

**Project Name:** Katanning land resources survey  
**Project Code:** KLC **Site ID:** 0497 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

<b>Desc. By:</b> Heather Percy	<b>Locality:</b>
<b>Date Desc.:</b> 07/10/92	<b>Elevation:</b> 321 metres
<b>Map Ref.:</b>	<b>Rainfall:</b> No Data
<b>Northing/Long.:</b> 6343800 AMG zone: 50	<b>Runoff:</b> No Data
<b>Easting/Lat.:</b> 516400 Datum: AGD84	<b>Drainage:</b> Moderately well 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> Mid-slope	<b>Relief:</b> 30 metres
<b>Elem. Type:</b> Hillslope	<b>Slope Category:</b> No Data
<b>Slope:</b> 2 %	<b>Aspect:</b> 180 degrees

#### Surface Soil Condition Firm

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

#### Soil Classification

<b>Australian Soil Classification:</b>	<b>Mapping Unit:</b> N/A
Ferric Mesotrophic Grey Chromosol	<b>Principal Profile Form:</b> Dy5.41
<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** 10-20%, medium gravelly, 6-20mm, subrounded, ; No surface coarse fragments

#### Profile

A1 0 - 0.15 m	Very dark greyish brown (10YR3/2-Moist); , 0-0% ; Loamy sand; Single grain grade of structure; Moist;
Field pH 6	Loose consistence; 20-50%, medium gravelly, 6-20mm, subrounded, , coarse fragments; (Raupach); Abundant, fine (1-2mm) roots; Abrupt, Smooth change to -
A2e 0.15 - 0.3 m	Light brownish grey (10YR6/2-Moist); , 0-0% ; Sand; Single grain grade of structure; Wet;
Loose	consistence; 20-50%, coarse gravelly, 20-60mm, subrounded, , coarse fragments; 20-
50%, medium	gravelly, 6-20mm, rounded, , coarse fragments; Field pH 6 (Raupach); Abundant, fine (1-
2mm) roots;	Abrupt, Wavy change to -
B2t 0.3 - 0.8 m	Light brownish grey (10YR6/2-Moist); Mottles, 7.5YR58, 20-50% , 15-30mm, Distinct;
Sandy light clay;	Moderate grade of structure, 20-50 mm, Polyhedral; Rough-ped fabric; Moderately moist;
Weak	consistence; 20-50%, coarse gravelly, 20-60mm, subrounded, , coarse fragments;
Common (10 - 20 %),	Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 6.5 (Raupach); Common, fine (1-
2mm) roots;	Gradual, Smooth change to -
C 0.8 - 1.2 m	White (10YR8/1-Moist); Mottles, 10R46, 20-50% , 30-mm, Distinct; Light medium clay;
Weak grade of	structure, 50-100 mm, Polyhedral; Rough-ped fabric; Dry; Firm consistence; Field pH 6
(Raupach);	

#### Morphological Notes

#### Observation Notes

#### Site Notes

Narrakine Gully soil pit No. 3 PSA of B2 horizon (15%) doesn't agree with field texture; B2 may be a reticulite layer.

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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 - 0.15	5B 5.8H	6B	5.62H	0.73	0.06	0.07	0.32J		6.48D	
0 - 0.1	4.8B 5.6H	10B								
0 - 0.15	5B 5.8H	6B	5.62H	0.73	0.06	0.07	0.32J		6.48D	
0 - 0.11	5.08B									
0 - 0.1	4.8B 5.6H	10B								
0.15 - 0.3	5B 6H	2B	0.76H	0.2	0.03	0.04	0.12J		1.03D	
0.15 - 0.3	5B 6H	2B	0.76H	0.2	0.03	0.04	0.12J		1.03D	
0.16 - 0.26	4.95B									
0.3 - 0.8	5.6B 6.5H	2B	0.93H	0.79	0.04	0.11	0.03J		1.87D	
0.3 - 0.8	5.6B 6.5H	2B	0.93H	0.79	0.04	0.11	0.03J		1.87D	
0.41 - 0.51	5.42B									
0.8 - 1.2	5.1B 6H	6B	0.11H	2.56	0.04	0.51	0.03J		3.22D	
0.8 - 1.2	5.1B 6H	6B	0.11H	2.56	0.04	0.51	0.03J		3.22D	

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 - 0.15 4.7		2.64D		310B	0.171E					4.7
0 - 0.1		2.15D		260B	0.144E					
0 - 0.15 4.7		2.64D		310B	0.171E					4.7
0 - 0.11										
0 - 0.1		2.15D		260B	0.144E					
0.15 - 0.3 4.3		0.34D		78B	0.02E					3.2
0.15 - 0.3 4.3		0.34D		78B	0.02E					3.2
0.16 - 0.26										
0.3 - 0.8 15.9		0.2D		63B	0.01E					4.2
0.3 - 0.8 15.9		0.2D		63B	0.01E					4.2
0.41 - 0.51										
0.8 - 1.2 45.3		0.1D		65B	0.006E					3.9
0.8 - 1.2 45.3		0.1D		65B	0.006E					3.9

**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 (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 (Mn<sup>2+</sup>) by compulsive exchange, no pretreatment for soluble salts

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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)