Project Name: **Three Springs Latham land resources survey**
Project Code: **TSL** **Site ID:** **0323** **Observation ID:** **1**
Agency Name: **Agriculture Western Australia**

Site Information

Desc. By:	Christopher Grose	**Locality:**	
Date Desc.:	09/08/93	**Elevation:**	300 metres
Map Ref.:		**Rainfall:**	No Data
Northing/Long.:	6736214 AMG zone: 50	**Runoff:**	No Data
Easting/Lat.:	447788 Datum: AGD84	**Drainage:**	Moderately well drained

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 rises 9-30m 1-3% **Pattern Type:** Hills

Morph. Type:	Upper-slope	**Relief:**	No Data
Elem. Type:	Hillcrest	**Slope Category:**	No Data
Slope:	%	**Aspect:**	No Data

Surface Soil Condition

Firm, Hardsetting

Erosion

Soil Classification

Australian Soil Classification:
Ferric Calcic Red Dermosol

ASC Confidence:
Confidence level not specified

Mapping Unit: N/A
Principal Profile Form: Gn4.13
Great Soil Group: N/A

Site Disturbance

Cultivation. Rainfed

Vegetation

Surface Coarse Fragments

; 2-10%, , angular, Granulite

Profile Morphology

Ap 0 - 0.15 m Dark brown (7.5YR3/3-Moist); ; Sandy clay loam; Moderate grade of structure, 5-10 mm, Subangular blocky; Firm consistence; Field pH 7 (pH meter); Clear, Wavy change to -

B 0.15 - 0.35 m Dark red (2.5YR3/6-Moist); ; Sandy light clay; Moderate grade of structure, 10-20 mm, Angular blocky; Firm consistence; Soil matrix is Slightly calcareous; Field pH 9 (pH meter); Clear, Wavy change to -

0.35 - 0.5 m ; Strong grade of structure, 10-20 mm, Angular blocky; Very firm consistence;

0.5 - 0.6 m ; Very strong consistence;

Morphological Notes

Cemented by iron and with coatings of $CaCO_3$ on upper surface - Coffee Rock.
Cemented weathered granite.

Observation Notes

Site Notes

Ferric calcic red dermosol.

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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations Ca	Mg	K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.1	5.8B	7B	5.07A	1.29	0.72	0.13			7.21D	
	6.6H									
0.25 - 0.45	8.3B	22B	5.81E	3.74	0.12	1.55		14B	11.22D	11.07
	9.2H		5.81E	3.74	0.12	1.55		14B	11.22D	
	8.3B									
	9.2H									
0.25 - 0.45	8.3B	22B	5.81E	3.74	0.12	1.55		14B	11.22D	11.07
	9.2H		5.81E	3.74	0.12	1.55		14B	11.22D	
	8.3B									
	9.2H									

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis GV	CS	FS	Silt
		Clay									
m	%	%	mg/kg	%	%	%	Mg/m3			%	
0 - 0.1		1.04D		210B	0.081E						6.8
19.4											
0.25 - 0.45	2C	0.42D		120B	0.039E						6.5
44.4											
	2C	0.42D		120B	0.039E						6.5
	44.4										
0.25 - 0.45	2C	0.42D		120B	0.039E						6.5
44.4											
	2C	0.42D		120B	0.039E						6.5
	44.4										

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
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
19B_NR	Calcium Carbonate (CaCO3) - 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
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method

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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)
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)