



- World-class, low-cost GEMCO manganese mine at Groote Eylandt produces more than 15% of global production, and has been in operation since 1965.
- Mineralisation at Groote Eylandt comprises flat-lying oolitic and pisolitic sedimentary manganese within the Cretaceous Walker River Formation of the Carpentaria Basin.
- The Cretaceous palaeo-shoreline is a target for further sedimentary manganese deposits.
- The Bootu Creek manganese deposit is a hydrothermally modified sedimentary deposit hosted in Palaeoproterozoic rocks of the Tomkinson Province.

## Operating mines

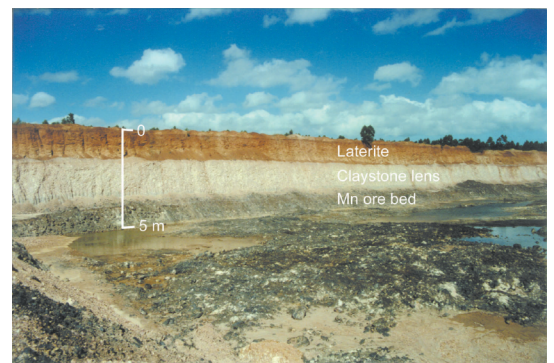
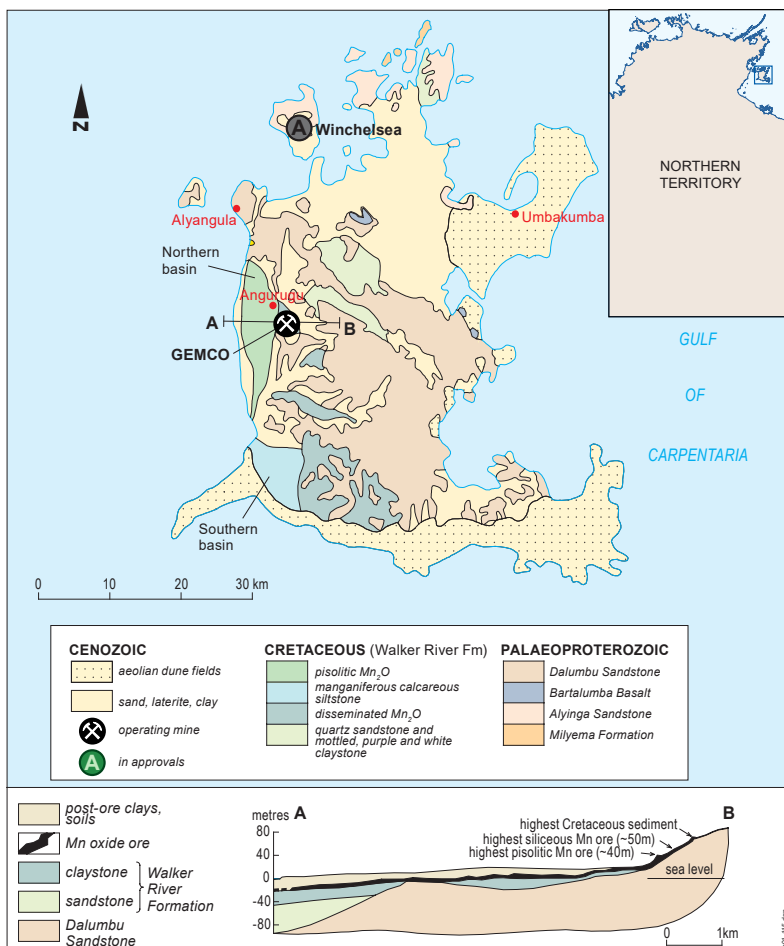
Geological Province	Name	Annual Production	Resource	Company
Carpentaria Basin	GEMCO	5.9 Mt manganese concentrate (2022-23)	123 Mt @ 43.6% Mn (ROM) and 12 Mt @ 20% Mn (Sands)	South 32 Ltd

## Care and Maintenance

Geological Province	Name	Resource	Company
Tomkinson Province	Bootu Creek	6.86 Mt @ 13.19% Mn	OM Holdings Ltd

## Developing projects In approvals process

Geological Province	Name	Resource	Company
Carpentaria Basin	Winchelsea	18.9 Mt @ 24.0 % Mn (From Draft EIS)	Winchelsea Mining Pty Ltd

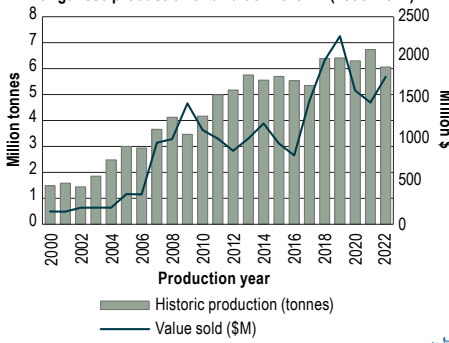


Wedge-shaped claystone lens along northern wall of Quarry F1, Groote Eylandt.  
Reference: Northern Territory Geological Survey, Report 13.

Simplified geology of Groote Eylandt.  
Reference: Northern Territory Geological Survey, Report 13.

# Manganese in Australia's Northern Territory

Manganese production and value in the NT (2000–2022)



**Total production**  
147 million tonnes



**2023–24 production**  
3.9 million tonnes



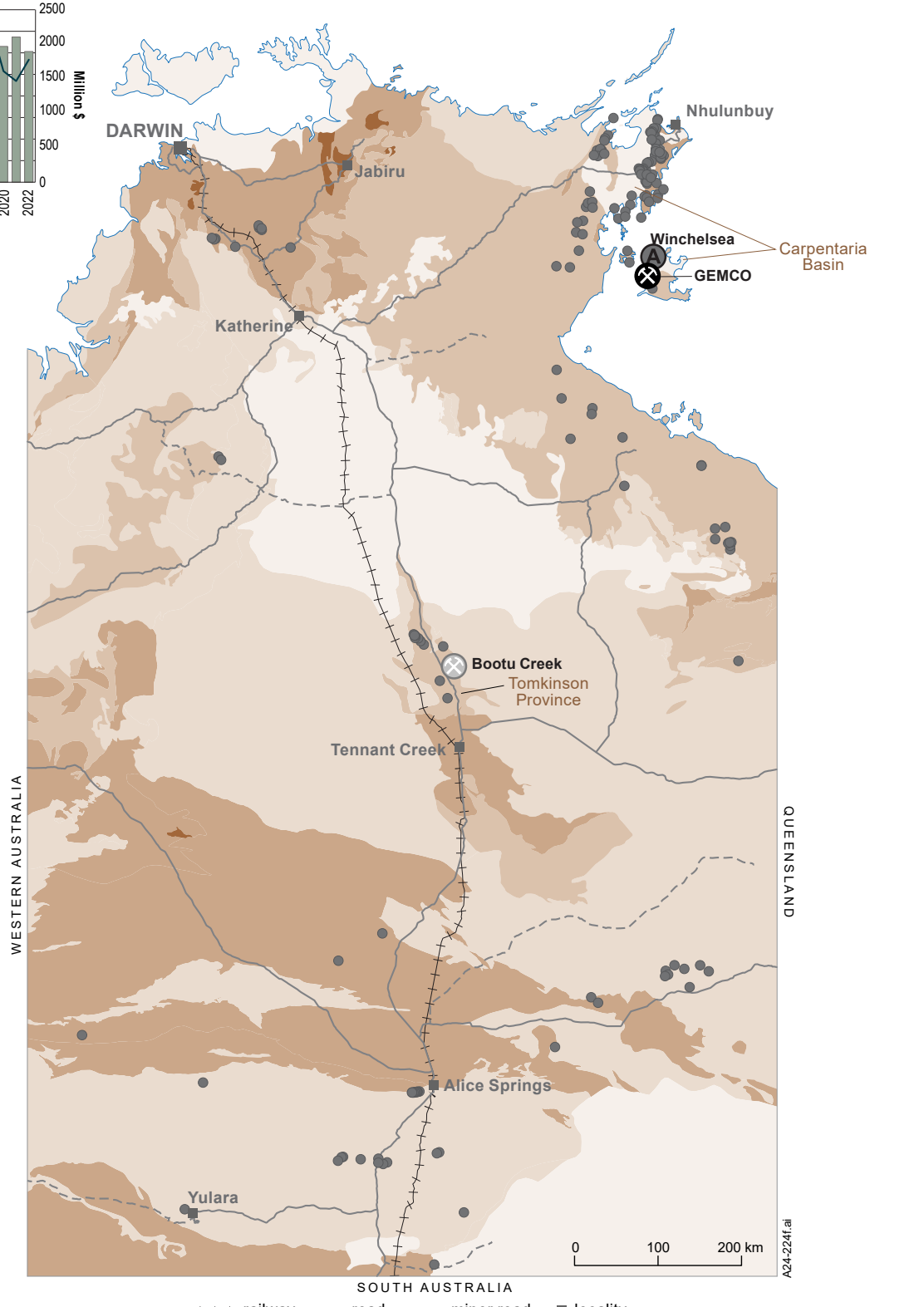
**Remaining JORC resources**  
> 135 million tonnes of manganese ore



**Value of production in 2023–24**  
\$993 million



**Production ranking in Australia**  
1<sup>st</sup>



- operating mine
  - care and maintenance
  - in approvals process
  - under feasibility
  - JORC resource
  - prospect
  - manganese occurrence
- 
- Mesozoic–Cenozoic
  - Neoproterozoic–Palaeozoic
  - Palaeo–Mesoproterozoic basins
  - Palaeo–Mesoproterozoic orogens
  - Archaean

+++ railway — road - - - minor road ■ locality

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