

**Project Name:** Nyabing Kukerin land resources survey  
**Project Code:** NYA **Site ID:** 0083 **Observation ID:** 1  
**Agency Name:** Agriculture Western Australia

#### Site Information

**Desc. By:** Heather Percy  
**Date Desc.:** 29/05/95  
**Map Ref.:**  
**Northing/Long.:** 6283960 AMG zone: 50  
**Easting/Lat.:** 606200 Datum: AGD84  
**Locality:**  
**Elevation:** 335 metres  
**Rainfall:** No Data  
**Runoff:** No Data  
**Drainage:** Well 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:** Lower-slope  
**Elem. Type:** Footslope  
**Slope:** 1 %  
**Relief:** 10 metres  
**Slope Category:** No Data  
**Aspect:** 90 degrees

**Surface Soil Condition** Recently cultivated

#### Erosion

#### Soil Classification

**Australian Soil Classification:** Ferric Mesonatric Brown Sodosol  
**ASC Confidence:** All necessary analytical data are available.  
**Mapping Unit:** N/A  
**Principal Profile Form:** Dy4.62  
**Great Soil Group:** N/A

**Site Disturbance** Cultivation. Rainfed

#### Vegetation

**Surface Coarse Fragments** 20-50%, medium gravelly, 6-20mm, subrounded, ; No surface coarse fragments

#### Profile Morphology

**A1** 0 - 0.12 m Very dark greyish brown (10YR3/2-Moist); , 0-0% ; Loamy sand; Single grain grade of structure; Moist;  
 Loose consistence; 10-20%, fine gravelly, 2-6mm, subrounded, , coarse fragments; 20-50%, medium gravelly, 6-20mm, subrounded, , coarse fragments; Field pH 5.5 (Raupach); Abrupt change to -  
  
**A2** 0.12 - 0.35 m Yellowish brown (10YR5/4-Moist); , 0-0% ; Clayey sand; Single grain grade of structure; Moist; 20-50%,  
 fine gravelly, 2-6mm, subrounded, , coarse fragments; 20-50%, medium gravelly, 6-20mm, subrounded, , coarse fragments; Field pH 6 (Raupach); Clear change to -  
  
**B21** 0.35 - 0.5 m Yellowish brown (10YR5/6-Moist); , 0-0% ; Clay loam, sandy; Massive grade of structure; Dry; 20-50%,  
 fine gravelly, 2-6mm, subrounded, , coarse fragments; 20-50%, medium gravelly, 6-20mm, subrounded, , coarse fragments; Field pH 7 (Raupach); Gradual change to -  
  
**B22** 0.5 - 0.7 m Yellowish brown (10YR5/6-Moist); , 0-0% ; Sandy light clay; Massive grade of structure; Dry; 20-50%,  
 fine gravelly, 2-6mm, subrounded, , coarse fragments; 20-50%, medium gravelly, 6-20mm, subrounded, , coarse fragments; Field pH 7 (Raupach);

#### Morphological Notes

**A1** Fine to medium sand.

#### Observation Notes

#### Site Notes

No visible land degradation at site, possibly obscured by cultivation - sown to lupins.

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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	4.7B									
0.15 - 0.25	5.6B									
0.35 - 0.55	6B	9B	0.7A	2.51	0.06	0.77			4.04D	
	6.9H									
0.35 - 0.55	6B	9B	0.7A	2.51	0.06	0.77			4.04D	
	6.9H									
0.4 - 0.5	6B									

Depth	CaCO <sub>3</sub>	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	Particle GV	Size CS	Analysis FS	Silt
m	%	%	mg/kg	%	%	%	Mg/m <sup>3</sup>			%	
0 - 0.1											
0.15 - 0.25											
0.35 - 0.55									65I		3.5
0.35 - 0.55									65I		3.5
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_CMRR	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
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
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