single grain grade of structure; Loose consistence; Common (10 - 20 %), Calcareous, , Soft

segregations; Common (10 - 20 %), Calcareous, , Concretions; Diffuse change to -

0.5 - 0.7 m Brown (7.5YR4/4-Moist); Brown (7.5YR5/4-Dry); ; Loamy sand; Massive grade of structure;

Single grain grade of structure; Weak consistence; Common (10 - 20 %), Calcareous, , Soft

segregations; Common (10 - 20 %), Calcareous, , Concretions; Diffuse change to -

0.7 - 0.9 m Brown (7.5YR4/4-Moist); Light brown (7.5YR6/4-Dry); ; Loamy sand; Massive grade of structure: Single grain grade of structure: Very weak consistence: Many (20 - 50 %).

Calcareous, , Soft segregations; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm),

Concretions; Diffuse change to -

0.7 - 0.9 m Brown (7.5YR4/4-Moist); Light brown (7.5YR6/4-Dry); ; Loamy sand; Massive grade of

structure; Single grain grade of structure; Loose consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Concretions; Diffuse

change to -

0.9 - 1.1 m Brown (7.5YR4/4-Moist); Light brown (7.5YR6/4-Dry); ; Loamy sand; Massive grade of

structure; Single grain grade of structure; Loose consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Concretions; Diffuse

change to -

Project Name: Eyre Peninsula Soil Survey

Project Code: EP Site ID: A1218 Observation ID: 1

Agency Name: CSIRO Division of Soils (SA)

0.9 - 1.1 m Brown (7.5YR4/4-Moist); Light brown (7.5YR6/4-Dry); ; Loamy sand; Massive grade of structure; Single grain grade of structure; Very weak consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Concretions: Diffuse change to -

1.1 - 1.4 m Brown (7.5YR5/4-Moist); Pink (7.5YR7/4-Dry); ; Loamy sand; Massive grade of structure; Single grain grade of structure; Loose consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Concretions; Diffuse change

1.1 - 1.4 m

Brown (7.5YR5/4-Moist); Pink (7.5YR7/4-Dry); ; Loamy sand; Massive grade of structure; Single grain grade of structure; Very weak consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Concretions; Diffuse change

to -

1.4 - 1.7 m Brown (7.5YR5/4-Moist); Pink (7.5YR7/4-Dry); ; Loamy sand; Massive grade of structure; Single grain grade of structure; Loose consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Common (10 - 20 %), Calcareous, , Concretions; Clear change to -

1.4 - 1.7 m Brown (7.5YR5/4-Moist); Pink (7.5YR7/4-Dry); ; Loamy sand; Massive grade of structure; Single grain grade of structure; Very weak consistence; Many (20 - 50 %), Calcareous, , Soft segregations: Common (10 - 20 %), Calcareous, . Concretions: Clear change to -

1.7 - 2 m Brown (7.5YR5/4-Moist); Pink (7.5YR7/4-Dry); ; Sandy loam (Light); Massive grade of structure; Firm consistence; Many (20 - 50 %), Calcareous, , Soft segregations; Common (10 - 20 %), Calcareous, Fine (0 - 2 mm), Concretions;

## **Morphological Notes**

Consistence = coherent but loose when disturbed.

Texture = LS to light SL.

## **Observation Notes**

Vegetation is cleared. Soil family: Unit 20 (Bald Hills). PPF: Uc5.12 (MJW)/Uc1.33 (NBB).

## **Site Notes**

Local climate: semi-arid.

Project Name: Eyre Peninsula Soil Survey
Project Code: EP Site ID: A1218
Agency Name: CSIRO Division of Soils (SA) Observation ID: 1

Laboratory Test Result	s:
------------------------	----

Depth	рН	1:5 EC		hangeable			Exchangea	ble CEC		ECEC	1	ESP
m		dS/m	Ca	Mg	К	Na Cmo	Acidity I (+)/kg					%
0 - 0.15	9A	0.12A	8.4K	1.1	1.4	0.12		12J		11D		1.00
0.15 - 0.3	9A	0.13A	7.3K	1.2	1.3	0.2		9J		10D	2	2.22
0.3 - 0.5	8.6A	0.33A	7K	1.1	0.69	0.2		7.8	l	9D	2	2.56
0.5 - 0.7	8.4A	0.96A										
0.7 - 0.9	8.6A	1.07A										
0.9 - 1.1	9A	1.01A										
1.1 - 1.4	9.5A	0.97A	1.5K	3.6	0.84	3.6		11J		9.5D	3	2.73
1.4 - 1.7	9.6A	1.09A										
1.7 - 2	9.7A	1.08A	0.88K	2.6	0.79	3.8		9.20	l	8D	4	1.30
Depth	CaCO3	Organic	Avail.	Total	Total		otal Bul		article		Analysis	
	%	C %	P	P %	N %		K Dens % Ma/n	•	cs	FS %	Silt	Clay
m	%	70	mg/kg	70	70		% Mg/n	13		70		
0 - 0.15	5.3B	0.95A	15E		0.0	8A			37D	42	3	10
0.15 - 0.3	9.6B	0.69A							36D	40	2	11
0.3 - 0.5	14B	0.57A							34D	35	3	9
0.5 - 0.7	19B	0.3A							34D	34	3	9
0.7 - 0.9	26B	0.25A							30D	30	3	9
0.9 - 1.1	32B	0.4A							25D	27	4	8
1.1 - 1.4	32B	0.59A							24D	27	3	11
1.4 - 1.7	34B	0.51A							25D	25	2	10
1.7 - 2	37B	0.24A							24D	24	3	9
Depth	COLE		Grav	imetric/Vo	olumetric V	Nater C	ontents		Κs	at	K unsa	t
m		Sat.	0.05 Bar	0.1 Bar q/	0.5 Bar g - m3/m	1 Ba	ır 5 Bar	15 Bar	mm	/h	mm/h	

0 - 0.15 0.15 - 0.3 0.3 - 0.5 0.5 - 0.7 0.7 - 0.9 0.9 - 1.1 1.1 - 1.4 1.4 - 1.7

Project Name: Eyre Peninsula Soil Survey

Project Code: EP Site ID: A1218 Observation ID: 1

Agency Name: CSIRO Division of Soils (SA)

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

12C2 Calcium chloride extractable boron - ICPAES

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

15\_NR\_CEC CEC - meg 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
15\_NR\_NA
Exch. basic cations (Na++) - meq per 100g of soil - Not recorded

15J\_BASES Sum of Bases

18B2 Sulfuric acid (10%)- extractable potassium

19B1 Carbonates - manometric
2\_LOI Loss on Ignition (%)
3A1 FC of 1:5 soil/water extract

3A1 EC of 1:5 soil/water extract 4A1 pH of 1:5 soil/water suspension

5A2 Chloride - 1:5 soil/water extract, automated colour

6A1 Organic carbon - Walkley and Black

7A2 Total nitrogen - semimicro Kjeldahl , automated colour
 9B2 Bicarbonate-extractable phosphorus - automated colour

P10\_PB\_C
P10\_PB\_CS
Coarse sand (%) - Plummet balance
P10\_PB\_FS
P10\_PB\_Z
Clay (%) - Plummet balance
Fine sand (%) - Plummet balance
Silt (%) - Plummet balance

P10\_PB1\_C
P10\_PB1\_CS
Clay (%) - Plummet balance (Acid digestion pretreatment)
Coarse sand (%) - Plummet balance (Acid digestion pretreatment)
Fine sand (%) - Plummet balance (Acid digestion pretreatment)

P10\_PB1\_Z Silt (%) - Plummet balance (Acid digestion pretreatment)