

DESCRIPTION OF ZONES OF MINERAL POTENTIAL						
Map Code	Principal Commodity	Economic Importance	Probability of Further Deposits	Accuracy of Zone Boundary	Size of Deposits	Genetic Type
AuA4	gold, copper	A	possible	B	small - medium	volcanogenic
AuA5	gold	A	likely	A	small	volcanogenic
AuA6	gold	A	likely	A	small	volcanogenic
AuB21	gold	B	likely	A	small	structure-controlled vein
AuB22	gold	B	likely	A	small	structure-controlled vein
AuB23	gold	B	likely	A	small	structure-controlled vein
AuB24	gold	B	likely	A	small	structure-controlled vein
AuB25	gold	B	likely	A	small	structure-controlled vein
AuB26	gold	B	likely	A	small - medium	structure-controlled vein
AuB27	gold	B	likely	A	small	structure-controlled vein
AuB28	gold	B	likely	A	small	structure-controlled vein
AuB29	gold	B	likely	A	small	structure-controlled vein
AuB30	gold	B	likely	A	small	structure-controlled vein
AuB31	gold	B	likely	A	small	structure-controlled vein
AuB32	gold, lead, zinc, mercury	B	likely	A	very small	structure-controlled vein
AuB33	gold	B	likely	A	small	structure-controlled vein
CbC1	coal	-	likely	A	small	sedimentary
CbC2	coal	-	likely	A	medium	sedimentary
CbC3	coal	-	possible	B	small - medium	sedimentary
IM13	rutile, zircon, ilmenite	Z	likely	A	medium - large	sedimentary
IM14	limestone	-	likely	A	medium - large	sedimentary
IM15	kaolin	-	likely	A	small	sedimentary
IM16	barrenite	-	likely	B	small	sedimentary
MEA16	copper	A	likely	A	small - medium	porphyry
MEA17	copper	A	likely	A	small - medium	porphyry
MEC1	mercury, gold	C	likely	A	small	volcanogenic
MED8	copper, gold	D	likely	A	small	structure-controlled vein
MED9	copper	D	likely	A	small	structure-controlled vein
MED10	copper, gold	D	possible	B	small	structure-controlled vein

MAP 3

Assessment of Mineral Resource Potential in the Chinchilla-Gympie Sector of the South-east Queensland Biogeographic Region

SCALE 1:250 000

BLUE NUMBERED LINES ARE 10 000 METRE INTERVALS OF THE AUSTRALIAN MAP GRID, ZONE 58

TRANSVERSE MERCATOR PROJECTION

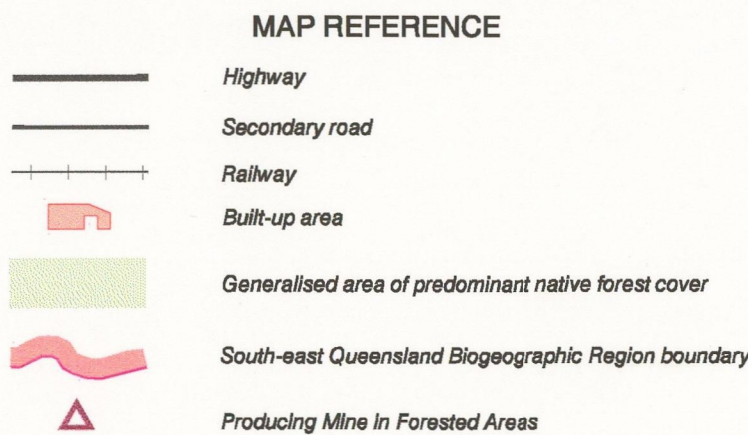
This series of five maps accompanies a report on the Mining Industry and Mineral Potential of Forested Areas of the South-east Queensland Biogeographic Region. Information compiled by D.A. Bertram (Consultant) with assistance from C.G. Murray, L.C. Cranfield, W. F. Willmott and R.K.J. Blight (DME), 1996.

Ceratology and GIS coverages prepared by the Graphical Services Unit, DME.

Forested areas have been interpreted from 1:250 000 maps of Landsat TM imagery supplied by the Forest Assessment Section of the Department of Natural Resources, Queensland.

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MINERAL OCCURRENCES

Location of mineral occurrence

The number shown to the right of each location on the map is that in Appendix 2 of the accompanying report which lists details of occurrences.

Metals			
Sh	Antimony	Cu	Copper
As	Arsenic	Ni	Nickel
Au	Gold	Pb	Lead
Ba	Barite	Fe	Iron
Bt	Bauxite	Ag	Silver
Bi	Bismuth	Sn	Tin
Cr	Chromite	Mn	Manganese
Co	Cobalt	Hg	Mercury
		Zn	Zinc
		Mo	Molybdenum

Industrial Minerals and Rocks			
A	Asbestos	Gs	Germstones
Im	Ilmenite	Ma	Marble
Ca	Calcium	Pt	Pyrite
Ca	Calcium	R	Rutile
Ca	Calcium	Si	Silica
Ca	Calcium	Si	Silica
Ca	Calcium	Si	Silica
Ca	Calcium	Si	Silica
Ca	Calcium	Si	Silica
Ca	Calcium	Si	Silica

Energy Minerals			
Cb	Coal	Os	Oil Shale

The classification below is based on that established by Parkinson (1988) for the Atlas of Australian Resources.

It has been amended to allow for the well-developed infrastructure of the Region.

SIZE CLASSIFICATION OF DEPOSITS*			
Commodity	Small	Medium	Large
Bentonite	<100 000	100 000 - 1 000 000	>1 000 000
Coal	<10 000 000	10 000 000 - 100 000 000	>100 000 000
Copper	<50 000	50 000 - 1 000 000	>1 000 000
Dolomite	<500 000	500 000 - 1 000 000	>1 000 000
Gold (free surface)	<50 000 (1 t)	50 000 - 500 000	>500 000
Graptolite	<10 000	10 000 - 500 000	>500 000
Ilmenite	<50 000 000	50 000 000 - 10 000 000 000	>10 000 000 000
Kaolin	<500 000	500 000 - 1 000 000	>1 000 000
Lead	<100 000	100 000 - 1 000 000	>1 000 000
Limestone	<2 000 000	2 000 000 - 10 000 000	>10 000 000
Mercury	<500	500 - 50 000	>50 000
Molybdenum	<50 000	50 000 - 500 000	>500 000
Oil shale (cu. m of oil)	<10 000 000	10 000 000 - 100 000 000	>100 000 000
Rutile	<500 000	500 000 - 1 000 000	>1 000 000
Silica sand	<1 000 000	1 000 000 - 1 500 000	>1 500 000
Zinc	<500 000	500 000 - 1 000 000	>1 000 000
Zircon	<500 000	500 000 - 1 000 000	>1 000 000

*Amended from Parkinson, G. (Ed.), 1988, Atlas of Australian Resources, vol. 5 (AUSLIG: Canberra)

ZONES OF MINERAL POTENTIAL

Notes: Areas of likely potential for further deposits are bounded by full lines; areas of possible potential for further deposits are bounded by long-dashed lines; alienated areas are bounded by short-dashed lines.

Gold	Industrial Minerals
Metalliferous	Coal
Heavy Minerals	Oil Shale

Codes for Zones of Mineral Potential

Each zone of mineral potential is identified by a code, which describes the principal commodity, the economic importance of the deposits in the zone, and its location. The code is a series of letters and numbers, arranged in a standard order, to provide the following information:

- Commodity: The first two letters indicate the principal commodity, using Cb for black coal deposits, Au for gold, HM for heavy minerals (ilmenite, rutile and zircon), IM for industrial minerals (dolomite, graphite, kaolin clay, limestone, magnetite, perlite, silica and foundry sand), ME for metals (copper, lead, mercury and zinc), and OS for oil shale.
- Economic importance: The economic importance of the various types of gold and metalliferous deposits is shown by the letters A, B, C, D, Z, which are based on the typical size of the deposits in the class. Thus an A class zone is expected to contain large deposits of mineable grade, suitable for company mines, average B class deposits are smaller than A size, whereas D class zones contain small deposits, which may be suitable for small mines where they contain high-grade ore. Deposits that have been alienated are shown by the letter L.
- Location: This is a number which gives a guide to the location of the zone, starting in the north of the area for gold and metalliferous deposits. As an example, zone AuA1 is a zone with potential to contain gold deposits, of type A genesis (in this case of volcanogenic origin), which is considered to have the potential to provide large ore bodies, and is the northernmost of the AuA type zones.

The probability of further deposits existing in a zone of mineral potential is judged to fall within one of four classes:

- Likely: Indicating there is a strong probability that the zone contains more deposits (zone boundary shown with a solid line, and abbreviated to the letter L in the coded name of the zone in the accompanying report); or
- Possible: Indicating that there is some chance that the zone contains further deposits (zone boundary shown with a long-dashed line and abbreviated to the letter P in the report); or
- Alienated: Indicating areas of known resources, but where closer settlement, mature conservation and other interests effectively preclude development for the foreseeable future (zone boundary shown with a short-dashed line).

Lower or Unknown: With only a slight or unknown chance of further deposits.

Only the areas of likely, possible, or alienated potential are shown as mineral potential zones on the maps, and the area of little or unknown potential is left as a white or background area. The assessment of probability or potential is not in any way related to the size of a deposit which may exist within a zone, but is an indication of the chance that an unknown deposit, of a specified origin, may be found. Likewise the position of the boundary of the zone is not related to the assessment of the level of potential.

Accuracy of Zone Boundaries

The accuracy of the location of each zone boundary is described in the text of the accompanying report. Two levels of information were used. For level A, the position of the boundary is based on adequate knowledge, so that the boundary position is considered 'definite'. At this level the zone boundary was based on information from detailed geological mapping, or modern regional geological mapping, and confirmed by the airphoto pattern.

For level B, the information and concepts used to draw the zone boundary are of lesser certainty, and the position of the boundary is classified as 'probable'. In these cases the boundary is often based on information from 'first-pass' regional geological mapping, carried out in the early 1970s, which is less accurate than the recent mapping.