

**Project Name:** Balonne-Maranoa Soil Survey and Soil Moisture Profiles  
**Project Code:** B-M **Site ID:** L45 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (ACT)

**Site Information**

<b>Desc. By:</b>	Gunn, RH	<b>Locality:</b>	Profile L45 located 1.6 km NW of "Green Hills" HS.
<b>Date Desc.:</b>	01/01/74	<b>Elevation:</b>	No Data
<b>Map Ref.:</b>	Sheet No. : SG55-16 1:250000	<b>Rainfall:</b>	530
<b>Northing/Long.:</b>	149.8589223	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	-27.54061713	<b>Drainage:</b>	Imperfectly drained

**Geology**

<b>ExposureType:</b>	Auger boring	<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>	Gently undulating plains <9m 1-3%	<b>Pattern Type:</b>	Plain
<b>Morph. Type:</b>	No Data	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	Plain	<b>Slope Category:</b>	No Data
<b>Slope:</b>	1 %	<b>Aspect:</b>	No Data

**Surface Soil Condition (dry):**

**Erosion:**

**Soil Classification**

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Black Vertosol		<b>Principal Profile Form:</b>	Ug5.16
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Black earth
Analytical data are incomplete but reasonable confidence.			

**Site Disturbance:**

**Vegetation:**

Tall Strata - Tree, 3.01-6m, Mid-dense. \*Species includes - Acacia harpophylla, Geijera parviflora, Eremophila

mitchellii

**Surface Coarse Fragments:**

**Profile Morphology**

A1	0 - 0.1 m	Very dark greyish brown (10YR3/2-Moist); ; Heavy clay; , Platy; , Subangular blocky; Firm consistence;
B21	0.1 - 0.4 m	Very dark grey (10YR3/1-Moist); ; Heavy clay; , Subangular blocky; Firm consistence; , Calcareous, , ;
B22	0.4 - 0.9 m	Dark brown (7.5YR3/2-Moist); Mottles, 20-50% , Distinct; Heavy clay; Massive grade of structure, Subangular blocky; Very firm consistence; Very few (0 - 2 %), Calcareous, , ;
B24	0.9 - 1.5 m	Dark reddish grey (5YR4/2-Moist); Mottles, 20-50% , Distinct; Heavy clay; Massive grade of structure; Very firm consistence; Very few (0 - 2 %), Calcareous, , Soft segregations; Very few (0 - 2 %), Calcareous, , Concretions;

**Morphological Notes**

**Observation Notes**

**Site Notes**

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**Laboratory Test Results:**

Depth	pH	1:5 EC	Exchangeable Ca	Exchangeable Mg	Cations K	Exchangeable Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.1	7A		20.7A	10.9	0.55					
0.1 - 0.4	8.4A	0.62A								
0.4 - 0.9	8.8A		33.6A	19.7	0.05					
0.9 - 1.5	8.8A	0.69A								

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**Laboratory Analyses Completed for this profile**

14B1	Electrical conductivity/SE
15A1_CA	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_K	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_MG	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
6A1	Organic carbon - Walkley and Black
9G1	Acid-extractable phosphorus - manual colour