Project Name: BRUCEDALE/LADYSMITH/GRIGGWARD - Soil Landscape Modelling Project Code: Wagga_SLM Site ID: BD82 Observation ID: 1 Agency Name: CSIRO Division of Soils (ACT) Site ID: Division of Soils (ACT) Division of Soils (ACT)

Ret/Slope Class: No Data Pattern Type: No Data No Data Relief: No Data No Data Relief: No Data Slope Category: Slope 2 % No Data Slope Category: 270 degrees No Data Slope Category: Soil Classification: Aspect: 270 degrees 270 degrees Soil Classification: Soil Classification: Mapping Unit: N/A N/A Australian Soil Classification: Soil Classification: Mapping Unit: N/A N/A Asc Confidence: Confidence level not specified Site Disturbance: Yegetation: Surface Coarse Fragments: Great Soil Group: N/A N/A Profile Morphology A1 0 - 0.16 m Data reddish brown (5YR3/3-Moist); : Coarse sandy clay loam; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Firm consistence; 2-10%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Many, very fine (0-1mm) roots; Gradual change to - B1 0.16 - 0.53 m Yellowish red (5YR4/8-Moist); : Light clay: Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Medium (2-5mm) macropores, Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Few, very fine (0-1mm) roots; Gradual change to - B21 0.53 - 0.91 m Brownish yellow (10YR6/8-Moist); Mottles, 10-20%, Prominent; Mottles, 10-20%, Distinct; Light clay; Weak grade of structure, 2-5 mm, Subangular bloc	Agen	cy Nume.	001		,							
Map Ref: Sheet No.: 8327 DGPS Rainfall: No Data Geology 6123375 AMG sone: 55 Rumoff; No Data Geology ExposureType: Undisturbed soil core Corf. Sub. is Parent. Mat.: Probable Geology ExposureType: Undisturbed soil core Corf. Sub. is Parent. Mat.: Probable Geol. Ref.: No Data Pattern Type: No Data Granite Land Form Reversion No Data Relief: No Data Biope: 2.% Aspect: 270 degrees Strate: Solid Condition (dry): Erosion: Mapping Unit: N/A Soli Classification: Mapping Unit: N/A AsSC confidence: Great Soil Group: N/A Confidence level not specified Site Disturbance: Very degrees Yegetation: Subragular, dispersed, coarse fragments; MappingUnit: N/A Profile Morphology Dark reddish brown (5YR3/3-Moist); Coarse sandy clay Ioam; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (100mm2) Very fin	Desc.	By:	McKa		•	050 m etc						
Northing/Long: 6123375 AMG zone: 55 Prainage: No Data Basting/Lat: 540126 Datum: AGD66 Drainage: No Data Geology ExposureType: Undisturbed soil core Geol. Ref: No Data Basting/Lat: Stable is Parent. Mat: Probable Geol. Ref: No Data Pattern Type: No Data Rel/Slope Class: No Data Slope Category: No Data Slope: 2 % Aspect: Z70 degrees Surface Soil Condition (dry): Erosion: Soil Classification Australian Soil Classification: Mapping Unit: N/A Mottled Eutrophic Yellow Demosol Medium Slightly gravelly Principal Profile Form: N/A Confidence: Confidence: Vegetation: Surface Coarse Fragments: Profile Morphology A1 0 - 0.16 m Dark reddish brown (5YR3/3-Moist); : Coarse sandy clay loam; Massive grade of structure; Earthy fabric: Common (1-5 per 100mm2) Very fine (0.075-fmm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (c1 per 100mm2) Very fine (0.075-fmm) mocropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (c1 per 100mm2) Very fine (0.075-fmm) mocropores, Few (<1 per 100mm2) Very fine (0.075-fmm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Very firm consistence: 2-10%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Few, very fine (0-1mm) Toots; Gradual change to - B1 0.16 - 0.53 m Per 100mm2) Very fine (0.075-fmm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Very firm consistence: 2-10%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Few, very fine (0-1mm) Toots; Gradual change to - B21 0.53 - 0.91 m Brownish yellow (10YR6/8-Moist); Mottles, 10-20%, Prominent; Mottles, 10-20%, Distinct; Light clay: Weak grade of structure, 2-5 mm, Subangular blocky; Smooth-ped fabric; Common (1-5							es					
Easting/Lat: 540126 Datum: AGD66 Drainage: No Data Geology Exposure Type: Undisturbed soil core Conf. Sub. is Parent. Mat:: Probable Geol. Ref: No Data Substrate Material: Granite Rel/Stope Class: No Data Relief: No Data Morph. Type: No Data Relief: No Data Stope: 2 % Aspect: 270 degrees Surface Soil Condition (dry): Erosion: Soil Classification: Mapping Unit:: N/A Motted Eutrophic Yellow Demosol Medium Slightly gravelly Principal Profile Form: N/A Soil Classification: Mapping Unit:: N/A ASC Confidence: Great Soil Group: N/A Confidence level not specified Stite Disturbance: Yelgetation: Surface Coarse Fragments: Profile Morphology A1 0 - 0.16 m Dark reddish brown (5YR3/3-Moist); Coarse sandy clay loam; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (C1 per 100mm2) Fine (1-2mm) macropores, Fire (C1 per 100mm2) Fine (1-2mm) macropores, Few (C1 per 100mm												
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Rel/Slope Class: No Data Pattern Type: No Data Morph. Type: No Data Relief: No Data Slope: 2% Aspect: 270 degrees Surface Soil Condition (dry): Erosion: Soil Classification: Mapping Unit: N/A Australian Soil Classification: Mapping Unit: N/A Mottled Eutrophic Yellow Dermosol Medium Slightly gravelly Principal Profile Form: N/A Confidence: Great Soil Group: N/A Confidence level not specified Stragents N/A Sturface Coarse Fragments: Profile Morphology No Data Profile Morphology Dark reddish brown (SYR3/3-Moist); Coarse sandy clay loam; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm)												
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Erosion: Soli Classification Australian Soli Classification: Mottled Eutrophic Yellow Dermosol Medium Slightly gravelly Loamy Clayey Very deep Mapping Unit: Principal Profile Form: N/A N/A ASC Confidence: Confidence level not specified Great Soil Group: M/A N/A Site Disturbance: Yeegetation: Surface Coarse Fragments: Profile Morphology A1 0 - 0.16 m Dark reddish brown (5YR3/3-Moist); : Coarse sandy clay loam; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Firm consistence; 2-10%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Many, very fine (0-1mm) roots; Gradual change to - B1 0.16 - 0.53 m Yellowish red (5YR4/8-Moist); : Light clay; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, dispersed, Quartz, coarse fragments; 0-2%, fine gravelly, 2-6 mm, subangular, dispersed, coarse fragments; Few, very fine (0-1mm) roots; Gradual change to - B21 0.53 - 0.91 m Brownish yellow (10YR6/8-Moist); Mottles, 10-20%, Prominent; Mottles, 10-20%, Distinct; Light clay; Weak grade of structure; 2-5 mm, Subangular blocky; Smooth-ped fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (very fine (0-1mm) roots; Clear B22 0.91 - 1.24 m Yellowish brown (10YR5/6-Moist); Mottles, 10-20%, Distinct; Light clay; Moderate grade of structure; 2-5 mm, Subangular blocky; Smooth-ped fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, 2-10%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragm	-			on (drv):								
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 Mottled Eutrophic Yellow Dermosol Medium Slightly gravelly Principal Profile Form: N/A ASC Confidence: Great Soil Group: N/A Confidence level not specified Site Disturbance: Vegetation: Surface Coarse Fragments: Profile Morphology A1 0 - 0.16 m Dark reddish brown (5YR3/3-Moist); ; Coarse sandy clay loam; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Firm consistence; 2-10%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Many, very fine (0.10mm) roots; Gradual change to - B1 0.16 - 0.53 m Yellowish red (5YR4/8-Moist); ; Light clay; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Fine (1-2mm), macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Very firm consistence; 2-10%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Common (10 - 20 %), Manganiferous, .; Few very fine (0.175 mm) macropores, Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, .; Few very fine (0-1mm) roots; Clear B22 0.91 - 1.24 m Yellowish brown (10YR5/6-Moist); Mottles, 10-20%, Distinct;	Austra	lian Soil C	lassific	cation:	Маррі	na Unit:		N/A				
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Surface Coarse Fragments: Profile Morphology A1 0 - 0.16 m Dark reddish brown (5YR3/3-Moist); ; Coarse sandy clay loam; Massive grade of structure; Earthy fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Fim consistence; 2-10%, fine gravelly, 2-6mm, subangular, dispersed, coarse fragments; Many, very fine (0-1mm) roots; Gradual change to -												
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Morphological Notes	B23	1.24 - 1.9	99 m	structure; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, 20-50%, fine gravelly, 2-								
	Morph	hological	Notes									

Observation Notes

Site Notes

Project Name: Project Code: Agency Name: BRUCEDALE/LADYSMITH/GRIGGWARD - Soil Landscape Modelling Wagga_SLM Site ID: BD82 Observation ID: 1 Wagga_SLM Site ID: BD82 CSIRO Division of Soils (ACT)

Laboratory Test Results:

Depth	рН	1:5 EC		hangeable Mg	Cations K	Na	Exchangeable Acidity	CEC		ECEC	I	ESP
m		dS/m	u			Cmol (%	
0 - 0.16	4.87A	0.079A	2.2J	0.53	0.78	0.06		7.91			(0.76
0.16 - 0.53	5.75A	0.032A	4J	1.3	0.55	0.07		8.5I			(0.82
0.53 - 0.91	6.49A	0.056A	5.5J	3.7	0.5	0.19		11.8				1.61
0.91 - 1.24	7.17A	0.053A	5.2J	4.2	0.63	0.42		14.11			2	2.98
1.24 - 1.99	7.88A	0.077A	7.6J	6.1	0.87	0.77		15.6l			4	4.94
Depth	CaCO3	Organic	Avail.	Total	Total	Tota	l Bulk	Pa	rticle	Size	Analysis	5
		С	Р	Р	N	ĸ	Density	GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.16		1.6C							30.9		23.9	45.2
0.16 - 0.53		0.4C							42.9		17.9	-
0.53 - 0.91		0.32C							53.8			28.6
0.91 - 1.24		0.320 0.2C							55.9		-	31.3
1.24 - 1.99		0.19C							55.7		-	27.4
1.24 - 1.99		0.190							55.7		10.5	27.4
Depth	COLE		Grav	vimetric/Vo	olumetric V	Vater Co	ntents		Ks	at	K unsa	t
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar 15 E	Bar				
m				g/	′g - m3/m	3			mm	/h	mm/h	
0 - 0.16												

0 - 0.16 0.16 - 0.53 0.53 - 0.91 0.91 - 1.24 1.24 - 1.99

BRUCEDALE/LADYSMITH/GRIGGWARD - Soil Landscape Modelling **Project Name:** Project Code: Wagga_SLM Site ID: BD82 Observation ID: 1 Agency Name: CSIRO Division of Soils (ACT)

Laboratory Analyses Completed for this profile

- 15F1 CA Exchangeable bases by 0.01M silver-thiourea (AgTU)+, no pretreatment for soluble salts
 - Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts
- 15F1_K 15F1_MG Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts
- Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts CEC by 0.01M silver-thiourea (AgTU)+ 15F1_NA 15F3
- 15L1 Base saturation percentage (BSP)
- 15N1 Exchangeable sodium percentage (ESP)
- EC of 1:5 soil/water extract 3A1
- 4A1 pH of 1:5 soil/water suspension
- 6B3 Total organic carbon - high frequency induction furnace, infrared
- Clay (%) Not recorded Sand (%) Not recorded P10_NR_C
- P10_NR_S P10_NR_Z Silt (%) - Not recorded