

**Project Name:** Soil Studies in the Lower Namoi Valley  
**Project Code:** EDGEROI **Site ID:** ed363 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

**Site Information**

<b>Desc. By:</b>	W.T. Ward	<b>Locality:</b>	Frank O'Neill, Llano
<b>Date Desc.:</b>	23/01/87	<b>Elevation:</b>	197 metres
<b>Map Ref.:</b>	Sheet No. : 8837_N 1:50000	<b>Rainfall:</b>	No Data
<b>Northing/Long.:</b>	6675020 AMG zone: 55	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	751680 Datum: AGD66	<b>Drainage:</b>	No Data

**Geology**

<b>ExposureType:</b>	Undisturbed soil core	<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>	Fan	<b>Slope Category:</b>	Level
<b>Slope:</b>	0 %	<b>Aspect:</b>	No Data

**Surface Soil Condition (dry):** Self-mulching, Recently cultivated

**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>	Ug5.16
		<b>Great Soil Group:</b>	Grey clay

**Site Disturbance:** Cultivation. Rainfed

**Vegetation:**

**Surface Coarse Fragments:**

**Profile Morphology**

A11p	0 - 0.08 m	Dark brown (7.5YR3/2-Moist); Brown (7.5YR4/2-Dry); ; Medium heavy clay; Strong grade of structure, 2-5 mm, Granular; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Weak consistence; Field pH 8 (pH meter); Few, very fine (0-1mm) roots; Abrupt, Smooth change to -
A12	0.08 - 0.23 m	Dark brown (7.5YR3/2-Moist); , N20, 0-2% , 5-15mm, Prominent; Medium heavy clay; Weak grade of structure, 100-200 mm, Subangular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Strong consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 8.5 (pH meter); Few, very fine (0-1mm) roots; Gradual, Smooth change to -
A13	0.23 - 0.55 m	Dark brown (7.5YR3/2-Moist); , 7.5YR54, 0-2% , 0-5mm, Distinct; Medium clay; Moderate grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Medium, (5 - 10) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Strong consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 9 (pH meter); Few, very fine (0-1mm) roots;
A14	0.55 - 0.97 m	Dark reddish brown (5YR3/2-Moist); , 7.5YR32, 20-50% , 30-mm, Distinct; Medium clay; Moderate grade of structure, 20-50 mm, Subangular blocky; Moderate grade of structure, 10-20 mm, Lenticular; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Strong consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 9 (pH meter); Few, very fine (0-1mm) roots;

**Morphological Notes**

A11p Llano 12. 10-20cm seems to be compacted by cultivation. The segregations (1kn1) in 10-20cm are extremely small.

**Observation Notes**

Parent Rock: alluvial sediment, clay, parna on fourth fan

**Site Notes**

**Observation ID: 1**

Agency Name: CSIRO Division of Soils (QLD)

**Laboratory Test Results:**

Depth	pH	1:5 EC	Exchangeable Cations	Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca Mg K	Na Acidity			%
				Na Cmol (+)/kg			

0 - 0.1  
0.1 - 0.2  
0.3 - 0.4  
0.7 - 0.8

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle		Size	Analysis	
		C	P	P	N	K	Density	GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		

0 - 0.1  
0.1 - 0.2  
0.3 - 0.4  
0.7 - 0.8

Depth	COLE	Gravimetric/Volumetric Water Contents							K sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar		
m			g/g - m <sup>3</sup> /m <sup>3</sup>						mm/h	mm/h

0 - 0.1  
0.1 - 0.2  
0.3 - 0.4  
0.7 - 0.8

Project Name: Soil Studies in the Lower Namoi Valley  
Project Code: EDGEROI Site ID: ed363 Observation ID: 1  
Agency Name: CSIRO Division of Soils (QLD)

Laboratory Analyses Completed for this profile