Project Name:	Soils of the Lo	wer Macqua	arie Vall	ey, New South Wales	
Project Code: Agency Name:	Macquarie CSIRO Divisio	Site ID: n of Soils (#	303 ACT)	Observation ID:	1

Land Form Rel/Stope Class: No Data       Pattern Type: Rel/Stope Class: No Data       No Data Stope X       No Data No Data         Stope:       % ba       Aspect: No Data       No Data         Stope:       % ba       Aspect: No Data       No Data         Stope:       % ba       Aspect: No Data       No Data         Stope:       % ba       Marketting, Surface crust         Erosion:       Partial, Moderate (wind);         Solid Classification:       Mapping Unit: Marketting       OLD ALLUVIUM MEANDER PLAIN         N/A       Meaning Onit: Solid Classification:       Mapping Unit: Great Soil Group: N/A       OLD ALLUVIUM MEANDER PLAIN         N/A       Stee Disturbance: Confidence level not specified       Confidence: Surface Coarse Fragments:       Confidence: Complete clearing: Pasture, native or improved, cultivated at some stage         Yegetation:       Tall Strata - Tussock grass, "Species includes - None Recorded         Surface Coarse Fragments:       Morphorphorphorphorphorphorphorphorphorph	Site Info Desc. By: Date Desc Map Ref.: Northing/ Easting/L Geology Exposure Geol. Ref	c.: /Long.: .at.: / / / Type: .:	N.J. N 27/07/ Sheet 64624	No. : 8434 1:10000 80 AMG zone: 55 90 Datum: AGD66	Locality: Elevation: Rainfall: Runoff: Drainage: Conf. Sub. i Substrate M			ly draine No Data No Data	a
Partial, Moderate (wind);         Soil Classification:       Mapping Unit:       CLD ALLUVIUM MEANDER PLAIN         MA       Principal Profile Form:       Grat Soil Group:       N/A         Soil Classification:       Mapping Unit:       CLD ALLUVIUM MEANDER PLAIN         MEANDER PLAIN         Mathematication:       Great Soil Group:       N/A         Soil Confidence:       Confidence:       Or profile Corps:         Confidence:       Complete clearing. Pasture, native or improved, cultivated at some stage         Vegetation:         Tail Strata - Tussock grass, 'Species includes - None Recorded         Surface Coarse Fragments:         Profile Morphology         Park reddish brown (5YR3/3-Moist); Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A1       0 - 0.22 m         Dark reddish brown (5YR3/3-Moist); Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many (spe ret 00mm2) Very fine (0.075-1mm) macropores, Mo	Rel/Slope Morph. Ty Elem. Typ	Class:	Flat No Da		Relief: Slope Cate		No Data No Data		
Soil Classification         Australian Soil Classification:       Mapping Unit:       OLD ALLUVIUM MEANDER PLAIN Ornicipal Profile Form:       OLD ALLUVIUM MEANDER PLAIN Great Soil Group:       N/A         ASC Confidence:       Great Soil Group:       N/A         Confidence:       Great Soil Group:       N/A         Confidence:       Complete clearing. Pasture, native or improved, cultivated at some stage       Vegetation:         Tall Strata - Tussock grass, "Species includes - None Recorded       Vegetation:       Tall Strata - Tussock grass, "Species includes - None Recorded         Surface Coarse Fragments:       Profile Morphology       Dark reddish brown (5YR3/3-Moist); : Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky: Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mn) macropores, Few (<1 per 0.01m2) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); : Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mn) roots; Many (r5 per 100mm2) Fine (1-2mn) macropores, Few (<1 per 0.10m2) macropores, Moist; Very weak grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many (s-5 per 100mm2) Very fine (0.075-1mm) macropores, Many (r5 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 0.10m2) macropores, Moist; Veak agrade	Surface	Soil Co	nditio	on (dry): Hardsetting, Surf	ace crust				
Australian Soil Classification:       Mapping Unit:       OLD ALLUVIUM MEANDER PLAIN Principal Profile Form:       Gn4.2 N/A         ASC Confidence:       Confidence:       Great Soil Group:       N/A         Confidence level not specified       Site Disturbance:       N/A         Site Disturbance:       Comfidence level not specified       N/A         Vagetation:       Tail Strata - Tussock grass, *Species includes - None Recorded       N/A         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subanguat blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Koist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.175-1mm) macropores, Koist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.175-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.075-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.175-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.175-1mm) macropores, Moist; Very macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.175-1mm) macropores, Moist; Very macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.175-1mm) macropores, Moist; Very macropores, Moist; Very Meak consistence; Field pH 7.5 (Raupach); Many, very fine (0.175-1mm) macropores, Moist; Very Meak consistence; Field pH 7.5 (Raupach); Many, very fine (0.175-1mm) macropores, Moist; Very Kine (0-1mm) roots; Cear, Smooth change to -		-		erate (wind);					
N/A     MEANDER PLAIN       Principal Profile Form: Confidence: Confidence: Confidence: Confidence: Confidence: Confidence: Confidence: Confidence: Confidence: Confidence: Confidence: Confidence: Complete clearing. Pasture, native or improved, cultivated at some stage     MA       Site Disturbance: Confidence     Complete clearing. Pasture, native or improved, cultivated at some stage     N/A       Surface Coarse Fragments: Profile Morphology     Tall Strata - Tussock grass, "Species includes - None Recorded     Surface Coarse Fragments: Profile Morphology       A1     0 - 0.22 m     Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Moist; Vear weak consistence; Field PT.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -       A1     0 - 0.22 m     Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Moist; Weak consistence; Field PT 7.5 (Raupach); Many, very fine (0-1mm) roots; Many (s5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field PT 7 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Clear, Smooth change to -       A22     0.58 - 0.69 m     Light reddish brown (SYR6/4-Moist); Pink (SYR8/3-Dry); , SYR56, 10-20%, , 15-30mm, Faint; Sandy clay; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (<1 per 100mm2) Very fine	Soil Clas	ssificati	on						
ASC Confidence:       Grad Soil Group:       N/A         Site Disturbance:       Complete clearing. Pasture, native or improved, cultivated at some stage         Vegetation:       Tall Strata - Tussock grass,*Species includes - None Recorded         Surface Coarse Fragments:       Profile Morphology         A1       0 - 0.22 m       Dark reddish brown (SYR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist, Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Noist, Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.075-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.075-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A1       0 - 0.22 m       Dark reddish brown (SYR3/3-Moist); ; Sandy clay loam; Woderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A21       0.22 - 0.58 m       Yellowish red (5YR4/7-Moist); Sandy clay loam; Weak grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many, very fine (0.175-1mm) macropores, Many (-5 per 100mm2) Very fine (0.075-1mm) macropores, Many (-5 per 100mm2) Very fine (0.075-1mm) macropores, Many (-5 per 100mm2) Very fine (0.075-1mm) macropores, Many (-5 per 100mm2) Ve		n Soil Cl	assific	ation:		Mappir	ng Unit:		
Site Disturbance:       Complete clearing. Pasture, native or improved, cultivated at some stage         Yegetation:       Tall Strata - Tussock grass, , . *Species includes - None Recorded         Surface Coarse Fragments:       Profile Morphology         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); : Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) noto; Clear, Smooth change to -         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); : Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) notots; Clear, Smooth change to -         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); : Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) nots; Clear, Smooth change to -         A21       0.22 - 0.58 m       Yellowish red (5YR4/7-Moist); ; Sandy clay loam; Weak grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many (55 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (<1 per 0.01m2) macropores, Moist; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric;	ASC Con					•			Gn4.2
Vegetation:       Tall Strata - Tussock grass, , . *Species includes - None Recorded         Surface Coarse Fragments:       Frofile Morphology         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Five (1-2 pm 0.1m2) warg fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Five (1-2 mm) macropores, Few (<1 per 0.1m2) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A21       0.22 - 0.58 m       Yellowish red (5YR4/7-Moist); Sandy clay loam; Weak grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, (>5 per 100mm2) Fine (1-2mm) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Common, very fine (0.075-1mm) macropores, Many (>5 per 100mm2) Fine (1-2mm) macropores, Per (<1 per 0.10m2) macropores, Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Many (>5 per 100mm2) Fine (1-2mm) macropores, Per (<1 per 0.10m2) macropores, Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Many (>5 per 100mm2) Very fine (0.10m1) roots; Clear, Smooth change to - <th></th> <th></th> <th>•</th> <th></th> <th>ive or improv</th> <th>ad aulti</th> <th>ustad at as</th> <th>maataa</th> <th>•</th>			•		ive or improv	ad aulti	ustad at as	maataa	•
Tall Strata - Tussock grass, , .*Species includes - None Recorded         Surface Coarse Fragments:         Profile Morphology         A1       0 - 0.22 m         Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A21       0.22 - 0.58 m       Yellowish red (5YR4/7-Moist); Sandy clay loam; Weak grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Clear, Smooth change to -         A22       0.58 - 0.69 m       Light reddish brown (5YR6/4-Moist); Pink (5YR8/3-Dry); , 5YR56, 10-20%, 15-30mm, Faint; Sandy clay; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH			<u>e.</u> co	Inplete cleaning. Fasture, hat		eu, cuiti	valeu al sc	ine stage	8
Profile Morphology         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Common (1-5 per 100mm2) Key (<1 per 0.01m2) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.075-1mm) motos; Many, fine (1-2mm) roots; Clear, Smooth change to -         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Common (1-5 per 100mm2) Key fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A21       0.22 - 0.58 m       Yellowish red (5YR4/7-Moist); ; Sandy clay loam; Weak grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many (Se per 100mm2) Very fine (0.075-1mm) macropores, Many (-5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0-1mm) roots; Clear, Smooth change to -         A22       0.58 - 0.69 m       Light reddish brown (5YR6/4-Moist); Pink (5YR8/3-Dry); , 5YR56, 10-20% , 15-30mm, Faint; Sandy clay; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH 7.5 (Raupach); Few, very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH 7.5 (Raupach); Few, very fine (0.0	rogotati	<u></u>	Та	ll Strata - Tussock grass, , . *	Species inclu	des - N	one Recor	ded	
A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A1       0 - 0.22 m       Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -         A21       0.22 - 0.58 m       Yellowish red (5YR4/7-Moist); ; Sandy clay loam; Weak grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Many (>5 per 100mm2) Fine (1-2mm) macropores, Faw (<1 per 0.01m2) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0.075-1mm) macropores, Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0-1mm) roots; Clear, Smooth change to -         A22       0.58 - 0.69 m       Light reddish brown (5YR6/4-Moist); Pink (5YR8/3-Dry); , 5YR56, 10-20% , 15-30mm, Faint; Sandy clay; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH 7.5 (Raupach); Tew, very fine (0-1mm) roots; Clear, Smooth change to -         B2       0.69 - 1.15 m       Reddish brown (2.5YR4/4-Moist); , 5YR56, 10	Surface	Coarse	Fragi	ments:					
<ul> <li>mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (&lt;1 per 0.01m2) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -</li> <li>A1 0 - 0.22 m Dark reddish brown (5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-01m2) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -</li> <li>A21 0.22 - 0.58 m Yellowish red (5YR4/7-Moist); ; Sandy clay loam; Weak grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many (&gt;5 per 100mm2) Very fine (0.075-1mm) macropores, Many (&gt;5 per 100mm2) Fine (1-2mm) macropores, Few (&lt;1 per 0.01m2) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0.01m2) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0.01m2) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Clear, Smooth change to -</li> <li>A22 0.58 - 0.69 m Light reddish brown (5YR6/4-Moist); Pink (5YR8/3-Dry); , 5YR56, 10-20%, 15-30mm, Faint; Sandy clay; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (&lt;1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH 7.5 (Raupach); Few, very fine (0-1mm) roots; Clear, Smooth change to -</li> <li>B2 0.69 - 1.15 m Reddish brown (2.5YR4/4-Moist); 5YR56, 10-20%, 15-30mm, Faint; Sandy clay; Moderate grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Many (&gt;5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Many</li></ul>									
<ul> <li>mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (&lt;1 per 0.01m2) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Clear, Smooth change to -</li> <li>A21 0.22 - 0.58 m Yellowish red (5YR4/7-Moist); Sandy clay loam; Weak grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Many (&gt;5 per 100mm2) Very fine (0.075-1mm) macropores, Many (&gt;5 per 100mm2) Fine (1-2mm) macropores, Few (&lt;1 per 0.01m2) macropores, Many (&gt;5 per 100mm2) Fine (1-2mm) macropores, Few (&lt;1 per 0.01m2) macropores, Many (&gt;5 per 100mm2) Fine (1-2mm) macropores, Few (&lt;1 per 0.01m2) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0.075-1mm) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Clear, Smooth change to -</li> <li>A22 0.58 - 0.69 m Light reddish brown (5YR6/4-Moist); Pink (5YR8/3-Dry); , 5YR56, 10-20% , 15-30mm, Faint; Sandy clay; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (&lt;1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH 7.5 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Clear, Smooth change to -</li> <li>B2 0.69 - 1.15 m Reddish brown (2.5YR4/4-Moist); , 5YR56, 10-20% , 15-30mm, Faint; Sandy clay; Moderate grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Many (&gt;5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Many (utans, &gt;50% of ped faces or walls coated; Field pH 8 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots;</li> <li>Morphological Notes</li> <li>B2 Backhoe could penetrate beyond 110cm. Possibly a former channel. Slopes into scalded depression to the East - surface crust. A22 is discontinuous sporadic to conspicuous in places.</li> </ul>	A1 C	) - 0.22 m	n	mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Moist; Very weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm)					
<ul> <li>Subangular blocky; Earthy fabric; Many (&gt;5 per 100mm2) Very fine (0.075-1mm) macropores, Many (&gt;5 per 100mm2) Fine (1-2mm) macropores, Few (&lt;1 per 0.01m2) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1- 2mm) roots; Clear, Smooth change to -</li> <li>A22 0.58 - 0.69 m Light reddish brown (5YR6/4-Moist); Pink (5YR8/3-Dry); , 5YR56, 10-20%, 15-30mm, Faint; Sandy clay; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (&lt;1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH 7.5 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Clear, Smooth change to -</li> <li>B2 0.69 - 1.15 m Reddish brown (2.5YR4/4-Moist); , 5YR56, 10-20% , 15-30mm, Faint; Sandy clay; Moderate grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Many (&gt;5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Many cutans, &gt;50% of ped faces or walls coated; Field pH 8 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots;</li> <li>B2 Backhoe could penetrate beyond 110cm. Possibly a former channel. Slopes into scalded depression to the East - surface crust. A22 is discontinuous sporadic to conspicuous in places.</li> </ul>	A1 C	) - 0.22 m	n	mm, Subangular blocky; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Moist; Weak consistence; Field pH 7.5 (Raupach); Many, very fine (0-1mm) roots;					
Sandy clay; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH 7.5 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Clear, Smooth change to -B20.69 - 1.15 mReddish brown (2.5YR4/4-Moist); , 5YR56, 10-20% , 15-30mm, Faint; Sandy clay; Moderate grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Many cutans, >50% of ped faces or walls coated; Field pH 8 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots;Morphological NotesBackhoe could penetrate beyond 110cm. Possibly a former channel. Slopes into scalded depression to the East - surface crust. A22 is discontinuous sporadic to conspicuous in places.	A21 (	).22 - 0.5	i8 m	Subangular blocky; Earthy fabric; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Many (>5 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 0.01m2) macropores, Moist; Weak consistence; Field pH 7 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-					
grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Many cutans, >50% of ped faces or walls coated; Field pH 8 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots;         Morphological Notes       B2         B2       Backhoe could penetrate beyond 110cm. Possibly a former channel. Slopes into scalded depression to the East - surface crust. A22 is discontinuous sporadic to conspicuous in places.	A22 (	).58 - 0.6	i9 m	Sandy clay; Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH 7.5 (Raupach);					
B2 Backhoe could penetrate beyond 110cm. Possibly a former channel. Slopes into scalded depression to the East - surface crust. A22 is discontinuous sporadic to conspicuous in places.	B2 (	).69 - 1.1	5 m	grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Many cutans, >50% of ped faces or walls					
scalded depression to the East - surface crust. A22 is discontinuous sporadic to conspicuous in places.	<u>Morphol</u>	ogical I	Notes						
Observation Notes	B2			scalded depression to the Ea					
	<u>Observa</u>	tion No	tes						

Mitchell Soil Profile Class, Moderately Drained Phase, Vegetation - lucerne

Project Name:Soils of the Lower Macquarie Valley, New South WalesProject Code:MacquarieSite ID: 303Observation ID: 1Agency Name:CSIRO Division of Soils (ACT)

Site Notes

Project Name:	Soils of the Lov	wer Macqua	arie Valley	/, New South Wales
Project Code:	Macquarie	Site ID:	303	Observation ID: 1
Agency Name:	CSIRO Divisior	n of Soils (A	NCT)	

## Laboratory Test Results:

Depth	рН	1:5 EC		nangeable /Ig	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m			i.	Cmol (+				%
0.1 - 0.15	6.5A	0.038A	4.2E	0.2	0.8	0.2			5.4D	
0.3 - 0.35 0.7 - 0.75 1.3 - 1.35	6.9A 7.8A 7.9A	0.027A 0.049A 0.046A	6.3E	2.6	0.5	0.2			9.6D	
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Tota K	l Bulk Density	Particl GV CS		alysis Silt Clay
m	%	%	mg/kg	%	%	%	Mg/m3		%	
0.1 - 0.15 0.3 - 0.35							1.50 1.60	26.	BA 29.3	24 19.9
0.7 - 0.75 1.3 - 1.35							1.78 1.87	17	A 18.8	27.7 36.5

Depth	COLE	Gravimetric/Volumetric Water Contents Sat. 0.05 Bar 0.1 Bar 0.5 Bar 1 Bar 5 Bar 15 Bar	K sat	K unsat
m		g/g - m3/m3	mm/h	mm/h
0.1 - 0.15 0.3 - 0.35 0.7 - 0.75 1.3 - 1.35	0.027A 0.036A 0.017A 0.016A	0.15G0.06D0.13G0.05D0.13G0.1D0.11G0.08D		

## Project Name:Soils of the Lower Macquarie Valley, New South WalesProject Code:MacquarieSite ID: 303Observation ID: 1Agency Name:CSIRO Division of Soils (ACT)

## Laboratory Analyses Completed for this profile

15C1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_K	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_MG	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_NA	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15J_BASES	Sum of Bases
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
P10_CF_C	Clay (%) - Coventry and Fett pipette method
P10_CF_CS	Coarse sand (%) - Coventry and Fett pipette method
P10_CF_FS	Fine sand (%) - Coventry and Fett pipette method
P10_CF_Z	Silt (%) - Coventry and Fett pipette method
P3A1	Bulk density - g/cm3
P3B1GV_15	15 BAR Moisture g/g - Gravimetric of ground sample (<2mm) using pressure plate
P3B4GV_01	0.1 BAR Moisture g/g - Gravimetric of soil clods (Soil Survey Staff,1967)
P5_COLE	Coefficient of Linear Extensibility (Grossman et al. 1968)