

31 October 2000

## QUARTERLY REPORT TO 30 SEPTEMBER 2000

### HIGHLIGHTS

- Austpac, Ticor and Indian Rare Earths have reached agreement in principle for Ticor to become a 37% shareholder in AusRutile India, with Austpac and IRE holding 37% and 26% respectively. The agreement is expected to be ratified by all parties before the end of the year. The parties envisage that construction of the initial plant will commence by mid 2001, as a first step toward a larger synthetic rutile plant of at least 100,000 tpa capacity.
- The scope of the AusRutile project in India has been expanded. The initial plant is being designed to produce 10,000 tpa of synthetic rutile and it will include the application of both the ERMS and EARS technologies at this early stage.
- Austpac has successfully tendered for a 933 square kilometre exploration licence in the Victorian sector of the Murray Basin. The area contains the very large, fine-grained WIM 150 resource, three other similar, though less well delineated, heavy mineral resources, and has good potential for coarser strandline deposits. Austpac will focus on the WIM 150 deposit and believes its proprietary technologies can address the fine-grained character of the heavy mineral suite. The Victorian Government reports the core area of WIM 150 to contain a resource of over one billion tonnes containing 4% heavy mineral. Ilmenite comprises almost one third of the heavy mineral suite, together with 9% rutile, 12% leucoxene and 13% zircon. A resource of this magnitude could form the basis for the development of a major synthetic rutile/heavy mineral sand complex.

### CORPORATE

In August 2000, the Company announced that it had placed 10,000,000 fully paid ordinary shares in Austpac Resources N.L. at 15 cents each to raise \$1,500,000 for working capital. The placement was assisted by Intersuisse Limited.

In September 2000, Austpac announced that it had acquired Rothschild and Sons (Australia) Group's 10% interest in the ERMS and EARS technologies for 5,000,000 fully paid ordinary Austpac Resources N.L. shares. The technologies were formerly owned by a Technology Joint Venture, in which Austpac held a 90% interest and Rothschild's a 10% interest. The Company now owns 100% of its technologies.

## **AUSRUTILE PROJECT, INDIA**

As advised in the June 2000 Quarterly Report, Auspac and Tigor Limited (Tigor) have formed a 50/50 joint venture (the ATJV) for the global development of the ERMS and EARS processes for upgrading titaniferous feedstocks. Tigor is a major participant in the Australian mineral sand industry holding a 50% interest in the Western Australian-based Tiwest Joint Venture with Kerr-McGee Chemical Corporation of the USA. Tigor has stated that its “strategic objective is to focus its efforts on growth in the titanium feedstock industry, which has been defined as its core business”. Tigor recognised that Auspac’s joint venture with Indian Rare Earths Limited (IRE) was a significant opportunity to marry Auspac’s synthetic rutile technology with IRE’s high grade heavy mineral sand resources, and so the ATJV was formed.

Tigor will join the Indian project by taking a 37% interest in AusRutile India a joint venture company formed to manage the Indian operations. Auspac will reduce its interest to 37% and IRE will remain at 26%. Tigor’s participation in the project is subject to the formal approval of IRE and relevant Indian authorities. IRE has accepted the re-structuring of the AusRutile joint venture, and this is expected to be ratified by all parties during the last quarter of 2000.

It was initially envisaged that AusRutile would construct an ERMS synthetic rutile plant that would purchase ilmenite from and share the existing acid regeneration facilities at IRE’s OSCOM project in Orissa. Following the significant increase in oil prices during the year, the scope of the AusRutile project was re-examined as the IRE process uses oil to generate its energy, and the cost of acid regeneration was high. Auspac’s ERMS and EARS processes use coal for energy, and low cost coal can be obtained from nearby mines in Orissa. The parties now envisage the construction of a 10,000 tpa synthetic rutile plant together with an EARS acid regeneration plant. This fully integrated plant will purchase ilmenite from OSCOM.

The testwork program at Newcastle has therefore been expanded to include EARS pilot plant runs that will be completed in late 2000. This will allow detailed design to be completed during the first half of next year, with construction commencing by mid year and first production in 2002.

## **MURRAY BASIN**

### **Chrome Removal from Murray Basin Ilmenite**

Over the past two years Auspac has undertaken testwork for many groups actively exploring in the Murray Basin, demonstrating the efficacy of the ERMS process for chrome removal. One group, at a more advanced development stage than the other explorers, plans a major testwork program early next year when significant tonnages of ilmenite concentrate become available. This program will be undertaken as part of a pre-feasibility study into the use of the ERMS process to produce a premium ilmenite as feedstock for TiO<sub>2</sub> pigment manufacture.

Auspac envisages licensing the ERMS process for the removal of chromite to potential ilmenite producers in the Murray Basin. Most deposits are still in the exploration stage, but the Company is well placed to benefit as these resources reach the development stage.

## Potential for Synthetic Rutile from the Murray Basin

In May 2000, the Victorian Minister for Energy and Resources called for tenders for the right to apply for an exploration licence in 14 areas in the Murray Basin. Two of these areas were formerly held by Rio Tinto, and the others by RGC. Austpac on behalf of the Austpac-Ticor joint venture, tendered for Block 1, an ex-Rio Tinto area, which contains the WIM 150 resource, as well as a further three fine grained WIM-type heavy mineral accumulations, the WIM 150 Extended (west of WIM 150), the Nathan (part) and MacKenzie prospects. All these deposits were delineated by CRA Exploration/Rio Tinto during their Murray Basin exploration program. The area also has potential for coarser grained strandline heavy mineral deposits that have been the target of most of the recent exploration in the Murray Basin.

A total of 1,247 heavy mineral exploration holes have been drilled on Block 1, approximately 800 within the limits of what is referred to at WIM 150 global resource area. The drilling also outlined a higher grade core area of approximately 40 square kilometres. Resource estimates based on Rio Tinto's drilling and published by the Victorian Government are given below.

	<b>Global Resource</b>	<b>Core Resource</b>
Ore	4,900 million tonnes	1,014 million tonnes
Grade	2.2% total heavy minerals	4.0% total heavy minerals
Size	>200 square kilometres	41 square kilometres

The WIM 150 deposit is relatively flat-lying and is overlain by 5-10 metres of overburden. The ore zone comprises numerous mineralised layers interleaved with relatively unmineralised sand. The mineralised sequence ranges in thickness from 4 to 15 metres, and the core area has an average stripping ratio of 0.8:1. The heavy mineral fraction includes 31% ilmenite, 9% rutile, 12% leucosene and 13% zircon. The majority of the valuable heavy minerals occur within the size range 38 to 75 microns.

In early October Austpac announced that the Company's tender was successful and an application has been made for an exploration licence covering 933 square kilometres over WIM 150 and the surrounding areas. The licence is expected to be granted later this year. The first year's program, which will commence early in 2001, will include large diameter drilling to obtain a bulk sample for testwork at Newcastle. Products from this testwork will be made available for evaluation by TiO<sub>2</sub> pigment manufacturers. If all results are positive, it is envisaged a prefeasibility study into the establishment of a large ERMS and EARS synthetic rutile complex in Victoria will be completed by the end of the second year of the exploration licence.

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.