

Project Name: Three Springs Latham land resources survey
Project Code: TSL **Site ID:** 0326 **Observation ID:** 1
Agency Name: Agriculture Western Australia

Site Information

Desc. By:	Christopher Grose	Locality:	
Date Desc.:	10/08/93	Elevation:	260 metres
Map Ref.:		Rainfall:	No Data
Northing/Long.:	6716506 AMG zone: 50	Runoff:	No Data
Easting/Lat.:	389900 Datum: AGD84	Drainage:	No Data

Geology

ExposureType:	Auger boring	Conf. Sub. is Parent. Mat.:	No Data
Geol. Ref.:	No Data	Substrate Material:	No Data

Landform

Rel/Slope Class:	Level plain <9m <1%	Pattern Type:	Plain
Morph. Type:	Flat	Relief:	No Data
Elem. Type:	Plain	Slope Category:	No Data
Slope:	%	Aspect:	No Data

Surface Soil Condition Firm, Hardsetting

Erosion

Soil Classification

Australian Soil Classification:		Mapping Unit:	N/A
Haplic Eutrophic Red Chromosol		Principal Profile Form:	Dr2.11
ASC Confidence:		Great Soil Group:	N/A
Confidence level not specified			

Site Disturbance Cultivation. Rainfed

Vegetation

Surface Coarse Fragments

Profile Morphology

A1	0 - 0.1 m	Dark reddish brown (5YR3/4-Moist); ; Loam; Moderate grade of structure, 5-10 mm, Subangular blocky;
		Firm consistence; Field pH 6 (pH meter);
B1	0.1 - 0.35 m	Reddish brown (2.5YR4/4-Moist); ; Medium clay; Weak grade of structure, 20-50 mm, Prismatic; Firm
		consistence; Field pH 7 (pH meter);
B21	0.35 - 0.85 m	Red (10R4/6-Moist); ; Medium clay; Weak grade of structure, 20-50 mm, Angular blocky; Firm
		consistence; Few (2 - 10 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Field pH 6 (pH meter);
B22	0.85 - 1.3 m	Weak red (10R4/4-Moist); ; Light clay; Very strong consistence; Manganiferous pan, Moderately
		cemented, Massive; Field pH 6 (pH meter);
	1.3 - m	; Light clay;

Morphological Notes

B21	Bottom varies between 45 and 90 cm.
B22	Moderately cemented by Fe/Mn. Crushes to give a LC texture. Occasional SiO ₂ and chert pebbles to 2cm. Occasional roots to base of layer 3. Very occasional roots in layer 4.

Observation Notes

Site Notes

[marginal duplex from lab data]

Project Name: Three Springs Latham land resources survey
Project Code: TSL **Site ID:** 0326 **Observation** 1
Agency Name: Agriculture Western Australia

Laboratory Test Results:

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.1	5.4B 6.3H	6B	4.18H	1.26	0.9	0.16	0.02J		6.5D	
0.2 - 0.3	6.1B 7.1H	6B	5.33A	1.45	0.47	0.38			7.63D	
0.5 - 0.6	6.1B 6.8H	8B	5.61A	1.96	0.09	0.34			8D	
1 - 1.1	6.1B 7.5H	4B	5.69A	2.96	0.09	0.64			9.38D	

Depth	CaCO3	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis
m	%	%	mg/kg	%	%	%	Mg/m3	GV CS FS Silt
0 - 0.1		0.8D		140B	0.062E			10.1
14.3								
0.2 - 0.3		0.54D		120B	0.033E			12.1
27.8								
0.5 - 0.6		0.19D		110B	0.02E			12.3
30.3								
1 - 1.1		0.1D		89B	0.013E			10.6
38.5								

Laboratory Analyses Completed for this profile

15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CMR	Exchangeable bases (Ca/Mg ratio) - Not recorded
15A1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
15A1_CEC	Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_K	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
15A1_MG	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
15A1_NA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
15E1_AL	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble
salts	
15E1_K	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_MG	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_MN	Exchangeable bases (Mn2+) by compulsive exchange, no pretreatment for soluble salts
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15J_BASES	Sum of Bases
15L1_a	Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using
Sum of Cations	and measured clay
15N1_a	Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC
15N1_b	Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations
3_NR	Electrical conductivity or soluble salts - Not recorded
4_NR	pH of soil - Not recorded
4B_AL_NR	Aluminium in 1:5 soil/0.01M calcium chloride extract - method not recorded
4B1	pH of 1:5 soil/0.01M calcium chloride extract - direct
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
7A1	Total nitrogen - semimicro Kjeldahl, steam distillation
9A3	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour

9H1	Anion storage capacity
P10_1m2m	1000 to 2000u particle size analysis, (method not recorded)
P10_20_75	20 to 75u particle size analysis, (method not recorded)
P10_75_106	75 to 106u particle size analysis, (method not recorded)

Project Name: Three Springs Latham land resources survey
Project Code: TSL **Site ID:** 0326 **Observation** 1
Agency Name: Agriculture Western Australia

P10_NR_C	Clay (%) - Not recorded
P10_NR_Saa	Sand (%) - Not recorded arithmetic difference, auto generated
P10_NR_Z	Silt (%) - Not recorded
P10106_150	106 to 150u particle size analysis, (method not recorded)
P10150_180	150 to 180u particle size analysis, (method not recorded)
P10180_300	180 to 300u particle size analysis, (method not recorded)
P10300_600	300 to 600u particle size analysis, (method not recorded)
P106001000	600 to 1000u particle size analysis, (method not recorded)