**Project Name:** Eyre Peninsula Soil Survey

**Project Code:** Site ID: A1228 Observation ID: 1 EP

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

Site Information

Malcolm J. Wright Locality: North of Witera silos, Venus district.

Desc. By: Date Desc.: Elevation: 20/10/83 No Data Map Ref.: 1:100000 Rainfall: No Data Northing/Long.: 134.56666667 Runoff: Rapid

Easting/Lat.: -33.05 Drainage: Imperfectly drained

Geology

ExposureType: Conf. Sub. is Parent. Mat.: Almost certain or certain Soil pit

Geol. Ref.: **Substrate Material:** No Data Soil pit, Granite

**Land Form** 

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

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

Australian Soil Classification: Mapping Unit: N/A Principal Profile Form: Dr2.23

ASC Confidence: **Great Soil Group:** Red-brown earth

Confidence level not specified

Site Disturbance:

Vegetation:

**Surface Coarse Fragments:** 

Profile Morphology

Frome Morphology		WOODINGOGY	
	A1	0 - 0.12 m	Dark reddish brown (5YR3/3-Moist); Dark reddish brown (5YR3/4-Dry); ; Sandy loam; Massive grade of structure; Single grain grade of structure; Very weak consistence; 10-20%, medium gravelly, 6-20mm, Ironstone, coarse fragments; , fine (1-2mm) roots; Clear change to -
	A2	0.12 - 0.3 m	Dark reddish brown (5YR3/3-Moist); Dark reddish brown (5YR3/4-Dry); ; Sandy loam; Massive grade of structure; Single grain grade of structure; Weak consistence; 50-90%, medium gravelly, 6-20mm, Ironstone, coarse fragments; , fine (1-2mm) roots; Clear change to -
	A2	0.3 - 0.45 m	Reddish brown (5YR4/4-Moist); Yellowish red (5YR5/6-Dry); ; Sandy loam; Massive grade of structure; Single grain grade of structure; Weak consistence; 10-20%, medium gravelly, 6-20mm, Ironstone, coarse fragments; , fine (1-2mm) roots; Sharp change to -
	B1	0.45 - 0.6 m	Dark red (2.5YR3/6-Moist); Red (2.5YR4/6-Dry); ; Light clay; Massive grade of structure; Weak grade of structure, Angular blocky; Very firm consistence; 10-20%, medium gravelly, 6-20mm, Ironstone, coarse fragments; Few, fine (1-2mm) roots; Clear change to -
	B2	0.6 - 0.75 m	Dark red (2.5YR3/6-Moist); Red (2.5YR4/6-Dry); ; Medium clay (Light); Weak grade of structure, Angular blocky; Moderate grade of structure, Angular blocky; Very strong consistence; 0-2%, fine gravelly, 2-6mm, Ironstone, coarse fragments; Few, fine (1-2mm) roots;

fine gravelly, 2-6mm, Ironstone, coarse fragments; Few, fine (1-2mm) roots;

Dark red (2.5YR3/6-Moist); Red (2.5YR4/6-Dry); ; Medium clay (Light); Weak grade of structure, Angular blocky; Moderate grade of structure, Angular blocky; Very strong consistence; 0-2%,

**Morphological Notes** 

0.75 - 0.92 m

Texture is a gravelly SL. Texture is a gravelly SL. A2 Α2 Texture is a gravelly SL.

В1 B horizons consistence is very sticky when wet.

**Observation Notes** 

Vegetation is cleared. Soil Family: Unit 11 (Haye). Parent material: granite below profile. Field PPF = Ks-Dr2.23

**Site Notes** 

B2

Landform: near crest of low rise.

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## **Laboratory Test Results:**

D	Depth	pН	1:5 EC		changeable Mg	Cations K	Na	Exchangeable Acidity	CEC		ECEC		ESP
	m		dS/m	ou ing it			Cmol					%	
	0 - 0.12 .12 - 0.3	7.5A 7.7A	0.15A 0.09A		0.88	0.68	0.18		11J		8.5D		1.64
0	.3 - 0.45	7.9A	0.11A	4.5K	1	0.44	0.18		7.5J		6.2D		2.40
0	.45 - 0.6	7.7A	0.14A	8.7K	4.2	0.96	0.81		20J		15D		4.05
0	.6 - 0.75	7.5A	0.1A	10K	4.5	1.2	1.1		22J		17D		5.00
0.	75 - 0.92	7.5A	0.15A	9.7K	3.7	1.1	1.2		25J		16D		4.80
	Depth	CaCO3	Organic	Avail.	Total	Total	l Tot	tal Bulk	Pa	rticle	Size	Analys	is
			С	Р	P	N	K		G۷	CS	FS	Silt	Clay
	m	%	%	mg/kg	%	%	%	Mg/m3			%		
0	0.12		5.01A	12E		0.0	9A			42D	35	8	9
0.	12 - 0.3		4.53A							48D	31	5	11
0.	3 - 0.45	<0.1B	1.39A							38D	42	6	13
0.4	45 - 0.6		1.14A							16D	24	7	47
0.	6 - 0.75		0.68A							9D	17	12	55
0.7	75 - 0.92		0.26A							9D	22	15	45

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		a/a - m3/m3							mm/h	mm/h

0 - 0.12 0.12 - 0.3 0.3 - 0.45 0.45 - 0.6 0.6 - 0.75 0.75 - 0.92 Project Name: Eyre Peninsula Soil Survey

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## **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 - 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 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 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