

**Project Name:** Three Springs Latham land resources survey  
**Project Code:** TSL **Site ID:** 0349 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

|                        |                      |                   |                 |
|------------------------|----------------------|-------------------|-----------------|
| <b>Desc. By:</b>       | Christopher Grose    | <b>Locality:</b>  |                 |
| <b>Date Desc.:</b>     | 19/08/93             | <b>Elevation:</b> | No Data         |
| <b>Map Ref.:</b>       |                      | <b>Rainfall:</b>  | No Data         |
| <b>Northing/Long.:</b> | 6717758 AMG zone: 50 | <b>Runoff:</b>    | No Data         |
| <b>Easting/Lat.:</b>   | 424958 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

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

|                     |           |                        |         |
|---------------------|-----------|------------------------|---------|
| <b>Morph. Type:</b> | No Data   | <b>Relief:</b>         | No Data |
| <b>Elem. Type:</b>  | Hillslope | <b>Slope Category:</b> | No Data |
| <b>Slope:</b>       | 2 %       | <b>Aspect:</b>         | No Data |

**Surface Soil Condition** Soft

#### Erosion

#### Soil Classification

|  |  |                                |        |
|--|--|--------------------------------|--------|
| <b>Australian Soil Classification:</b>       |  | <b>Mapping Unit:</b>           | N/A    |
| Basic Arenic Yellow-Orthic Tenosol           |  | <b>Principal Profile Form:</b> | Uc5.22 |
| <b>ASC Confidence:</b>                       |  | <b>Great Soil Group:</b>       | N/A    |
| All necessary analytical data are available. |  |                                |        |

**Site Disturbance** Cultivation. Rainfed

#### Vegetation

#### Surface Coarse Fragments

#### Profile Morphology

|    |             |   |
|----|-------------|---|
| Ap | 0 - 0.1 m   | Yellowish brown (10YR5/6-Moist); ; Loamy sand; Dry; Very weak consistence; Field pH 6 (pH meter);                             |
| B1 | 0.1 - 0.3 m | Brownish yellow (10YR6/6-Moist); ; Clayey sand; Moderately moist; Weak consistence; Cultivation pan; Field pH 6.8 (pH meter); |
| B2 | 0.3 - 1.4 m | Brownish yellow (10YR6/8-Moist); ; Clayey sand; Moist; Very weak consistence; Field pH 7.2 (pH meter);                        |
|    | 1.4 - m     | ; Clayey sand;  |

#### Morphological Notes

#### Observation Notes

#### Site Notes

Roots penetrate to 120 cm. Deep good yellow sand.

**Project Name:** Three Springs Latham land resources survey  
**Project Code:** TSL **Site ID:** 0349 **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     | 5.2B<br>6.3H         | 2B     | 0.86H | 0.32            | 0.12      | 0.03        | 0.04J                |     | 1.33D |     |
| 0 - 0.1     | 5.2B<br>6.3H<br>5.5B | 2B     | 0.86H | 0.32            | 0.12      | 0.03        | 0.04J                |     | 1.33D |     |
| 0.1 - 0.35  | 5.4B<br>6.1H         | 1B     | 0.68H | 0.21            | 0.06      | 0.02        | <0.02J               |     | 0.97D |     |
| 0.15 - 0.25 | 5.4B                 |        |       |                 |           |             |                      |     |       |     |
| 0.4 - 0.5   | 5.7B                 |        |       |                 |           |             |                      |     |       |     |
| 0.45 - 0.55 | 5.7B<br>6.1H         | 1B     | 0.71H | 0.29            | 0.04      | 0.02        | 0.02J                |     | 1.06D |     |
| 0.9 - 1     | 5.8B<br>6.1H         | 2B     | 0.53H | 0.45            | 0.03      | 0.02        | <0.02J               |     | 1.03D |     |

| 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     |       | 0.39D          |          | 110B    | 0.024E  |         |              | 1.7                    |
| 0 - 0.1     |       | 0.39D          |          | 110B    | 0.024E  |         |              | 1.7                    |
| 0.1 - 0.35  |       | 0.09D          |          | 25B     | 0.006E  |         |              | 2.2                    |
| 0.15 - 0.25 |       |                |          |         |         |         |              |                        |
| 0.4 - 0.5   |       |                |          |         |         |         |              |                        |
| 0.45 - 0.55 |       | 0.05D          |          | 21B     | 0.003E  |         |              | 2.4                    |
| 0.9 - 1     |       | 0.04D          |          | 19B     | 0.002E  |         |              | 2.6                    |

**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   |
| 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                                   |
| 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                                   |

**Project Name:** Three Springs Latham land resources survey  
**Project Code:** TSL                      **Site ID:** 0349                      **Observation** 1  
**Agency Name:** Agriculture Western Australia

|            |  |
|------------|--|
| 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) |