

**Project Name:** National Soil Fertility  
**Project Code:** NSF **Site ID:** SW39 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (SA)

**Site Information**

<b>Desc. By:</b>	Coppi, John	<b>Locality:</b>	
<b>Date Desc.:</b>	13/04/70	<b>Elevation:</b>	No Data
<b>Map Ref.:</b>	Sheet No. : 6029 1:100000	<b>Rainfall:</b>	0
<b>Northing/Long.:</b>	135.833333333333	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	-34.333333333333	<b>Drainage:</b>	No Data

**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>	No Data	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	No Data	<b>Slope Category:</b>	No Data
<b>Slope:</b>	%	<b>Aspect:</b>	No Data

**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>	Dr3.43
		<b>Great Soil Group:</b>	N/A

**Site Disturbance:**

**Vegetation:**

**Surface Coarse Fragments:**

**Profile Morphology**

0 - 0.1 m	Reddish brown (5YR4/4-Moist); ; Sand; Massive grade of structure; Very weak consistence; Few (2 - 10 %), Ferruginous, , Nodules; Soil matrix is Highly calcareous;
0.1 - 0.2 m	Light brown (7.5YR6/4-Moist); ; Sand; Massive grade of structure; Very weak consistence; Many (20 - 50 %), Ferruginous, , Nodules; Soil matrix is Highly calcareous;
0.2 - 0.3 m	Light yellowish brown (10YR6/4-Moist); ; Medium clay; Strong grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Very strong consistence; Few (2 - 10 %), Ferruginous, , Nodules; Soil matrix is Highly calcareous;
0.3 - 0.4 m	Light yellowish brown (10YR6/4-Moist); ; Medium clay; Strong grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Very strong consistence; Few (2 - 10 %), Ferruginous, , Nodules; Soil matrix is Highly calcareous;
0.4 - 0.5 m	Yellow (10YR7/6-Moist); ; Medium clay; Strong grade of structure, 10-20 mm, Subangular blocky; Smooth-ped fabric; Very strong consistence; Few (2 - 10 %), Ferruginous, , Nodules; Soil matrix is Highly calcareous;
0.5 - 0.6 m	Very pale brown (10YR7/4-Moist); ; Medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Weak consistence; Few (2 - 10 %), Ferruginous, , Nodules; Very few (0 - 2 %), Calcareous, , Nodules; Soil matrix is Highly calcareous;
0.6 - 0.7 m	Yellow (10YR7/6-Moist); ; Medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Weak consistence; Few (2 - 10 %), Ferruginous, , Nodules; Very few (0 - 2 %), Calcareous, , Nodules; Soil matrix is Highly calcareous;
0.7 - 0.8 m	Yellow (10YR7/6-Moist); ; Medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Weak consistence; Few (2 - 10 %), Ferruginous, , Nodules; Very few (0 - 2 %), Calcareous, , Nodules; Soil matrix is Highly calcareous;
0.8 - 0.9 m	Yellow (10YR7/6-Moist); ; Medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Weak consistence; Few (2 - 10 %), Ferruginous, , Nodules; Very few (0 - 2 %), Calcareous, , Nodules; Soil matrix is Highly calcareous;
0.9 - 1.2 m	;

**Morphological Notes**

**Observation Notes**

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**Site Notes**

CUMMINS

SW70W18; DATA IS FROM BULK OF 8 CORES;

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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	6.2I	0.12D								
0.1 - 0.2	8.1I	0.49D								
0.2 - 0.3	7.8I	0.53D								
0.3 - 0.4	8.8I	0.67D								
0.4 - 0.5	9I	0.84D								
0.5 - 0.6	9.2I	0.92D								
0.6 - 0.7	9.3I	0.97D								
0.7 - 0.8	9.3I	0.99D								
0.8 - 0.9	9.2I	1.08D								
0.9 - 1	9.2I	1.11D								

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle GV	Particle CS	Size FS	Analysis Silt	Analysis Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.1	0C				0.05A				31C	59	4	6
0.1 - 0.2	0.4C				0.031A							
0.2 - 0.3	0C				0.034A				21C	25	3	44
0.3 - 0.4	0.3C											
0.4 - 0.5	1.9C											
0.5 - 0.6	13.1C				0.015A							
0.6 - 0.7	12.3C											
0.7 - 0.8	7.8C											
0.8 - 0.9	7.8C											
0.9 - 1	7.7C				0.009A				18C	20	3	48

[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