

Project Name: Three Springs Latham land resources survey
Project Code: TSL **Site ID:** 0001 **Observation ID:** 1
Agency Name: Agriculture Western Australia

Site Information

Desc. By:	Christopher Grose	Locality:	
Date Desc.:	30/03/93	Elevation:	265 metres
Map Ref.:		Rainfall:	No Data
Northing/Long.:	6748775 AMG zone: 50	Runoff:	No Data
Easting/Lat.:	374767 Datum: AGD84	Drainage:	No Data

Geology

ExposureType:	Soil pit	Conf. Sub. is Parent. Mat.:	No Data
Geol. Ref.:	No Data	Substrate Material:	No Data

Landform

Rel/Slope Class: Gently undulating plains <9m 1-3% **Pattern Type:** Plain

Morph. Type:	Flat	Relief:	No Data
Elem. Type:	Plain	Slope Category:	No Data
Slope:	%	Aspect:	No Data

Surface Soil Condition Firm

Erosion

Soil Classification

Australian Soil Classification:		Mapping Unit:	N/A
Haplic Hypercalcic Red Chromosol		Principal Profile Form:	Dr4.13
ASC Confidence:		Great Soil Group:	N/A
Confidence level not specified			

Site Disturbance Cultivation. Rainfed

Vegetation

Surface Coarse Fragments 2-10%, medium gravelly, 6-20mm, subangular, Ironstone

Profile Morphology

<p>A 0 - 0.1 m</p> <p>Angular blocky;</p> <p>change to -</p>	<p>Dark reddish brown (5YR3/3-Moist); ; Loam; Strong grade of structure, 50-100 mm,</p> <p>Rough-ped fabric; Dry; Very firm consistence; Field pH 7.5 (pH meter); Sharp, Smooth</p>
<p>B 0.1 - 0.19 m</p> <p>Angular</p> <p>walls coated;</p> <p>meter); Sharp,</p> <p>Smooth change to -</p>	<p>Dark reddish brown (5YR3/4-Moist); ; Medium clay; Strong grade of structure, 20-50 mm,</p> <p>blocky; Rough-ped fabric; Dry; Strong consistence; Few cutans, <10% of ped faces or</p> <p>Many (20 - 50 %), Ferromanganiferous, Medium (2 -6 mm), Nodules; Field pH 8.5 (pH</p>
<p>B2 0.19 - 0.35 m</p> <p>Angular blocky;</p> <p>coated; Many (20 -</p> <p>Gradual, Wavy</p> <p>change to -</p>	<p>Reddish brown (5YR4/4-Moist); ; Medium clay; Strong grade of structure, 20-50 mm,</p> <p>Rough-ped fabric; Dry; Strong consistence; Many cutans, >50% of ped faces or walls</p> <p>50 %), Ferromanganiferous, Medium (2 -6 mm), Nodules; Field pH 8.5 (pH meter);</p>
<p>B22 0.35 - 1.4 m</p> <p>of structure;</p> <p>Few (2 - 10 %),</p> <p>Field pH 10 (pH</p> <p>meter);</p>	<p>Yellowish red (5YR5/8-Moist); Reddish yellow (5YR7/6-Moist); ; Light clay; Massive grade</p> <p>Dry; Weak consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Fragments;</p> <p>Calcareous, Fine (0 - 2 mm), Soft segregations; Soil matrix is Very highly calcareous;</p>

Morphological Notes

B22 Considerable soft powdery carbonates.

Observation Notes

Site Notes

Project Name: Three Springs Latham land resources survey
Project Code: TSL **Site ID:** 0001 **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	6.7B 7.7H	10B	12.59A	4.33	1.77	0.29			18.98D	
0.1 - 0.19	7B 8.3H	5B	13.04E	4.18	1.16	0.28		21B	18.66D	1.33
0.19 - 0.35	7.6B 8.6H	8B	15.33E	5.04	0.7	0.42		23B	21.49D	1.83
0.35 - 0.9	8.2B 9.4H	22B	7.03E	5.17	0.22	1.2		13B	13.62D	9.23
0.9 - 1.4	8.5B 9.9H	43B	1.72E	4.93	0.36	2.81		9B	9.82D	31.22

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		1.31D		200B	0.118E			14.3
19.4								
0.1 - 0.19		0.5D		120B	0.054E			9.9
35								
0.19 - 0.35	2C	0.4D		110B	0.047E			9.6
38.6								
0.35 - 0.9	37C	0.19D		95B	0.03E			28.3
31.5								
0.9 - 1.4	63C	0.1D		40B	0.013E			45.5
21.8								

Laboratory Analyses Completed for this profile

15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CMV	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
15C1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5,
pretreatment for	soluble salts
15C1_CEC	CEC - 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
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
18A1_NR	Bicarbonate-extractable potassium (not recorded)
19B_NR	Calcium Carbonate (CaCO ₃) - Not recorded
3_NR	Electrical conductivity or soluble salts - Not recorded
4_NR	pH of soil - Not recorded
4B1	pH of 1:5 soil/0.01M calcium chloride extract - direct

Project Name: Three Springs Latham land resources survey
Project Code: TSL **Site ID:** 0001 **Observation** 1
Agency Name: Agriculture Western Australia

6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
7A1	Total nitrogen - semimicro Kjeldahl, steam distillation
9A3	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour
9B_NR	Bicarbonate-extractable phosphorus (not recorded)
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)
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)