Project Name: **Katanning land resources survey**
Project Code: **KLC** **Site ID:** **1589** **Observation ID:** **1**
Agency Name: **Agriculture Western Australia**

Site Information

Desc. By:	Heather Percy	**Locality:**	
Date Desc.:	16/02/94	**Elevation:**	301 metres
Map Ref.:		**Rainfall:**	No Data
Northing/Long.:	6298710 AMG zone: 50	**Runoff:**	No Data
Easting/Lat.:	581630 Datum: AGD84	**Drainage:**	Well 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: Gently undulating rises 9-30m 1-3% **Pattern Type:** Rises

Morph. Type:	Upper-slope	**Relief:**	25 metres
Elem. Type:	Hillslope	**Slope Category:**	No Data
Slope:	2 %	**Aspect:**	0 degrees

Surface Soil Condition Hardsetting, Hardsetting

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

Soil Classification

Australian Soil Classification: N/A
ASC Confidence: Confidence level not specified

Mapping Unit: N/A
Principal Profile Form: Uc4.11
Great Soil Group: N/A

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

Vegetation:

Surface Coarse 10-20%, medium gravelly, 6-20mm, rounded, ; No surface coarse fragments

Profile

A1p 0 - 0.1 m Brown (10YR5/3-Moist); , 0-0% ; Clayey sand; Single grain grade of structure; Dry; Loose consistence; 20-50%, fine gravelly, 2-6mm, subrounded, , coarse fragments; 20-50%, medium gravelly, 6-20mm, subrounded, , coarse fragments; Field pH 5.5 (Raupach); Many, very fine (0-1mm) roots; Abrupt, Smooth change to -

A2 0.1 - 0.2 m Yellowish brown (10YR5/4-Moist); , 0-0% ; Single grain grade of structure; Dry; Loose consistence; 20-50%, fine gravelly, 2-6mm, subrounded, , coarse fragments; 20-50%, medium gravelly, 6-20mm, subrounded, , coarse fragments; 20-50%, coarse gravelly, 20-60mm, subrounded, , coarse fragments; Field pH 6 (Raupach); Many, very fine (0-1mm) roots; Abrupt, Irregular change to -

B1 0.2 - 0.45 m Yellowish brown (10YR5/8-Moist); Mottles, 2.5YR46, 10-20% , 0-5mm, Distinct; Massive grade of structure; Dry; 20-50%, fine gravelly, 2-6mm, subrounded, , coarse fragments; 20-50%, medium gravelly, 6-20mm, subrounded, , coarse fragments; Many (20 - 50 %), Ferruginous, Medium (2 -6 mm), Nodules; Many (20 - 50 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 6.5 (Raupach); Common, very fine (0-1mm) roots; Clear, Wavy change to -

B 0.45 - 1 m Brownish yellow (10YR6/8-Moist); Mottles, 2.5YR46, 20-50% , 5-15mm, Distinct; Coarse sandy loam; Massive grade of structure; Dry; 10-20%, medium gravelly, 6-20mm, subrounded, , coarse fragments; Few (2 - 1mm) roots; Clear change to -

C 1 - 1.5 m White (10YR8/1-Moist); Mottles, 10R36, 20-50% , 15-30mm, Distinct; Mottles, 10YR66, 10-20% , 5-15mm, Distinct; Clay loam; Weak grade of structure, Polyhedral; Smooth-ped fabric; Dry;

Field pH 6.5
(Raupach);

Morphological Notes

A2	MSL
B1	+ CKS - roots in cracks
B	Mottled zone

Observation Notes

Site Notes

Datatine Soil Pit 4

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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	4.8B 5.6H 4.9B 5.7H 4.8B	9B 10B	2.5H	0.62	0.71	0.11	0.17J		3.94D	
0 - 0.1	4.8B 5.6H 4.9B 5.7H 4.8B	9B 10B	2.5H	0.62	0.71	0.11	0.17J		3.94D	
0 - 0.1	4.8B 5.6H 4.9B 5.7H 4.8B	9B 10B	2.5H	0.62	0.71	0.11	0.17J		3.94D	
0 - 0.1	4.8B 5.6H 4.9B 5.7H 4.8B	9B 10B	2.5H	0.62	0.71	0.11	0.17J		3.94D	
0 - 0.1	4.8B 5.6H 4.9B 5.7H 4.8B	9B 10B	2.5H	0.62	0.71	0.11	0.17J		3.94D	
0.1 - 0.2	5.4B 6.2H 5.1B	4B	2.2H	0.83	0.26	0.13	<0.02J		3.42D	
0.1 - 0.2	5.4B 6.2H 5.1B	4B	2.2H	0.83	0.26	0.13	<0.02J		3.42D	
0.1 - 0.2	5.4B 6.2H 5.1B	4B	2.2H	0.83	0.26	0.13	<0.02J		3.42D	
0.2 - 0.45	5.8B 6.1H	6B	1.9H	1.8	0.16	0.27	<0.02J		4.13D	
0.2 - 0.45	5.8B 6.1H	6B	1.9H	1.8	0.16	0.27	<0.02J		4.13D	
0.3 - 0.4	5.6B									
0.45 - 0.75	5.6B 5.6H	20B	1.1H	2.7	0.09	0.78	<0.02J		4.67D	
0.45 - 0.75	5.6B 5.6H	20B	1.1H	2.7	0.09	0.78	<0.02J		4.67D	
0.45 - 0.75	5.6B 5.6H	20B	1.1H	2.7	0.09	0.78	<0.02J		4.67D	
0.75 - 1	5.4B 5.4H	21B	0.75H	2.8	0.04	0.66	<0.02J		4.25D	
0.75 - 1	5.4B 5.4H	21B	0.75H	2.8	0.04	0.66	<0.02J		4.25D	
0.75 - 1	5.4B	21B	0.75H	2.8	0.04	0.66	<0.02J		4.25D	

5.4H

1 - 1.5	5.3B 5.4H	24B	0.5H	3.1	0.03	0.92	<0.02J	4.55D
1 - 1.5	5.3B 5.4H	24B	0.5H	3.1	0.03	0.92	<0.02J	4.55D

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	GV	Particle Size Analysis CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.1		1.51D 1.52D		200B 220B	0.113E 0.109E						5.2	9.7
0 - 0.1		1.51D 1.52D		200B 220B	0.113E 0.109E						5.2	9.7
0 - 0.1		1.51D 1.52D		200B 220B	0.113E 0.109E						5.2	9.7
0 - 0.1		1.51D 1.52D		200B 220B	0.113E 0.109E						5.2	9.7
0 - 0.1		1.51D 1.52D		200B 220B	0.113E 0.109E						5.2	9.7
0.1 - 0.2		0.43D		48B	0.031E						4.6	8.3
0.1 - 0.2		0.43D		48B	0.031E						4.6	8.3
0.1 - 0.2		0.43D		48B	0.031E						4.6	8.3
0.2 - 0.45		0.24D		31B	0.02E						7	10.3
0.2 - 0.45		0.24D		31B	0.02E						7	10.3
0.3 - 0.4												
0.45 - 0.75		0.1D		23B	0.008E						10.7	18
0.45 - 0.75		0.1D		23B	0.008E						10.7	18
0.45 - 0.75		0.1D		23B	0.008E						10.7	18
0.75 - 1		0.05D		17B	0.004E						13.4	25.8
0.75 - 1		0.05D		17B	0.004E						13.4	25.8
0.75 - 1		0.05D		17B	0.004E						13.4	25.8
1 - 1.5		0.05D		25B	0.005E						14.6	36.2
1 - 1.5		0.05D		25B	0.005E						14.6	36.2

Laboratory Analyses Completed for this profile

13C1_AL	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
13C1_FE	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
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)