

**Project Name:** Nyabing Kukerin land resources survey  
**Project Code:** NYA **Site ID:** 0367 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

<b>Desc. By:</b>	Heather Percy	<b>Locality:</b>	
<b>Date Desc.:</b>	08/08/95	<b>Elevation:</b>	255 metres
<b>Map Ref.:</b>		<b>Rainfall:</b>	No Data
<b>Northing/Long.:</b>	6241170 AMG zone: 50	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	601140 Datum: AGD84	<b>Drainage:</b>	Imperfectly drained

#### Geology

<b>ExposureType:</b>	Auger boring	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	No Data	<b>Substrate Material:</b>	No Data

#### Landform

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

<b>Morph. Type:</b>	Mid-slope	<b>Relief:</b>	10 metres
<b>Elem. Type:</b>	Hillslope	<b>Slope Category:</b>	No Data
<b>Slope:</b>	2 %	<b>Aspect:</b>	90 degrees

**Surface Soil Condition** Hardsetting, Hardsetting

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

#### Soil Classification

<b>Australian Soil Classification:</b>	<b>Mapping Unit:</b>	N/A
Supracalcic Subnatric Yellow Sodosol	<b>Principal Profile Form:</b>	Dy2.13
<b>ASC Confidence:</b>	<b>Great Soil Group:</b>	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; 0-2%, , angular, Gneiss

#### Profile Morphology

A1	0 - 0.1 m	Very dark grey (10YR3/1-Moist); , 0-0% ; Clayey sand; Massive grade of structure; Moderately moist;
		Field pH 6.5 (Raupach); Abrupt, Wavy change to -
B21	0.1 - 0.3 m	Light yellowish brown (2.5Y6/4-Moist); , 0-0% ; Sandy medium clay; Moderate grade of structure; Rough-
		ped fabric; Dry; Very firm consistence; Soil matrix is Moderately calcareous; Field pH 8.5 (Raupach);
		Abrupt change to -
B22k	0.3 - 0.45 m	Light yellowish brown (2.5Y6/4-Moist); Mottles, 7.5YR56, 0-2% , 0-5mm, Faint; Medium clay; Moderate
		grade of structure; Rough-ped fabric; Dry; Strong consistence; 20-50%, coarse gravelly, 20-60mm,
		subangular, Calcrete, coarse fragments; Common (10 - 20 %), Calcareous, Coarse (6 - 20 mm), Soft
		segregations; Soil matrix is Moderately calcareous; Field pH 9 (Raupach); Gradual change to -
B23k	0.45 - 0.5 m	Light yellowish brown (2.5Y6/4-Moist); Mottles, 2.5Y73, 10-20% , 15-30mm, Faint; Medium clay;
		Moderate grade of structure; Smooth-ped fabric; Dry; Strong consistence; 2-10%,
		medium gravelly, 6-20mm, Calcrete, coarse fragments; Many (20 - 50 %), Calcareous, Coarse (6 - 20 mm),
		Soft segregations; Soil matrix is Moderately calcareous; Field pH 9.5 (Raupach);

#### Morphological Notes

B22k ??Duplicate--"many" carbonate "nodules" removed from segregations table  
 B23k Kaolinitic clay.

#### Observation Notes

#### Site Notes

"Hardsetting grey clay".

**Project Name:** Nyabing Kukerin land resources survey

Project Code: **NYA** Site ID: **0367** 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				Na Cmol (+)/kg				%
0 - 0.1	6.4B 7.2H	12B	7.22A	1.44	0.5	0.21			9.37D	
0 - 0.1	6.4B 7.2H	12B	7.22A	1.44	0.5	0.21			9.37D	
0 - 0.1	6.4B 7.2H	12B	7.22A	1.44	0.5	0.21			9.37D	
0.1 - 0.3	7.7B 8.6H	12B	5E	5.06	1.07	0.92		12B	12.05D	7.67
0.1 - 0.3	7.7B 8.6H	12B	5E	5.06	1.07	0.92		12B	12.05D	7.67
0.1 - 0.3	7.7B 8.6H	12B	5E	5.06	1.07	0.92		12B	12.05D	7.67

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 - 0.1 7		1.53D						87I 6
0 - 0.1 7		1.53D						87I 6
0 - 0.1 7		1.53D						87I 6
0.1 - 0.3 45	<2C	0.23D						50.5I 4.5
0.1 - 0.3 45	<2C	0.23D						50.5I 4.5
0.1 - 0.3 45	<2C	0.23D						50.5I 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_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 salts	
15A1_NA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment
for soluble salts	
15C1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5,
pretreatment for	
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 (CaCO3) - Not recorded
3_NR	Electrical conductivity or soluble salts - Not recorded

**Project Name:** Nyabing Kukerin land resources survey  
**Project Code:** NYA **Site ID:** 0367 **Observation** 1  
**Agency Name:** Agriculture Western Australia

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