

**Project Name:** Three Springs Latham land resources survey  
**Project Code:** TSL **Site ID:** 0692 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

|   |                                  |
|---|----------------------------------|
| <b>Desc. By:</b> Christopher Grose          | <b>Locality:</b>                 |
| <b>Date Desc.:</b> 23/02/94                 | <b>Elevation:</b> No Data        |
| <b>Map Ref.:</b>                            | <b>Rainfall:</b> No Data         |
| <b>Northing/Long.:</b> 6686863 AMG zone: 50 | <b>Runoff:</b> No Data           |
| <b>Easting/Lat.:</b> 441435 Datum: AGD84    | <b>Drainage:</b> Rapidly drained |

#### Geology

|                               |  |
|-------------------------------|--|
| <b>ExposureType:</b> Soil pit | <b>Conf. Sub. is Parent. Mat.:</b> No Data |
| <b>Geol. Ref.:</b> No Data    | <b>Substrate Material:</b> No Data         |

#### Landform

|  |                                |
|--|--------------------------------|
| <b>Rel/Slope Class:</b> Undulating rises 9-30m 3-10% | <b>Pattern Type:</b> Hills     |
| <b>Morph. Type:</b> Mid-slope                        | <b>Relief:</b> No Data         |
| <b>Elem. Type:</b> Hillslope                         | <b>Slope Category:</b> No Data |
| <b>Slope:</b> 3 %                                    | <b>Aspect:</b> No Data         |

#### Surface Soil Condition Loose

#### Erosion

#### Soil Classification

|  |                                       |
|--|---------------------------------------|
| <b>Australian Soil Classification:</b> | <b>Mapping Unit:</b> N/A              |
| Basic Fluvic Orthic Tenosol            | <b>Principal Profile Form:</b> Uc5.22 |
| <b>ASC Confidence:</b>                 | <b>Great Soil Group:</b> N/A          |
| Confidence level not specified         |                                       |

#### Site Disturbance Cultivation. Rainfed

#### Vegetation

#### Surface Coarse Fragments

#### Profile Morphology

|    |               |  |
|----|---------------|--|
| Ap | 0 - 0.12 m    | Brownish yellow (10YR6/6-Moist); ; Clayey sand; Moderate grade of structure, 50-100 mm, Platy; Rough-ped fabric; Dry; Very weak consistence; Field pH 5.9 (pH meter); Abrupt, Smooth change to -                 |
| B  | 0.12 - 0.35 m | Brownish yellow (10YR6/6-Moist); ; Clayey sand; Single grain grade of structure; Earthy fabric; Dry; Weak consistence; Other pans, Weakly cemented, Massive; Field pH 5.5 (pH meter); Abrupt, Smooth change to - |
| B  | 0.35 - 0.62 m | Brownish yellow (10YR6/8-Moist); ; Clayey sand; Single grain grade of structure; Earthy fabric; Dry; Weak consistence; Field pH 6.6 (pH meter); Clear, Wavy change to -  |
| B  | 0.62 - 1.3 m  | Brownish yellow (10YR6/8-Moist); ; Clayey sand; Single grain grade of structure; Earthy fabric; Moist; Very weak consistence; Field pH 6.9 (pH meter);   |

#### Morphological Notes

|   |                     |
|---|---------------------|
| B | traffic pan         |
| B | partial traffic pan |

#### Observation Notes

#### Site Notes

Basic regolith orthic tenosol. Traffic pan in second and part of third layers. Roots to 130cm. Well drained.

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**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 - 0.12    | 5.2B<br>6H   | 8B     | 1.29H | 0.45            | 0.22      | 0.04        | <0.02J               |     | 2D    |     |
| 0.12 - 0.35 | 4.5B<br>5.4H | 2B     | 0.64H | 0.23            | 0.13      | <0.02       | 0.02J                |     | 1.01D |     |
| 0.35 - 0.65 | 5.3B<br>5.9H | 2B     | 0.88H | 0.36            | 0.11      | <0.02       | <0.02J               |     | 1.36D |     |
| 0.8 - 1     | 6.1B<br>6.4H | 3B     | 0.84H | 0.62            | 0.05      | 0.07        | <0.02J               |     | 1.58D |     |

| 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 - 0.12<br>6.5     |       | 0.72D          |          | 98B     | 0.057E  |         |              | 91I 2.5                |
| 0.12 - 0.35<br>13.5 |       | 0.14D          |          | 27B     | 0.015E  |         |              | 84I 2.5                |
| 0.35 - 0.65<br>15   |       | 0.09D          |          | 22B     | 0.01E   |         |              | 82I 3                  |
| 0.8 - 1<br>16       |       | 0.06D          |          | 21B     | 0.007E  |         |              | 80.5I 3.5              |

**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   |
| 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  |
| 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                                   |
| P10_NR_C  | Clay (%) - Not recorded   |
| P10_NR_S  | Sand (%) - Not recorded   |
| P10_NR_Z  | Silt (%) - Not recorded   |