

Project Name: Katanning land resources survey
Project Code: KLC **Site ID:** 0801 **Observation ID:** 1
Agency Name: Agriculture Western Australia

Site Information

Desc. By: Heather Percy	Locality:
Date Desc.: 14/05/93	Elevation: 320 metres
Map Ref.:	Rainfall: No Data
Northing/Long.: 6343700 AMG zone: 50	Runoff: No Data
Easting/Lat.: 544940 Datum: AGD84	Drainage: Imperfectly 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: Lower-slope	Relief: 20 metres
Elem. Type: Valley flat	Slope Category: No Data
Slope: 1 %	Aspect: 135 degrees

Surface Soil Condition Loose

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

Soil Classification

Australian Soil Classification:	Mapping Unit: N/A
Hypocalcic Mottled-Hypernatric Grey Sodosol	Principal Profile Form: Dg4.43
ASC Confidence:	Great Soil Group: N/A
Confidence level not specified	

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

Vegetation:

Surface Coarse No surface coarse fragments; No surface coarse fragments

Profile

A1p 0 - 0.12 m Moderately moist; Loose	Very dark grey (10YR3/1-Moist); , 0-0% ; Sand; Single grain grade of structure; consistency; Field pH 6 (Raupach); Few, very fine (0-1mm) roots; Sharp, Smooth change to -
A21e 0.12 - 0.35 m grain grade of roots; Gradual,	Light brownish grey (10YR6/2-Moist); , 10YR31, 2-10% , 30-mm, Distinct; Sand; Single structure; Moist; Loose consistency; Field pH 7.5 (Raupach); Few, very fine (0-1mm) Smooth change to -
A22e 0.35 - 0.5 m consistence;	Light grey (2.5Y7/2-Moist); , 0-0% ; Sand; Single grain grade of structure; Wet; Loose Field pH 8 (Raupach); Few, very fine (0-1mm) roots; Sharp, Wavy change to -
B1 0.5 - 0.65 m 10R36, 2-10% , 15- Rough-ped fragments; Few (2 - 5mm) roots;	Light grey (2.5Y7/1-Moist); Mottles, 7.5YR56, 20-50% , 15-30mm, Distinct; Mottles, 30mm, Distinct; Sandy clay loam; Moderate grade of structure, 200-500 mm, Columnar; fabric; Dry; Strong consistence; 2-10%, medium gravelly, 6-20mm, rounded, , coarse 10 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 8 (Raupach); Few, coarse (> Clear change to -
B2t 0.65 - 1 m Moderate grade of is Slightly	Grey (2.5Y6/1-Moist); Mottles, 10R36, 20-50% , 15-30mm, Prominent; Medium clay; structure, 20-50 mm, Polyhedral; Smooth-ped fabric; Dry; Strong consistence; Soil matrix calcareous; Field pH 9.5 (Raupach);

Morphological Notes

A21e	Mottles due to old root channels
A22e	Coarse sand in medium sand
B1	Columnar peds massive in top 10cm

Observation Notes

Site Notes

Project Name: Katanning land resources survey
Project Code: KLC **Site ID:** 0801
Agency Name: Agriculture Western Australia

Observation 1

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	4.8B 5.7H	4B	2.6H	0.41	0.12	0.03	0.12J		3.16D	
0 - 0.1	4.9B 5.5H 5B	12B								
0 - 0.12	4.8B 5.7H	4B	2.6H	0.41	0.12	0.03	0.12J		3.16D	
0 - 0.1	4.9B 5.5H 5B	12B								
0 - 0.1	4.9B 5.5H 5B	12B								
0.12 - 0.35	6.2B 7H	1B	0.58A	0.14	0.05	0.05			0.82D	
0.12 - 0.35	6.2B 7H	1B	0.58A	0.14	0.05	0.05			0.82D	
0.15 - 0.25	6.1B									
0.35 - 0.5	6.3B 7.1H	2B	0.31A	0.14	0.04	0.09			0.58D	
0.35 - 0.5	6.3B 7.1H	2B	0.31A	0.14	0.04	0.09			0.58D	
0.4 - 0.5	6.2B									
0.5 - 0.65	6.6B 8.2H	7B	0.8E	1.8	0.18	1.24		6B	4.02D	20.67
0.5 - 0.65	6.6B 8.2H	7B	0.8E	1.8	0.18	1.24		6B	4.02D	20.67
0.5 - 0.65	6.6B 8.2H	7B	0.8E	1.8	0.18	1.24		6B	4.02D	20.67
0.65 - 1	7.2B 8.8H	10B	1.46E	5.74	0.38	3.58		12B	11.16D	29.83
0.65 - 1	7.2B 8.8H	10B	1.46E	5.74	0.38	3.58		12B	11.16D	29.83
0.65 - 1	7.2B 8.8H	10B	1.46E	5.74	0.38	3.58		12B	11.16D	29.83

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 3.1		1.09D		160B	0.082E					2.4
0 - 0.1		1.29D		140B	0.083E					
0 - 0.12 3.1		1.09D		160B	0.082E					2.4
0 - 0.1		1.29D		140B	0.083E					
0 - 0.1		1.29D		140B	0.083E					
0.12 - 0.35 2.1		0.1D		30B	0.012E					3.2
0.12 - 0.35 2.1		0.1D		30B	0.012E					3.2
0.15 - 0.25										
0.35 - 0.5 1.6		0.07D		24B	0.009E					3.2
0.35 - 0.5 1.6		0.07D		24B	0.009E					3.2
0.4 - 0.5										

Project Name: Katanning land resources survey
Project Code: KLC **Site ID:** 0801 **Observation** 1
Agency Name: Agriculture Western Australia

0.5 - 0.65 21.8	<2C	0.13D	30B	0.019E	8.4
0.5 - 0.65 21.8	<2C	0.13D	30B	0.019E	8.4
0.5 - 0.65 21.8	<2C	0.13D	30B	0.019E	8.4
0.65 - 1 46.1	<2C	0.13D	28B	0.025E	6.8
0.65 - 1 46.1	<2C	0.13D	28B	0.025E	6.8
0.65 - 1 46.1	<2C	0.13D	28B	0.025E	6.8

Laboratory Analyses Completed for this profile

15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CMRR	Exchangeable bases (Ca/Mg ratio) - Not recorded
15A1_CA for soluble	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
15A1_CEC	salts
15A1_K for soluble	Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_MG for soluble	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
15A1_NA for soluble	salts
15C1_CA pretreatment for	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
15C1_CEC	salts
15C1_K soluble salts	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15C1_MG soluble salts	soluble salts
15C1_NA soluble salts	CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15E1_AL	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15E1_CA	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15E1_K	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_MG	Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble
15E1_MN	salts
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15J_BASES	Exchangeable bases (Mn2+) by compulsive exchange, no pretreatment for soluble salts
15L1_a	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
Sum of Cations	Sum of Bases
	Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using
15N1_a	and measured clay
15N1_b	Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC
18A1_NR	Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations
19B_NR	Bicarbonate-extractable potassium (not recorded)
3_NR	Calcium Carbonate (CaCO3) - Not recorded
4_NR	Electrical conductivity or soluble salts - Not recorded
4B_AL_NR	pH of soil - Not recorded
4B1	Aluminium in 1:5 soil/0.01M calcium chloride extract - method not recorded
6A1_UC	pH of 1:5 soil/0.01M calcium chloride extract - direct
7A1	Organic carbon (%) - Uncorrected Walkley and Black method
9A3	Total nitrogen - semimicro Kjeldahl, steam distillation
9B_NR	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour
9H1	Bicarbonate-extractable phosphorus (not recorded)
	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)