

**Project Name:** Katanning land resources survey  
**Project Code:** KLC **Site ID:** 0152 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

**Desc. By:** Heather Percy  
**Date Desc.:** 26/03/92  
**Map Ref.:**  
**Northing/Long.:** 6250730 AMG zone: 50  
**Easting/Lat.:** 486030 Datum: AGD84  
**Locality:**  
**Elevation:** 310 metres  
**Rainfall:** No Data  
**Runoff:** No Data  
**Drainage:** Moderately well drained

#### Geology

**Exposure Type:** Soil pit  
**Geol. Ref.:** No Data  
**Conf. Sub. is Parent. Mat.:** No Data  
**Substrate Material:** No Data

#### Land Form

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

**Morph. Type:** Upper-slope  
**Elem. Type:** Hillslope  
**Slope:** 8 %  
**Relief:** 40 metres  
**Slope Category:** No Data  
**Aspect:** 90 degrees

#### Surface Soil Condition Hardsetting

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

#### Soil Classification

**Australian Soil Classification:** Ferric Magnesic-Natric Red Kurosol  
**Mapping Unit:** N/A  
**Principal Profile Form:** Dr2.11  
**ASC Confidence:** All necessary analytical data are available.  
**Great Soil Group:** N/A

**Site** Extensive clearing, for example poisoning, ringbarking

#### Vegetation:

**Surface Coarse** 2-10%, medium gravelly, 6-20mm, subangular, Ironstone; No surface coarse fragments

#### Profile

**A1** 0 - 0.05 m Dark brown (7.5YR3/2-Moist); , 0-0% ; Clayey fine sand; Massive grade of structure; Dry; 10-20%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Strongly water repellent, "Field pH 5 (Raupach); Abundant, fine (1-2mm) roots; Abrupt, Smooth change to -  
**B1** 0.05 - 0.15 m Red (2.5YR4/6-Moist); , 0-0% ; Light clay; Weak grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Dry; 50-90%, medium gravelly, 6-20mm, subrounded, , coarse fragments; Many (20 - 50 %), Ferromanganiferous, Coarse (6 - 20 mm), Nodules; Field pH 5 (Raupach); Common, very fine (0-1mm) roots; Clear, Smooth change to -  
**B2** 0.15 - 0.7 m Red (2.5YR4/8-Moist); , 0-0% ; Light medium clay; Strong grade of structure, 20-50 mm, Polyhedral; Smooth-ped fabric; Dry; Field pH 4.5 (Raupach); Few, fine (1-2mm) roots; Gradual, Irregular change to -  
**C** 0.7 - 1.6 m White (5YR8/1-Moist); ; Coarse sandy clay loam; Weak grade of structure, Polyhedral; Smooth-ped fabric; Dry; Field pH 4.5 (Raupach); Common, coarse (>5mm) roots;

#### Morphological Notes

**A1** Also fine round smoothfaced ironstone gravel  
**C** Kaolinitic clay 30% 30% 10%

#### Observation Notes

#### Site Notes

Surface covered with thin (<5mm) veneer of sand

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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 - 0.1	5.7B 6.3H	51B								
0 - 0.1	5.7B 6.3H	51B								
0 - 0.1	5.7B 6.3H	51B								
0 - 0.1	5.7B 6.3H	51B								
0.05 - 0.15	4.7B 5H	110B	1.5H	5.82	0.3	1.13	0.89J		8.75D	
0.05 - 0.15	4.7B 5H	110B	1.5H	5.82	0.3	1.13	0.89J		8.75D	
0.15 - 0.7	4B 4.2H	110B	0.25H	5.08	0.11	0.78	1.89J		6.22D	
0.15 - 0.7	4B 4.2H	110B	0.25H	5.08	0.11	0.78	1.89J		6.22D	
0.7 - 1.6	3.8B 3.8H	420B	0.05H	4.18	<0.02	1.81	0.95J		6.05D	
0.7 - 1.6	3.8B 3.8H	420B	0.05H	4.18	<0.02	1.81	0.95J		6.05D	

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis
m	%	Clay %	mg/kg	%	%	%	Mg/m3	GV CS FS Silt
0 - 0.1		10.76D		770B	0.626E			
0 - 0.1		10.76D		770B	0.626E			
0 - 0.1		10.76D		770B	0.626E			
0 - 0.1		10.76D		770B	0.626E			
0 - 0.1		10.76D		770B	0.626E			
0.05 - 0.15		2.4D		83B	0.071E			13.6
0.05 - 0.15		2.4D		83B	0.071E			13.6
0.15 - 0.7		0.56D		28B	0.021E			11
0.15 - 0.7		0.56D		28B	0.021E			11
0.7 - 1.6		0.33D		27B	0.007E			20.6
0.7 - 1.6		0.33D		27B	0.007E			20.6

### Laboratory Analyses Completed for this profile

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

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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 <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) 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 <sup>2+</sup> ) 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
7A1	Total nitrogen - semimicro Kjeldahl, steam distillation
9A3	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour
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_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)