

**Project Name:** Nyabing Kukerin land resources survey  
**Project Code:** NYA **Site ID:** 0197 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

**Desc. By:** Heather Percy  
**Date Desc.:** 05/07/95  
**Map Ref.:**  
**Northing/Long.:** 6257800 AMG zone: 50  
**Easting/Lat.:** 606115 Datum: AGD84  
**Locality:**  
**Elevation:** 305 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:** Level plain <9m <1%  
**Morph. Type:** Flat  
**Elem. Type:** Plain  
**Slope:** 0 %  
**Pattern Type:** Alluvial plain  
**Relief:** 5 metres  
**Slope Category:** No Data  
**Aspect:** No Data

#### Surface Soil Condition Hardsetting, Hardsetting

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

#### Soil Classification

**Australian Soil Classification:** Hypocalcic Hypernatric 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 Cultivation. Rainfed

#### Vegetation

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

#### Profile Morphology

**A1** 0 - 0.1 m Very dark greyish brown (10YR3/2-Moist); , 0-0% ; Sandy loam; Weak grade of structure, Subangular blocky; Sandy (grains prominent) fabric; Moderately moist; Weak consistence; Field pH 6 (Raupach); Abrupt, Wavy change to -  
**B21** 0.1 - 0.5 m Light brownish grey (2.5Y6/3-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 8.5 (Raupach); Gradual change to -  
**B22** 0.5 - 0.9 m Light yellowish brown (2.5Y6/4-Moist); Mottles, 10YR58, 0-2% , 0-5mm, Distinct; Sandy medium clay; Moderate grade of structure; Rough-ped fabric; Dry; Very firm consistence; Soil matrix is Slightly calcareous; Field pH 8.5 (Raupach);

#### Morphological Notes

B21 pH 9 at 40-50cm.

#### Observation Notes

#### Site Notes

"Hardsetting grey clay".

**Project Name:** Nyabing Kukerin land resources survey  
**Project Code:** NYA **Site ID:** 0197 **Observation** 1  
**Agency Name:** Agriculture Western Australia

#### 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	4.8B 5.8H 4.8B	20B	2.89H	1.55	0.08	0.76	0.15J		5.28D	

0 - 0.1	4.8B 5.8H	20B	2.89H	1.55	0.08	0.76	0.15J	5.28D
0 - 0.1	4.8B 5.8H	20B	2.89H	1.55	0.08	0.76	0.15J	5.28D
0 - 0.1	4.8B 5.8H	20B	2.89H	1.55	0.08	0.76	0.15J	5.28D
0.1 - 0.3	6.5B 7.6H	28B	2.29A	5.52	0.07	3.16		11.04D
0.1 - 0.3	6.5B 7.6H	28B	2.29A	5.52	0.07	3.16		11.04D
0.1 - 0.3	6.5B 7.6H	28B	2.29A	5.52	0.07	3.16		11.04D
0.15 - 0.25	6.8B							
0.4 - 0.5	7.6B							

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 - 0.1		1.91D						83I 6
11								
0 - 0.1		1.91D						83I 6
11								
0 - 0.1		1.91D						83I 6
11								
0 - 0.1		1.91D						83I 6
11								
0.1 - 0.3		0.31D						61.5I 5
33.5								
0.1 - 0.3		0.31D						61.5I 5
33.5								
0.1 - 0.3		0.31D						61.5I 5
33.5								
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_CMR	Exchangeable bases (Ca/Mg ratio) - Not recorded
15A1_CA	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
for soluble	salts
15A1_CEC	Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_K	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
for soluble	salts
15A1_MG	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
for soluble	salts
15A1_NA	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
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

**Project Name:** Nyabing Kukerin land resources survey  
**Project Code:** NYA **Site ID:** 0197 **Observation** 1  
**Agency Name:** Agriculture Western Australia

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
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