Hastings Rare Metals Limited

ASX Announcement
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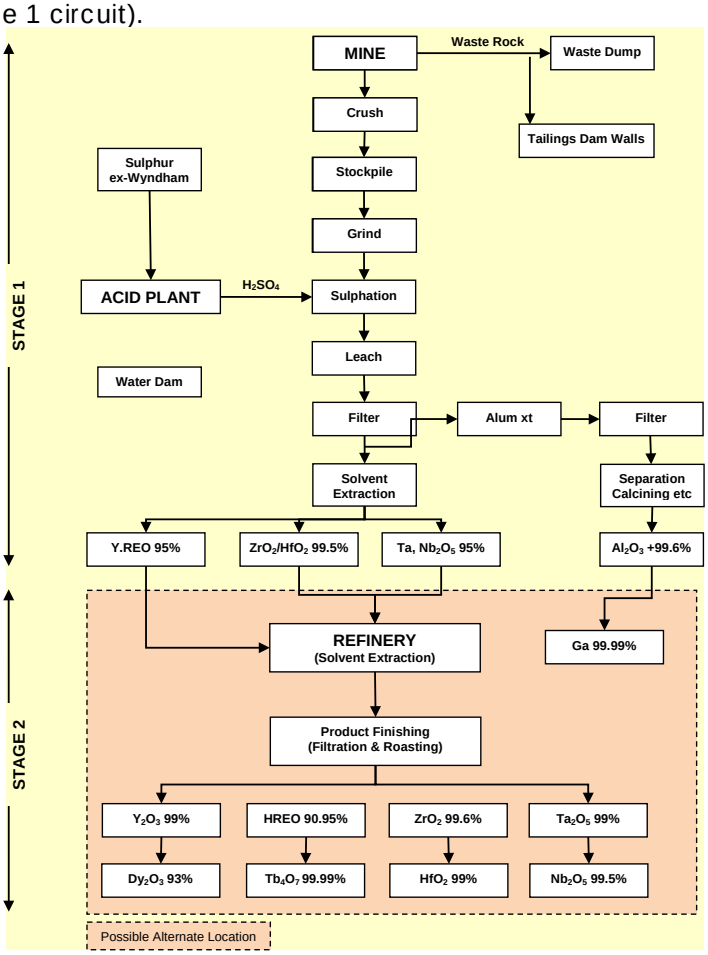
SIGNIFICANT BREAKTHROUGHS AT ANSTO KEEP HASTINGS ON SCHEDULE

HIGHLIGHTS

- **Two significant milestones achieved with completion of Phase 2 of the development program for the extraction of target minerals**
- **ANSTO separated Zircon (Zr), Niobium (Nb) and Hafnium (Hf) from the bake-leach liquor with effective rejection of the major impurities**
- **ANSTO separated Yttrium (Y) and Rare Earth Elements (REE) with effective rejection of the major impurities.**

ANSTO has successfully built upon the validation and verification of the previous sulphation and water leaching works (Part 1 of the Warren Spring Laboratory (WSL) 1990 circuit, see below) announced to the ASX on 10 October 2012, and has achieved two very significant milestones in the primary solvent extraction test work (Part 2 of the WSL Stage 1 circuit).



Using the liquors generated from the sulphation bake and water leach, ANSTO has achieved primary separation of Zr, Nb and Hf from the bake-leach liquor (PLS) using a modified SX circuit/concept (to that in the original WSL Stage 1 work) with excellent rejection of the major impurities.

This modified SX circuit has also successfully separated Zr, Nb and Hf from the Y+REE and from the major impurities in the PLS.

Steve Mackowski, Technical Director – Hastings Rare Metals Limited, explained the achievements as follows:

"The development program for the *chemical circuit of the Hastings Project can be viewed in three phases. Phase 1 targets getting the valuable components of the ore into solution. This is the most critical step as the recovery of valuables governs the economics of the entire operation. This is where typically 50% of the CAPEX and OPEX is expended. Sulphation baking converts the relatively insoluble valuables into sulphates so that they then become soluble in water. The baked ore is then dissolved in water and the valuables go into solution.*

This step was demonstrated at pilot scale in 1990 by WSL and confirmed by Hastings in the validation and verification stage of the test program that has previously been reported. Recoveries of valuable constituents of around 75% were achieved in Phase 1 - a world comparable result. Importantly, this gives the Hastings Project a very significant saving in development time compared to some of our peers.

Phase 2 involves extracting the valuables from the solution generated in Phase 1. As is always the case in these hydrometallurgical operations, both the valuables and proportions of the valueless gangue go into solution. So in the Hastings' case aluminium from the mica dissolves. In other projects other gangues dissolve, for example phosphates and iron oxides. Producing this liquor can result in very unstable liquids where premature crystallisation (uncontrolled conditions) can occur. ANSTO has modified the final physical and *chemical conditions such that the liquor is stable over extended periods; a very creditable effort.*

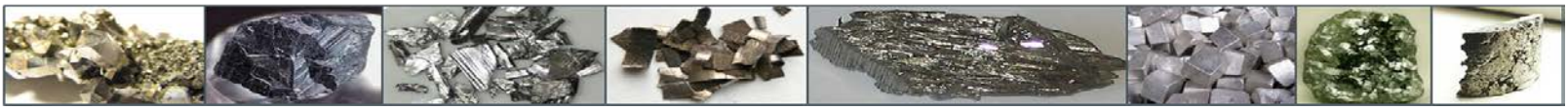
"With completion of the Phase 2 Primary Solvent Extraction work ANSTO has successfully recovered the valuables. This work highlights *the benefit of* technological advances *of solvent extraction research and experience since the original pilot plant at WSL built 20 years ago. The ANSTO scientists have re-designed the original WSL concept to remove the Zr / Nb / Hf first, followed by removal of the rare earths. The improved circuit is more controllable with excellent recoveries of all of the valuable components whilst rejecting the impurities. This work now has two streams ready for processing to produce customer specific products."*

"Phase 3 of the development program for the chemical circuit *can now commence. This is where specific customer requirements are tailored into the process design, and where final products come out of the hydrometallurgical circuit."*

"The development schedule is on track. Physical experimentation that will enhance the sulphation pilot plant design has just been awarded to ANSTO."

Alastair Metcalf, CEO – Hastings Rare Metals Limited, acknowledged the fine work done at ANSTO and put the developments into context:

"Producing separate streams each containing valuable constituents is an achievement that can sometimes take years to attain. Having these streams ready for customer product tailoring is a very strong position for Hastings. Our current discussions with strategic partners can now be bolstered with the support of these very significant technical achievements. I would like to extend my personal thanks to ANSTO for the results of the R&D efforts so far. Further success in tailoring our products to meet customer requirements is expected. These achievements are further demonstration of Hastings clear path to production in 2016. I look forward to the project producing around 10% of the world's current supply of supply and significant quantities of yttrium."



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About Hastings Rare Metals

- Hastings Rare Metals is a leading Australian rare earths company, with two rare earths projects in Western Australia.
- The Hastings deposit contains JORC Indicated and Inferred Resources totaling 36.2 million tonnes at 0.21% TREO, including 0.18% HREO, plus 0.89% ZrO_2 and 0.35% Nb_2O_5.
- Rare earths are critical to a wide variety of current and new technologies, including smart phones, hybrid cars, wind turbines and energy efficient light bulbs.
- The Hastings deposit contains predominantly heavy rare earths (HREO) (85%), such as dysprosium and yttrium which are substantially more valuable than the more common light rare earths (LREO).
- The company aims to capitalise on the strong demand for heavy rare earths created by expanding new technologies. It has recently validated the extensive historical work and completed a Scoping Studies to confirm the economics of the Project.

Competent Person's Statement

The information in this presentation that relates to Resources is based on information compiled by Simon Coxhell. Simon Coxhell is a consultant to the Company and a member of the Australasian Institute of Mining and Metallurgy. The information in this presentation that relates to Exploration Results is based on information compiled by Andy Border, an employee of the Company and a member of the Australasian Institute of Mining and Metallurgy. The information in this presentation that relates to metallurgy is based on information compiled by Steve Mackowski, an employee of the Company and a fellow of the Australasian Institute of Mining and Metallurgy.

Each have sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this presentation and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code"). Each consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.