Project Name: Project Code: Agency Name:	Soil Studies in the Lower EDGEROI Site ID: CSIRO Division of Soils (C	ed177 O	Observation ID: 1					
Site Informatio Desc. By: Date Desc.: Map Ref.: Northing/Long.: Easting/Lat.:	n G.M. Roberts 29/08/85 Sheet No. : 8837_N 1:50000 6654000 AMG zone: 55 744050 Datum: AGD66	Locality: Elevation: Rainfall: Runoff: Drainage:	R.A.(Richard) Williams, Merinda 195 metres No Data No Data No Data					
<u>Geology</u> ExposureType: Geol. Ref.:	Undisturbed soil core No Data	Conf. Sub. is Pare Substrate Materia						
Land Form Rel/Slope Class: Morph. Type: Elem. Type: Slope:	No Data No Data Terrace flat 0 %	Pattern Type: Relief: Slope Category: Aspect:	No Data No Data Level No Data					
Surface Soil Co	ondition (dry): Self-mulching, I	Recently cultivated						
Erosion:								
Soil Classificat	tion							
Australian Soil C N/A ASC Confidence Confidence level	9:	Princi	ing Unit: N/A ipal Profile Form: Ug5.15 Soil Group: Brown clay					
	ce: Cultivation. Irrigated, past or p	resent						
Vegetation: Surface Coarse								
Profile Morpho								
A11p 0-0.1 m	n Dark greyish brown (10YR grade of structure, 5-10 m blocky; Earthy fabric; Smo 100mm2) Very fine (0.075	m, Subangular blocky oth-ped fabric; Mediur -1mm) macropores, M m (2 -6 mm), Nodules	ish brown (10YR4/2-Dry); ; Medium clay; Weak ; Weak grade of structure, <2 mm, Subangular m, (5 - 10) mm crack; Common (1-5 per <i>I</i> oderately moist; Firm consistence; Very few (0 s; Field pH 9 (pH meter); Few, very fine (0-1mm)					
A12 0.1 - 0.2	Moderate grade of structu Lenticular; Smooth-ped fal	ure, 20-50 mm, Lentic bric; Medium, (5 - 10)	ish brown (10YR4/2-Dry); ; Medium heavy clay; ular; Moderate grade of structure, 5-10 mm, mm crack; Common (1-5 per 100mm2) Very fine rm consistence; Field pH 9 (pH meter); Few, very					
A13 0.25 - 0.	Moderate grade of structu Lenticular; Smooth-ped fal (0.075-1mm) macropores,	ure, 20-50 mm, Lentic bric; Medium, (5 - 10) Moderately moist; Fir	ish brown (10YR4/2-Dry); ; Medium heavy clay; sular; Moderate grade of structure, 5-10 mm, mm crack; Common (1-5 per 100mm2) Very fine rm consistence; Very few (0 - 2 %), Calcareous, eter); Few, very fine (0-1mm) roots;					
A14 0.55 - 1	Angular blocky; Moderate Fine, (0 - 5) mm crack; Co	grade of structure, 5-1 mmon (1-5 per 100mr	clay; Moderate grade of structure, 20-50mm, 10mm, Angular blocky; Smooth-ped fabric; m2) Very fine (0.075-1mm) macropores, (pH meter); Few, very fine (0-1mm) roots;					
A15 1 - 1.5 m	mm, Lenticular; Moderate (0 - 5) mm crack; Commo	grade of structure, 5-1 on (1-5 per 100mm2) \	dium clay; Moderate grade of structure, 20-50 10 mm, Angular blocky; Smooth-ped fabric; Fine, Very fine (0.075-1mm) macropores, Moderately Gradual, Smooth change to -					
B2 1.5 - 2.9	Weak grade of structure, 1 Subangular blocky; Smoot	n Dark yellowish brown (10YR4/4-Moist); , 10YR41, 10-20% , 5-15mm, Distinct; Medium clay; Weak grade of structure, 100-200 mm, Subangular blocky; Weak grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Firm consistence; Field pH 9 (pH meter);						
<u>Morphological</u> A11p	Notes Very few fine calcium carbo	nate segregations for	und from 150-250					
Observation No		Shale segregations for						

Project Name:Soil Studies in the Lower Namoi ValleyProject Code:EDGEROISite ID: ed177Agency Name:CSIRO Division of Soils (QLD)

Observation ID: 1

Site Notes

Difficult core recovery. This site has higher clay content than site 176.

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Project Code:	EDGEROI	Site ID:	ed177	Observation ID:	1
Agency Name:	CSIRO Divisio	on of Soils (0	QLD)		

## Laboratory Test Results:

Depth	рН	1:5 EC		changeabl			Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	к	Na Cmol	Acidity (+)/kg			%
0 - 0.02	8.39A	0.2734	A 26.13B	14.58	1.74	1.19				
0 - 0.1	8.32A	0.1294	A 23.91B	14.47	1.33	0.9				
0.1 - 0.2	8.65A	0.0964	A 25.06B	13.85	1.23	1.16				
0.3 - 0.4	8.77A	0.12A	25.46B	14.55	0.8	2.22				
0.7 - 0.8	8.9A	0.189/	A 23.39B	15.61	0.87	5.51				
1.2 - 1.3	9.04A	0.293/	A 18.53B	15.89	1.14	7.65				
2.5 - 2.6	9.01A	0.409/	A 16.16B	15.53	0.83	8.63				

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	P	article	Size	Analysis	5
		С	Р	Р	N	ĸ	Density	GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.02	0.1B	0.91C									17.6	62.7
0 - 0.1	<0.1B	0.98C	31.1J								18.7	63.4
0.1 - 0.2	0.1B	0.86C	29.5J								18.4	63.9
0.3 - 0.4	0.3B	0.7C	23.5J								19.5	66
0.7 - 0.8	0.4B	0.64C	43.6J								19.6	71.2
1.2 - 1.3	0.8B	0.59C	55.4J								20.4	71.2
2.5 - 2.6	0.8B	0.21C	33.6J								21.2	68.8

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 - m3/m3	6			mm/h	mm/h

0 - 0.02 0 - 0.1 0.1 - 0.2 0.3 - 0.4 0.7 - 0.8 1.2 - 1.3 2.5 - 2.6

## Soil Studies in the Lower Namoi Valley **Project Name:** Project Code: Agency Name: EDGEROI Site ID: ed177 **CSIRO** Division of Soils (QLD)

Observation ID: 1

## Laboratory Analyses Completed for this profile

15A2_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, pretreatment for
	soluble salts
15A2_K	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15A2_MG	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15A2_NA	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
19B1	Carbonates - manometric

- 3A1 EC of 1:5 soil/water extract
- 4A1
- pH of 1:5 soil/water suspension Chloride 1:5 soil/water extract, automated colour 5A2
- Total organic carbon high frequency induction furnace, infrared Water soluble nitrate automated colour 6B3
- 7B1
- Bicarbonate-extractable phosphorus manual colour Clay (%) Coventry and Fett pipette method Silt (%) Coventry and Fett pipette method 9B1
- P10\_CF\_C P10\_CF\_Z