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DECEMBER 11, 2006

## **TERTIARY MAKES BREAKTHROUGH IN USE OF SEA WATER FOR MINERAL PROCESSING OF GHURAYYAH ORE**

- **Offers Alternative To Saudi Arabia's Scarce Groundwater Resources**
  - **Metallurgical Testwork Has Largely Defined Bulk Mineral Concentration Route**
  - **Leading Industry Participants Show "Strong Interest" In Ghurayyah Production**
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"A significant breakthrough" has been achieved by AIM-listed Tertiary Minerals in the current mineral processing testwork for its giant Ghurayyah rare-metal project in Saudi Arabia with the development of a process that will allow the use of local seawater as the mineral processing medium.

This offers a sustainable alternative to using scarce local groundwater resources in Saudi Arabia, reveals chairman, Mr Patrick Cheetham, in the audited financial statements for the year ended September 30, 2006. It also gives the company a further site option for some or all of the project's processing plant to be located close to the coast, he adds.

This development is part of the pre-feasibility studies on the Ghurayyah project which extend across a range of disciplines. These studies, now well underway, are funded by Tertiary's Saudi partners who are earning a 50p.c. interest in the project. Metallurgical testwork is sufficiently advanced to have largely defined the bulk mineral concentration scheme for Ghurayyah ore. Improved metal recoveries and reduced reagent usage have been achieved, indicating potentially lower operating costs compared with schemes suggested by earlier testwork in 2002, the chairman states.

A 55-tonne bulk sample, which has been generated from a drilling programme, will form the basis for pilot-scale plant testing of the proposed method of producing a bulk concentrate. Further metallurgical testwork to refine the process to separate the contained tantalum, niobium, zircon and yttrium should be completed early in 2007.

The main potential revenue generators at Ghurayyah are tantalum and niobium and, since customers for one metal do not require nor wish to pay for large volumes of the other, Tertiary believes it will be necessary to separate the metals into two revenue streams in order to maximise revenues. In so doing, there is potential to extract the yttrium content of the ore as a separate saleable product, the company states.

Progress with the company's market development plan remains on schedule with strong interest being shown by leading industrial players in future production from Ghurayyah.

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The market outlook for both tantalum and niobium remains strong, says Mr Cheetham, and “excellent local markets” have been identified for the zircon contained in the deposit, provided current testwork shows that it can be produced to the necessary specification.

The pre-feasibility study is scheduled for completion by the end of 2007. In addition to the above, it will include final process definition, flow sheet development, engineering and operating/capital cost studies.

### **US\$20 BILLION IN CONTAINED METAL AT CURRENT PRICES**

The Ghurayyah deposit contains minerals valued at almost US\$20bn at today’s prices. At the planned extraction rate of 1.5m tpa of ore, this would support a mining operation for some 200 years and offer ample scope to increase the production rate as demand requires.

Meanwhile, Mr Cheetham comments that the company 23.45p.c. owned associate, Sunrise Diamonds plc, continues to make excellent progress with its diamond exploration projects in Finland, announcing a number of new diamondiferous kimberlite discoveries. It has also entered into a significant joint venture with Canada’s Nordic Diamonds Ltd that will give it access to previous kimberlite discoveries made in the 1990s by Ashton Mining prior to its takeover by Rio Tinto in 2000 and the switch in exploration focus to Canada.

Tertiary reports a loss of £250,934 for the year and had cash resources of £884,110 at the end of this period.

### **Further information:**

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