

**Project Name:** Katanning land resources survey  
**Project Code:** KLC **Site ID:** 0558 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

**Site Information**

<b>Desc. By:</b> Heather Percy	<b>Locality:</b>
<b>Date Desc.:</b> 19/11/92	<b>Elevation:</b> 240 metres
<b>Map Ref.:</b>	<b>Rainfall:</b> No Data
<b>Northing/Long.:</b> 6266960 AMG zone: 50	<b>Runoff:</b> No Data
<b>Easting/Lat.:</b> 482200 Datum: AGD84	<b>Drainage:</b> Poorly 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

**Land Form**

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

<b>Morph. Type:</b> Lower-slope	<b>Relief:</b> 30 metres
<b>Elem. Type:</b> Hillslope	<b>Slope Category:</b> No Data
<b>Slope:</b> 3 %	<b>Aspect:</b> 225 degrees

**Surface Soil Condition** Saline

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

**Soil Classification**

<b>Australian Soil Classification:</b>	<b>Mapping Unit:</b> N/A
Mesotrophic Mottled-Mesonatric Yellow Sodosol	<b>Principal Profile Form:</b> Dy5.21
<b>ASC Confidence:</b>	<b>Great Soil Group:</b> 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; No surface coarse fragments

**Profile**

<p>A1 0 - 0.12 m structure, 10-20 mm,  Loose  to -</p>	<p>Very dark grey (10YR3/1-Moist); , 0-0% ; , 0-0% ; Clayey sand; Moderate grade of  Subangular blocky; Moderate grade of structure, 10-20 mm, Subangular blocky; Moist;  consistence; Field pH 6 (Raupach); Abundant, fine (1-2mm) roots; Clear, Smooth change</p>
<p>A2 0.12 - 0.5 m structure; Dry;  change to -</p>	<p>Light yellowish brown (10YR6/4-Moist); , 0-0% ; Clayey sand; Single grain grade of  Loose consistence; Field pH 7 (Raupach); Common, fine (1-2mm) roots; Abrupt, Smooth</p>
<p>B21t 0.5 - 0.6 m medium clay;  consistence; 20-50%,  20mm,  Gradual, Smooth</p>	<p>Light yellowish brown (2.5Y6/4-Moist); Mottles, 10YR68, 2-10% , 5-15mm, Distinct; Sandy  Weak grade of structure, 10-20 mm, Polyhedral; Rough-ped fabric; Dry; Very firm  fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; 10-20%, medium gravelly, 6-  subangular, Quartz, coarse fragments; Field pH 7 (Raupach); Few, fine (1-2mm) roots;  change to -</p>
<p>B22t 0.6 - 1.3 m influence, 10R36,  Polyhedral;  Irregular</p>	<p>Light grey (10YR7/1-Moist); Mottles, 7.5YR58, 20-50% , 15-30mm, Distinct; Substrate  20-50% , 15-30mm, Prominent; Medium clay; Moderate grade of structure, 5-10 mm,  Smooth-ped fabric; Moderately moist; Firm consistence; Field pH 6.5 (Raupach); Clear,  change to -</p>
<p>C 1.3 - 1.4 m Distinct; Substrate  structure; Wet; Very  10-20%, coarse</p>	<p>Brownish yellow (10YR6/6-Moist); Substrate influence, 10YR61, 10-20% , 15-30mm,  influence, 10R36, 10-20% , 15-30mm, Distinct; Sandy clay loam; Massive grade of  weak consistence; 20-50%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments;</p>

gravelly, 20-60mm, angular, Quartz, coarse fragments; Field pH 6 (Raupach);

### Morphological Notes

A2 Layer of sub angular medium quartz at base of L2  
C Water entered in this layer

### Observation Notes

### Site Notes

Lower Balgarup Soil pit 3

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### 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 - 0.12	5.1B 6.4H	9B	3.2H	2.5	0.02	0.68	0.17J		6.4D	
0 - 0.1	5.2B 5.8H	62B								
0 - 0.12	5.1B 6.4H	9B	3.2H	2.5	0.02	0.68	0.17J		6.4D	
0 - 0.1	5.2B 5.8H	62B								
0.12 - 0.5	5.1B 6.3H	7B	0.33H	0.82	0.02	0.34	0.05J		1.51D	
0.12 - 0.5	5.1B 6.3H	7B	0.33H	0.82	0.02	0.34	0.05J		1.51D	
0.5 - 0.6	5.6B 6.2H	20B	0.56H	2.55	0.03	0.96	0.02J		4.1D	
0.5 - 0.6	5.6B 6.2H	20B	0.56H	2.55	0.03	0.96	0.02J		4.1D	
0.6 - 1.3	4.9B 5.3H	57B	0.74H	6.54	0.03	2.2	0.16J		9.51D	
0.6 - 1.3	4.9B 5.3H	57B	0.74H	6.54	0.03	2.2	0.16J		9.51D	

Depth m	CaCO3 %	Organic C Clay %	Avail. P mg/kg	Total P %	Total N %	Total K %	Bulk Density Mg/m3	Particle GV CS	Size FS	Analysis Silt
0 - 0.12 8.8		1.99D		210B	0.133E					5.2
0 - 0.1 8.8		2.39D		260B	0.178E					5.2
0 - 0.12 8.8		1.99D		210B	0.133E					5.2
0 - 0.1 7		2.39D		260B	0.178E					3.3
0.12 - 0.5 7		0.18D		51B	0.017E					3.3
0.12 - 0.5 7		0.18D		51B	0.017E					3.3
0.5 - 0.6 29.4		0.13D		65B	0.016E					7.9
0.5 - 0.6 29.4		0.13D		65B	0.016E					7.9
0.6 - 1.3 48.3		0.1D		37B	0.012E					10.6
0.6 - 1.3 48.3		0.1D		37B	0.012E					10.6

### Laboratory Analyses Completed for this profile

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

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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)