

THOR LAKE “NECHALACHO” REO PROJECT GAINS MOMENTUM

Highlights

- Completion of acquisition of Cheetah Resources Pty Ltd to transform Vital into near term REO producer
- Early works program on Nechalacho REO (Thor Lake, Canada) project commenced during the quarter
- Conversion of the world class NI 43-101 149.3Mt at 1.42% REO to JORC resource underway
- Infill drill program completed on the North T Zone along with assaying of historically drilled diamond core underway
- Bulk sample taken for extensive metallurgical program confirms logistics chain
- Tomra Systems engaged for optimising initial concentration via ore sorting technology
- Hydrometallurgical process test work underway on high grade bastnaesite samples

Vital Metals Limited (**Vital** or the **Company**) (ASX: VML) is pleased to provide the following Company update following the completion of the acquisition of Cheetah Resources Pty Ltd (“**Cheetah**”)

Vital's new Managing Director Geoff Atkins said:

“We have hit the ground running following the completion of the Cheetah acquisition. Over the past few months we have been very fortunate to have continued the development of the Nechalacho REO Project whilst Vital undertook its regulatory approval process.

We have completed our infill drill program on the North T REO deposit and commenced optimisation of the ore sorting concentration testwork and hydrometallurgical process test work on the high grade bastnaesite ore which will ultimately feed into our start up study into becoming one of the next REO producers”

Since announcing the acquisition, Cheetah has continued to develop the Nechalacho Rare Earth Project while the Company was undertaking Due Diligence and obtaining shareholder approval for the acquisition of Cheetah. A summary of key activities is as follows:

Nechalacho Rare Earth Project

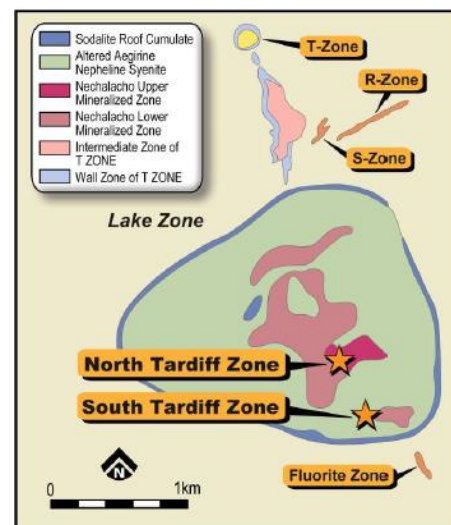
JORC Resource Conversion

The Nechalacho REO Project boasts an impressive NI 43-101 resource of 149.3Mt at 1.42% REO contained within the upper zone over which Vital has rights to mine.

Within the NI 43-101 foreign resource estimate Cheetah has commenced the conversion of near surface, high grade resources found in the North T and Tardiff Zones to JORC 2012.

The Company believes that the Nechalacho Project has potential for a start-up operation exploiting high grade, easily accessible near surface mineralisation initially from the North T Zone before then shifting to the larger Tardiff Zones.

The Company expects to release a JORC 2012 Resource for the North T and Tardiff Zone in November 2019. In addition, the Company intends to ultimately convert the full 149.3Mt resource into JORC status in due course but given



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the size Vital has chosen to focus only on the bastnaesite zones at North T and Tardiff which will be the focus of its start-up operation.

Investors should note that the Mineral Resource estimate for the Nechalacho Project Upper Zone is a foreign estimate and is not reported in accordance with the JORC Code. A competent person has not done sufficient work to classify this foreign estimate as a mineral resource in accordance with the JORC Code and it is uncertain that following further exploration or evaluation work that this foreign estimate will be able to be reported as a mineral resource in accordance with the JORC Code.

Resampling and Infill Drilling Program

In July 2019 a campaign was undertaken to resample North T core from historical work conducted by previous operators in the 1980's. The purpose of this campaign was to identify and assay core which had not previously been assayed for rare earths in addition to undertaking assays for the complete suite of rare earths. Furthermore, gaps in the sampling of historic core were identified. These are currently being investigated and sampled wherever bastnaesite mineralisation was encountered. The resampling program will also generate new density data to be used for future resource upgrades.

Following the resampling program, an infill diamond drilling program of 19 holes and approximately 770m has also been undertaken. Assaying of the drill core is currently underway and will be released to the market this quarter.

Resampling assay results are currently being analysed and together with results from the infill drilling program will form the basis for a revised JORC resource for the North T Zone and initial focus of its start-up operation.

Process Testwork

Cheetah has commenced three process testwork programs on existing bulk sample material from the North T Zone. A total of more than 60 tons of ore was successfully loaded on barges and shipped to Yellowknife with samples then being sent to the various laboratories for testwork. The Company is very pleased with this achievement as it is essentially mirroring a potential logistics chain of the Company's start-up operations.



Fig 1: Infill Diamond Drilling North T Zone



Fig 2: Ore being loaded onto Barge at Nechalacho Barge Landing prior to transport to Yellowknife for dispatch to the various laboratories for metallurgical testwork

Tomra Systems ASA have been engaged to undertake a program to produce a high grade rare earth concentrate utilising their XRT sorting technology. Vital intends to use ore sorting technology to initially concentrate its bastenite bearing North T and Tardiff zone into a high grade concentrate prior to shipping for hydrometallurgical treatment.



Fig 3: A sample of North T mineralised ore. Rare earths are contained within the red bastnaesite minerals and white material is quartz waste rock. Vital intends to initially separate the bastnaesite materials via conventional ore sorting technology.

The test work undertaken by Tomra will seek to determine optimum crushing sizes in addition to the amenability of XRT sorting technology to separate the red rare earth minerals from the white quartz (see fig 3 above)

In addition to sorting test work, Cheetah has also engaged Saskatchewan Research Council (SRC) and SGS Canada Inc (SGS) to undertake hydrometallurgical testing for the extraction of REE from beneficiated North-T samples. This test work will include acid bake and hydrochloric acid/caustic conversion testing to produce a mixed rare earth carbonate/oxalate product. Both processes are readily used to treat bastnaesite ores in other REO projects

The Company expects to announce initial process test work results in November 2019 with a proposed process flow sheet to be announced in December 2019. This is anticipated to be the only metallurgical test work required prior to the Company releasing its start-up study to becoming the next REO producer.

ENDS

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ABOUT VITAL METALS

Vital Metals Limited (ASX:VML) is an explorer and developer focussing on rare earths, technology metals and gold projects. Our projects are located across a range of jurisdictions in Canada, Africa and Germany.

Nechalacho Rare Earth Project

The Nechalacho project is a high grade, light rare earth (bastnaesite) project located at Nechalacho in the Northwest Territories of Canada and has potential for a start-up operation exploiting high-grade, easily accessible near surface mineralisation. The Nechalacho Rare Earth Project hosts within the Upper Zone, a NI 43-101 compliant Indicated Resource of 47.21Mt grading at 1.52% REO and Inferred Resource of 102Mt grading at 1.38% for a combined Mineral Resource estimate of 149.30Mt grading at 1.42% REO.

Wigu Hill Project

The Company has signed a project development and option agreement with Montero Mining & Exploration Ltd, to acquire and develop the Wigu Hill Project located near Kisiwa in Tanzania.

The Wigu Hill project is a light rare earth element deposit and consists of a large carbonite complex with bastnaesite mineralisation with a NI 43-101 Inferred resource estimate of 3.3Mt at 2.6% LREO5 including 510,000t @ 4.4% LREO5 on 2 of 10 possible drill targets.

Nahouri Gold Project – Burkina Faso

The Nahouri Gold Project (100% Vital) is located in southern Burkina Faso. The Project is made up of three contiguous permits; the Nahouri, Kampala and Zeko exploration permits. The Project is located in highly prospective Birimian Greenstone terrain with 400 sq km of contiguous tenements lying on the trend of the Markoye Fault Corridor.

Aue Project – Germany

The Aue Project (100% Vital) is located in the western Erzgebirge area of the German state of Saxony. The permit, comprising an area of 78 sq km is located in the heart of one of Europe's most famous mining regions surrounded by

several world class mineral fields. Historical mining and intensive exploration work carried out between from the 1940s and 1980s showed high prospectivity of the Aue permit area for cobalt, tungsten, tin, uranium and silver mineralisation.

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Investors should note that the Mineral Resource estimate for the Wigu Hill Rare Earth Project is a foreign estimate and is not reported in accordance with the JORC Code. A competent person has not done sufficient work to classify this foreign estimate as a mineral resource in accordance with the JORC Code and it is uncertain that following further exploration or evaluation work that this foreign estimate will be able to be reported as a mineral resource in accordance with the JORC Code.

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