

Project Name: Geraldton land resources survey
Project Code: GTN **Site ID:** 1402 **Observation ID:** 1
Agency Name: Agriculture Western Australia

Site Information

| | | | |
|------------------------|----------------------|-------------------|--------------|
| Desc. By: | Rogers, Gary | Locality: | |
| Date Desc.: | 14/02/91 | Elevation: | 150 metres |
| Map Ref.: | | Rainfall: | 456 |
| Northing/Long.: | 6839450 AMG zone: 50 | Runoff: | No Data |
| Easting/Lat.: | 283802 Datum: AGD84 | Drainage: | Well drained |

Geology

| | | | |
|----------------------|--------------|------------------------------------|---------|
| ExposureType: | Auger boring | Conf. Sub. is Parent. Mat.: | No Data |
| Geol. Ref.: | No Data | Substrate Material: | No Data |

Land Form

| | | | |
|-------------------------|------------------------------|------------------------|-------------|
| Rel/Slope Class: | Undulating rises 9-30m 3-10% | Pattern Type: | Rises |
| Morph. Type: | Upper-slope | Relief: | 25 metres |
| Elem. Type: | No Data | Slope Category: | No Data |
| Slope: | 2 % | Aspect: | 270 degrees |

Surface Soil Condition Hardsetting, Hardsetting

Erosion:

Soil Classification

| | | | |
|--|--|--------------------------------|--------|
| Australian Soil Classification: | | Mapping Unit: | N/A |
| Haplic Eutrophic Red Kandosol | | Principal Profile Form: | Gn2.15 |
| ASC Confidence: | | Great Soil Group: | N/A |
| Confidence level not specified | | | |

Site Cultivation. Rainfed

Vegetation:

Surface Coarse

Profile

| | | |
|-----|---------------|---|
| A11 | 0 - 0.13 m | Reddish brown (5YR4/4-Moist); ; Sandy loam; Massive grade of structure; Smooth-ped fabric; Dry; Firm (pH meter); Abrupt change to - |
| A2 | 0.13 - 0.33 m | Yellowish red (5YR4/6-Moist); ; Sandy clay loam; Massive grade of structure; Smooth-ped fabric; Dry; pH 5.5 (pH meter); Clear change to - |
| B21 | 0.33 - 0.7 m | Dark red (2.5YR3/6-Moist); ; Sandy light clay; Massive grade of structure; Earthy fabric; Dry; Firm medium gravelly, consistency; 2-10%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; 2-10%, 6-20mm, subangular, coarse fragments; Field pH 6.2 (pH meter); Clear change to - |
| B22 | 0.7 - 0.95 m | Red (2.5YR4/6-Moist); ; Sandy light clay; Massive grade of structure; Earthy fabric; Moderately moist; 10%, medium Weak consistency; 2-10%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; 2-gravelly, 6-20mm, subangular, Quartz, coarse fragments; Field pH 7 (pH meter); Clear change to - |
| B23 | 0.95 - 1.65 m | Yellowish red (5YR4/6-Moist); ; Sandy light clay; Massive grade of structure; Earthy fabric; Moderately moist; Weak consistency; 0-2%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Field pH 7 (pH meter); Clear change to - |
| B3 | 1.65 - 1.8 m | Strong brown (7.5YR4/6-Moist); ; Sandy clay loam; Massive grade of structure; Earthy fabric; Moderately moist; Weak consistency; 0-2%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Field pH 7 (pH meter); |

Morphological Notes

A11 (sandy) MK sandy loam, firm consistence, few pores

A2

few pores, firm consistence.

Observation Notes

Site Notes

Loose sand in areas. Layer 3-5 lighter texture with depth. Bulk 0-10cm 2% angular qz and feldspar 2-6mm,
5yr4/6 pH

Project Name: Geraldton land resources survey
Project Code: GTN **Site ID:** 1402
Agency Name: Agriculture Western Australia

Observation 1

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 - 0.13 | 4.3B 5.1H | 4B | 0.88H | 0.17 | 0.25 | 0.03 | 0.28J | | 1.33D | |
| 0 - 0.1 | 4.3B 5.1H | 5B | 1.01H | 0.21 | 0.26 | 0.06 | 0.27J | | 1.54D | |
| 0.13 - 0.33 | 4.2B 5H | 4B | 1.14H | 0.38 | 0.37 | 0.04 | 0.28J | | 1.93D | |
| 0.33 - 0.7 | 5.7B 6.4H | 5B | 3.06H | 1.58 | 0.35 | 0.14 | <0.02J | | 5.13D | |
| 0.7 - 0.95 | 6.2B 6.9H | 6B | 2.67H | 2.93 | 0.21 | 0.4 | <0.02J | | 6.21D | |
| 0.95 - 1.65 | 6.3B 7.2H | 5B | 2.6A | 2.5 | 0.2 | 0.28 | | | 5.58D | |
| 1.65 - 1.8 | 6.4B 7.3H | 5B | 2.42A | 2.72 | 0.19 | 0.39 | | | 5.72D | |

| 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 - 0.13 | | 0.56D | | | | | | |
| 5.3 | | | | | | | | 5.9 |
| 0 - 0.1 | | 0.5D | | | | | | 6 |
| 5.7 | | | | | | | | |
| 0.13 - 0.33 | | 0.17D | | | | | | 7.1 |
| 14.6 | | | | | | | | |
| 0.33 - 0.7 | | 0.18D | | | | | | 6 |
| 29.8 | | | | | | | | |
| 0.7 - 0.95 | | 0.14D | | | | | | 7.5 |
| 26.7 | | | | | | | | |
| 0.95 - 1.65 | | 0.1D | | | | | | 11.6 |
| 22.6 | | | | | | | | |
| 1.65 - 1.8 | | 0.04D | | | | | | 9.9 |
| 12 | | | | | | | | |

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 |
| 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 |

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

Project Name: Geraldton land resources survey
Project Code: GTN **Site ID:** 1402 **Observation** 1
Agency Name: Agriculture Western Australia

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