

MARCH 2017 QUARTERLY REPORT

28 April 2017

- Continuous beneficiation pilot plant testing has successfully validated the simple and effective flowsheet of the Yangibana flotation process
- The pilot operation confirmed 70% TREO recovery at a final concentrate grade of 23% TREO
- Optimised flotation circuit chemistry improved recovery to >80% at a higher TREO grade
- Generated concentrate for next stage hydrometallurgy pilot plant operation
- Environmental Impact Assessment (EIA) lodged with Western Australia (WA) Environmental Protection Authority (EPA)
- Referral Submission lodged with Commonwealth Department of Environment and Energy
- Preliminary Mine Development Proposal (MDP) lodged with WA Department of Mines and Petroleum (DMP)
- Commencement of iterative reviews of the applications with EPA and DMP to map out approval timelines
- Drilling beyond the limits of current resources at Bald Hill returns the highest accumulation* of neodymium and praseodymium oxides to date throughout the Yangibana Project
- Phase 5 drilling programme delayed by rain

DEFINITIVE FEASIBILITY STUDY UPDATE

Metallurgy Progress

Metallurgical test trials have progressed well. **Hastings Technology Metals Ltd ("Hastings" or "the Company")** completed the continuous beneficiation pilot plant testing, which validated the simple and effective flowsheet of the Yangibana flotation process. The Company has successfully generated bulk samples for downstream engineering equipment design testwork and concentrate for the hydrometallurgy pilot plant.

The flowsheet developed in the laboratory testwork programme was translated into a 150kg/hr pilot processing circuit, operating 24 hours per day continuously over 8 days (5 days plus 3 days after a weekend shutdown) at ALS Metallurgy in Perth. The flowsheet consisted of milling, rougher flotation, regrind and cleaner flotation stages. The Beneficiation pilot operation achieved a 70% recovery at a final concentrate grade of 23% TREO. This was in line with what was achieved in the laboratory. Further improvements in the laboratory were made in parallel to the pilot plant, to achieve more than 81% recovery with 27% grade TREO through



optimising the flotation circuit chemistry. The pilot plant shows a clear indication of progress from bench scale to commercial production.

The hydrometallurgy pilot plant programme began at end of March and is being undertaken at Australian Nuclear Science and Technology Organisation (ANSTO). It will complete early May 2017.

Figure 1 Flotation Pilot Plant Operation at ALS Metallurgy, Perth



Figure 2: Close-up of Monazite Flotation

Figure 3: Final flotation concentrate



Approvals and Permits

Hastings has lodged the EIA for its Yangibana Nd-Pr Rare Earths project with the EPA and a Referral Submission was also lodged with the Commonwealth Department of Environment and Energy. Under the Commonwealth and State Approval system, the EPA is the reviewing agency acting on behalf of WA and the Commonwealth.



A preliminary MDP has been lodged with the DMP. Further studies emanating from the Definitive Feasibility Study (DFS) are required to be lodged at a later time to complete the MDP for final assessment. The DFS is scheduled for completion during Q3 2017. The lodgement of the preliminary MDP is to enable the MDP to be fast tracked, pending further outstanding reports that will flow from the DFS.

An iterative review process has commenced with the EPA and DMP that will identify any areas of additional information, if required, for the relevant permitting approvals to be granted. The review process will also clarify the timeline for the approval processes.

Resource Extension Drilling

During the quarter assay results were received from three holes drilled outside the western limits of the current resources at Bald Hill. Significant results were:-

Hole	From	То	Interval	%(Nd ₂ O ₃ +Pr ₂ O ₃)	%TREO	%(Nd ₂ O ₃ +Pr ₂ O ₃)/TREO
BHW	(m)	(m)	(m)			
01	59	62	3	0.76	2.09	36
02	86	89	3	0.57	1.63	35
04	79	102*	23	0.77	1.87	41
incl	80	90	10	1.12	2.72	41

*hole terminated in mineralisation

The intersection in hole BHW04 remains open at depth and provides the highest accumulation^{*}, at 17.7m%(Nd₂O₃+Pr₂O₃) (43m%TREO), returned from all drilling at the Yangibana Project since commencement of exploration. The rare earths are associated with monazite, with minor bastnaesite. With its high (Nd₂O₃+Pr₂O₃) : TREO ratio of 41%, this mineralisation is expected to have similar processing characteristics to the Eastern Belt-style mineralisation. This intersection lies to the west of what was considered to be the western limit to the Bald Hill South mineralisation as shown in Figure 4. It establishes a new major target with potential to host the higher value Eastern Belt-style mineralisation to depth and along strike to the northwest and southeast.





Figure 4 – Yangibana Project – Bald Hill Cross Section showing BHW04 intersection beyond limit of current JORC Resources

The next phase of drilling has been delayed by heavy rainfall and will commence in late April.

BROCKMAN PROJECT

During the quarter the Company made application for a Mining Lease covering the area currently held under ten Prospecting Licences at the Brockman Project in northern Western Australia.

CORPORATE

In March 2017, the Company presented the Yangibana Nd-Pr at the 121 Mining Investment Conference in Hong Kong. For a copy of the presentation please visit <u>www.hastingstechmetals.com</u>

TERMINOLOGY USED IN THIS REPORT

Total Rare Earths Oxides, TREO, is the sum of the oxides of the light rare earth elements lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), and samarium (Sm) and the heavy rare earth elements europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb), lutetium (Lu), and yttrium (Y).

*Accumulation is the product of intersected length by grade, such that the intersection in BHW04 of 23m at 1.87%TREO provides an accumulation of 23 times 1.87 equals 43m%TREO. An intersection of 2m at 1.5%TREO, which would still have potential economic significance, would have an accumulation of 3m%TREO.



For further information please contact:

Charles Tan, Chief Operations Officer, +61 457 853 839 Andy Border, General Manager Exploration, +61 2 8268 8689

About Hastings Technology Metals

- Hastings Technology Metals is a leading Australian rare earths company, with two rare earths projects hosting JORC-compliant resources in Western Australia.
- The Yangibana Project hosts JORC Indicated and Inferred Resources totalling 13.41 million tonnes at 1.18% TREO (comprising Measured Resources of 2.16 million tonnes at 1.01% TREO, Indicated Resources of 5.45 million tonnes at 1.30% TREO and Inferred Resources of 5.81 million tonnes at 1.12% TREO), including 0.39% Nd₂O₃+Pr₂O₃.
- The Brockman deposit contains JORC Indicated and Inferred Resources totalling 41.4 million tonnes (comprising 32.3 million tonnes Indicated Resources and 9.1 million tonnes Inferred Resources) at 0.21% TREO, including 0.18% HREO, plus 0.36% Nb₂O₅ and 0.90% ZrO₂.
- 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 Company aims to capitalise on the strong demand for critical rare earths created by expanding new technologies.

Competent Persons' Statement

The information in this announcement that relates to Resources is based on information compiled by Lynn Widenbar. Mr. Widenbar is a consultant to the Company and a member of the Australasian Institute of Mining and Metallurgy. The information in this announcement 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.

Each has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this announcement and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code"). Each consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.



TENEMENT SCHEDULE

as at 31 March 2017 (All tenements are in Western Australia)

YANGIBANA PROJECT

Hastings Technology Metals Ltd Es09/2084, 2086, 2095, 2129 - 100% P09/482 - 100% M09/157 - 100% Gascoyne Metals Pty Limited (100% subsidiary) Es09/1989, 2007, 2137, - 100% Es09/1043, 1703, 1704, 1705, 1706 - 70% Ms09/159, 161, 163 - 70% Ms09/160, 164, 165 - 100% G09/10 - 100% G09/10 - 100% L09/66-72, 74, 75, 80-83 - 100% Yangibana Pty Limited (100% subsidiary) Es09/1700, 1943, 1944, 2018 - 100% Ms09/158, 162 -100%

Gs09/16-18 – 100%

BROCKMAN PROJECT

Brockman Project Holdings Pty Limited (100% subsidiary)

P80/1626 to 1635 - 100%

E80/4555 - 100%