Project Name: **Katanning land resources survey**
Project Code: **KLC** **Site ID:** **0147** **Observation ID:** **1**
Agency Name: **Agriculture Western Australia**

Site Information

Desc. By:	Heather Percy	**Locality:**	
Date Desc.:	27/03/92	**Elevation:**	340 metres
Map Ref.:		**Rainfall:**	No Data
Northing/Long.:	6247930 AMG zone: 50	**Runoff:**	No Data
Easting/Lat.:	495190 Datum: AGD84	**Drainage:**	Poorly drained

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:	Crest	**Relief:**	40 metres
Elem. Type:	Summit surface	**Slope Category:**	No Data
Slope:	2 %	**Aspect:**	0 degrees

Surface Soil Condition Loose

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

Soil Classification

Australian Soil Classification: **Mapping Unit:** N/A
Ferric-Sodic Mesotrophic Yellow Chromosol **Principal Profile Form:** Dy4.41
ASC Confidence: **Great Soil Group:** N/A
Analytical data are incomplete but reasonable confidence.

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

Vegetation:

Surface Coarse 50-90%, medium gravelly, 6-20mm, rounded, Ironstone; 2-10%, , subangular, Ironstone

Profile

A1 0 - 0.1 m Very dark grey (10YR3/1-Moist); , 0-0% ; Loamy sand; Single grain grade of structure; Dry; 20-50%, medium gravelly, 6-20mm, rounded, , coarse fragments; Strongly water repellent, "Field pH 6 (Raupach); Abundant, very fine (0-1mm) roots; Abrupt, Wavy change to -

A2e 0.1 - 0.35 m Yellowish brown (10YR5/4-Moist); , 0-0% ; Clayey coarse sand; Single grain grade of structure; Dry; 50-90%, medium gravelly, 6-20mm, rounded, , coarse fragments; Water repellent; Field pH 6 (Raupach); Many, fine (1-2mm) roots; Abrupt, Wavy change to -

B2 0.35 - 0.65 m Light yellowish brown (10YR6/4-Moist); Mottles, 2.5YR48, 2-10% , 5-15mm, Distinct; Medium clay; Moderate grade of structure, 50-100 mm, Polyhedral; Rough-ped fabric; Dry; Field pH 5.5 (Raupach); Common, medium (2-5mm) roots; Clear, Irregular change to -

C 0.65 - 1.2 m White (10YR8/1-Moist); Mottles, 2.5YR36, 10-20% , 30-mm, Distinct; Medium clay; Strong grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Dry; Field pH 5 (Raupach); Few, medium (2-5mm) roots;

Morphological Notes

A1	+KS PARTICLES
B2	+KS
C	+KS. KAOLINITIC CLAY

Observation Notes

Site Notes

Profile is classifed as a Chromosol for the following reasons: ESP of upper B2 (35-55 cm) was not measured; ESP of B2 (35-65 cm) is 6;
based on similar profiles, this profile is classified as a Chromosol.

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Project Code: KLC **Site ID:** 0147 **Observation** 1
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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations Ca	Mg	K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.1	5.4B 5.9H 5.6B 6.3H	97B 49B	26.4H	9.95	4.12	1.3	0.03J		41.77D	
0 - 0.1	5.4B 5.9H 5.6B 6.3H	97B 49B	26.4H	9.95	4.12	1.3	0.03J		41.77D	
0 - 0.1	5.4B 5.9H 5.6B 6.3H	97B 49B	26.4H	9.95	4.12	1.3	0.03J		41.77D	
0 - 0.1	5.4B 5.9H 5.6B 6.3H	97B 49B	26.4H	9.95	4.12	1.3	0.03J		41.77D	
0.1 - 0.35	5.3B 6.2H 5.5B 6.2H	14B 21B	1.67H 2.85H	0.96 1.36	0.57 1.05	0.22 0.23	0.1J 0.08J		3.42D 5.49D	
0.1 - 0.35	5.3B 6.2H 5.5B 6.2H	14B 21B	1.67H 2.85H	0.96 1.36	0.57 1.05	0.22 0.23	0.1J 0.08J		3.42D 5.49D	
0.1 - 0.35	5.3B 6.2H 5.5B 6.2H	14B 21B	1.67H 2.85H	0.96 1.36	0.57 1.05	0.22 0.23	0.1J 0.08J		3.42D 5.49D	
0.1 - 0.35	5.3B 6.2H 5.5B 6.2H	14B 21B	1.67H 2.85H	0.96 1.36	0.57 1.05	0.22 0.23	0.1J 0.08J		3.42D 5.49D	
0.35 - 0.65	5.3B 5.6H	59B	0.67H	2.98	1.26	0.32	0.16J		5.23D	
0.35 - 0.65	5.3B 5.6H	59B	0.67H	2.98	1.26	0.32	0.16J		5.23D	
0.65 - 1.2	4.9B 5.1H	180B	0.17H	4.77	0.36	0.42	0.13J		5.72D	
0.65 - 1.2	4.9B 5.1H	180B	0.17H	4.77	0.36	0.42	0.13J		5.72D	

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.1		22.95D 9.74D		1100B 700B	1.488E 0.638E						2.5	2.1
0 - 0.1		22.95D 9.74D		1100B 700B	1.488E 0.638E						2.5	2.1
0 - 0.1		22.95D 9.74D		1100B 700B	1.488E 0.638E						2.5	2.1

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0 - 0.1	22.95D	1100B	1.488E	2.5
2.1				
	9.74D	700B	0.638E	
0.1 - 0.35	0.99D	78B	0.051E	4.3
9.7				
	1.53D	100B	0.079E	6
	11.5			
0.1 - 0.35	0.99D	78B	0.051E	4.3
9.7				
	1.53D	100B	0.079E	6
	11.5			
0.1 - 0.35	0.99D	78B	0.051E	4.3
9.7				
	1.53D	100B	0.079E	6
	11.5			
0.1 - 0.35	0.99D	78B	0.051E	4.3
9.7				
	1.53D	100B	0.079E	6
	11.5			
0.35 - 0.65	0.47D	27B	0.025E	4.4
58.3				
0.35 - 0.65	0.47D	27B	0.025E	4.4
58.3				
0.65 - 1.2	0.26D	11B	0.014E	9.2
53.5				
0.65 - 1.2	0.26D	11B	0.014E	9.2
53.5				

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 (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
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)