

**Project Name:** Katanning land resources survey  
**Project Code:** KLC **Site ID:** 2313 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

**Site Information**

<b>Desc. By:</b>	Heather Percy	<b>Locality:</b>	
<b>Date Desc.:</b>	28/02/95	<b>Elevation:</b>	330 metres
<b>Map Ref.:</b>		<b>Rainfall:</b>	No Data
<b>Northing/Long.:</b>	6265130 AMG zone: 50	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	542660 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:** Gently undulating rises 9-30m 1-3% **Pattern Type:** Rises

<b>Morph. Type:</b>	Upper-slope	<b>Relief:</b>	20 metres
<b>Elem. Type:</b>	Hillcrest	<b>Slope Category:</b>	No Data
<b>Slope:</b>	3 %	<b>Aspect:</b>	No Data

**Surface Soil Condition** Surface flake

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

**Soil Classification**

<b>Australian Soil Classification:</b>	N/A	<b>Mapping Unit:</b>	N/A
<b>ASC Confidence:</b>	Confidence level not specified	<b>Principal Profile Form:</b>	Dr2.22
		<b>Great Soil Group:</b>	N/A

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

**Vegetation:**

**Surface Coarse** No surface coarse fragments; 20-50%, , rounded, Dolerite

**Profile**

A1	0 - 0.1 m	Dark brown (7.5YR3/2-Moist); , 0-0% ; Sandy loam; Moderate grade of structure, 10-20 mm, Subangular
		blocky; Sandy (grains prominent) fabric; Dry; 10-20%, fine gravelly, 2-6mm, subangular, Dolerite, coarse fragments; Field pH 5.5 (Raupach); Clear change to -
A21	0.1 - 0.2 m	Dark reddish brown (2.5YR3/4-Moist); , 0-0% ; Clayey sand; Weak grade of structure, 10-20 mm, Subangular blocky; Rough-ped fabric; Dry; 10-20%, fine gravelly, 2-6mm, subangular, Dolerite, coarse fragments; 10-20%, medium gravelly, 6-20mm, subangular, Dolerite, coarse fragments; Field pH 6 (Raupach); Gradual change to -
A22	0.2 - 0.3 m	Reddish brown (5YR5/4-Moist); , 0-0% ; Clayey sand; Massive grade of structure; Dry; 10-20%, fine gravelly, 2-6mm, subangular, Dolerite, coarse fragments; Field pH 6.5 (Raupach); Abrupt change to -
B2	0.3 - 0.6 m	Red (2.5YR4/6-Moist); , 0-0% ; Medium clay; Strong grade of structure, 50-100 mm, Polyhedral; Smooth-ped fabric; Dry; Strong consistence; Field pH 7 (Raupach); Clear change to -
B3	0.6 - 0.9 m	Strong brown (7.5YR4/6-Moist); , 2.5YR46, 2-10% , 15-30mm, Distinct; Clay loam, sandy; Moderate grade of structure, 20-50 mm, Polyhedral; Smooth-ped fabric; Dry; 20-50%, medium gravelly, 6-20mm, rounded, Dolerite, coarse fragments; Field pH 7.5 (Raupach); Clear change to -
C	0.9 - 1.2 m	Strong brown (7.5YR4/6-Moist); , 0-0% ; Sandy clay loam; Massive grade of structure; Dry; Field pH 7.5 (Raupach);

**Morphological Notes**

A21	Dolerite boulders and stones present
C	Weathered dolerite

**Observation Notes****Site Notes**

Soil pit on Bronte Rundle's farm "Ucarro" CSIRO soil pit

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Depth m	pH	1:5 EC dS/m	Ca	Exchangeable Mg	Cations K	Na Cmol (+)/kg	Exchangeable Acidity	CEC	ECEC	ESP %
0 - 0.1	4.7B 5.5H 4.7B 4.8B 5.4H	10B 11B	6.5H	1.2	0.59	0.13	0.22J		8.42D	
0 - 0.1	4.7B 5.5H 4.7B 4.8B 5.4H	10B 11B	6.5H	1.2	0.59	0.13	0.22J		8.42D	
0 - 0.1	4.7B 5.5H 4.7B 4.8B 5.4H	10B 11B	6.5H	1.2	0.59	0.13	0.22J		8.42D	
0 - 0.1	4.7B 5.5H 4.7B 4.8B 5.4H	10B 11B	6.5H	1.2	0.59	0.13	0.22J		8.42D	
0 - 0.1	4.7B 5.5H 4.7B 4.8B 5.4H	10B 11B	6.5H	1.2	0.59	0.13	0.22J		8.42D	
0.1 - 0.2	4.9B 5.9H 4.9B 5.9H 4.9B	4B	5.5H	1.2	0.31	0.13	0.12J		7.14D	
0.1 - 0.2	4.9B 5.9H 4.9B 5.9H 4.9B	4B	5.5H	1.2	0.31	0.13	0.12J		7.14D	
0.1 - 0.2	4.9B 5.9H 4.9B 5.9H 4.9B	4B	5.5H	1.2	0.31	0.13	0.12J		7.14D	
0.2 - 0.3	6B 7.4H	4B	7.7A	7.7	0.26	0.68			16.34D	
0.2 - 0.3	6B 7.4H	4B	7.7A	7.7	0.26	0.68			16.34D	
0.3 - 0.6	6B 7.3H	4B	7.8A	7.9	0.25	0.66			16.61D	
0.3 - 0.5	6.3B 7.4H	6B	7.6A	7.7	0.26	0.63			16.19D	
0.3 - 0.6	6B 7.3H	4B	7.8A	7.9	0.25	0.66			16.61D	
0.3 - 0.5	6.3B 7.4H	6B	7.6A	7.7	0.26	0.63			16.19D	
0.4 - 0.5	6.4B									
0.6 - 0.9	6.6B 7.7H	10B	14A	19	0.21	2.7			35.91D	
0.6 - 0.9	6.6B 7.7H	10B	14A	19	0.21	2.7			35.91D	

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0.9 - 1.2	6.8B 8.3H	6B	12E	15	0.15	3.4		30B	30.55D	11.33
0.9 - 1.2	6.8B 8.3H	6B	12E	15	0.15	3.4		30B	30.55D	11.33

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size	Analysis
m	%	Clay %	mg/kg	%	%	%	Mg/m3	GV CS FS	Silt
0 - 0.19		1.68D		230B	0.164E				10.9
0 - 0.19		2D 1.68D		260B 230B	0.185E 0.164E				10.9
0 - 0.19		2D 1.68D		260B 230B	0.185E 0.164E				10.9
0 - 0.19		2D 1.68D		260B 230B	0.185E 0.164E				10.9
0 - 0.19		2D 1.68D		260B 230B	0.185E 0.164E				10.9
0.1 - 0.210.5		2D 0.74D		260B 120B	0.185E 0.078E				10.4
0.1 - 0.210.5		0.74D		120B	0.078E				10.4
0.1 - 0.210.5		0.74D		120B	0.078E				10.4
0.2 - 0.328.9		0.35D		69B	0.047E				10.6
0.2 - 0.328.9		0.35D		69B	0.047E				10.6
0.3 - 0.629.9		0.34D		61B	0.038E				10.4
0.3 - 0.649.5		0.37D		61B	0.053E				10
0.3 - 0.629.9		0.34D		61B	0.038E				10.4
0.3 - 0.649.5		0.37D		61B	0.053E				10
0.4 - 0.5									
0.6 - 0.925.9		0.1D		83B	0.012E				13.6
0.6 - 0.925.9		0.1D		83B	0.012E				13.6
0.9 - 1.220.1	<2C	0.05D		63B	0.006E				10.2
0.9 - 1.220.1	<2C	0.05D		63B	0.006E				10.2

#### 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	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
15A1_CEC	Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_K	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	salts
15A1_MG	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble	

15A1_NA for soluble	salts Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 1M ammonium chloride at pH 7.0, no pretreatment
15C1_CA pretreatment for	salts Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - alcoholic 1M ammonium chloride at pH 8.5,
15C1_CEC	soluble salts CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_K soluble salts	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15C1_MG soluble salts	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15C1_NA soluble salts	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
15E1_AL	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_CA salts	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) by compulsive exchange, no pretreatment for soluble
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
15L1_a Sum of Cations	Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using and measured clay
15N1_a	Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC
15N1_b	Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations
18A1_NR	Bicarbonate-extractable potassium (not recorded)
19B_NR	Calcium Carbonate (CaCO <sub>3</sub> ) - 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)