

VITAL TO ACCELERATE HREO STRATEGY Aims to be world's first Heavy and Light REO Producer

HIGHLIGHTS

- Vital aims to be the world's first rare earths producer with capabilities to produce commercial quantities of both heavy and light rare earths
- Vital's three-stage development strategy includes adding heavy rare earths to its existing light rare earths operation at Nechalacho with first production ~ mid 2022
- The heavy rare earth strategy will investigate developing a zone of xenotime mineralisation, a heavy rare earth mineral, at Nechalacho's North T pit near the base of the current mining envelope
- Vital will re-assay historical core and investigate further drilling to update North T's resource estimate in 2022
- Vital also plans to complete a metallurgical testwork program to confirm a potential process flowsheet for the xenotime zone
- Vital will target a 10 year operation from the North T Xenotime Zone
- Vital is also completing due diligence on Kipawa and Zeus heavy rare earths projects in Quebec which would further add to its heavy rare earth production profile.

Canada's first rare earths producer **Vital Metals Limited** (ASX: **VML**) ("**Vital**" or "**the Company**") is pleased to announce it will focus 2022 work programs on becoming the first rare earths producer capable of producing commercial quantities of both heavy and light rare earths.

Vital aims to progress its three-stage development strategy – foundation (targeting customer acceptance of product); growth (expansion of 1 million contained ton resource); and production of heavy rare earths.

Vital completed its first mining campaign at North T at its Nechalacho rare earths project in Northwest Territories, Canada, in 2021. It is on track to produce first rare earth carbonate at its Saskatoon extraction facility in mid-2022.

Its second stage will focus on growth via the Tardiff deposit at Nechalacho (which has a contained REO resource of in excess of 1 million contained tons), as well as development of the Wigu Hill rare earths project in Tanzania, where it is continuing discussions for a Mining Licence.

With plans to add heavy rare earths to its production capabilities, Vital will focus its 2022 work plans on development of a xenotime subzone identified in North T's 2019 Mineral Resource, which would transform Vital into the world's only REE producer of light and heavy rare earths.

In addition, it is continuing due diligence to acquire interests in two heavy rare earths projects, Kipawa (68%) and Zeus (100%) in Quebec, Canada from Quebec Precious Metals Corporation.



Vital Metals' Managing Director Geoff Atkins said: "We've worked so hard to achieve our foundation goals over the past two years, focusing on mining and sorting ore from North T at Nechalacho and commencing construction of our rare earths extraction facility in Saskatoon as we aim to produce our first mixed rare earth carbonate mid this year. It has been pleasing to achieve this significant progress, given the impact of the global pandemic since early 2020.

"In light of the introduction of the bi-partisan Bill to the US senate which seeks to reduce the US reliance on Chinese rare earth elements by 2026, we are looking to accelerate our HREO strategy as we believe we are one of the only companies in the world that can produce both heavy and light rare earths to assist the US government with their goals.

Over the next 12 months, we will focus on our long-term growth plans which include becoming the world's first REE producer able to produce both heavy and light rare earth feedstock for separation. Being able to guarantee a secure source of both light and heavy rare earths will be critical to meeting the requirements of recent US and European legislation regarding the establishment of rare earth supply chains within these jurisdictions.

"To achieve this, we plan to incorporate North T's xenotime subzone, which sits beneath the base of the current mining envelope, into our development strategy, which could accelerate our plans to become a producer of both rare earths groups. The current North T operations and infrastructure provides an ideal opportunity for Nechalacho North T to become Vital's first heavy rare earth.

"We will benefit from the experience of our Chief Operating Officer Tony Hadley, who was part of the team to successfully design and commission the world's first heavy rare earth process plant for xenotime feedstock as Browns Range General Manager."

Vital's 3 Stage Development Strategy

Vital is implementing a 3 stage development strategy which will enable it to guarantee feedstock to the global rare earth supply chain. To achieve this goal it will be critical for Vital to demonstrate its capabilities to produce feedstock, build the capability for growth and supply both light and heavy rare earths to ensure the ability to fully satisfy customer requirements.

Stage 1: Foundations

Nechalacho North T

- Demonstrate the ability to supply rare earth feedstock at specification critical for rare earth customer acceptance protocols.
- Generate positive cashflow to fund expansion.
- Operations at North T are continuing with approximately 5,000t of product forecast to be transported to Saskatoon this year.

Stage 2: Expansion and Growth

Nechalacho Tardiff

Large scale operation to provide long term security to the rare earth supply chain capitalising
off a 1 million contained ton rare earth resource.

Wigu Hill

- Expansion capability through an additional project.
- Large carbonatite (6km+ strike) with limited drilling.

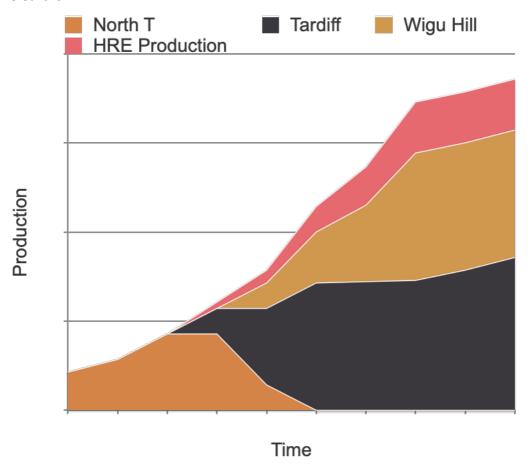


• Multiple projects enable the flexibility to react quickly to changes in market demand and customer requirements.

Stage 3: Heavy Rare Earth Production – North T Xenotime

North T Xenotime/Kipawa

- Enable Vital to be a 'one stop shop' for the supply of the full suite of rare earths.
- Only HREO project in the world able to meet US requirement for non Chinese heavy rare earths.
- Enabling Vital to become the first producer of commercial quantities of both light and heavy rare earths.



Heavy Rare Earth Production – Plans for 2022

In December 2019, Vital Metals announced JORC 2012 compliant Mineral Resources for its Nechalacho project which included an MRE for the North T Zone, demonstrating that the deposit contained two distinct zones of REE mineralisation, a bastnaesite subzone at surface and an underlying xenotime subzone.



Table 1 - JORC resources at North T Zone - 20191

Xenotime	Cutoff grade	Toppogo	Nd ₂ O ₃	CeO ₂	Y ₂ O ₃
Subzones	Y ₂ O ₃	Tonnage	%	%	%
Indicated	>0.1%	346,270		0.156	0.271
Inferred	>0.1%	4,700		0.177	0.224
Indicated			Not		
+ Inferred	>0.1%	350,970	Estimated	0.156	0.270

This was based on updated geological interpretations and a validated historic database, prepared according to the 2012 JORC code. Although historic assays were validated by core duplicates and the drill coverage was considered adequate, due to a lack of QAQC records for the historic assays, the resources were classed as indicated and inferred.

Vital partially mined the bastnaesite zone at North T in its 2021 mining campaign (refer ASX announcement 28th January 2022), and the xenotime zone lies near the base of the proposed final mining envelope.

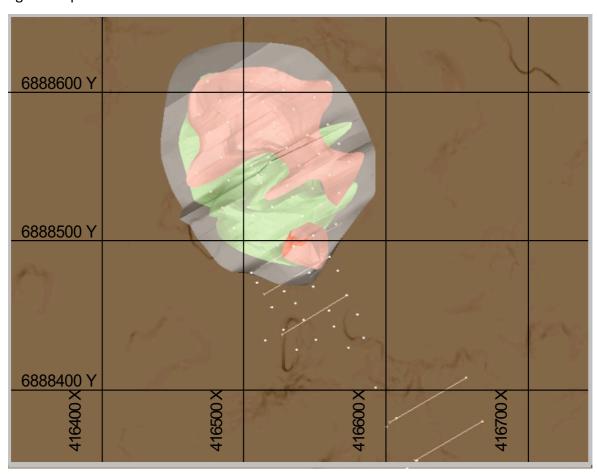


Figure 1: Plan view showing the topography and the 3D geology wireframes for the North T-Zone. Bastnaesite zones are shown in red, with Xenotime zones in green

¹ Refer ASX Announcement dated 13 December 2019 – <u>Nechalacho Rare Earth Deposit – JORC 2012 Resources</u>. Mineral Resource Estimation prepared in accordance with JORC 2012 under the supervision of Dr. William Mercer, registered Professional Geoscientist (P. Geo.) in the Northwest Territories and Ontario, Canada, as the Competent Person. The cutoff grade for this resource estimate is preliminary, at pre-scoping study level, as no detailed market, metallurgical or engineering studies have been performed.



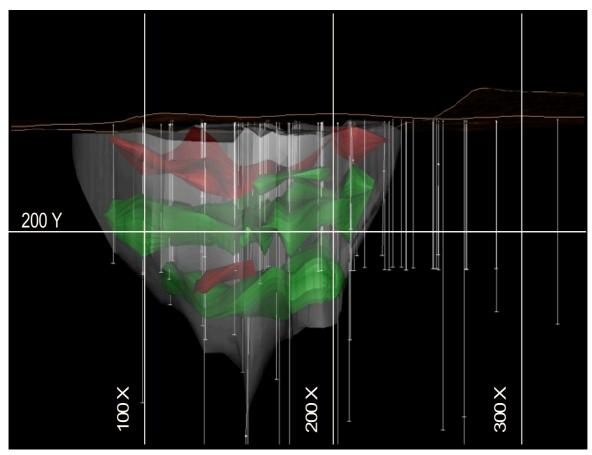


Figure 2 Section view of the 3D geology wireframes for the North T-Zone (section direction approximately NW to SE)

In 2022, Vital aims to:

- Re-assay core from the xenotime zone with a view to defining a revised JORC resource; and
- Undertake a scouting metallurgical testwork program to define a potential process flowsheet for the xenotime zone.

In its heavy rare earth strategy, Vital aims to develop the xenotime deposit at North T as its first heavy rare earths project with Kipawa to be its second potential heavy rare earths development.





Figure 3: Vital Metals partially mined the bastnaesite zone at North T in 2021, with the xenotime zone beneath the mined area

Kipawa – Plans for 2022

As outlined in its announcement on 7 February 2022, Vital will spend the next seven months formulating options for the development of Kipawa.

This will include process flowsheets as well as understanding opportunities to utilise Vital's Saskatoon processing facilities.

Vital aims to build on the 2013 Definitive Feasibility Study completed for Kipawa to minimise capital and operating expenditure and reduce development timelines.

- ENDS-

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This announcement has been authorised for release by the Board of Vital Metals.



ABOUT VITAL

Vital Metals Limited (ASX: VML) is Canada's first rare earths producer following commencement of production at its Nechalacho rare earths project in Canada in June 2021. It holds a portfolio of rare earths, technology metals and gold projects located in Canada, Africa and Germany.

Nechalacho Rare Earth Project - Canada

The Nechalacho project is located at Nechalacho in the Northwest Territories of Canada and has potential for a start-up operation exploiting high-grade, easily accessible near surface mineralization before expanding into a large scale operation. The Nechalacho Rare Earth Project hosts within the Upper Zone, a JORC Resource of **94.7MT at 1.46% TREO** comprised of a Measured Resource of 2.9MT at 1.47% TREO, an Indicated Resource of 14.7MT at 1.5% TREO, and an Inferred Resource of 77.1MT at 1.46% TREO.

Compliance Statement

This announcement contains information relating to Mineral Resource Estimates in respect of the Nechalacho Project extracted from an ASX market announcement reported previously and published on the ASX platform on 13 December 2019. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed.

Forward-Looking Statements

This release includes forward -looking statements. Often, but not always, forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production output.

Forward-looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of resources or reserves, political and social risks, changes to the regulatory framework within which the entity operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward-looking statements are based on the entity and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect business and operations in the future. There are no assurances that the assumptions on which forward-looking statements are based will prove to be correct, or that the business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the entity or management or beyond the entity's control.

Although there have been attempts to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward-looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be anticipated, estimated or intended, and many events are beyond the reasonable control of the entity. Accordingly, readers are cautioned not to place undue reliance on forward-looking statements.

Forward-looking statements in this release are given as at the date of issue only. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the entity does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.