Project Name: Nyabing Kukerin land resourcs survey

Project Code: NYA Site ID: 0489 Observation ID: 1

Agency Name: Agriculture Western Australia

Site Information

Desc. By: Heather Percy Locality:
Date Desc.: 28/02/96 Elevation:

Date Desc.: 2 Map Ref.:

Map Ref.:Rainfall:No DataNorthing/Long.:6292750 AMG zone: 50Runoff:No DataEasting/Lat.:623600 Datum: AGD84Drainage:Rapidly drained

<u>Geology</u>

ExposureType:Soil pitConf. Sub. is Parent. Mat.:No DataGeol. Ref.:No DataSubstrate Material:No Data

**Landform** 

Rel/Slope Class: Undulating rises 9-30m 3-10% Pattern Type: Rises Morph. Type: Relief. 2 metres Upper-slope Elem. Type: Hillslope Slope Category: No Data Slope: 4 % Aspect: 270 degrees

<u>Surface Soil Condition</u> Loose <u>Erosion</u> (wind); (sheet) (rill) (gully)

Soil Classification

Australian Soil Classification:Mapping Unit:N/ABasic Ferric-Petroferric Bleached-Orthic TenosolPrincipal Profile Form:Uc2.12ASC 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 - 0.1 m Greyish brown (10YR5/2-Moist); , 0-0%; Coarse sand; Single grain grade of structure;

Dry; Loose

consistence; Field pH 6 (Raupach); Many, very fine (0-1mm) roots; Clear, Smooth change

325 metres

to -

A2e 0.1 - 0.7 m Light grey (10YR7/1-Moist); , 0-0%; Coarse sand; Single grain grade of structure; Sandy

(grains

prominent) fabric; Dry; Loose consistence; Field pH 6 (Raupach); Few, very fine (0-1mm)

roots; Gradual,

Smooth change to -

B1 0.7 - 0.95 m

prominent)

Pale yellow (2.5Y7/3-Moist); , 0-0% ; Sand; Single grain grade of structure; Sandy (grains

fabric; Moderately moist; Loose consistence; 2-10%, fine gravelly, 2-6mm, subrounded, ,

coarse

fragments; Field pH 6.5 (Raupach); Few, very fine (0-1mm) roots; Abrupt, Wavy change

to -

B21wc 0.95 - 1.05 m

(grains

 $\label{light yellowish brown (2.5Y6/4-Moist); 0-0\%; Single grain grade of structure; Sandy} \\$ 

prominent) fabric; Moderately moist; Loose consistence; 20-50%, fine gravelly, 2-6mm,

subrounded, ,

coarse fragments; 20-50%, medium gravelly, 6-20mm, subrounded, , coarse fragments;

10-20%, coarse

gravelly, 20-60mm, subrounded, , coarse fragments; Field pH 6 (Raupach); Few, very fine

(0-1mm) roots;

Abrupt, Irregular change to -

B22cm 1.05 - 1.65 m Yellowish brown (10YR5/8-Moist); , 0-0%; Sand; Massive grade of structure; Dry;

**Morphological Notes** 

A2e cpH 4000 = 51 B21wc Fine to medium sand.

**Observation Notes** 

Site Notes

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## **Laboratory Test Results:**

| Depth                    | рН   | 1:5 EC   | E<br>Ca | xchangeable<br>Mg | Cations<br>K | Na    | Exchangeable<br>Acidity | CEC | ECEC  | ESP |
|--------------------------|--|----------|---------|-------------------|--------------|-------|-------------------------|-----|-------|-----|
| m                        |  | dS/m     | -Ca     | IVIG              | K            |       | (+)/kg                  |     |       | %   |
| 0 - 0.1                  | 5.6B<br>6.5H<br>6B<br>6.9H<br>5.6B<br>6.4H | 3B<br>4B | 0.93A   | 0.18              | 0.05         | 0.03  |                         |     | 1.19D |     |
| 0 - 0.1                  | 5.6B<br>6.5H<br>6B<br>6.9H<br>5.6B<br>6.4H | 3B<br>4B | 0.93A   | 0.18              | 0.05         | 0.03  |                         |     | 1.19D |     |
| 0 - 0.1                  | 5.6B<br>6.5H<br>6B<br>6.9H<br>5.6B<br>6.4H | 3B<br>4B | 0.93A   | 0.18              | 0.05         | 0.03  |                         |     | 1.19D |     |
| 0 - 0.1                  | 5.6B<br>6.5H<br>6B<br>6.9H<br>5.6B<br>6.4H | 3B<br>4B | 0.93A   | 0.18              | 0.05         | 0.03  |                         |     | 1.19D |     |
| 0 - 0.1                  | 5.6B<br>6.5H<br>6B<br>6.9H<br>5.6B<br>6.4H | 3B<br>4B | 0.93A   | 0.18              | 0.05         | 0.03  |                         |     | 1.19D |     |
| 0.1 - 0.4                | 5B<br>6.2H                                 | 1B       | 1.12H   | <2                | <0.02        | <0.02 |                         |     | 2.14D |     |
| 0.1 - 0.4                | 5B<br>6.2H                                 | 1B       | 1.12H   | <2                | <0.02        | <0.02 |                         |     | 2.14D |     |
| 0.15 - 0.25<br>0.4 - 0.7 | 5.1B<br>6.1H<br>4.8B                       | 1B<br>1B | 0.04H   | <2                | <0.02        | <0.02 |                         |     | 1.06D |     |
| 0.4 - 0.7                | 5.6H<br>4.8B                               | 1B       | 0.04H   |                   | <0.02        | <0.02 |                         |     | 1.06D |     |
| 0.4 - 0.5                | 5.6H<br>5.1B                               | 1B       |         |                   |              |       |                         |     |       |     |
| 0.7 - 0.95               | 6H<br>4.8B                                 | 1B       | 0.04K   | <2                | <0.02        | <0.02 | 0.03J                   |     | 1.06D |     |
| 0.7 - 0.95               | 5.7H<br>4.8B<br>5.7H                       | 1B       | 0.04K   | <2                | <0.02        | <0.02 | 0.03J                   |     | 1.06D |     |
| 0.95 - 1.05              | 4.6B<br>5.8H                               | 1B       | 0.22K   | 0.11              | 0.1          | 0.04  | 0.16J                   |     | 0.47D |     |
| 0.95 - 1.05              | 4.6B<br>5.8H                               | 1B       | 0.22K   | 0.11              | 0.1          | 0.04  | 0.16J                   |     | 0.47D |     |

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| Depth                           | CaCO3 | Organic<br>C<br>Clay | Avail.<br>P | Total<br>P | Total<br>N | Total<br>K | Bulk<br>Density | Particle<br>GV CS | Size Analysis<br>FS Silt |
|---------------------------------|-------|----------------------|-------------|------------|------------|------------|-----------------|-------------------|--------------------------|
| m                               | %     | %                    | mg/kg       | %          | %          | %          | Mg/m3           |                   | %                        |
| 0 - 0.1<br>0.3                  |       | 0.48D                |             | 45B        | 0.025E     |            |                 |                   | 1.6                      |
| 0 - 0.1<br>0.3                  |       | 0.42D<br>0.48D       |             | 50B<br>45B | 0.025E     |            |                 |                   | 1.6                      |
| 0 - 0.1<br>0.3                  |       | 0.42D<br>0.48D       |             | 50B<br>45B | 0.025E     |            |                 |                   | 1.6                      |
| 0 - 0.1<br>0.3                  |       | 0.42D<br>0.48D       |             | 50B<br>45B | 0.025E     |            |                 |                   | 1.6                      |
| 0 - 0.1<br>0.3                  |       | 0.42D<br>0.48D       |             | 50B<br>45B | 0.025E     |            |                 |                   | 1.6                      |
| 0.1 - 0.4<br>0.1                |       | 0.42D<br>0.1D        |             | 50B<br>17B |            |            |                 |                   | 1.4                      |
| 0.1 - 0.4<br>0.1<br>0.15 - 0.25 |       | 0.1D                 |             | 17B        |            |            |                 |                   | 1.4                      |
| 0.4 - 0.7<br>0.1                |       | 0.06D                |             | 19B        |            |            |                 |                   | 1.7                      |
| 0.4 - 0.7<br>0.1                |       | 0.06D                |             | 19B        |            |            |                 |                   | 1.7                      |
| 0.4 - 0.5<br>0.7 - 0.95<br>0.3  |       | 0.05D                |             | 22B        |            |            |                 |                   | 1.5                      |
| 0.7 - 0.95<br>0.3               |       | 0.05D                |             | 22B        |            |            |                 |                   | 1.5                      |
| 0.95 - 1.05<br>3.7              |       | 0.15D                |             | 25B        |            |            |                 |                   | 2.3                      |
| 0.95 - 1.05<br>3.7              |       | 0.15D                |             | 25B        |            |            |                 |                   | 2.3                      |

## **Laboratory Analyses Completed for this profile**

| 15_NR_AL 15_NR_BSa 15_NR_CA 15_NR_CMR 15_NR_K 15_NR_MG 15_NR_MN 15_NR_NA | Aluminium Cation - meq per 100g of soil - Not recorded  Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available  Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded  Exchangeable bases (Ca/Mg ratio) - Not recorded  Exch. basic cations (K++) - meq per 100g of soil - Not recorded  Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded  Exchangeable bases (Mn++) - meq per 100g of soil - Not recorded  Exch. basic cations (Na++) - meq per 100g of soil - Not recorded  Exch. basic Cations (Na++) - meq per 100g of soil - Not recorded  Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment |
|--|---|
| for soluble  |   |
|  | salts   |
| 15A1_CEC<br>15A1_K   | Exchangeable bases (CEC) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment  |
| for soluble  | salts   |
| 15A1_MG<br>for soluble   | Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment   |
|  | salts   |
| 15A1_NA<br>for soluble   | Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment   |
|  | salts   |
| 15E1_AL<br>15E1_CA   | Exchangeable AI - by compulsive exchange, no pretreatment for soluble salts Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble   |
| salts  |   |
| 15E1_K<br>15E1_MG  | Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts<br>Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts  |

| 15E1_NA<br>15J_BASES | Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts 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             |
| 18A1_NR              | Bicarbonate-extractable potassium (not recorded)   |
| 3_NR                 | Electrical conductivity or soluble salts - Not recorded  |
| 4_NR                 | pH of soil - Not recorded  |
| 4B_AL_NR             | Aluminium in 1:5 soil/0.01M calcium chloride extract - method not recorded                             |
| 4B1                  | pH of 1:5 soil/0.01M calcium chloride extract - direct   |

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Organic carbon (%) - Uncorrected Walkley and Black method Total nitrogen - semimicro Kjeldahl, steam distillation 6A1\_UC

7A1 9A3 Total Phosphorus (ppm) - semimicro kjeldahl, automated colour

9B\_NR Bicarbonate-extractable phosphorus (not recorded)

9H1 Anion storage capacity

P10\_1m2m 1000 to 2000u particle size analysis, (method not recorded) P10\_20\_75 P10\_75\_106 20 to 75u particle size analysis, (method not recorded) 75 to 106u particle size analysis, (method not recorded) P10\_gt2m > 2mm particle size analysis, (method not recorded)

P10\_NR\_C P10\_NR\_Saa

Clay (%) - Not recorded
Sand (%) - Not recorded arithmetic difference, auto generated

Salt (%) - Not recorded

106 to 150u particle size analysis, (method not recorded) P10\_NR\_Z P10106\_150 P10150\_180 150 to 180u particle size analysis, (method not recorded) P10180\_300 180 to 300u particle size analysis, (method not recorded) P10300\_600 300 to 600u particle size analysis, (method not recorded) P106001000 600 to 1000u particle size analysis, (method not recorded)