

**Project Name:** National Soil Fertility  
**Project Code:** NSF **Site ID:** SP10 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (SA)

**Site Information**

<b>Desc. By:</b>	Thompson, Jim	<b>Locality:</b>	
<b>Date Desc.:</b>	23/12/71	<b>Elevation:</b>	2 metres
<b>Map Ref.:</b>	Sheet No. : 7024 1:100000	<b>Rainfall:</b>	510
<b>Northing/Long.:</b>	140.5	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	-36.6166666666667	<b>Drainage:</b>	Well drained

**Geology**

<b>ExposureType:</b>	No Data	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	No Data	<b>Substrate Material:</b>	No Data

**Land Form**

<b>Rel/Slope Class:</b>	No Data	<b>Pattern Type:</b>	No Data
<b>Morph. Type:</b>	Mid-slope	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	No Data	<b>Slope Category:</b>	No Data
<b>Slope:</b>	0 %	<b>Aspect:</b>	270 degrees

**Surface Soil Condition (dry):**

**Erosion:**

**Soil Classification**

<b>Australian Soil Classification:</b>	N/A	<b>Mapping Unit:</b>	N/A
<b>ASC Confidence:</b>	Confidence level not specified	<b>Principal Profile Form:</b>	Dr2.13
		<b>Great Soil Group:</b>	Terra rossa soil

**Site Disturbance:** Complete clearing. Pasture, native or improved, cultivated at some stage

**Vegetation:**

**Surface Coarse Fragments:**

**Profile Morphology**

0 - 0.1 m	Reddish brown (5YR4/4-Moist); ; Loamy sand; Massive grade of structure; Weak consistence;
0.1 - 0.2 m	Reddish brown (5YR4/4-Moist); ; Loamy sand; Massive grade of structure; Strong consistence; 0-2%, Gravel, coarse fragments;
0.2 - 0.3 m	Yellowish red (5YR4/8-Moist); ; Loamy sand; Massive grade of structure; Strong consistence;
0.3 - 0.4 m	Yellowish red (5YR4/8-Moist); ; Heavy clay; Strong grade of structure, 2-5 mm; Very strong consistence;
0.4 - 0.5 m	Yellowish red (5YR4/8-Moist); ; Heavy clay; Strong grade of structure, 2-5 mm; Very strong consistence;
0.5 - 0.6 m	Yellowish red (5YR4/8-Moist); ; Heavy clay; Strong grade of structure, 2-5 mm; Very strong consistence;
0.6 - 0.7 m	Yellowish red (5YR4/8-Moist); ; Heavy clay; Strong grade of structure, 2-5 mm; Very strong consistence;
0.7 - 0.8 m	Yellowish red (5YR4/6-Moist); ; Heavy clay; Strong grade of structure, 2-5 mm; Very strong consistence;
0.8 - 0.9 m	Strong brown (7.5YR5/6-Moist); , 10YR66, 2-10% , Faint; , 2-10% , Faint; Heavy clay; Strong grade of structure, 2-5 mm; Very strong consistence; Very few (0 - 2 %), Ferruginous, , Nodules; Very few (0 - 2 %), Calcareous, , Nodules; Soil matrix is Highly calcareous;
0.9 - 1 m	Strong brown (7.5YR5/6-Moist); , 10YR66, 2-10% , Faint; , 2-10% , Faint; Heavy clay; Strong grade of structure, 2-5 mm; Very strong consistence; Many (20 - 50 %), Calcareous, , Nodules; Soil matrix is Highly calcareous;

**Morphological Notes**

**Observation Notes**

ORIGINALLY SP71/P2; CHEMICAL DATA IS FROM BULK OF 8 CORES;

**Site Notes**

PADTHAWAY

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**Laboratory Test Results:**

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.1	6.4I	0.29D								
0.1 - 0.2	6.4I	0.09D								
0.2 - 0.3	6.3I	0.11D								
0.3 - 0.4	6.6I	0.09D								
0.4 - 0.5	7.1I	0.16D								
0.5 - 0.6	7.3I	0.2D								
0.6 - 0.7	7.7I	0.3D								
0.7 - 0.8	7.8I	0.29D								
0.8 - 0.9	7.9I	0.27D								
0.9 - 1	8.2I	0.21D								

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle		Size	Analysis	
m	%	C	P	P	N	K	Density	GV	CS	FS	Silt	Clay
		%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.1					0.111A				23C	53	10	13
0.1 - 0.2					0.03A							
0.2 - 0.3					0.078A							
0.3 - 0.4									6C	10	3	76
0.4 - 0.5	0.3C											
0.5 - 0.6	0.3C				0.075A							
0.6 - 0.7	7.7C											
0.7 - 0.8	22C											
0.8 - 0.9	23.8C											
0.9 - 1	31.4C				0.035A				12C	8	3	53

[illegible]

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**Laboratory Analyses Completed for this profile**

19B_NR	Calcium Carbonate (CaCO <sub>3</sub> ) - Not recorded
2A1	Air-dry moisture content
3_C_B	Electrical conductivity or soluble salts - Total soluble salts %
4A_C_2.5	pH of soil - pH of 1:2.5 soil/water suspension
5_C_B	Water soluble Chloride - Method recorded as B
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
MIN_EC	Exchange Capacity - Minerology
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_Hm	Hematite - X-Ray Diffraction
XRD_C_Il	Illite - X-Ray Diffraction
XRD_C_Is	Interstratified clay minerals - X-Ray Diffraction
XRD_C_Ka	Kaolin - X-Ray Diffraction
XRD_C_Qz	Quartz - X-Ray Diffraction