

Project Name: Katanning land resources survey
Project Code: KLC **Site ID:** 0139 **Observation ID:** 1
Agency Name: Agriculture Western Australia

Site Information

| | | | |
|------------------------|----------------------|-------------------|------------|
| Desc. By: | Heather Percy | Locality: | |
| Date Desc.: | 03/12/91 | Elevation: | 330 metres |
| Map Ref.: | | Rainfall: | No Data |
| Northing/Long.: | 6330730 AMG zone: 50 | Runoff: | No Data |
| Easting/Lat.: | 498530 Datum: AGD84 | Drainage: | No Data |

Geology

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

Land Form

Rel/Slope Class: Undulating low hills 30-90m 3-10% **Pattern Type:** Low hills

| | | | |
|---------------------|-----------|------------------------|-----------|
| Morph. Type: | Mid-slope | Relief: | 40 metres |
| Elem. Type: | Hillslope | Slope Category: | No Data |
| Slope: | 5 % | Aspect: | 0 degrees |

Surface Soil Condition Hardsetting, Hardsetting

Erosion: (wind); (sheet) (rill) (gully)

Soil Classification

| | | |
|--|--------------------------------|--------|
| Australian Soil Classification: | Mapping Unit: | N/A |
| Eutrophic Mottled-Mesonatric Brown Sodosol | Principal Profile Form: | Db2.41 |
| ASC Confidence: | Great Soil Group: | N/A |

All necessary analytical data are available.

Site Complete clearing. Pasture, native or improved, cultivated at some stage

Vegetation:

Surface Coarse No surface coarse fragments; 2-10%, , subangular, Granite

Profile

| | | |
|-----|--------------|--|
| A11 | 0 - 0.1 m | Dark reddish brown (5YR3/2-Moist); , 0-0% ; Coarse sand; Massive grade of structure; Dry; 2-10%, |
| | | Quartz, coarse fragments; Field pH 6 (Raupach); Many, very fine (0-1mm) roots; Abrupt, Smooth change to - |
| A12 | 0.1 - 0.3 m | Dark reddish brown (5YR3/3-Moist); , 0-0% ; Loamy coarse sand; Massive grade of structure; Dry; 2- |
| | | 10%, Quartz, coarse fragments; Field pH 5.5 (Raupach); Common, fine (1-2mm) roots; Clear, Smooth change to - |
| A2e | 0.3 - 0.4 m | Yellowish brown (10YR5/4-Moist); , 0-0% ; Coarse sand; Massive grade of structure; Dry; 20-50%, |
| | | Quartz, coarse fragments; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 6 (Raupach); Common, fine (1-2mm) roots; Abrupt, Wavy change to - |
| B21 | 0.4 - 0.45 m | Grey (10YR6/1-Moist); Mottles, 10YR68, 2-10% , 0-5mm, Faint; Medium clay; Massive grade of structure; Dry; Sharp change to - |
| B22 | 0.45 - 0.7 m | Olive brown (2.5Y4/6-Moist); Mottles, 10YR53, 20-50% , 5-15mm, Distinct; Medium clay; Strong grade of structure, 50-100 mm, Prismatic; Strong grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Dry; Field pH 6 (Raupach); Few, fine (1-2mm) roots; Abrupt, Smooth change to - |
| C | 0.7 - 0.85 m | Olive yellow (2.5Y6/6-Moist); , 0-0% ; Massive grade of structure; Dry; Field pH 5.5 (Raupach); |

Morphological Notes

| | |
|-----|----------------------------|
| A11 | F A QZ & ROCK FRAG.KS>1MM |
| A12 | F A QZ KS>1MM |
| A2e | F QZ M,C GS, M R IS KS<1MM |
| B21 | SAMPLED |
| C | WEATHERED ROCK |

Observation Notes

Site Notes

Project Name: Katanning land resources survey
Project Code: KLC **Site ID:** 0139 **Observation** 1
Agency Name: Agriculture Western Australia

Laboratory Test Results:

| Depth m | pH | 1:5 EC dS/m | Ca | Exchangeable Mg | Cations K | Na Cmol (+)/kg | Exchangeable Acidity | CEC | ECEC | ESP % |
|------------|--------------|----------------|-------|--------------------|--------------|-------------------|-------------------------|-----|--------|----------|
| 0 - 0.1 | 4.9B 5.7H | 13B | 6.24H | 1.08 | 0.39 | 0.29 | 0.19J | | 8D | |
| 0 - 0.1 | 4.9B 5.7H | 13B | 6.24H | 1.08 | 0.39 | 0.29 | 0.19J | | 8D | |
| 0.1 - 0.3 | 4.6B 5.9H | 3B | 2.59H | 0.78 | 0.13 | 0.18 | 0.36J | | 3.68D | |
| 0.1 - 0.3 | 4.6B 5.9H | 3B | 2.59H | 0.78 | 0.13 | 0.18 | 0.36J | | 3.68D | |
| 0.3 - 0.4 | 4.6B 6.1H | 2B | 0.64H | 0.56 | 0.05 | 0.1 | 0.11J | | 1.35D | |
| 0.3 - 0.4 | 4.6B 6.1H | 2B | 0.64H | 0.56 | 0.05 | 0.1 | 0.11J | | 1.35D | |
| 0.4 - 0.45 | 4.5B 6.4H | 3B | 0.7H | 2.81 | 0.04 | 0.68 | 0.1J | | 4.23D | |
| 0.4 - 0.45 | 4.5B 6.4H | 3B | 0.7H | 2.81 | 0.04 | 0.68 | 0.1J | | 4.23D | |
| 0.45 - 0.7 | 4.4B 5.9H | 8B | 1.87H | 9.58 | 0.06 | 2.42 | 0.14J | | 13.93D | |
| 0.45 - 0.7 | 4.4B 5.9H | 8B | 1.87H | 9.58 | 0.06 | 2.42 | 0.14J | | 13.93D | |

| Depth m | CaCO ₃ % | Organic C Clay % | Avail. P mg/kg | Total P % | Total N % | Total K % | Bulk Density Mg/m ³ | Particle GV CS | Size FS | Analysis Silt |
|--------------------|------------------------|---------------------------|----------------------|-----------------|-----------------|-----------------|--------------------------------------|----------------------|------------|------------------|
| 0 - 0.1 7 | | 2.9D | | 330B | 0.216E | | | | | 7.6 |
| 0 - 0.1 7 | | 2.9D | | 330B | 0.216E | | | | | 7.6 |
| 0.1 - 0.3 10.5 | | 0.58D | | 110B | 0.046E | | | | | 6.5 |
| 0.1 - 0.3 10.5 | | 0.58D | | 110B | 0.046E | | | | | 6.5 |
| 0.3 - 0.4 4.3 | | 0.15D | | 53B | 0.014E | | | | | 5.2 |
| 0.3 - 0.4 4.3 | | 0.15D | | 53B | 0.014E | | | | | 5.2 |
| 0.4 - 0.45 18.3 | | 0.14D | | 50B | 0.017E | | | | | 10.7 |
| 0.4 - 0.45 18.3 | | 0.14D | | 50B | 0.017E | | | | | 10.7 |
| 0.45 - 0.7 39.3 | | 0.26D | | 44B | 0.03E | | | | | 9.5 |
| 0.45 - 0.7 39.3 | | 0.26D | | 44B | 0.03E | | | | | 9.5 |

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 (Ca ²⁺ , Mg ²⁺ , 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 (Mn ²⁺) 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 |

Project Name: Katanning land resources survey
Project Code: KLC **Site ID:** 0139 **Observation** 1
Agency Name: Agriculture Western Australia

| | |
|------------|---|
| 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_gt2m | > 2mm 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) |