• World-class, low-cost GEMCO manganese mine at Groote Eylandt produces more than 15% of global production.
• The mine has been in operation since 1965 and the value of production in 2018/19 was $2.26 billion.
• Mineralisation at Groote Eylandt comprises flat-lying oolitic and pisolithic 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

<table>
<thead>
<tr>
<th>Region</th>
<th>Mine</th>
<th>Annual production</th>
<th>Current resource</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpentaria Basin</td>
<td>Gemco</td>
<td>5.58 Mt manganese concentrate (2018–19)</td>
<td>156.4 Mt @ 41.92 % Mn</td>
<td>South 32 Ltd</td>
</tr>
<tr>
<td>Tomkinson Province</td>
<td>Bootu Creek</td>
<td>0.57 Mt Mn concentrate produced 2019</td>
<td>10.03 Mt @ 16.51 % Mn</td>
<td>OM Holdings Ltd</td>
</tr>
</tbody>
</table>

Wedge-shaped claystone lens along northern wall of Quarry F1, Groote Eylandt.

Simplified geology of Groote Eylandt.
Manganese in Australia’s Northern Territory

Total production
129.1 million tonnes of manganese ore and concentrate

2018/19 production
6.41 million tonnes

Remaining JORC resources
167 million tonnes of manganese ore

Value of production in 2018/19
$2.265 billion

Production ranking in Australia
1st

Manganese production and value in the NT (2009–2019)

Operating mine
Prospect
In approvals process
Under feasibility
JORC resource

Mesozoic–Cenozoic
Neoproterozoic–Palaeozoic
Palaeo–Mesoproterozoic basins
Palaeo–Mesoproterozoic orogens
Archaean