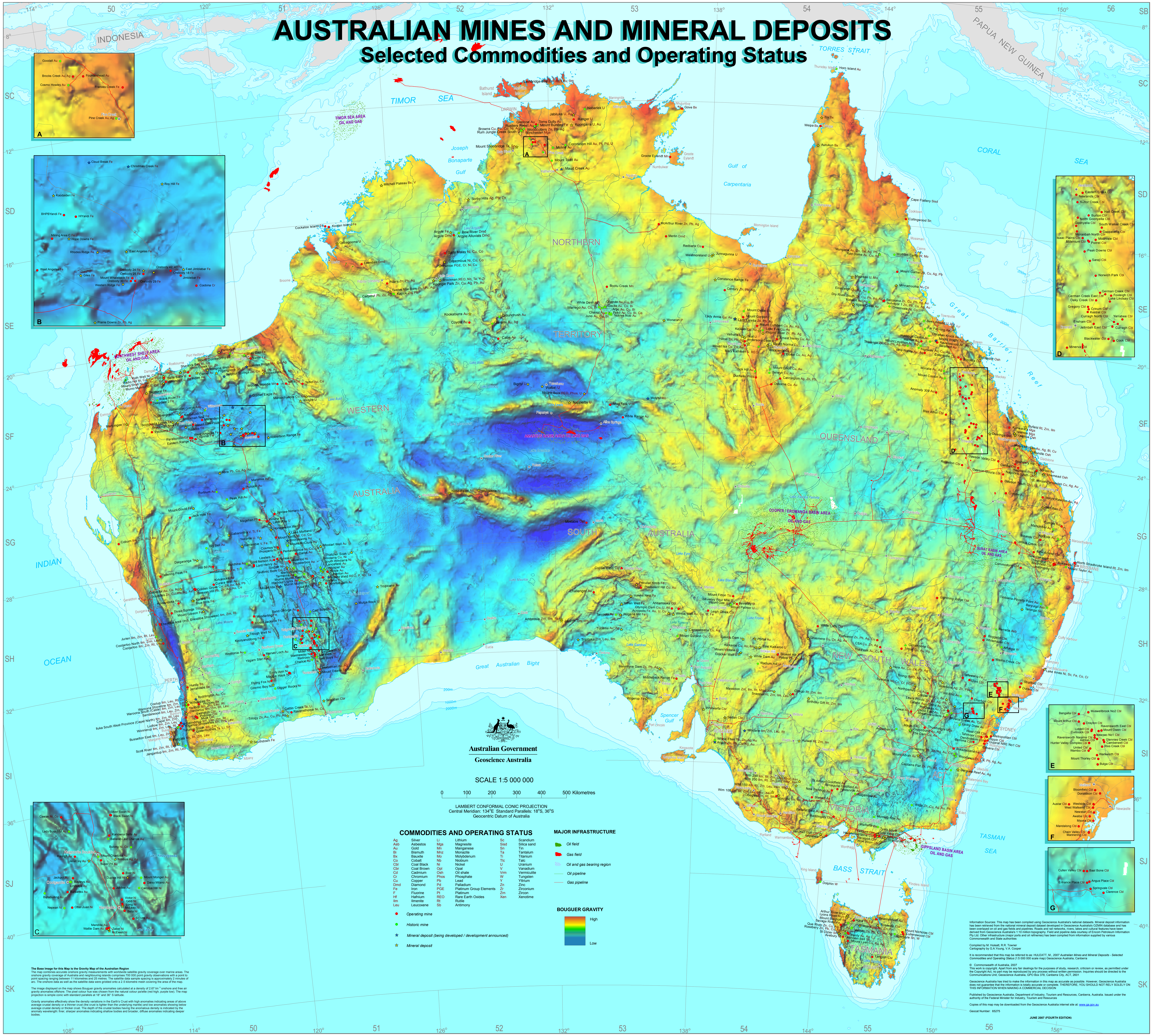
AUSTRALIAN MINES AND MINERAL DEPOSITS

Selected Commodities and Operating Status



Australian Government
Geoscience Australia

SCALE 1:5 000 000

0 100 200 300 400 500 Kilometres

LAMBERT CONFORMAL CONIC PROJECTION
Central Meridian: 134°E Standard Parallels: 18°S, 36°S
Geocentric Datum of Australia

COMMODITIES AND OPERATING STATUS

Ag	Silver	Li	Lithium	Sc	Scandium
Asb	Asbestos	Mgs	Magnesite	Sisd	Silica sand
Au	Gold	Mn	Manganese	Sn	Tin
Bi	Bismuth	Mnz	Monazite	Ta	Tantalum
Bx	Bauxite	Mo	Molybdenum	Ti	Titanium
Co	Cobalt	Nb	Niobium	Tlc	Talc
Cbl	Coal Black	Ni	Nickel	U	Uranium
Cbr	Coal Brown	Opl	Opal	V	Vanadium
Cd	Cadmium	Osh	Oil shale	Vrm	Vermiculite
Cr	Chromium	Phos	Phosphate	W	Tungsten
Cu	Copper	Pb	Lead	Y	Yttrium
Dmd	Diamond	Pd	Palladium	Zn	Zinc
Fe	Iron	PGE	Platinum Group Elements	Zr	Zirconium
F	Fluorine	Pt	Platinum	Zrn	Zircon
Hf	Hafnium	REO	Rare Earth Oxides	Xen	Xenotime
Ilm	Ilmenite	Rt	Rutile		
Leu	Leucoxene	Sb	Antimony		

- Operating mine
- Historic mine
- Mineral deposit (being developed / development announced)
- Mineral deposit

MAJOR INFRASTRUCTURE

- Oil field
- Gas field
- Oil and gas bearing region
- Oil pipeline
- Gas pipeline

BOUGUER GRAVITY

High

Low

The Base Image for this Map is the Gravity Map of the Australian Region
The map combines accurate onshore gravity measurements with worldwide satellite gravity coverage over marine areas. The onshore gravity coverage of Australia and neighbouring islands comprises 700 000 point gravity observations with a point to point spacing ranging between 11 kilometres and 25 metres. The satellite data sample spacing is approximately 2 minutes of arc. The onshore data as well as the satellite data were gridded onto a 2.5 kilometre mesh covering the area of the map.

The image displayed on the map shows Bouguer gravity anomalies calculated at a density of 2.67 tm^{-3} onshore and free air gravity anomalies offshore. The pixel colour hue was chosen from the natural colour palette (red high, purple low). The map projection is simple conic with standard parallels at 18° and 36° S latitude.

Gravity anomalies effectively show the density variations in the Earth's Crust with high anomalies indicating areas of above average crustal density or a thinner crust (the crust is lighter than the underlying mantle) and low anomalies showing below average crustal density or thicker crust. The depth of the crustal bodies having the anomalous density is indicated by the anomaly wavelength: finer, sharper anomalies indicating shallow bodies and broader, diffuse anomalies indicating deeper bodies.

Information Sources: This map has been compiled using Geoscience Australia's national datasets. Mineral deposit information has been retrieved from the national mineral deposit dataset developed in Geoscience Australia's OZMIN database and has been overlayed on oil and gas fields and pipelines. Roads and rail networks, rivers, lakes and cultural features have been derived from Geoscience Australia's 1:10 million topography. Field and pipeline data courtesy of Encom Petroleum Information Pty Ltd. Other infrastructure (major ports and oil refineries) has been compiled from information supplied by various Commonwealth and State authorities

Compiled by M. Huleatt, R.R. Towner
Cartography by G.A.Young, V.A. Cooper

It is recommended that this map be referred to as: HULEATT, M., *2007 Australian Mines and Mineral Deposits - Selected Commodities and Operating Status* (1:5 000 000 scale map) Geoscience Australia, Canberra

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Geoscience Australia has tried to make the information in this map as accurate as possible. However, Geoscience Australia does not guarantee that the information is totally accurate or complete. THEREFORE, YOU SHOULD NOT RELY SOLELY ON THIS INFORMATION WHEN MAKING A COMMERCIAL DECISION

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