Project Name: LSG

Project Code: LSG Site ID: CP90 Observation ID: 1

Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By: J.R. Sleeman Locality: Irrigation 2nd paddock, just below Imgn dam:

Date Desc.: // Elevation: 660 metres

Map Ref.: Sheet No.: S15516 1:250000 Rainfall: 640

Northing/Long.: 149.1 Runoff: Moderately rapid Easting/Lat.: -35.2 Drainage: Poorly drained

Geology

ExposureType: Undisturbed soil core Conf. Sub. is Parent. Mat.: No Data

Geol. Ref.: No Data Substrate Material: Undisturbed soil core, Slightly porous,

Unconsolidated material (unidentified)

Land Form

Rel/Slope Class:Undulating rises 9-30m 3-10%Pattern Type:HillsMorph. Type:No DataRelief:No DataElem. Type:HillslopeSlope Category:Gently inclinedSlope:0 %Aspect:0 degrees

Surface Soil Condition (dry): Firm, Firm

Erosion:

Soil Classification

Australian Soil Classification:Mapping Unit:N/ABleached Eutrophic Yellow ChromosolPrincipal Profile Form:Gn3.85

ASC Confidence: Great Soil Group: Yellow podzolic

All necessary analytical data are available.

<u>Site Disturbance:</u> Complete clearing. Pasture, native or improved, but never cultivated **Vegetation:** Low Strata - Sod grass, . . *Species includes - None recorded

Surface Coarse Fragments: 2-10%, fine gravelly, 2-6mm, , Detrital sedimentary rock (unidentified)

Profile Morphology

A11 0 - 0.1 m Brown (10YR4/3-Moist); Light grey (10YR7/2-Dry); ; Fine sandy loam; Massive grade of structure; Sandy (grains prominent) fabric; Dry; Firm consistence; 2-10%, medium gravelly, 6-20mm, dispersed, Gravel, coarse fragments; Few (2 - 10%), Ferromanganiferous, Fine (0 - 2 mm), Soft segregations; Field pH 5.7 (pH meter); Diffuse change to -

A12 0.1 - 0.2 m Brown (10YR4/3-Moist); Light grey (10YR7/2-Dry); ; Fine sandy loam; Massive grade of structure; Sandy (grains prominent) fabric; Dry; Firm consistence; 2-10%, medium gravelly, 6-20mm, dispersed, Gravel, coarse fragments; Few (2 - 10%), Ferromanganiferous, Fine (0 - 2

mm), Soft segregations; Field pH 5.8 (pH meter); Diffuse change to -

A13 0.2 - 0.3 m Brown (10YR4/3-Moist); Light grey (10YR7/2-Dry); ; Fine sandy loam; Massive grade of structure; Sandy (grains prominent) fabric; Dry; Firm consistence; 2-10%, medium gravelly, 6-20mm, dispersed, Gravel, coarse fragments; Few (2 - 10%), Ferromanganiferous, Fine (0 - 2)

mm), Soft segregations; Field pH 6.1 (pH meter); Clear change to -

A21 0.3 - 0.4 m Light yellowish brown (10YR6/4-Moist); White (10YR8/2-Dry); ; Loamy fine sand; Massive

grade of structure; Sandy (grains prominent) fabric; Dry; Very firm consistence; 10-20%, medium gravelly, 6-20mm, dispersed, Gravel, coarse fragments; Common (10 - 20 %), Ferromanganiferous, Coarse (6 - 20 mm), Soft segregations; Field pH 6.2 (pH meter); Diffuse

change to -

A22 0.4 - 0.5 m Light yellowish brown (10YR6/4-Moist); White (10YR8/2-Dry); ; Loamy fine sand; Massive

grade of structure; Sandy (grains prominent) fabric; Dry; Very firm consistence; 10-20%, medium gravelly, 6-20mm, dispersed, Gravel, coarse fragments; Common (10 - 20 %), Ferromanganiferous, Coarse (6 - 20 mm), Soft segregations; Field pH 6.3 (pH meter); Gradual

change to -

A3 0.5 - 0.6 m Pale brown (10YR6/3-Moist); Very pale brown (10YR8/3-Dry); ; Sandy loam; Massive grade of

structure; Earthy fabric; Dry; Very strong consistence; 10-20%, coarse gravelly, 20-60mm, dispersed, Gravel, coarse fragments; Common (10 - 20%), Ferromanganiferous, Medium (2 -6

mm), Soft segregations; Field pH 6.9 (pH meter); Abrupt change to -

B1 0.6 - 0.75 m Brownish yellow (10YR6/6-Moist); ; Sandy clay loam; Massive grade of structure; Earthy

fabric; Dry; Very strong consistence; 10-20%, coarse gravelly, 20-60mm, dispersed, Gravel, coarse fragments; Common (10 - 20 %), Ferromanganiferous, Medium (2 -6 mm), Soft

segregations; Field pH 6.8 (pH meter); Gradual change to -

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CSIRO Division of Soils (ACT)

0.75 - 1 m

Brownish yellow (10YR6/8-Moist); , 7.5YR56, 2-10%, Distinct; , 2-10%, Distinct; Light clay; Strong grade of structure, 20-50 mm, Angular blocky; Earthy fabric; Dry; Very strong consistence; 0-2%, medium gravelly, 6-20mm, dispersed, Gravel, coarse fragments; Very few (0 - 2%), Ferromanganiferous, Fine (0 - 2 mm), Soft segregations; Field pH 6.8 (pH meter);

Morphological Notes

Observation Notes

ALLUV/COLLUV FROM MT.PAINTER PORPHYRY: LAYERS RE NUMBERED 21/10/92

Site Notes

GINNINDERRA

Project Name: LSG
Project Code: LSG Site ID: CP
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Laboratory Test Results:

Depth	рН	pH 1:5 EC Exchangeable Cations					Exchangeab	ECEC		Е	SP	
	P			Mg	K	Na	Acidity	le CEC			_	
m		dS/m		_	Cmol (+)		+)/kg	/kg			9	6
0 - 0.1	5.7A	0.12A	3.4K	1.4	0.45	0.02	8.4B	13.7			_	.15
0.1 - 0.2	5.8A	0.04A	3.2K	1.2	0.24	0.02	6.4B	11.2	J		0	.18
0.2 - 0.3	6.1A	0.03A	3.6K	1.5	0.14	0.03	5.9B	11.2	J			.27
0.3 - 0.4	6.2A	0.07A	2.6K	1.1	0.08	0.02	3.2B	7.1J	l			.28
0.4 - 0.5	6.3A	A80.0	1.9K	0.85	0.07	0.02	1.7B	4.5J	l		0	.44
0.5 - 0.6	6.9A	0.02A	2.1K	1.4	0.1	0.06	2.3B	6.1J	l		0	.98
0.6 - 0.75	6.8A	0.03A	2.6K	3.1	0.14	0.12	4.7B	10.7	J		1	.12
0.75 - 1	6.8A	0.03A	3.1K	4	0.14	0.1	6.5B	13.8	J		0	.72
Depth CaCO3		Organic	Avail.	Total	Total	Tota	ıl Bulk	Pa	rticle	Size	Analysis	
•		Č	Р	Р	N	K	Densit	y GV	cs	FS	Silt (Clay
m	%	%	mg/kg	%	%	%	Mg/m3	Š		%		•
0 - 0.1		2.07D 0.176B					2	15D	41	23	14	
0.1 - 0.2						1	14D			16		
0.2 - 0.3						1	12D		27	17		
0.3 - 0.4		0.23D	0.034B 3					16D	_	19	13	
0.4 - 0.5		0.12D		0.023B 13					20D	_		10
0.5 - 0.6		0.1D		0.02B 9					18D	55	14	14
0.6 - 0.75		0.15D		0.026B 48					13D	48		25
0.75 - 1		0.15D			0.02	25B		2	9D	49	13	29
Depth	COLE		Grav	imetric/Vo	Vater Cor	ater Contents		Ks		at K unsat		
•		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar				
m				g/s	g - m3/m	3			mm	/h	mm/h	

^{0 - 0.1} 0.1 - 0.2 0.2 - 0.3 0.3 - 0.4 0.4 - 0.5 0.5 - 0.6 0.6 - 0.75 0.75 - 1

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Laboratory Analyses Completed for this profile

13C1 FE Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded CEC - meq per 100g of soil - Not recorded 15_NR_CA

15_NR_CEC

15 NR K Exch. basic cations (K++) - meq per 100g of soil - Not recorded 15_NR_MG Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded 15_NR_NA

Exch. basic cations (Na++) - meq per 100g of soil - Not recorded

Exchangeable aluminium - meq per 100g of soil - Aluminium By difference of C and A or B 15G_C_AL1

Air-dry moisture content 2A1 EC of 1:5 soil/water extract 3A1 4A1 pH of 1:5 soil/water suspension

5A2

Chloride - 1:5 soil/water extract, automated colour Organic carbon (%) - Uncorrected Walkley and Black method Total nitrogen (%) - Not recorded 6A1_UC

7_NR

P10_GRAV

P10_PB_C P10_PB_CS Clay (%) - Plummet balance Coarse sand (%) - Plummet balance P10_PB_FS Fine sand (%) - Plummet balance P10_PB_Z Silt (%) - Plummet balance