



# Atlas of Australian Resources

Third Series

Volume 5

# GEOLOGY and MINERALS



**AUSLIG**

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# Preface

Australia is a very old continent, parts of it dating back around 3500 million years. Yet, despite its vast age and the general stability of its crustal rocks over a long period, volcanoes were still active as recently as 5000 years ago.

Life began very early in Australia. Fossil evidence of some of the world's first known life forms has been found in north-western Australia. And the oldest oil yet discovered anywhere is in the Northern Territory.

Australia's mineral wealth is enormous. Iron ore, uranium, rutile and zircon resources, for example, are amongst the world's largest. Australia now produces more

bauxite, lead and industrial diamonds than any other country and exports the most black coal, alumina and precious opals.

This volume, through numerous maps and the supporting commentary, traces Australia's long geological history from its origins in the Archaean up to the present. It then describes the associated mineralisation—from the earliest metal-forming eras, through the great periods of sedimentation which gave rise to the nation's extensive fossil fuel resources and on to the most recent mineralisation.

The final section deals with the development of Australia's widespread mineral resources, particu-

larly over the past two decades.

Many people have contributed to this volume, including various specialists in the Bureau of Mineral Resources, Geology and Geophysics, and staff geographers and cartographers in the Australian Surveying and Land Information Group. The commentary has been adapted from material specially prepared by David Palfreyman (*Geology*) and Colleen Mock (*Minerals*) of the Bureau of Mineral Resources.

Unless otherwise acknowledged, all tables and graphs were derived from data kindly supplied by the Bureau of Mineral Resources.



Editor

## Volumes in this atlas

### Published

1. Soils and Land Use
2. Population
3. Agriculture
4. Climate
5. Geology and Minerals

### In preparation

- Water
- Vegetation

## Abbreviations used in this volume

length	cm	centimetre
	m	metre
	km	kilometre
mass	kg	kilogram
	t	tonne
	Mt	million tonnes
volume	m <sup>3</sup>	cubic metre
	L	litre
	ML	million litres
quantity	M	million
	10 <sup>9</sup>	billion
time	m.y.	million years
other	f.o.b.	free on board
	n.a.	not available

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- Geology
- Minerals other than fuels