

Woolwionga Mine ⊗ Closed Mine



LAND RESOURCES of a portion of BAN BAN SPRINGS

For further information contact: Department of Environment and Natural Resources

Director, Land Assessment, Rangelands Division,
Ph. (08) 8999 4443 Email: rangelands@nt.gov.au Web: http://denr.nt.gov.au
Level 3, Goyder Centre, 25 Chung Wah Terrace, Palmerston, Northern Territory of Australia.
Web: http://nrmaps.nt.gov.au Map Reference: Banba Land-Resources 25k.

LAND UNIT DESCRIPTIONS

High hills with rounded crests and moderately steep slopes formed on Dolerite. Relief >10 metres, slopes >10%. Extensive surface stone cover, minor outcrop. Lithosols, (Rudosols) with greater than 50% stone and gravel content on steeper slopes and hill crests. Deep, stony red earths (Kandosols) on broader hill tops and narrow footslopes. Eucalyptus miniata and Corymbia polysciada open woodland to open forest, minor Corymbia foelscheana and Erythrophleum chlorostachys. Sparse to moderately dense grasses; pre-dominantly Sorghum plumosum, Themeda triandra, Chrysopogon latifolius.

High hills with rounded crests and moderately steep slopes formed on Dolerite. Relief >10 metres, slopes >10%. Extensive surface stone cover, minor outcrop. Lithosols, (Rudosols) with greater than 50% stone and gravel content on steeper slopes and hill crests. Deep, stony red earths (Kandosols) on broader hill tops and narrow footslopes. Eucalyptus miniata and Corymbia polysciada open woodland to open forest, minor Corymbia foelscheana and Erythrophleum chlorostachys. Sparse to moderately dense grasses; pre-dominantly Sorghum plumosum, Themeda triandra, Chrysopogon latifolius. 1b component present.

High ridged hills with steep sideslopes, >15%. Relief >15 metres, formed on fine-medium grained sedimentary rocks. Extensive outcrop, surface stone and gravel. Shallow lithosols (Rudosols) with >50% stone and gravel. Eucalyptus miniata, Corymbia polysciada and Corymbia dichromophloia open woodland with associated trees of Buchanania, Owenia, Erythrophleum chlorostachys. Sparse to moderately dense grasses Aristida sp., Chrysopogon latifolius, Schyzacharium fragile.

LOW HILLS

Low rounded hills and long, gentle sideslopes (5 - 10% slope) formed on dolerite. Minor outcrop, extensive surface stone on crests and upper slopes. Stony deep red earths (Red Kandosols), with stone content generally decreasing downslope. Friable to firm consistence. Clay loam surface to light clay subsoil. Moderately strongly structured topsoil. Eucalyptus miniata woodland to open forest, associated with Erthrophleum chlorostachys, Corymbia polysciada, C. foelscheana, C. bella dominant on lower slopes. Dense grasses; Themeda triandra, Heteropogon contortus, Sorghum plumosum, Chrysopogon latifolius.

Broad, gentle mid and lower slopes (3 - 6% slope). Minor areas of surface stone. Parent rock dolerite. Deep red earths (Red Dermosols); gradational, with clay loam surface and light clay subsoil; friable to firm consistence; well structured Eucalyptus miniata and Corymbia bella open forest, with minor Corymbia foelscheana, Corymbia polysciada. Dense grasses; Themeda triandra, Chrysopogon latifolius, Heteropogon contortus, Sorghum plumosum, Sehima nervosum.

LOW RISES

Low rises and gentle upper erosional slopes (4 - 8% slope) on fine-medium grained sedimentary rocks. Extensive gravel and stone cover, minor outcrop. Lithosols (i.e. greater than 50% gravel) (Yellow Tenosols) dominant. Very gravelly, shallow yellow earths on gentler slopes. Eucalyptus tectifica or Eucalyptus miniata woodland to low woodland with minor Corymbia polysciada, Corymbia foelscheana, Erythrophleum chlorostachys. Moderately dense grasses; Sorghum plunosum, Themeda triandra, Chrysopogon latifolius.

PLAINS

Upper colluvial slopes; 2 - 4% slope. Low termitaria usually evident. Shallow yellow earths (Yellow Kandosols). Sandy loam surface to sandy clay loam subsoil, usually containing gravel. Dry out and set hard during dry season. Eucalyptus miniata open woodland to woodland with Erythrophleum chlorostachys, Corymbia polysciada, Corymbia foelscheana, Eucalyptus tectifica. Moderately dense to dense grasses; Themeda triandra, Chrysopogon latifolius,

Mid colluvial slope; 0.5 - 2% slope. Large termitaria usually evident. Moderately deep to deep yellow earths (Yellow Kandosols). Sandy loam surface to sandy clay loam or light clay subsoil. Surface dries out and sets hard in the dry season. Corymbia polysciada, Eucalyptus alba, Corymbia foelscheana, Corymbia polycarpa, Melaleuca sp. and Erythrophleum chlorostachys mixed low woodland to low open woodland. Dense grasses; Themeda triandra, Chrysopogon latifolius, Sorghum plumosum.

Lower colluvial slopes; 0.5 - 1% slope. Large termitaria evident. Deep yellow earths very mottled subsoils (Yellow Kandosols), with high proportion of ferruginous gravels. Gradational, with light textured surface soil and sandy clay loam to light clay subsoil. Surface sets hard in dry season. E. alba and Melaleuca sp. woodland to open woodland with Corymbia polysciada, C. polycarpa and C. bella. Moderately dense to dense grasses Chrysopogon latifolius,

C. fallax, Themeda triandra, Sorghum plumosum, Heteropogon contortus, Bothriochloa bladhi.

Valley flats between dolerite hills. Slopes mostly <0.5%. Up to 3% along edge of hills. Deep red earths (Red Kandosols). Friable to firm consistence. Gradational, with clay loam surface to light clay sub-soil. Eucalyptus miniata, Eucalyptus tetrodonta, Corymbia bella and Erythrophleum chlorostachys open forest. Moderately dense to dense grasses; Bothriochloa bladhi, Heteropogon contorus, Themeda triandra, Schyzacharium fragile.

ALLUVIAL PLAINS

Narrow plains and drainage lines. Channels usually contain permanent water. Cracking grey clays (Grey Vertosols).

Alkaline reaction trend. Corymbia bella, C. polycarpa and Melaleuca sp. woodland to open woodland. Dense grasses;
Heteropogon contortus, Bothriochloa bladhii, Sorghum plumosum, Chrysopogon latifolius, Imperata cylindrica.

Extensive plains. Solodics and soloths (Hydrosols). Texture contrast profiles with shallow medium textured A horizon over clay B horizon. Surface sets very hard upon drying out. Subsoil is dense with low permeability. Themeda triandra, Eriachne burkittii and Sorghum plumosum open grassland, or Corymbia bella, Corymbia polycarpa, Eucalyptus alba and Melaleuca sp. open woodland to woodland with a similar grass understorey.

DRAINAGE SYSTEMS

Major drainage lines and associated narrow levees. Yellow earths and red earths on levees (Kandosols). Deep, medium textured profile. Friable to firm consistence. Eucalyptus bigalerita, Eucalyptus miniata and Corymbia polysciada mixed woodland to open forest. Dense mixed perennial grasses.

Plains formed of broad inactive levees. Deep yellow earths (Yellow Kandosols). Clay loam surface soil grading into light clay subsoil. Friable to firm consistence. Eucalyptus miniata dominant woodland with Corymbia polysciada, Corymbia bella and Eucalyptus bigalerita. Moderately dense to dense grasses; Themeda triandra, Sorghum plumosum, Sehima nervosum, Mnesithea rottboellioides.

Example of Land Unit Descriptions

DRAINAGE SYSTEMS

Major drainage lines and associated narrow levees. Yellow earths and red earths on levees (Kandosols). Deep, medium textured profile. Friable to firm consistence. Eucalyptus bigalerita, Eucalyptus miniata and Corymbia polysciada mixed woodland to open forest. Dense mixed perennial grasses.

Land unit

Vegetation description

BIBLIOGRAPHIC REFERENCE:

Fogarty P.J. (1977), LAND UNITS OF A PORTION OF BAN BAN SPRINGS
Report Number SLR D0148. Land Conservation Section,
Animal Industry and Agriculture Branch, Department of Northern Australia,
Darwin NT.Commission of the Department of the Northern Territory, Alice Springs, NT.

TECHNICAL REFERENCES: Ishell R.F. Speight, I.G. Walker, I. and

McDonald R.C, Isbell R.F, Speight J.G, Walker J. and Hopkins M.S (1998). "Australian Soil and Land Survey Field Handbook", 2nd edition, Inkata Press, Melbourne.

Isbell R.F (1998). "The Australian Soil Classification". CSIRO Publishing, Melbourne.

Geospatial Services, Water Resources Division,
Department of Environment and Natural Resources,
Northern Territory of Australia.

Cartography by R.Koberstein - July 2017

Base Information Data Sources:
Northern Territory, Department of Infrastructure, Planning and Logistics
Geoscience Australia, Australian Government

MAP DISCLAIMER:

Land resource information has been derived from aerial imagery interpretation and field data describing landform, soil and vegetation. Mapping has been collected according to the national standards and prepared at a scale of 1:25 000. Enlarging this map beyond this scale will not provide further detail.

A site inspection should always accompany mapping for specific areas.

(C) Northern Territory of Australia

This product and all material forming part of it is copyright belonging to the Northern Territory of Australia. You may use this material for your personal, non-commercial use or use it within your organisation for non-commercial purposes, provided that an appropriate acknowledgement is made and the material is not altered in any way. Subject to the fair dealing provisions of the Copyright Act 1968, you must not make any other use of this product (including copying or reproducing it or part of it in any way) unless you have the written permission of the Northern Territory of Australia to do so.

The Northern Territory of Australia does not warrant that the product or any part of it is correct or complete and will not be liable for any loss damage or injury suffered by any person as a result of its inaccuracy or incompleteness.