

# manganese, tungsten, molybdenum, vanadium, nickel, titanium

## important notes

- World-class, low-cost manganese mine at Groote Eylandt producing more than 15% of global production.
- Major vanadium-titanium magnetite resource discovered at Mount Peake, with a metallurgical process developed to produce vanadium pentoxide, titanium, iron ore and potentially ferrovandium.
- Molyhil tungsten-molybdenum project ready to be developed.
- New nickel-sulfide systems recently discovered in Arunta Region.
- Large ilmenite sand resource in Roper River area.
- High greenfields tungsten, vanadium and nickel potential, especially in central Australia.



Groote Eylandt Mn ore

## current activity

### operating mines

region	mine	annual production	current resource	company
Carpentaria Basin	Groote Eylandt	4.99 Mt (2016–17)	157 Mt @ 44.1% Mn	South32 Ltd
Tomkinson Province	Bootu Creek	0.66 Mt (2017)	20.5 Mt @ 22.24% Mn	OM Holdings

### advanced projects

region	deposit	resource	company
Arunta Region	Molyhil	4.71 Mt @ 0.28% WO <sub>3</sub> , 0.13% MoS <sub>2</sub> , 18.1% Fe <sub>2</sub> O	Thor Mining PLC
	Mount Peake	160.4 Mt @ 0.28% V <sub>2</sub> O <sub>5</sub> , 5.3% TiO <sub>2</sub> , 23% FeO <sub>2</sub> ,	TNG Ltd
Ngalia Basin	Biglyi	7.5 Mt @ 0.12% V <sub>2</sub> O <sub>5</sub> , 0.13% U <sub>3</sub> O <sub>8</sub>	Energy Metals Ltd

### undeveloped deposits

region	deposit	resource	company
Arunta Region	Prospect D	1.57 Mt @ 0.25% Ni, 0.62% Cu (sulfide) *	Kidman Resources Ltd
		1.63 Mt @ 0.15% Ni, 0.52% Cu (oxide) *	
Carpentaria Basin	South Rosie Creek	5 Mt @ 25% Mn*	MMG Ltd
Davenport Province	Hatches Creek	225 006 t @ 0.58% WO <sub>3</sub> (stockpiles)	GWR Group Ltd

- denotes non-JORC compliant resource

### recent exploration highlights

region	deposit	drill intersection	company
Arunta Region	Baldrick	9 m @ 0.48% Ni, 0.37% Cu	Mithril Resources Ltd
	Jervois vanadium	49 m @ 0.96% V <sub>2</sub> O <sub>5</sub> , 8.55% TiO <sub>2</sub> , 34.5% Fe	Arafura Resources Ltd
	Prospect D	6 m @ 0.6% Ni, 1.4% Cu	Kidman Resources Ltd
Davenport Province	Hatches Creek	7 m @ 1.16% WO <sub>3</sub> , 0.81 g/t Au	GWR Group Ltd
Pine Creek Orogen	Nipper	21 m @ 0.32% WO <sub>3</sub>	Thundelarra Ltd

Other companies with exploration projects include: Conarco Minerals Pty Ltd, Independence Group NL, Mineral Resources Ltd, Pacifico Minerals Ltd, Scriven Exploration Pty Ltd, Universal Splendour Investments Pty Ltd

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