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## QUARTERLY REPORT TO 31 MARCH 2004

### HIGHLIGHTS

- **The 2.5 tonnes per hour LTR (low temperature roasting) plant constructed and commissioned in record time by New Zealand Steel at its Glenbrook Steel facility near Auckland, New Zealand, is operating at design capacity. Austpac's LTR process can now be considered a proven technology.**
- **Funding for working capital and to finalise the design and costing for the pilot plant modifications has been secured and will be announced shortly. This is the first step toward commencing the bankable feasibility study for the proposed 30,000 tonnes per annum ERMS SR plant on the East Coast of Australia.**

### **OPERATION OF 2.5 TPH LOW TEMPERATURE ROASTING (LTR) PLANT - NEW ZEALAND**

The 2.5 tonnes per hour LTR plant, built by New Zealand Steel to test Austpac's LTR process in treating tailings from the Waikato North Head iron sand mine, has now been commissioned and is operating reliably in accordance with the design expectations. NZ Steel engineers have built and commissioned this first complete LTR facility in record time and are pleased with the plant performance. Austpac engineers are assisting with optimising the performance of the plant. Final product quality is in accordance with projections based on the batch testwork undertaken last year at Austpac's Newcastle pilot plant. The stability of the low temperature roasting process has been exceptional and the accumulated operational data will be invaluable in providing a solid foundation for the full scale LTR plant. Plant emissions are much lower than statutory requirements. Austpac is pleased that the Company's low temperature roasting technology can now be considered proven.

The LTR plant will be operated for sufficient periods over the next quarter to provide bulk mineral samples for testing in the steel making process and for other applications. NZ Steel has made no commitments beyond the 2.5 tph plant until the test runs are completed.

### **INCO TESTWORK FOR GORO NICKEL PROJECT AT EARS FACILITY, NEWCASTLE**

Late last year, Austpac signed a Letter of Intent with Inco Limited (formerly International Nickel) under which Inco will evaluate Austpac's EARS hydrochloric acid regeneration process for the production of nickel oxide from nickel chloride solutions at the Goro nickel project in

**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.

New Caledonia. The first stage of an Inco-funded testwork program was successfully completed at the Kooragang Island pilot plant in December 2003.

Inco recently completed a detailed evaluation of the acid regeneration options available, and concluded that, because of the unique requirements of the Goro project and because some of the benefits of the EARS process (such as super-strength acid) were not necessary for Goro, they would not proceed with further testwork.

The EARS process was developed for regenerating acid from iron chlorides generated by Austpac's ERMS SR process. Our work with Inco has conclusively demonstrated that the EARS process is applicable to nickel chlorides, broadening its application to other industries.

### **ERMS SR PLANT - EAST COAST AUSTRALIA**

Last October, Austpac signed an agreement with Consolidated Rutile Limited (CRL) for the supply of ilmenite to a 30,000 tpa ERMS SR plant proposed by Austpac for the eastern seaboard of Australia. At the same time, Austpac also signed an agreement with Iluka Resources Limited (Iluka) whereby Iluka undertook to purchase all the synthetic rutile produced by the proposed plant. Both contracts are subject to the successful completion of a Bankable Feasibility Study (BFS) by Austpac.

The BFS will take approximately six months to complete, including modifications to the Kooragang Island pilot plant and testwork on a bulk sample of ilmenite concentrate from CRL's North Stradbroke Island heavy mineral sand operations. This will be followed by detailed engineering, design and costing of the ERMS SR plant. The BFS is estimated to cost \$5,000,000 (inclusive of Austpac's working capital) and during the past quarter institutional funds have been sought for this work. Funds have now been secured to finalise the planning for the pilot plant modifications. This activity was originally included as the first month of the BFS, but it was decided to undertake this work now separately from the study, so that the BFS can commence immediately the additional necessary funds are in place.

### **MURRAY BASIN - E.L. 4521, HORSHAM, VICTORIA**

Southern Titanium has undertaken an extensive review of drilling and other data related to the zircon content of WIM 150, most of which were acquired in the 1980's and 90's by Rio Tinto as part of their comprehensive assessment of the potential of the WIM 150 heavy mineral resource.

Discussions are progressing with respect to a new joint venture to explore for base metals on this property.

### **CORPORATE**

Institutional support both for working capital and to finalise the design and costing for the pilot plant modifications has been secured and will be announced next month.

A paper on Austpac's planned 30,000 tpa ERMS SR plant was presented to the 17<sup>th</sup> International Industrial Minerals Conference and is available on the Company's web site. This has led to additional interest in Austpac's technologies and a number of additional opportunities have been identified.

A detailed review of the Company, recently prepared by Andrew Pedler of Wilson HTM, Brisbane, is also available on our web site [www.austpacresources.com](http://www.austpacresources.com).

*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.*

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