Hastings Technology Metals Ltd: Stand-Out Simon's Find Metallurgical Test Results

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Perth, Australia - Australia's next rare earths producer Hastings Technology Metals Ltd. (ASX:HAS) is pleased to announce stand-out results from metallurgical test work carried out on drilling samples from Simon's Find, one of the key deposits that make up the Yangibana Rare Earths Project (Yangibana) in Western Australia's Gascoyne region.

The test work carried out at Simon's Find is a key milestone in the Company's finalisation of its updated Ore Reserves and mine scheduling that will underpin Yangibana's development.

The Simon's Find deposit is part of the 8km-long Bald Hill - Simon's Find - Frasers mineralised trend and is strategically located close to the site of Yangibana's proposed process plant and infrastructure.

The mineralisation at Simon's Find contains the highest level of Nd2O3 + Pr6O11 to total rare earth oxides (TREO) across all deposits at Yangibana - in fact, they are the highest NdPr levels of any known rare earths project in the world. The average of samples tested reported Nd2O3 + Pr6O11 oxide accounting for 54% of TREO. Values as high as 57% were recorded in individual samples.

Simon's Find has, on average, a much lower TREO head grade than the other Yangibana deposits. However, its industry high NdPr levels and an amenability to producing a clean monazite concentrate mean Simon's Find is able to deliver the same outstanding final results as the other deposits at Yangibana.

Test work completed to date has investigated the flotation performance of a representative composite sample from the Simon's Find drilling program in 2020 and earlier as well as 22 individual variability samples. The flotation performance on the composite sample resulted in an Nd2O3 recovery of 86.3% at 8.9% Nd2O3 grade, which is comparable to the 2017 Definitive Feasibility Study baseline of a recovery of 86.4% recovery at 9.0% Nd2O3 grade.

Variability test work within the Simon's Find deposit aimed to test some of the different parameters of the mineralisation and develop an understanding of ore blending requirements. Two blends of a composite sample concentrate were tested through acid bake and water leach hydrometallurgical tests. The acid bake and water leach tests achieved an Nd2O3 recovery of 98%, which is 4% higher than at other Yangibana deposits. The final water leach liquor chemistry was consistent with that of other deposits across Yangibana and suitable for further downstream impurity removal and mixed rare earths concentrate (MREC) precipitation steps designed for the project.

Simon's Find also contains a relatively high level of niobium, mostly in the mineral columbite. Deportment of niobium throughout the process flowsheet is still being assessed.

Ore sorting variability test work indicated that the average grade at Simon's Find could be upgraded during ore sorting from 0.58% to 0.84% TREO. Early flotation test work on sorted and unsorted ore indicated that the addition of ore sorting into the circuit could improve the flotation performance.

The test work results from this recent program will be used for ongoing Ore Reserves calculations.

Commenting on the results of the Simon's Find test work, Hastings Technology Metals' Chief Operating Officer Andrew Reid said: "The metallurgical test work carried out at Simon Find's underscores the potential that we have at Yangibana. These latest results continue to give us confidence in the multiple pathways we have to achieving high process recoveries and concentrate grades from the Yangibana project. "Simon's Find is delivering stand-out results that are remarkable given the low head grade of the deposit. Further test work will enable us to optimise the various aspects of our metallurgical program in terms of capital, operating costs, recoveries and operability. "Simon's Find further highlights Yangibana's potential to become a source rich in NdPr."

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About Hastings Technology Metals Ltd:

Hastings Technology Metals Ltd. (ASX:HAS) is advancing its Yangibana Rare Earths Project in the Upper Gascoyne Region of Western Australia towards production. The proposed beneficiation and hydro metallurgy processing plant will treat rare earths deposits, predominantly monazite, hosting high neodymium and praseodymium contents to produce a mixed rare earths carbonate that will be further refined into individual rare earth oxides at processing plants overseas.

Neodymium and praseodymium are vital components in the manufacture of permanent magnets which is used in a wide and expanding range of advanced and high-tech products including electric vehicles, wind turbines, robotics, medical applications and others. Hastings aims to become the next significant producer of neodymium and praseodymium outside of China.

Hastings holds 100% interest in the most significant deposits within the overall project, and 70% interest in additional deposits that will be developed at a later date, all held under Mining Leases. Numerous prospects have been identified warranting detailed exploration to further extend the life of the project.

Brockman Project

The Brockman deposit, near Halls Creek in Western Australia, contains JORC Indicated and Inferred Mineral Resources, estimated using the guidelines of JORC Code (2012 Edition).

The Company is also progressing a Mining Lease application over the Brockman Rare Earths and Rare Metals Project.

Hastings aims to capitalise on the strong demand for critical rare earths created by the expanding demand for new technology products.

Source:
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