| Project Name:<br>Project Code:<br>Agency Name:  | Geraldton land resources<br>GTN Site ID:<br>Agriculture Western Austr   | 1414 O  | bservation ID:                                      | 1                                      |  |  |  |  |  |
|---|---|---|---|--|--|--|--|--|--|
| Site Information<br>Desc. By:<br>Date Desc.:<br>Map Ref.:<br>Northing/Long.:<br>Easting/Lat.: | Rogers, Gary<br>21/02/91<br>6796630 AMG zone: 50<br>380630 Datum: AGD84 | Locality:<br>Elevation:<br>Rainfall:<br>Runoff:<br>Drainage:  | No Data<br>No Data<br>No Data<br>Moderately well dr | ained                                  |  |  |  |  |  |
| <u>Geoloqy</u><br>ExposureType:<br>Geol. Ref.:  | Auger boring<br>No Data   | Conf. Sub. is Pare<br>Substrate Material  |   |  |  |  |  |  |  |
| Land Form<br>Rel/Slope Class:<br>Morph. Type:<br>Elem. Type:<br>Slope:                        | No Data<br>No Data<br>Hillcrest<br>%                                    | Pattern Type:<br>Relief:<br>Slope Category:<br>Aspect:  | No Data<br>No Data<br>No Data<br>No Data            |  |  |  |  |  |  |
| Surface Soil Co<br>Erosion:<br>Soil Classificati  |   | urdsetting  |   |  |  |  |  |  |  |
| Australian Soil Cla<br>Ferric-Acidic Petrof<br>ASC Confidence:<br>Confidence level n          | erric Brown Kandosol  | Princi  | ng Unit:<br>pal Profile Form:<br>Soil Group:        | N/A<br>KS-Um4.23<br>N/A                |  |  |  |  |  |
| <u>Site</u><br><u>Vegetation:</u><br>Surface Coarse   | Cultivation. Rainfed  |   |   |  |  |  |  |  |  |
| <u>Profile</u><br>A11 0 - 0.09 m  | Strong brown (7.5YR4/6-M  | Strong brown (7.5YR4/6-Moist); ; Fine sandy clay loam; Massive grade of structure;  |   |  |  |  |  |  |  |
| Sandy (grains   | prominent) fabric; Dry; 20-   | prominent) fabric; Dry; 20-50%, fine gravelly, 2-6mm, angular, Gravel, coarse fragments;  |   |  |  |  |  |  |  |
| 2-10%, medium<br>change to -  | gravelly, 6-20mm, angula  | gravelly, 6-20mm, angular, Gravel, coarse fragments; Field pH 5.7 (pH meter); Abrupt  |   |  |  |  |  |  |  |
| A12 0.09 - 0.2<br>Earthy fabric; Dry;   | <b>3</b> (  | Strong brown (7.5YR5/6-Moist); ; Fine sandy clay loam; Massive grade of structure;  |   |  |  |  |  |  |  |
| 20%, medium   | Strong consistence; 10-20   | Strong consistence; 10-20%, fine gravelly, 2-6mm, angular, Gravel, coarse fragments; 10-  |   |  |  |  |  |  |  |
| change to -   | gravelly, 6-20mm, subang  | gravelly, 6-20mm, subangular, Gravel, coarse fragments; Field pH 5.5 (pH meter); Clear  |   |  |  |  |  |  |  |
| B21 0.2 - 0.4 r<br>Earthy fabric; Dry;  | J X   |   |   |  |  |  |  |  |  |
| gravelly, 6-20mm,   |   | 2-10%, fine gravelly, 2-6mm, subangular, Gravel, coarse fragments; 20-50%, medium   |   |  |  |  |  |  |  |
| coarse  | 0   | angular, Gravel, coarse fragments; 20-50%, coarse gravelly, 20-60mm, angular, Gravel,   |   |  |  |  |  |  |  |
| B22 0.4 - 0.6 r   | 0   | fragments; Field pH 5.5 (pH meter); Gradual change to -<br>Strong brown (7.5YR5/8-Moist); ; Fine sandy clay loam; Massive grade of structure; |   |  |  |  |  |  |  |
| Earthy fabric; Dry;   | <b>3</b> (  | 10-20%, fine gravelly, 2-6mm, angular, Gravel, coarse fragments; 20-50%, medium   |   |  |  |  |  |  |  |
| gravelly, 6-20mm,   |   |   | 0   |  |  |  |  |  |  |
| coarse  | 0   | angular, Gravel, coarse fragments; 20-50%, coarse gravelly, 20-60mm, angular, Gravel, fragments; Field pH 5.5 (pH meter); Gradual change to - |   |  |  |  |  |  |  |
| B23 0.6 - 0.9 r   | 0   | Strong brown (7.5YR5/8-Moist); ; Sandy clay loam; Massive grade of structure; Earthy  |   |  |  |  |  |  |  |
| fabric; Moderately  |   | moist; 10-20%, fine gravelly, 2-6mm, angular, Gravel, coarse fragments; 20-50%,   |   |  |  |  |  |  |  |
| medium gravelly, 6-   | 20mm, angular, Gravel, co   |   | -   |  |  |  |  |  |  |
| Gravel, coarse  | fragments; Field pH 5.5 (p  | <b>U</b>  | ,   | ······································ |  |  |  |  |  |

### **Morphological Notes**

| A11 | texture code was SCLFS, |
|-----|-------------------------|
| A12 | texture code was SCLFS, |
| B21 | texture code was SCLFS, |
| B22 | texture code was SCLFS, |

## **Observation Notes**

## Site Notes

Gravelly loam gravel profile 10m from road fence layer 1 has some pores;gravel samples of layers 2-5 layer 3 1.1kg gravel 0.6kg soil;layer 4 2.2 kg gravel 0.47kg soil layer 5 4.05kg gravel 1.25kg

| Project Name: | Geraldton land I | resources  | survey |             |   |
|---------------|------------------|------------|--------|-------------|---|
| Project Code: | GTN              | Site ID:   | 1414   | Observation | 1 |
| Agency Name:  | Agriculture Wes  | tern Austr | alia   |             |   |

### Laboratory Test Results:

| Depth      | рН           | 1:5 EC |       |      | le Cations |            | Exchangeable      | CEC | ECEC  | ESP |
|------------|--------------|--------|-------|------|------------|------------|-------------------|-----|-------|-----|
| m          |              | dS/m   | Ca    | Mg   | К          | Na<br>Cmol | Acidity<br>(+)/kg |     |       | %   |
| 0 - 0.09   | 4.6B<br>5.7H | 6B     | 1.2H  | 0.34 | 0.38       | 0.17       | 0.16J             |     | 2.09D |     |
| 0 - 0.1    | 4.6B<br>5.5H | 11B    | 1.25H | 0.34 | 0.33       | 0.26       | 0.17J             |     | 2.18D |     |
| 0.09 - 0.2 | 4.3B<br>5H   | 3B     | 1.26H | 0.32 | 0.16       | 0.05       | 0.34J             |     | 1.79D |     |
| 0.2 - 0.4  | 4.3B<br>4.9H | 4B     | 1.17H | 0.33 | 0.08       | 0.05       | 0.31J             |     | 1.63D |     |
| 0.2 - 0.4  | 4.3B<br>4.9H | 4B     | 1.17H | 0.33 | 0.08       | 0.05       | 0.31J             |     | 1.63D |     |
| 0.4 - 0.6  | 4.2B<br>4.9H | 3B     | 0.96H | 0.36 | 0.02       | 0.06       | 0.58J             |     | 1.4D  |     |
| 0.4 - 0.6  | 4.2B<br>4.9H | 3B     | 0.96H | 0.36 | 0.02       | 0.06       | 0.58J             |     | 1.4D  |     |
| 0.6 - 0.9  | 4.2B<br>4.8H | 3B     | 0.59H | 0.38 | 0.02       | 0.08       | 0.77J             |     | 1.07D |     |
| 0.6 - 0.9  | 4.2B<br>4.8H | 3B     | 0.59H | 0.38 | 0.02       | 0.08       | 0.77J             |     | 1.07D |     |

| Depth              | CaCO3 | Organic<br>C | Avail.<br>P | Total<br>P | Total<br>N | Total<br>K | Bulk<br>Density | Particl<br>GV CS | e Size Analysis<br>FS Silt |
|--------------------|-------|--------------|-------------|------------|------------|------------|-----------------|------------------|----------------------------|
| m                  | %     | Clay<br>%    | mg/kg       | %          | %          | %          | Mg/m3           |                  | %                          |
| 0 - 0.09<br>12.6   |       | 0.8D         |             |            |            |            |                 |                  | 5                          |
| 0 - 0.1<br>13.5    |       | 0.72D        |             |            |            |            |                 |                  | 5.5                        |
| 0.09 - 0.2<br>20.1 |       | 0.53D        |             |            |            |            |                 |                  | 5.4                        |
| 0.2 - 0.4<br>22.5  |       | 0.32D        |             |            |            |            |                 |                  | 5.5                        |
| 0.2 - 0.4<br>22.5  |       | 0.32D        |             |            |            |            |                 |                  | 5.5                        |
| 0.4 - 0.6<br>24.6  |       | 0.26D        |             |            |            |            |                 |                  | 6                          |
| 0.4 - 0.6<br>24.6  |       | 0.26D        |             |            |            |            |                 |                  | 6                          |
| 0.6 - 0.9<br>21.9  |       | 0.2D         |             |            |            |            |                 |                  | 6.2                        |
| 0.6 - 0.9<br>21.9  |       | 0.2D         |             |            |            |            |                 |                  | 6.2                        |

# Laboratory Analyses Completed for this profile

15\_NR\_BSa Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available

| 15_NR_CMR<br>15E1_AL | Exchangeable bases (Ca/Mg ratio) - Not recorded<br>Exchangeable AI - 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                                     |
| 18A1_NR              | Bicarbonate-extractable potassium (not recorded)   |
| 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  |
|                      |  |

| Project Name:   | Geraldton land resources survey  |
|---|--|
| Project Code:   | GTN Site ID: 1414 Observa  |
| Agency Name:  | Agriculture Western Australia  |
| 9B_NR<br>9H1<br>P10_1m2m<br>P10_20_75<br>P10_75_106<br>P10_NR_C<br>P10_NR_Saa<br>P10_NR_Z<br>P10106_150<br>P10150_180<br>P10150_180<br>P10180_300<br>P10300_600<br>P106001000 | Bicarbonate-extractable phosphorus (not recorded)<br>Anion storage capacity<br>1000 to 2000u particle size analysis, (method not recorded)<br>20 to 75u particle size analysis, (method not recorded)<br>75 to 106u particle size analysis, (method not recorded)<br>Clay (%) - Not recorded<br>Sand (%) - Not recorded arithmetic difference, auto generated<br>Silt (%) - Not recorded<br>106 to 150u particle size analysis, (method not recorded)<br>150 to 180u particle size analysis, (method not recorded)<br>180 to 300u particle size analysis, (method not recorded)<br>300 to 600u particle size analysis, (method not recorded)<br>600 to 1000u particle size analysis, (method not recorded) |

Observation 1