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**A GEOSCIENCE INFORMATION NEWSLETTER
SERVING THE MINERALS AND ENERGY INTERESTS OF QUEENSLAND**

THANK YOU to all who replied to our first newsletter.

Most of you have elected to receive GEOSERVE by email, while others are receiving this as hard copy.

Response has been good, however we are still missing some of your colleagues (the application form is repeated in this issue).

A number of new products have appeared since the last issue:

Geology and Mineralisation of the Yarraman Subprovince

Queensland Geology 10 provides a 1:250 000 scale geological map of the Yarraman Subprovince, South-East Queensland, with a comprehensive discussion of previous investigations, mining history, exploration, regional setting, morphostratigraphic units, stratigraphy, igneous rocks, geochemistry, age dating, tectonic evolution, current mines, mineral occurrences and resources.

The oldest, most extensive sequences are the late Devonian to early Carboniferous rocks of the Yarrol and

Wandilla Provinces. Oblique plate convergence during the early Permian produced transtensional backarc basins.

Earliest sedimentation in the Esk Trough ceased in the late Permian, when a major compressional event inverted the basin. Major Late Permian thrusting resulted in foreland loading and pronounced deepening of the Bowen Basin to the north. Analogously, isostatic loading in south-east Queensland produced foreland sagging over the Permian phase of the Esk Trough.

I-type, calc-alkali-style magmatism was sporadic within the Yarraman Subprovince. Geochemically similar granodiorite, tonalite, and diorite are the dominant intrusions. All known metalliferous deposits are very small in size.

In the late Triassic, the Tarong Basin developed along a northerly-trending fault, while downwarping initiated the Surat and Moreton Basins to the south.

The Tertiary history of the area is dominated by deposition of continental alkali basalts and rhyolites, and includes widespread lateritisation.

Queensland Geology 10, with map, sells for A\$71.50 (incl. A\$6.50GST).

Geological Site Observations, Isotopic Dates & Whole Rock Analyses (REGMAP Database) on CD!

The **REGMAP DATABASE ON CD** contains geological site observation data (92,000 sites) captured during geological mapping activities of the Geological Survey, mostly since 1986. These data include rock types, rock characteristics (e.g. colour, grain size, texture), structural measurements and formation name.

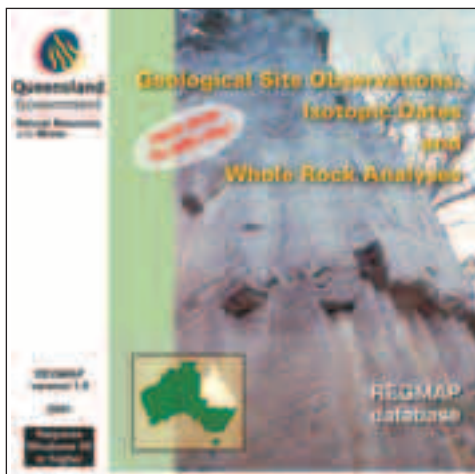
The isotopic dates (SHRIMP U-Pb, K-Ar) are all the age determinations obtained by the department and many of those available in the public domain (>800 dates).

The whole rock geochemistry is a compilation of all the analyses (>4,000) completed by the Geological Survey during its regional mapping activities. These analyses have been used to classify rock types and improve the understanding of Queensland's geology.

Most tables include latitude, longitude, and AMG co-ordinates for ease of display in Geographic Information System (GIS) software. In addition many tables have been populated with corresponding Rock Units and Structural Units.

GIS versions of the database have been created and are located in the appropriately named directories. The database will be regenerated annually to capture any new or updated information. For further technical information on the database, contact: iwithnall@dme.qld.gov.au.

The REGMAP CD sells for A\$220.00 (incl. \$20.00GST) per CD.



New poster-size Queensland Mineral Resource maps

Four new poster-size maps (75x60cm) depicting major gold, copper, silver-lead-zinc, and nickel-cobalt resources have been produced for Queensland.

Each map features the location of the resource represented as a pie-diagram, illustrating the proportional value of the different associated metals within the resource.

This highlights the mixed metal nature of most of Queensland's major mineral resources, while ensuring that metals in small physical volume but high value are accurately represented.

Resource locations are depicted on a geological structural elements background to illustrate the province control on metal assemblages for some of the major mineral resources.

Basic infrastructure such as roads, rail, ports and towns are also included.

To augment the map face information, a



A portion of the gold map around Mount Isa.

tabulation of the total resource contained metal (derived from published resource information) is included on the sheet.

These tables provide the raw numbers from which the pie-diagrams have been generated.

Data for the maps are derived directly from the Departments corporate Oracle database system, as part of the QUEENSLAND MINERALS (QMIN) Project initiative.

This direct extraction process, facilitated by the Department's GRAPHICAL SERVICES UNIT, ensures a quicker and simpler updating process.

Automated cartographic processes are used where possible.

Maps will be updated annually following the company annual

reporting cycle, to allow new resource data to be captured into the database and to be immediately released.

The REGMAP CD sells for A\$220.00 (incl.\$20.00GST) per CD.)

DON'T FORGET!!!

The South-East Queensland Geoscience Information Package is now available

The South-East Queensland Geoscience Information Package, on CD, contains seamless geological data compiled and interpreted from Geological Survey mapping, University theses and exploration company mapping at a nominal scale of 1:100 000.

The area studied is bounded by the New South Wales border to the south and Rainbow Beach to the north, with Toowoomba on the western margin.

Data are supplied in either ArcView and ArcExplorer or MapInfo GIS formats. Data sets on this product include geological boundaries, structural data, current and abandoned mine locations, geological site information, isotopic rock age dates, stratigraphic and coal drilling locations, geochemistry, tenure (historical and current) as at October 2000, coal resource areas and quarry data.

The package also includes geophysical images, with interpretations of these images, and a digital terrain model based on the AUSLIG 9 second DEM.

To order any of the products shown in this newsletter, please contact the Geoscience Sales unit on (07) 3237 1434 or email sales/DME@dme.qld.gov.au

NOTE: PRICES FOR THESE PRODUCTS INCLUDE HANDLING CHARGES. POSTAGE WILL BE CHARGED ONLY FOR COURIER SERVICE IN AUSTRALIA, AND SOME POSTAGE MAY BE CHARGED FOR OVERSEAS DELIVERY.

GST, a Federal Government Tax, only applies in Australia.

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