

**Project Name:** Nyabing Kukerin land resources survey  
**Project Code:** NYA **Site ID:** 0474 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

**Site Information**

**Desc. By:** Heather Percy **Locality:**  
**Date Desc.:** 19/09/95 **Elevation:** 320 metres  
**Map Ref.:** **Rainfall:** No Data  
**Northing/Long.:** 6288255 AMG zone: 50 **Runoff:** No Data  
**Easting/Lat.:** 621810 Datum: AGD84 **Drainage:** Imperfectly drained

**Geology**

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

**Landform**

**Rel/Slope Class:** Gently undulating plains <9m 1-3% **Pattern Type:** Alluvial plain

**Morph. Type:** Flat **Relief:** 5 metres  
**Elem. Type:** Plain **Slope Category:** No Data  
**Slope:** 1 % **Aspect:** No Data

**Surface Soil Condition** Hardsetting, Hardsetting

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

**Soil Classification**

**Australian Soil Classification:** **Mapping Unit:** N/A  
 Hypocalcic Hypernatric Yellow Sodosol **Principal Profile Form:** Dy2.13  
**ASC Confidence:** **Great Soil Group:** N/A  
 All necessary analytical data are available.

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

**Vegetation**

**Surface Coarse Fragments** No surface coarse fragments; No surface coarse fragments

**Profile Morphology**

A1 0 - 0.12 m Dark grey (10YR4/1-Moist); , 0-0% ; Sand; Single grain grade of structure; Dry; 10-20%,  
 fine gravelly,  
 2-6mm, subangular, Quartz, coarse fragments; 10-20%, medium gravelly, 6-20mm,  
 subangular, , coarse  
 fragments; Field pH 6.5 (Raupach); Abrupt, Wavy change to -  
 B21 0.12 - 0.3 m Light yellowish brown (2.5Y6/4-Moist); , 0-0% ; Sandy medium clay; Moderate grade of  
 structure,  
 Columnar; Rough-ped fabric; Dry; Very firm consistence; Soil matrix is Slightly  
 calcareous; Field pH 8.5  
 (Raupach); Clear change to -  
 B22 0.3 - 0.6 m Olive yellow (2.5Y6/5-Moist); Mottles, 10YR58, 2-10% , 5-15mm, Faint; Medium clay;  
 Moderate grade of  
 structure; Rough-ped fabric; Dry; Firm consistence; Soil matrix is Moderately calcareous;  
 Field pH 9  
 (Raupach);

**Morphological Notes**

**Observation Notes**

**Site Notes**

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**Laboratory Test Results:**

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				cmol (+)/kg				%
0 - 0.12	4.6B	4B	1.62H	0.48	0.25	0.12	0.17J		2.47D	
	6H									
0 - 0.12	4.6B	4B	1.62H	0.48	0.25	0.12	0.17J		2.47D	
	6H									

0 - 0.12	4.6B 6H	4B	1.62H	0.48	0.25	0.12	0.17J	2.47D		
0.12 - 0.32	7.5B 8.9H	15B	1.93E	4.55	0.29	2.73		9B	9.5D	30.33
0.12 - 0.32	7.5B 8.9H	15B	1.93E	4.55	0.29	2.73		9B	9.5D	30.33
0.12 - 0.32	7.5B 8.9H	15B	1.93E	4.55	0.29	2.73		9B	9.5D	30.33

Depth	CaCO <sub>3</sub>	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis	GV	CS	FS	Silt
m	%	%	mg/kg	%	%	%	Mg/m <sup>3</sup>				%	
0 - 0.12 5		1.34D								91.5I		3.5
0 - 0.12 5		1.34D								91.5I		3.5
0 - 0.12 5		1.34D								91.5I		3.5
0.12 - 0.32 31.5	<2C	0.2D								65.5I		3
0.12 - 0.32 31.5	<2C	0.2D								65.5I		3
0.12 - 0.32 31.5	<2C	0.2D								65.5I		3

#### **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
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	
15E1_AL	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_CA	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) 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
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no 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

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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