

**Project Name:** Nyabing Kukerin land resources survey  
**Project Code:** NYA **Site ID:** 0251 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

**Site Information**

**Desc. By:** Heather Percy  
**Date Desc.:** 18/07/95  
**Map Ref.:**  
**Northing/Long.:** 6248500 AMG zone: 50  
**Easting/Lat.:** 613990 Datum: AGD84  
**Locality:**  
**Elevation:** 320 metres  
**Rainfall:** No Data  
**Runoff:** No Data  
**Drainage:** Poorly drained

**Geology**

**ExposureType:** Auger boring  
**Geol. Ref.:** No Data  
**Conf. Sub. is Parent. Mat.:** No Data  
**Substrate Material:** No Data

**Landform**

**Rel/Slope Class:** Gently undulating rises 9-30m 1-3%  
**Pattern Type:** Rises

**Morph. Type:** Mid-slope  
**Elem. Type:** Hillslope  
**Slope:** 1 %  
**Relief:** 5 metres  
**Slope Category:** No Data  
**Aspect:** 270 degrees

**Surface Soil Condition** Poached, Hardsetting

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

**Soil Classification**

**Australian Soil Classification:**  
 Epibasic Pedal Hypocalcic Calcarosol  
**ASC Confidence:**  
 No analytical data and little or no knowledge of this soil.  
**Mapping Unit:** N/A  
**Principal Profile Form:** Dy2.13  
**Great Soil Group:** N/A

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

**Vegetation**

**Surface Coarse Fragments** 10-20%, medium gravelly, 6-20mm, angular, Gneiss; 20-50%, , subangular, Gneiss

**Profile Morphology**

A1 0 - 0.06 m Very dark grey (2.5Y3/1-Moist); , 0-0% ; Clay loam, sandy; Massive grade of structure; Moist; Field pH 8.5 (Raupach); Abrupt, Wavy change to -  
 B21k 0.06 - 0.5 m Greyish brown (2.5Y5/2-Moist); , 0-0% ; Sandy medium heavy clay; Strong grade of structure; Rough-ped fabric; Dry; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Soil matrix is Slightly calcareous; Field pH 9 (Raupach); Gradual change to -  
 B22 0.5 - 0.7 m Light brownish grey (2.5Y6/2-Moist); , 0-0% ; Sandy medium heavy clay; Strong grade of structure; Rough-ped fabric; Dry; Soil matrix is Moderately calcareous; Field pH 9.5 (Raupach);

**Morphological Notes**

A1 Slight dispersion.  
 B21k Slickensides common.

**Observation Notes**

**Site Notes**

"Hardsetting grey clay' - area gets boggy - barley grass dominant pasture.

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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 - 0.06	7.4B 8.2H	14B	10.33E	6.56	0.5	0.69		17B	18.08D	4.06
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0 - 0.06	7.4B 8.2H	14B	10.33E	6.56	0.5	0.69	17B	18.08D	4.06
0.06 - 0.26	8B 8.9H	24B	4.94E	6.61	0.24	1.93	15B	13.72D	12.87
0.06 - 0.26	8B 8.9H	24B	4.94E	6.61	0.24	1.93	15B	13.72D	12.87
0.06 - 0.26	8B 8.9H	24B	4.94E	6.61	0.24	1.93	15B	13.72D	12.87

Depth	CaCO <sub>3</sub>	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis
m	%	%	mg/kg	%	%	%	Mg/m <sup>3</sup>	GV CS FS Silt
0 - 0.06 29.5	<2C	1.17D						64.5I 6
0 - 0.06 29.5	<2C	1.17D						64.5I 6
0 - 0.06 29.5	<2C	1.17D						64.5I 6
0.06 - 0.26 36.5	<2C	0.23D						59I 4.5
0.06 - 0.26 36.5	<2C	0.23D						59I 4.5
0.06 - 0.26 36.5	<2C	0.23D						59I 4.5

#### **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
15C1_CA	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - alcoholic 1M ammonium chloride at pH 8.5,
pretreatment for	soluble salts
15C1_CEC	CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_K	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
soluble salts	
15C1_MG	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
soluble salts	
15C1_NA	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
soluble salts	
15J_BASES	Sum of Bases
15L1_a	Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using
Sum of Cations	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
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
4B1	pH of 1:5 soil/0.01M calcium chloride extract - direct
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
P10_gt2m	> 2mm particle size analysis, (method not recorded)
P10_NR_C	Clay (%) - Not recorded
P10_NR_S	Sand (%) - Not recorded
P10_NR_Z	Silt (%) - Not recorded