

**Project Name:** Nyabing Kukerin land resources survey  
**Project Code:** NYA **Site ID:** 0226 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

**Site Information**

**Desc. By:** Heather Percy  
**Date Desc.:** 13/07/95  
**Map Ref.:**  
**Northing/Long.:** 6250890 AMG zone: 50  
**Easting/Lat.:** 622370 Datum: AGD84  
**Locality:**  
**Elevation:** 320 metres  
**Rainfall:** No Data  
**Runoff:** No Data  
**Drainage:** Poorly drained

**Geology**

**Exposure Type:** 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:** Upper-slope  
**Elem. Type:** Hillslope  
**Slope:** 1 %  
**Relief:** 5 metres  
**Slope Category:** No Data  
**Aspect:** 0 degrees

**Surface Soil Condition** Hardsetting, Hardsetting

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

**Soil Classification**

**Australian Soil Classification:** Hypocalcic Mesonatric Grey Sodosol  
**ASC Confidence:** All necessary analytical data are available.  
**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, Quartz; No surface coarse fragments

**Profile Morphology**

A1 0 - 0.1 m Dark grey (10YR4/1-Moist); , 0-0% ; Clayey sand; Massive grade of structure; Moist; Field pH 6  
 (Raupach); Abrupt, Wavy change to -  
 B21 0.1 - 0.25 m Pale brown (10YR6/3-Moist); , 0-0% ; Sandy light medium clay; Moderate grade of structure; Rough-ped  
 fabric; Dry; Very firm consistence; Field pH 7.5 (Raupach); Clear change to -  
 B22 0.25 - 0.6 m Pale yellow (2.5Y7/4-Moist); , 0-0% ; Sandy light medium clay; Moderate grade of structure; Rough-ped  
 fabric; Dry; Very firm consistence; Soil matrix is Slightly calcareous; Field pH 9 (Raupach);

**Morphological Notes**

**Observation Notes**

**Site Notes**

"Hardsetting grey clay".

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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 - 0.1	5.4B 6.4H 5B	16B	4.78H	1.39	0.21	0.39	0.03J		6.77D	
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0.1 - 0.3	7B 8.1H	18B	2.39E	4.19	0.07	1.68		10B	8.33D	16.80
0.1 - 0.3	7B 8.1H	18B	2.39E	4.19	0.07	1.68		10B	8.33D	16.80
0.1 - 0.3	7B 8.1H	18B	2.39E	4.19	0.07	1.68		10B	8.33D	16.80
0.15 - 0.25	6.8B									
0.4 - 0.5	8B									

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 - 0.1 9		2.21D								87.5I		3.5
0 - 0.1 9		2.21D								87.5I		3.5
0 - 0.1 9		2.21D								87.5I		3.5
0 - 0.1 9		2.21D								87.5I		3.5
0.1 - 0.3 31	<2C	0.25D								66.5I		2.5
0.1 - 0.3 31	<2C	0.25D								66.5I		2.5
0.1 - 0.3 31	<2C	0.25D								66.5I		2.5
0.15 - 0.25												
0.4 - 0.5												

#### 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	
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

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15E1_MN	Exchangeable bases (Mn2+) 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 (CaCO3) - 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