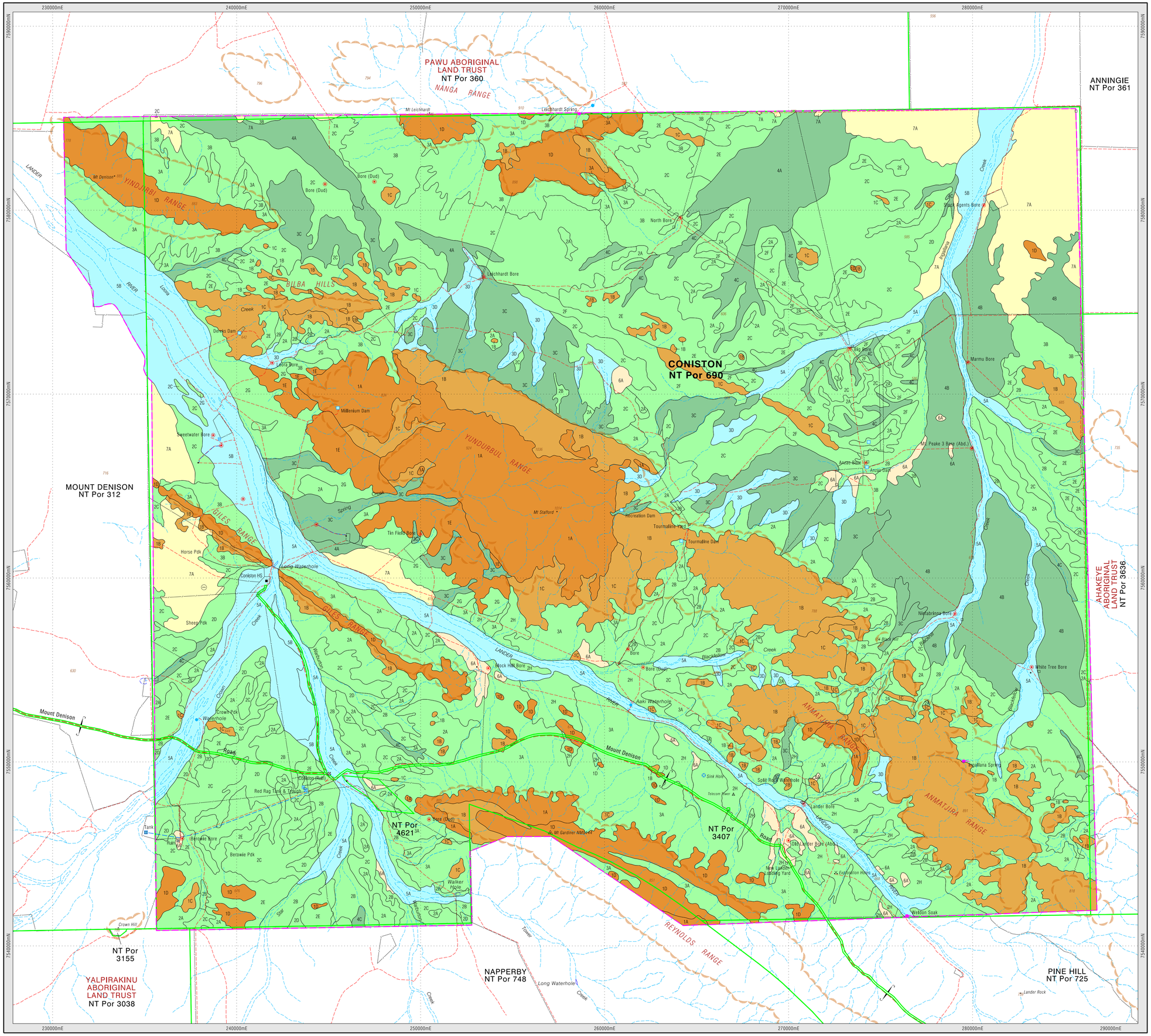


LAND SYSTEM DESCRIPTIONS

MOUNTAINS

Harts 1A — Steep-sided mountain peaks and ridges dissected by narrow, closely-spaced watercourses. Shallow, coarse textured lithosols. Sparse shrubs including cassias and Witchetty Bush over spinifex and Kangroo grass.

Davenport 1D — Rugged mountains ridges and bluffs with steep-sided slopes, drained by small watercourses. Pockets of shallow, coarse textured lithosols. Sparse to isolated cover of Hard Spinifex and scattered low shrubs such as Holly Grevillea.

1E — Broad-crested mountain ridges drained by small, widely-spaced stream channels. Shallow, course textured lithosols. Sparse shrubs and low trees, frequently Bloodwood, over Hard Spinifex.

HILLS

Napperby 1B — Low ranges, hills and outcrops (tors and domes) characterized by boulder-strewn slopes, bare summits and limited drainage line development. Shallow, gritty lithosols amongst rock outcrops. Sparse shrubs over mainly spinifex or Woollybutt Wanderrie grass. Native fig colonises crevices in bare rock faces.

Bond Springs 1C — Bold rocky hills and ridges, and prominent quartz reefs. Lower slopes have gentle grades and are drained by small creek channels. Pockets of coarse textured lithosols amongst rock outcrop, with gritty brown alluvial soils along creek tracts. Sparse Witchetty Bush, Mulga, occ. Bloodwood and shrubs over Oat, Woollyoat, Mulga, Kerosene grasses, Tarvive and other forbs. Umbrella grass occur under treecover. Rock outcrop areas may support spinifex, Woollybutt Wanderrie and native fig.

LOW RISES

Woolla 6A — Low rises located along the floor of drainage depressions, with shallow soils and occasional outcrops of calcrete. Shallow red calcareous soils, consisting of gravelly sandy clay loams 0.2 metres deep overlying calcrete. Open shrubland of Myall or a sparse open woodland of Whitewood with Supplejack, Prickly Wattle and Ironwood. Pastures consist of Oat and Limestone Oat grasses, scattered perennials such as Umbrella grass, with Queensland Bluegrass in minor depressions.

PLAINS

Pularoo 2A — Broad ridge crests with low relief, and plains at the foot of granite ridges (unit 1B). Drainage channels generally absent. Red earths, consisting of gritty sandy clay loams at the surface over light clays and decomposing granite at about 0.5 metres. Open shrubland of Mulga with occ. Whitewood, Witchetty Bush, Corkwood or Bloodwood over Mulga and Woollyoat grasses, Umbrella, Curly Windmill and Native Panic grasses grow under trees. Silky Browntop, Desert and Queensland Bluegrass in minor depressions.

Pularoo 2B — Drainage floors with little relief and very gentle slopes, usually featuring shallow watercourses. Texture-contrast soils, usually consisting of slightly acid sandy loams over alkaline sandy clays. Weathered granite occurs at depth. Open cover of Cottonbush with palatable perennial grasses (including Curly Windmill, Umbrella and Neverfail grasses), with Woollyoat and Mulga grasses, Frankenia and Copperburr. Isolated Mulga and Whitewood are often present, and Prickly Wattle and Dead Finish fringe the watercourses.

Warburton 2C — Gently undulating plains, with broad low rises often capped by Unit 2A. Defined creeklines are absent, and the landscape is drained by surface flow into broad depressions (Units 2D and 4C). Shallow, gritty red earths, consisting of slightly acid sandy loams grading to slightly heavier textures over rotten granite. Soil depth is less than about 0.4 metres. Open cover of Mulga, Witchetty Bush, Whitewood and Beetwood over blue and green leaf cassias, Silver Cassia and Turkey Bush over Wire, Kerosene, Mulga, Woollyoat and Woollybutt grasses and Lifesaver Burr. Silky Browntop is in minor depressions.

Warburton 2D — Broad drainage floors with little relief and very gentle slopes, drained by shallow tributary depressions without defined stream channels. Red earths, with textures grading from sandy clay loams at the surface to sandy clays at 0.3 metres. Decomposing granite occurs at about 0.6 metres. Slightly heavier soil textures occur in drainage depressions. Open shrubland of Mulga with scattered Whitewood and occassionally Ironwood and Prickly WattLe, over Mulga and Woollyoat grasses, with Curly Windmill and Umbrella grasses beneath the treecover. Palatable perennial grasses, mainly Curly Windmill and Umbrella grasses, and Desert Bluegrass, predominate in drainage depressions.

Ennugan 2E — Plains with low relief, either lacking defined drainage or drained by broad depressions feeding small creek channels. Some quartz reef outcrop is often present. Shallow red earths, with textures grading from gritty sandy loams at the surface to coarse sandy clay loams at about 0.3 metres. Surfaces often carry a pavement of quartz gravel. Open woodland of Mulga, Corkwood, Witchetty Bush and Whitewood with scattered Bloodwood and Dead Finish. Pastures consist of Mulga and Woollyoat grasses, with Wire, Curly Windmill, Umbrella and Golden Beard grasses. Desert Bluegrass and scattered forbs.

2F — Landscapes with gentle slopes and low relief occurring in association with Unit 2C. They feature small gilgaled plains and lack defined drainage lines. Heavy textured red earths predominate, consisting of light clays grading to medium clays at depth. Coarse-structured clay soils occur on the gilgaled plains. Open shrubland of Mulga and occ. Whitewood, Bloodwood, Corkwood and Prickly Wattle over Neverfall, Woollyoat, Mulga, Curly Windmill, Umbrella and Silky Browntop grasses. Gilgaled plains support Neverfall, Silky Browntop, QLD and Desert bluegrasses.

2G — Very gently sloping plains with scalded surfaces, in association with low, broad crested stony rises. The landscape drains by surface flow rather than along defined watercourses. Texture-contrast soils predominate on the lowland areas. They consist of a shallow, sandy loam surface horizon overlying sandy clays, and are extensively scalded. Medium textured red earths are also present. Isolated Curly Windmill, Winged Chloris and Button grass on islands of topsoil. Open areas have groves of Mulga and Witchetty Bush over Mulga grass. The low hills support Witchetty Bush and Black Gidyea over Woollyoat, Mulga and Cotton Panic grasses.

Weldon 2H — Gently sloping plains with low relief, drained by broad shallow depressions. The plains have been exposed where the gravelly terraces flanking the Reynolds Range (Unit 3A) have been stripped by watercourses tributary to the Lander River. Red earths, with textures graduating from sandy clay loams at the surface to light clays at about 0.4 metres. Texture-contrast soils are present on lower slopes and deep red earths occur in the drainage depressions. Open shrubland of Mulga with scattered Witchetty Bush, Bloodwood, Dead Finish and Black Gidyea over Mulga and Woollyoat grasses. Umbrella and Curly Windmill grasses occur under trees. Silky Browntop and Desert Bluegrass in minor depressions. Texture-contrast soils support Curly Windmill and Neverfail grasses. Dense Mulga in drainage depressions.

Weldon 3A — Gently-sloping terraces, terrace remnants and fans flanking quartzite mountain ridges. The extensive terraces along the Reynolds Range are dissected by large watercourses, but elsewhere the slopes are drained by relatively small creek channels. Stony red earths, usually with a sandy clay loam surface horizon. These soils are very gravelly and often contain large cobbles of textured alluvial soils fringe the main watercourses. The stony red earths support a dense shrubland of Mulga over Wire grass. Spinifex and Blue Mallee occur on gravelly surfaces with little soil. Alluvial soils along creeks support Bloodwood over palatable Silky Browntop and Desert Bluegrass.

Woodduck 3B — Sandy alluvial fans with gentle slopes flanking mainly quartzite mountain ridges. The fans are fed by small watercourses from the ranges, draining as narrow incised creeks to flood out on the lower slopes. Sandy red earths, consisting of acid sandy loams over sandy clay loams at depth. Heavier textured red earths occur in drainage depressions in floodout areas. Sparse Bloodwood and occassionally Black Gidyea on Dogwood over Soft Spinifx, Hard Spinifex and some Kerosene grass. Silky Browntop grass is present in drainage depressions.

ALLUVIAL PLAINS

Kanandra 3C — Sandy alluvial plains originating as outwash from the ranges. The plains are featureless and watercourses are largely absent. Coarse textured alluvial soils. Surface horizons consist of sandy loams overlying sandy clay loams at about 0.3 metres. Dark, mineral-rich soils occur along Spring Creek. An open woodland of Ironwood with occassional Whitewood over Kerosene, Woollybutt, Golden Beard, Mulga and some Woollyoat and Oat grasses.

Bushy Park 4A — Broad, flat-floored drainage tracts with very slight slopes carrying run-on from adjacent uplands. Drainage channels are absent. Deep red earths, with textures grading from sandy clay loams at the surface to light clays at about 0.5 metres. Dense shrublands of Mulga and occasionally Witchetty Bush over perennial tussock grasses including Silky Browntop, Desert Bluegrass, Cotton Panic, Umbrella and Kangaroo grasses with some Mulga and Woollyoat grasses.

Bushy Park 4B — Extensive featureless alluvial plains, with a very slight slope, draining to the north. Indistinct drainage depressions carry run-on from adjacent range frontages and floodouts, but these are of limited extent. East of Big Bore, a small area receives run Deep red earths, with textures grading from sandy clay loams at the surface to light clays at about 0.5 metres. Dense shrubland of groved Mulga with scattered Witchetty Bush and Ironwood over Wire grass and some Woollybutt, Kerosene and Mulga Mitchell grasses. Silky Browntop and Cotton Panic grasses grow in the drainage depressions. Areas receiving run-on east of Big Bore support Whitewood, Mulga, Witchetty Bush and Prickly Wattle over Mulga, Woollyoat and Silky Browntop grasses.

Warburton 4C — Tributary flat-floored depressions draining Unit 2C. Drainage channels are absent. Red earths, with textures grading from sandy clay loams at the surface to sandy clays at about 0.3 metres. Decomposing granite occurs beneath this depth. An open woodland of Whitewood and Corkwood with scattered Beefwood, Bloodwood, Ghost Gum, Witchetty Bush and Prickly Wattle over Silky Browntop, Desert Bluegrass, Umbrella grass and some Woollyoat and Mulga grasses.

SAND PLAINS

Aileron / Singleton 7A — Extensive sandplains with level or slightly undulating relief, sometimes featuring poorly-defined drainage depressions. This landscape has developed from the burial of Units 2C, 4A and 4B. Sandy red earths, with textures grading from sandy loam at the surface to sandy clay loam at depth, occur west of Coniston homestead. Deep earthy sands predominate elsewhere. A very sparse cover of Mulga or Bloodwood with Corkwood and Dogwood over spinifex. Scattered Ghost Gums, together with spinifex and Silky Browntop are often in depressions.

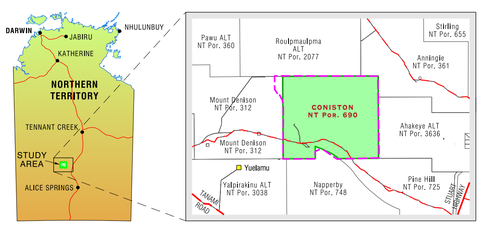
DRAINAGE SYSTEMS

Kanandra 3D — Sandy floodout deposits developed on the lower reaches of small watercourses draining from Unit 1B. Each watercourse disperses into small distributary channels which feed the floodout. Small scalded areas are often a feature of the lower margins of this Brown alluvial soils, usually consisting of deep sandy loams or coarse sandy clay loams, with scalded texture- contrast soils fringing the lower margins of the floodouts. An open woodland of Whitewood with occasional Prickly Wattle, Ironwood and Conkerberry over Mulga and Woollyoat grasses and some Silky Browntop, Curly Windmill and Umbrella grasses.

Sandover 5A — Narrow, sandy floodplains and levees bordering major stream channels. Includes broad floodplain deposit adjacent to Warburton Creek upstream from its junction with Crown Creek. Brown alluvial soils, with textures grading from sandy loams at the surface to gritty sandy clay loams at depth. An open woodland of Whitewood, Ironwood and Corkwood with scattered Supplejack, Bloodwood and occasional Mulga over Kerosene, Golden Beard, Woollybutt and some Mulga and Oat grasses. Perennials including Silky Browntop, Desert Bluegrass and Curly Windmill grass occur under trees and in drainage depressions.

Sandover 5B — Broad, sandy floodplains and levees, featuring shallow drainage depressions and small frequently inundated claypans. Present in association with sandplain country (Unit 7A). The levees and floodplains are comprised of coarse textured alluvial soils, predominantly loamy sands. Finer alluviums have been deposited in the claypans as dark brown light clays. Sparse Whitewood or Bloodwood with scattered Beefwood and Ironwood over Soft Spinifx, Kerosene and Wire grasses. Silky Browntop and palatable herbage, mainly Verbine.

MAP LOCALITY



Black numbered lines are 10 000 metre intervals of the Map Grid of Australia (MGA) Zone 53 Transverse Mercator Projection
Horizontal Datum: GDA 94 Vertical Datum: AHD (metres)

General features data sources:
Cadastre, roads, place names: Department of Infrastructure, Planning and Logistics, Northern Territory of Australia.
Pastoral Infrastructure: Department of Environment, Park and Water Security, Northern Territory of Australia.
Hydro features: Commonwealth of Australia (Bureau of Meteorology) 2014
Spot heights: Geoscience Australia. 2007. Geodata topo 250K. Series 3.

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This map was produced on the Geocentric Datum of Australia 1994 (GDA 94)

GENERAL FEATURES

Land unit boundary		Water Bore	Marmu Bore
Limit of Mapping		Dam	Anzac Dam
Property boundary		Tank	Red Rag Tank
Minor road: unsealed		Trough	Red Rag Trough
Local road: track		Stock Yard	Yard
Railway		Drainage	
Fence		Lake (non-perennial)	
Pastoral homestead	Coniston HS	Lagoon / Waterhole	*Walker Hole*
Building		Spring / Soak	Welldon Soak
Ruin / Historic site		Sink Hole	*Sink Hole*
Landing ground		Relief Feature	*Mt Stafford*
Paddock name	Horse Pdk	Range or Plain	*GILES RANGES*
Exploration Holes		Spot height	*1014*
Tower	Telecom Tower	Relief ridge	
Survey Control Site	*Mt Gardiner NMG144*		

Please Note:
This report is generally not available. Access requests should be directed to Arid Zone Research Institute Library in Alice Springs.
Email: azri.library@nt.gov.au

Bibliographic Reference:
Grant, R. (1983)
Range Condition assessment report: Coniston Station
Department of Primary Production, Alice Springs, Northern Territory

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Web: https://depws.nt.gov.au
Geospatial Information: https://nrmaps.nt.gov.au

Limitations of use
Land Resource information has been derived from aerial photograph interpretation and field data collection describing landform, soil and vegetation. Mapping has been collected at a nominal scale of between 1:100 000 and 1:250 000. Enlarging this map beyond this scale will not provide further detail and is not recommended.

Final mapping is presented at a scale of 1:100 000.

When assessing specific areas within the mapping it is recommended that a site inspection be undertaken to establish unmapped variations and to confirm the mapping accuracy on the ground.

Example of Land System Description

Harts 1A — Steep-sided mountain peaks and ridges dissected by narrow, closely-spaced watercourses. Shallow, coarse textured lithosols. Sparse shrubs including cassias and Witchetty Bush over spinifex and Kangroo grass.

(Map unit; Landform description; Land system; Soil description; Vegetation description)

NORTHERN TERRITORY GOVERNMENT

LAND RESOURCES of CONISTON STATION