

QUARTERLY REPORT TO 31 DECEMBER 2002

- **Austpac received a licence fee payment of \$US200,000 (\$A357,000) from Kumba Resources Limited, which represents the second tranche of the fee payable under the commercial licence signed in July 1998 with the South African steel producer, Iscor Limited.**
- **Austpac signed a Memorandum of Understanding with Ardeshir B. Cursetjee & Sons Limited (ABC) to study the production of synthetic rutile from its heavy mineral deposit south of Chatrapur in the state of Orissa, India (the South Chatrapur deposit).**
- **Gold mining major Newcrest commenced an extensive drilling program on Austpac's E.L. 4521 near Horsham in the Murray Basin region of Victoria seeking substantial new copper and gold deposits. Using a new interpretation of the regional geology of northwestern Victoria, Newcrest is seeking repetitions of the geology which hosts the massive North Parkes copper-gold porphyry-style orebody being mined in NSW.**
- **During the quarter Austpac identified several new opportunities applicable to our ERMS SR technology, and negotiations commenced with other parties with a view to developing a high grade synthetic rutile plant with an annual capacity of around 30,000 tpa.**

LICENCE FEE RECEIVED FOR USE OF AUSTPAC'S TECHNOLOGY

Austpac received a licence fee payment of \$US200,000 from Kumba Resources Limited in December 2002. This amount represents the second tranche of the fee payable under the commercial licence signed in July 1998 with the South African steel producer, Iscor Limited.

The licence followed an extensive testwork program conducted at Austpac's pilot plant at Newcastle in 1997-98. Austpac and Iscor jointly developed the now patented Beneficiated Titania Slag (BTS) Process, which uses some aspects of Austpac's technologies to upgrade titania slag.

Further fees are payable if a slag beneficiation plant is constructed within the Iscor Heavy Minerals (IHM) Project, which comprises a mine and titania slag smelter near Richards Bay in South Africa. This project, scheduled to commence slag production in 2003, is now managed and 40% owned by Ticor Limited, and has been renamed the Ticor South Africa Project.

NEW AGREEMENT FOR SYNTHETIC RUTILE IN INDIA

Following negotiations initiated earlier in 2002, in December Austpac signed a Memorandum of Understanding with Ardeshir B. Cursetjee & Sons Limited (ABC) to study the production of synthetic rutile from its heavy mineral deposit south of Chatrapur in the state of Orissa, India (the South Chatrapur deposit). ABC is involved in shipping, stevedoring and dredging operations in India and the Middle East, and has undertaken mineral sand dredging on contract to Indian Rare Earths' Orissa operations. ABC was granted an exploration licence over the deposit following a competitive tender process held by the Orissa State Government. The State, through the Industrial Development Corporation of Orissa Limited, will also hold an interest in the project when it is developed.

The first phase will comprise a prefeasibility study, which will commence as soon as the South Chatrapur deposit is sufficiently delineated. ABC is currently assessing data from the resource to confirm the size and grade of the deposit, and has undertaken heavy mineral separation testwork. ABC estimates the deposit contains over six million tonnes of ilmenite. The cost of the study will be borne by ABC as a capital contribution, with Austpac contributing technical and financial information for the project. Subject to the outcome of a final feasibility report, the parties plan to enter into a Joint Venture Agreement to establish an ERMS SR plant to produce up to 200,000 tonnes per year of high grade synthetic rutile.

GOLD-COPPER EXPLORATION - E.L. 4521, HORSHAM, VICTORIA

Newcrest Operations Limited commenced an extensive drilling program within the western half of Austpac's E.L. 4521 near Horsham in the Murray Basin region of Victoria, targeting substantial new copper and gold deposits within the basement volcanic rocks. Using a new interpretation of the regional geology of northwestern Victoria, Newcrest is seeking repetitions of the geology which hosts the massive North Parkes copper-gold porphyry-style orebody being mined in NSW. Newcrest is also attracted by the region's potential for major gold and base metal deposits hosted by the volcanic rocks of the area, which bear similarities to the mineral-rich Mt Read volcanics on Tasmania's west coast.

During December Newcrest completed a first pass, 76 hole air core drilling program along roads crossing the prospective volcanic belts as indicated by magnetic features. Assays are awaited, but Newcrest has informed Austpac that a number of holes intersected interesting sulphide mineralisation and hydrothermal alteration. Newcrest has also advised Austpac that follow-up drilling is planned for 2003.

WIM 150 FINE GRAINED MINERALS PROGRAM - E.L. 4521, HORSHAM, VICTORIA

Testwork continued at the Newcastle pilot plant on the production of synthetic rutile from WIM 150 ilmenite concentrate. Initial testwork was also undertaken on the reduction of radioactive elements within a WIM 150 zircon concentrate.

LOW TEMPERATURE ROASTING TESTWORK FOR BEMAX'S MURRAY BASIN PROJECT

Further definitive low temperature roasting testwork was completed during the quarter at our Newcastle pilot plant on behalf of BeMaX Resources N.L. The work was undertaken on ilmenite ore from the Ginkgo deposit in western NSW, which will be the first deposit mined as part of BeMaX's Pooncarrie Mineral Sands Project. This project envisages that heavy mineral concentrate produced at Ginkgo will be transported to a Mineral Separation Plant (MSP) at Broken Hill. The MSP will include a low temperature ilmenite roaster and associated magnetic separators to produce a number of low-chrome ilmenite concentrates suitable for both chloride and sulfate TiO₂ pigment production.

The pilot plant work was carried out as part of BeMaX's Project Optimisation to confirm specific aspects of the final design of the roaster section and provide data for the lump sum turnkey tender documents for the roaster, which were released by BeMaX in December.

Tenders for the key project elements (primarily the dredge, processing plants and the roaster) close at the end of January 2003. Austpac's test facilities and staff know-how were important factors for BeMaX to achieve full bankability with the low temperature roasting proposal. Austpac looks forward to continuing to assist BeMaX to develop their Murray Basin project.

NOTE: This report is based on and accurately reflects information compiled by M.J. Turbott who is a member of the Australasian Institute of Mining and Metallurgy and a member of the Australian Institute of Geoscientists and is a competent person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves.