

31 October 2005

## QUARTERLY REPORT TO 30 SEPTEMBER 2005

### HIGHLIGHTS

**During the past three quarters, steady progress has been made with the construction of the integrated ERMS SR Demonstration Plant at the Company's Newcastle facilities. Austpac has focussed on the roasting and magnetic separation section, which will have an operating capacity equivalent to 3,000 tonnes per annum of ilmenite. All hardware for this section has now been installed in the process tower, with the materials handling, electrical and air systems to follow.**

**Negotiations are continuing for total funding for the Demonstration Plant and the associated feasibility study leading to the construction of the first commercial ERMS SR plant. They are well advanced and we are confident they will be concluded in the coming quarter.**

**Continued support from Australian institutions and professional investors allowed the company to make a placement in September 2005 to raise \$527,000 to maintain progress on the Demonstration Plant at Newcastle**

#### ERMS SR Demonstration Plant

The conversion of our test facilities at Kooragang Island, Newcastle, into an integrated ERMS SR (synthetic rutile) Demonstration Plant continued during the quarter. This plant will demonstrate the ERMS SR technology sufficiently to satisfy engineering design requirements and to prove the risks associated with the technology and its scale-up to a commercial plant are low.

The Demonstration Plant has been divided into three major process areas. These are:

- the roasting and magnetic separation section (the "front end"),
- the continuous leaching, filtering, washing and calcining section, and
- the EARS acid regeneration and iron metallisation section (the "back end").

The front end of the plant has a design capacity of roasting 3,000 tonnes of ilmenite per year (equating to 1,500 tpa of synthetic rutile). It will be possible to run the front end and the back end of the plant sequentially. This will allow the back end of the plant to be expanded to achieve the rate of 3,000 tonnes of synthetic rutile per year which, subject to available funds, is the favoured option.

The front end roasting section was fabricated by Austpac personnel at Kooragang Island and the installation of the hardware is now essentially complete. This includes the ilmenite pre-heater, oxidation and reduction roasters (all fluid beds), the anaerobic cooler, the cyclone and afterburner for reduction gases, the off gas handling systems and the hot solids transfer lines. A six metre high structure, incorporating four bins (for ilmenite, coarse and fine coals, and roasted ilmenite) and a materials hoist, has been placed on top of the process tower. The front end will be completed with the installation of the feed conveyors, weigh hoppers, mass flow feeders, the electrical and air systems and the modifications to the drum magnets.

Commencement of construction of the back end of the plant is dependent upon the Company's source of funds. Once these are secured, it will take five months to complete the back end. Thus it is anticipated the Demonstration Plant could be operational in the first half of 2006, culminating in a feasibility study and then, subject to project financing, the commencement of construction of a commercial plant later next year.

### **Options for the First Commercial ERMS SR Plant**

Since 2003, the Company's vision has been to develop a high grade synthetic rutile facility in eastern Australia. Recognising the need for both ilmenite supply and synthetic rutile off take agreements, late in 2003, Austpac entered into a Memorandum of Understanding (MOU) to purchase ilmenite from Consolidated Rutile Limited, and a second MOU with Iluka Resources Limited to sell ERMS SR from a conceptual plant in Queensland. The MOUs were subject to Austpac obtaining sufficient capital to complete a 'Bankable Feasibility Study'. As Austpac has been unable to raise sufficient funds in the Australian market to undertake the Study for an ERMS SR plant in Queensland, the Company has decided not to proceed with that project.

Austpac is now evaluating locations for an ERMS SR plant in or near the Murray Basin, where the mining of two significant heavy mineral deposits will commence in 2006. The ilmenite from these deposits is high in chrome and therefore has a low value; consequently the owners have announced their intention to either stockpile it or return it to the mine. Our testwork has shown that these ilmenites, and others from the Murray Basin, can be readily upgraded with the ERMS SR process. Preliminary discussions for the supply of ilmenite are underway, and Austpac is undertaking an evaluation of potential sites for an ERMS SR plant in Victoria, New South Wales or South Australia. This is being undertaken in conjunction with the construction of the Demonstration Plant so that the results can be incorporated into the ERMS SR plant's feasibility study.

### **E.L. 4521, Victoria (Murray Basin)**

Austpac's WIM 150 deposit contains approximately five million tonnes of zircon and approximately 12.5 million tonnes of ilmenite; a very large, but fine grained, resource of heavy minerals. Austpac has previously demonstrated that a +95% TiO<sub>2</sub> synthetic rutile can be produced from the fine WIM 150 ilmenite, and that the synthetic rutile product can be agglomerated.

Australian Zircon N.L., who can earn an 80% participating interest by completing a bankable feasibility study on WIM 150, is planning a bulk sampling program on the deposit to check the bulk grades against the grade of mineralisation determined by previous drilling and to assess the geotechnical characteristics of the waste and mineralisation. Material from these excavations will also be used to conduct flocculant and thickener testwork and to develop a feed preparation flow sheet capable of meeting the requirements of the recently designed and successfully tested gravity circuit. A check drilling program may also be undertaken to further investigate or confirm the reliability of the results of the existing drill pattern.

*NOTE: This report is based on and accurately reflects information compiled by M.J. Turbott who is a fellow 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.*

**Austpac Resources N.L.** is an Australian listed minerals technology company and emerging synthetic rutile producer. Austpac's processes include technology to transform ilmenite into high grade synthetic rutile, a preferred feedstock for titanium dioxide pigment production. They can also be used to beneficiate a range of heavy minerals, as well as process waste chloride streams from a number of industrial operations.