# June 2022 start for Vital Metals to produce mixed rare earth carbonates with feed from its own mines

written by InvestorNews | May 13, 2022

The rare earths sector has been doing very well lately, especially the highly valued magnet rare earths for which prices have doubled over the past year. Neodymium (Nd) and praseodymium (Pr) are the key magnet rare earths used commonly in electric motors. They also fall into the category of the 'light rare earths'. Another group of rare earths, known as the 'heavy rare earths', also have value. They include europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium and yttrium. Dysprosium (Dy) in particular is very valuable and is critically necessary for and used in alloys for neodymium based magnets subject to high temperature swings in operation.

Today's company is working towards becoming a North American producer of both light and heavy rare earths.

<u>Vital Metals Limited</u> (ASX: VML | OTCQB: VTMXF) (Vital) is a rare earths ore producer from their Nechalacho Rare Earths Mine in the Northwest Territories (NWT), Canada. Nechalacho has a measured, indicated and inferred resource of <u>94.7Mt at 1.46% REO</u> for 1.3Mt contained TREO. The focus to date has been on the high-grade, light rare earths, found in the bastnaesite mineralization there.

Vital has off-take agreements with REEtec in Norway and with <a href="Ucore Rare Metals Inc.">Ucore Rare Metals Inc.</a> (TSXV: UCU | OTCQX: UURAF) in the USA. In

both cases, Vital is working with them to develop a qualified feed stock for them end at commercial scale. In some good recent news, offtake buyer, REEtec, signed a supply agreement with Germany's large OEM automotive supplier, Schaeffler, thereby potentially securing Vital's revenue from the sale of its product to REEtec.

Vital is currently constructing a Saskatoon, Saskatchewan, based cracking and leaching facility, with first feed to the facility expected in June 2022. An additional <u>C\$5 million of funding/reimbursement was recently achieved</u> to help support the commissioning and ramp-up stage. Vital aims to produce a minimum of 5,000 tons annually of contained REO by 2025 at the Nechalacho Mine.

Vital Metals' Managing Director Geoff Atkins <u>stated</u>: "With production forecast to commence in June 2022, this will make Vital North America's only producer of high purity rare earth carbonate with feed from its own mines providing security of supply for the global rare earths supply chain."

### Expansion into heavy rare earths

As <u>announced</u> on April 29, 2022, Vital is now planning to expand their existing light rare earths mine operation to also include heavy rare earths. Vital plans to investigate developing a zone of xenotime mineralization, the principle heavy rare earth hardrock mineral, at Nechalacho's North T pit, targeting a 10-year operation from the zone. <u>Xenotime</u>, is an yttrium phosphate mineral, and is the only known commercially feasible hard-rock source of dysprosium and terbium, which are the critical magnet rare earth additives for high temperature operations. As Vital <u>stated</u>: "Tardiff contains elevated heavy rare earths mineralization which may complement North T's xenotime deposit as part of Vital's strategy to produce heavy and light rare

earths."

### Next steps

In 2022, in addition to commencing production at the Saskatoon facility and working on expanding into heavy rare earths, Vital plans further drilling at the Tardiff zone to define a maiden Ore Reserve.

Vital Metals 3 stage strategy to become a North American producer of both light & heavy rare earths

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Source: Vital Metals March 2022 quarterly report

### Closing remarks

Vital Metals continues to march forward at a rapid pace. In <u>late June 2021</u> the Nechalacho mine came into production, notably being Canada's first-ever producing rare earths mine. Then only a year later in June 2022, the Saskatoon cracking and leaching facility's first production of a mixed rare earth carbonate is set to commence.

If that wasn't good enough the Company is now planning to also produce heavy rare earths, also from the Nechalacho Mine. Once achieved Vital announced that they would become the "the world's first producer of both heavy and light rare earth oxides."

Vital Metals trades on a market cap of <u>A\$204 million</u>. Exciting times ahead.

# Geoff Atkins discusses exceeding expectations in Vital Metals' output of rare earths with Peter Clausi

written by InvestorNews | May 13, 2022

In a recent InvestorIntel interview, Peter Clausi spoke with Geoff Atkins, Managing Director of <u>Vital Metals Limited</u> (ASX: VML) about Vital Metals' recent <u>news release</u> on redesigning the North T Pit at Vital's Nechalacho Rare Earths Mine after the ore sorter exceeded expectations.

In this InvestorIntel interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Geoff Atkins went on to say that Vital Metals' Nechalacho ore sorter is now able to sort even lower grade materials allowing Vital to process significant quantities of material previously identified as waste. He went on to explain the unique nature of mineralization at the North T Deposit allowing Vital to classify ore and waste visually without having to send materials to a lab for assaying.

To watch the full interview, <u>click here</u>.

### **About Vital Metals Limited**

Vital Metals Limited 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 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 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.

To learn more about Vital Metals Limited, <a href="click here">click here</a>

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Any projections given are principally intended for use as objectives and are not intended, and should not be taken, as

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## Jack Lifton, Byron King and Vital Metals' Geoff Atkins on the global rare earths market

written by InvestorNews | May 13, 2022

In this episode of the Critical Minerals Corner, Critical Materials' industry expert and InvestorIntel Editor-in-Chief Jack Lifton is joined by Critical Minerals Corner Co-Host & InvestorIntel Columnist Byron King, and Geoff Atkins, Managing Director of Vital Metals Limited (ASX: VML) to discuss how Vital Metals plans to guarantee feedstock to the non-Chinese rare earths supply chain and about how a rare earths project is different from any other mining project.

In this InvestorIntel interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel),

the panel discussed the high grades of neodymium and praseodymium found at Vital Metals' Nechalacho Rare Earths Project in Canada. With a growing push from the governments globally to establish rare earths supply chains outside of China, Geoff provided an update on Vital's off-take agreements signed with new separation facilities entering Europe and North America.

To watch the full interview, <u>click here</u>.

### **About Vital Metals Limited**

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### Nechalacho Rare Earth Project - Canada

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### The Post-COP26 World Looks To Australia For Future Non-Chinese Rare Earths Production

written by InvestorNews | May 13, 2022

To achieve U.N. climate change management goals the world needs to shift rapidly to clean energy, and that means we need to build or secure, reliable sources of rare earths. While the USA and Canada have made some progress in this direction, Australia will also be needed to play a key role.

When looking at a chart of rare earths reserves by country, China shows the largest reserves followed by Vietnam, Brazil, Russia, India, and Australia, in that order. The USA is ranked 8th and Canada is outside of the top ten. Given Australia's stellar track record as a reliable supplier of raw materials, it should not be surprising to know that the West is looking towards Australia to step up production of rare earths, especially those needed to support the surging cleantech sectors of electric vehicles, wind energy, and solar energy.

ClearWorld.us says it well, stating:

"Renewable energy development relies upon sufficient quantities of rare earth minerals, specifically neodymium, terbium, indium, dysprosium, and praseodymium. These are used in the production of solar panels and wind turbines. If the world is to meet the greenhouse gas emissions targets sought in the Paris Climate Agreement the availability of these minerals must increase by 12 times by 2050."

(Emphasis by the author.)

Rare earths are key elements in the cleantech revolution

### Australian listed rare earths companies:

### **Producers**

### Lynas Rare Earths Limited (ASX: LYC) ("Lynas")

Lynas is the second largest neodymium and praseodymium ("NdPr") producer in the world. Lynas owns the Mt Weld rare earth mine, which is one of the world's highest grade rare earths' mines, and the Mt Weld ORE Concentration Plant, both located in Western Australia. Lynas also owns the Lynas Advanced Materials Plant (LAMP), which is an integrated manufacturing facility, separating and processing rare earths' materials in Malaysia. The Lynas 2025 growth strategy encompasses plans to build the Kalgoorlie Rare Earths Processing Facility (cracking and leaching) in Australia and an LRE/HRE separation and specialty materials facility in the USA. Lynas trades on a market cap of A\$7.3 billion.

### Iluka Resources Ltd. (ASX: ILU) ("Iluka")

Iluka is a relatively new (April 2020) producer of rare earths at their Eneabba Project in Western Australia. Iluka intends to ramp to selling 50,000 tpa of a 20% monazite-zircon ore concentrate for further processing offshore. Iluka has an offtake agreement for 50,000 tpa. Iluka is working on developing a Phase 2 of the Eneabba Project which involves investigating techniques to beneficiate and purify the monazite to an 80% concentrate for sale further down the value chain. Iluka is mostly known for being an Australian heavy mineral sands, zirconium and titanium, producer. Iluka trades on a market cap of A\$3.5 billion.

### Vital Metals Limited (ASX: VML) ("Vital")

Vital recently began mining ore at its Nechalacho' Mine in Canada's Northwest Territories (NWT), with commencement of ore processing at Vital's, under construction, Saskatoon cracking and leaching facility expected to begin in 2022. The Nechalacho Mine is a high grade, light rare earth (bastnaesite) project with a world-class resource of 94.7Mt at 1.46% REO (measured, indicated and inferred). Nechalacho's North T Zone, which is being mined by Vital, hosts a high-grade resource of 101,000 tonnes at 9.01% LREO (2.2% NdPr). Vital has a non-binding MOU with Ucore Rare Metals Inc. for the supply to it of a mixed rare rare earth carbonate, beginning H1 2024. Vital Metals trades on a market cap of A\$250 million.

### Explorer/Developers (in alphabetical order):

### Arafura Resources Limited (ASX: ARU) ("Arafura")

Arafura 100% own the Nolan's Bore rare earth project 135kms from Alice Springs in the Northern Territory, Australia. Arafura states: "The Project is underpinned by low-risk Mineral Resources that have the potential to supply a significant proportion of the world's NdPr demand. It is a globally significant and strategic NdPr project which, once developed, will become a major supplier of these critical minerals to the high-performance NdFeB permanent magnet market."

The deposit contains a JORC 2012-compliant Mineral Resources of 56 million tonnes at an average grade of 2.6% total rare earth oxides (TREO). 26.4% of the total rare earths contained are NdPr. The Project is supported by Export Finance Australia (EFA), and the Northern Australia Infrastructure Facility (NAIF), via non-binding letters of support for a proposed senior debt facility of up to A\$200 million and A\$100 million respectively. Arafura is looking to raise further funds to get the project started. Arafura recently stated: "The momentum with

offtake discussion has enabled engagement to expand to include the options for strategic investment as part of the Nolan's project funding." Market cap is <u>A\$379 million</u>.

### Australian Rare Earths Limited (ASX: AR3) ("AREL")

AREL is progressing in the exploration of a significant deposit of valuable 'clay-hosted' rare earth elements, located at their Koppamurra Project spread over ~4,000km² of tenements in South Australia and Victoria. Past exploration of the Koppamurra region has shown it contains mineralization containing the rare earth elements neodymium, praseodymium, dysprosium and terbium. The Koppamurra Project is an 'ionic clay' rare earth opportunity with a 2021 JORC <u>Inferred</u> Mineral Resource of 39.9Mt @ 725ppm TREO. AREL trades on a market cap of A\$98 million.

### <u>Australian Strategic Materials Ltd.</u> (ASX: ASM) ("ASM")

ASM owns the Dubbo Rare Earths Project in NSW, Australia. The Dubbo Project is a 100% owned 'construction ready' poly-metallic and rare earths project with potential to become a key global supplier of specialty metals and rare earths. ASM's goal is a "mine to metal" strategy to extract, refine and manufacture high-purity metals and alloys, supplying directly to global technology manufacturers. Market cap is A\$1.92 billion.

### Northern Minerals Limited (ASX: NTU)

Northern Minerals own the Browns Range heavy rare earth minerals project in Western Australia. Northern Minerals has built a pilot plant to test a number of deposits and prospects that contain high-value dysprosium and other Heavy Rare Earths (HREs) such as yttrium, hosted in xenotime mineralization.

The Company <u>states</u>: "Northern Minerals is positioned to become the world's first significant producer of dysprosium outside of

China. Accounting for 60% of the Browns Range Project's (the Project) revenue, dysprosium is the key value driver of the Project and is at the core of Northern Minerals' marketing strategy. With a high value, high purity, dysprosium rich product, the Company is set to become a long term and reliable supplier of dysprosium and other critical heavy rare earths to world markets." Market cap is A\$339 million.

### Peak Resources Limited (ASX: PEK)

Peak Resources 75% owns the Ngualla Tanzania rare earth project, which the Company <u>states</u> is one of the world's, largest and highest grade, undeveloped rare earth projects. The Ngualla Project has ore reserves of 18.5 million tonnes at 4.8% REO; 22% of the total mineral resource is NdPr, with an expected 26 year life of mine. The Project is currently at the funding stage having completed a BFS in 2017. The BFS summary details are here. About 90% of the Project's revenues will be coming from NdPr. Peak Resources <u>state</u>: "Operating cost of US\$ 34.20/kg NdPr\* Oxide, demonstrating potential to be the world's lowest-cost fully integrated rare earth development project." Market cap is <u>A\$135 million</u>.

### **Closing remarks**

With rare earths demand set to grow strongly this decade as the world moves towards cleaner energy and technology, investors would be wise to take a second look at the rare earths sector.

Australian critical minerals projects were recently in the news after the Government announced that they would receive an A\$2 billion boost (via a loan facility), to support the sector. This bodes well for the Australian rare earths junior miners to join Lynas as producers. Stay tuned as this sector looks set to shine this decade.

### Vital Metals' Rare Earths offtake MOU with Ucore positions Vital as a key supplier for a non-Chinese Total Rare Earths' Supply Chain

written by InvestorNews | May 13, 2022

A key element for junior miners to demonstrate progress is to secure off-take agreements. This then typically leads to a greater degree of confidence that the company is credible as a supplier and that there is demand for its mined material. Such progress attracts not only investors but also potential project financiers. In the case of Vital Metals, the production of ore concentrates containing the key magnet rare earths neodymium & praseodymium (NdPr) that commenced in the summer of 2021 in the past year coincided with <a href="strong price gains">strong price gains</a> that confirm strong demand.

Neodymium 1 year price chart shows strong price gains the past year



Source: <u>Trading Economics</u>

Vital Metals MOU with Ucore

<u>Vital Metals Limited</u> (ASX: VML) ("Vital") recently <u>announced</u> news of signing a non-binding MOU with Ucore Rare Metals Inc.

(TSXV: UCU | OTCQX: UURAF) for the supply of a mixed rare earth carbonate, beginning H1 2024. Ucore's Alaska Strategic Metals' Center, SMC, facility is planned to be commissioned in the first half of 2024 with an initial 2,000tpa total rare earth oxide (TREO) separation and purification capacity, ramping to at least 5,000t/year TREO by 2026.

That means Ucore is looking to secure concentrate supply over 2.5 years in advance of when it is needed, showing the strength of demand for Western produced rare earths concentrate. It also means Vital has a growing off-take partner, making it a win-win relationship for both parties.

Vital Metals' Managing Director Geoff Atkins <u>stated</u>: "Vital to commence product acceptance with Ucore in Q4 CY21 by supplying a sample of concentrate produced from its Nechalacho rare earths project in NWT, Canada.....The MOU will position Vital as a key supplier of rare earths in the North American market, building on its offtake agreement with REEtec in Europe.....We are continuing to grow our operations in Canada and are well-placed to supply both geographies with the complete suite of rare earths."

Ucore Chairman and CEO, Mr. Pat Ryan, P.Eng, <u>stated</u>: "This partnership with Vital is an integral step in the development of the Alaska SMC, as Ucore continues to cultivate relationships with potential like-minded upstream and downstream partners in the evolving Western world market; with the ultimate goal of ensuring that original equipment manufacturers transforming to an electrified economy continue to have access to a comprehensive North American raw material and finished goods supply chain."

### A reminder about Vital Metals

Vital is already mining ore at its Nechalacho Mine in Canada's

Northwest Territories (NWT), with commencement of ore processing, at Vital's now under construction Saskatoon cracking and leaching facility, expected to begin in 2022. The Nechalacho Mine is a high grade, light rare earths (bastnaesite) project with a world-class resource of 94.7Mt at 1.46% TREO (measured, indicated and inferred). Nechalacho's North T Zone hosts a high-grade resource of 101,000 tonnes at 9.01% LREO (2.2% NdPr). Vital's strategy is to develop Nechalacho in two stages. Stage 1 of the operations focuses on the North T Zone resource, now in production, and is fully funded; Stage 2 will involve the development of the much larger Tardiff deposit.

Vital Metals' Nechalacho rare earths project in the NWT's of Canada — production of beneficiated ore commenced in June 2021

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Source: Vital Metals Annual report — June 2021

Vital has successfully produced a beneficiated product which is to be further processed at the Company's, now under construction, extraction facility in Saskatoon targeted to commence by late 2021 and with <a href="commercial production by mid-2022">commercial production by mid-2022</a>. Vital aims to produce a minimum of 5,000 tonnes of contained REO by 2025.

### Vital's off-take summary

■ Binding off-take agreement with Norwegian company REEtec for Stage 1 production with the supply of 1,000t REO (ex-Cerium)/yr for an initial five-year period. This was recently increased to rare earth carbonate product containing a minimum of 750t NdPr, contained within 2,000t/year total rare earth oxides (TREO) with a maximum of 25% cerium. Amended agreement extends Vital's product sales to REEtec to 2028 with option for an additional

expanded 10-year agreement.

• Non-binding MOU with Ucore Rare Metals Inc. to sell to Ucore a minimum of 500t REO (ex-cerium)/year, commencing H1 2024. Vital to expand production to support a minimum of 50% of Ucore's envisioned 5,000t TREO/yr processing capability (ie: 2,500t TREO/yr) by 2026.

The off-take agreements above combined, if completed, amount to 2,500t REO/yr (2,000 + 500) out of Vital's production target to achieve "5,000 tonnes of contained REO by 2025". It looks quite likely the Ucore off-take will be increased later.

Vital Metals' Nechalacho rare earths project is a simple open pit operation in northern Canada's NWT's

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Source: <u>Vital Metals Annual report - June 2021</u>

### Closing remarks

Vital is now the first rare earths producer in Canada and only the second in North America, from their Nechalacho rare earths mine, with commercial production set to be reached in mid-2022. Vital's extraction facility in Saskatoon will be built and produce a rare earths concentrate from about June 2022. Vital has secured off-takes in Europe with REEtec and now with Ucore in North America. These companies will take Vital's concentrate for further separation and purification.

Vital has agreed to acquire the Zeus heavy rare earth project (& 68% of the Kipawa Project) in Canada and it also owns a second light rare earths project in Tanzania.

Vital Metals Limited trades on a market cap of A\$248 million and certainly looks to be a company with a very bright future in the non-Chinese total rare earth supply chain.

# Jack Lifton with Vital Metals' Geoff Atkins on the commencement of rare earths production in NA

written by InvestorNews | May 13, 2022

In a recent InvestorIntel interview, Jack Lifton speaks with Geoff Atkins, Managing Director of <u>Vital Metals Limited</u> (ASX: VML) about Vital's recent milestones including the commencement of rare earths production and acquisition of two heavy rare earths projects in Canada.

In this InvestorIntel interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Geoff went on to say that the heavy rare earths projects will complement Vital's light rare earths operations at Nechalacho making them "one-stop-shop for rare earths." As Canada's first producer of rare earths, Geoff told InvestorIntel that Vital Metals is fully funded and discussed how it is well-positioned to be a strategic player in the North American rare earths supply chain at a time when demand continues to grow.

To watch the full interview, <u>click here</u>

### **About Vital Metals Limited**

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

### Nechalacho Rare Earth Project - Canada

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 mineralization. The Nechalacho Rare Earth Project hosts within the Upper Zone, a measured, indicated, and inferred JORC Resource of 94MT at 1.46% TREO.

To learn more about Vital Metals Limited, click here

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# Vital Metals stock is up 308% the past year as they commence rare earths production in NWT Canada

written by InvestorNews | May 13, 2022

It is always interesting to look back and see if what was written comes true. About 9 months ago I wrote an article here describing how <u>Vital Metals was on track to become a rare earths</u> <u>carbonate producer in 2021</u>. Fast forward to today and Vital Metals has delivered on their plan.

On July 6 <u>Vital Metals Limited</u> (ASX: VML) ("Vital") <u>announced</u> that the Company has commenced rare earth production at Nechalacho. This is a tremendous achievement and means Vital joins an elite group of only 2 or 3 North American rare earths

producers (includes MP Materials and for rare earths processing Energy Fuels). It also means Vital has become the first Canadian rare earths producer. Congratulations to Vital Metals from the team at InvestorIntel!

Mining at Vital's Nechalacho's North T Zone in Canada's Northwest Territories (NWT) is underway as part of Stage 1 production strategy. Vital is now crushing and sorting ore before sending it to a Saskatoon cracking and leaching facility later in 2021. Vital has also commenced drilling to define a mine plan for Stage 2 at Nechalacho as it works to develop a larger scale, longer life rare earths project.

### Vital Metal's Nechalacho Rare Earths Mine in NWT Canada location and key zones

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Source: Vital Metals

Nechalacho hosts a world-class resource of **94.7Mt at 1.46% REO** (measured, indicated and inferred). Nechalacho's North T Zone hosts **a high-grade resource of 101,000 tonnes at 9.01% LREO (2.2% NdPr)**, making it one of the highest grade rare earths deposits in the world. The resource has the potential to grow further as shown in recent drilling results that reported "broad high grade REO in near surface drilling at Tardiff Zone....thickness in excess of 60m in width and with grades up to 13.8% intersected". Vital stated in the release that high value Nd/Pr content was an impressive 24.2% of TREO and that Zone 1 was open in all directions. These results will form part of a new resource upgrade to be part of the Stage 2 expansion plans at Nechalacho.

The metallurgy is a simple process involving a 35%+ initial beneficiation via ore sorting and 97% recovery into solution via

hydrochloric acid using an industry standard process.

In more good news, in May 2021 it was <u>announced</u> that Vital's offtake partner REEtec has formally accepted Vital's rare earth carbonate sample. Vital will provide REEtec with 1,000 tonnes REO (ex-cerium) per year for five years with the option to increase volume by up to 5,000 tonnes REO per year over 10 years.

### Mid-term strategy and goals

Vital aims to become the lowest cost producer of mixed rare earth oxide outside of China by developing one of the highest grade rare earth deposits in the world and the only rare earth project capable of beneficiation solely by ore sorting. Vital also aims to be the largest independent supplier of clean mixed rare earth feedstock outside China.

More than \$120 million has been spent by previous owners on drilling, permitting and project development at Nechalacho, which includes a 40-person camp and airstrip.

Vital aims to produce a minimum of 5,000 tonnes of contained REO at Nechalacho by 2025, or earlier.

### Closing remarks

Achieving rare earths production in the West is no easy task. The process towards production, including permitting, can take over a decade. Vital has now achieved a low scale small CapEx rare earths production start-up operation, with big plans to expand in the years ahead. Given management's exceptional track record to date, it is looking good for Vital to achieve their expansion plans in the years ahead.

The production of rare earths on North American soil is not only a great step forward for Vital Metals, but it is also a

significant step forward for the West to secure a safe rare earths supply.

Vital Metals now trades on a market cap of A\$208 million after a great past 1 year return of 308%.

### In the Rare Earths Race-toProduction Race, Vital Metals is #2 in North America

written by InvestorNews | May 13, 2022

It's not often you get to be the first at something when it comes to mining in Canada. We are a country blessed with an abundance of natural resources and a lot of smart, diligent people have found a lot of those resources and put them into production. Although it hurts my pride a little bit, I have to give credit to an Australian miner, <a href="Vital Metals Limited">Vital Metals Limited</a> (ASX: VML) for becoming the first Canadian rare earths producer and only the second rare earths producer in North America (or third if Energy Fuels (NYSE: UUUU | TSX: EFR) beats them to the punch).

Now I'm jumping the gun a little as they have only <u>begun mining</u> <u>operations</u> at their Nechalacho rare earths project in Northwest Territories but barring any unforeseen circumstances, commencement of rare earth oxide (REO) production should occur sometime in Q2. The North T Zone of the Nechalacho project will be mined as a small open pit, with material transported to Vital Metal's ore sorter on-site at Nechalacho for sorting. This will

create a product suitable for further processing off-site at Vital Metal's rare earth extraction plant, to be constructed in Saskatoon, which will produce a mixed rare earth carbonate product for sale to separation facilities.

To that end, in February the company <u>announced an offtake</u> <u>agreement</u> with REEtec AS of Norway for an annual volume of 1,000 tonnes REO (ex-Cerium) over 5 years. Both parties have an option to increase this offtake volume by up to 5,000 tonnes REO per annum over 10 years. This is all part of the global strategy to diversify critical mineral supply chain which has been identified as a matter of significant importance to private companies and governments over the last 12 months and was highlighted by Jack Lifton of InvestorIntel in <u>this article</u>.

However, this is only the start for the Nechalacho project as Vital Metal's strategy is to develop it in two stages. Stage 1 of the operations focuses on the North T Zone resource (105,000 tonnes grading 8.9% TREO), and Stage 2 envisages the development of several high grade zones identified within the much larger Tardiff (Upper Zone) deposit. The Company previously announced this deposit's total resource of 95 million @ 1.46% total rare earth oxides (TREO). The Tardiff deposits are targeted to provide the resource for the long-term operation and expansion of the project, hence the option to increase the REEtec agreement.

But the real beauty of the Nechalacho project is that North T Zone is one of the highest grade rare earth deposits in the world. This gives Vital Metals the luxury of being able to put this zone into production with a minimal amount of capital, further allowing the company to build out Stage 2 from existing cash flow.

Source: <u>Vital Metals Corporate Presentation</u>

It is estimated maximum total construction cost for a beneficiation and rare earth extraction plant for Stage 1 is A\$20 million. The company recently raised A\$43 million via a share issue which should finance the company through commencement of mining operations at the Nechalacho Project; construction of the offsite extraction plant in Saskatoon; processing of mined material; and a drilling program at the Nechalacho Project to define a preliminary mine plan for its stage 2 production. All the pieces appear to be in place for Vital Metals to not only become the first Canadian rare earths producer but to build upon that success and achieve positive cash flow to continue building the company into a serious competitor in the global rare earth space.

### Vital Metals' Geoff Atkins on the countdown to rare earths production May 2021

written by InvestorNews | May 13, 2022 In a recent InvestorIntel interview, Tracy Weslosky spoke with Geoff Atkins, Managing Director of <u>Vital Metals Limited</u> (ASX: VML) about beginning production at its Nechalacho rare earths project in 2021.

In this InvestorIntel interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Mr. Atkins said the company's philosophy is to enter production

in the shortest amount of time using the least amount of capital. Vital Metals initially wants to focus on gaining customer acceptance and proving its ability to ramp up production. "Then we move to a larger operation, which is more typical of what you see people looking at developing in rare earths," said Mr. Atkins.

He also commented on the competitive advantages of Nechalacho, most notably its long-life potential, its mineralogy, and most importantly, the minimal expenditure required for infrastructure. Further discussion on an offtake agreement with REEtec also provides Vital Metals with a cornerstone customer with expertise in separation technology of rare earths. Mr. Atkins believes REEtec's experience will contribute to the company's success.

To watch the full interview, <a href="click here">click here</a>

### **About Vital Metals Limited**

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

### Nechalacho Rare Earth Project — Canada

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 mineralization. The Nechalacho Rare Earth Project hosts within the Upper Zone, a measured, indicated, and inferred JORC Resource of 94MT at 1.46% TREO.

To learn more about Vital Metals Limited, <u>click here</u>

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# Don Bubar of Avalon Advanced Materials talks about the surge in interest following the Rock Tech LOI

written by InvestorNews | May 13, 2022
Don Bubar, President and CEO of <u>Avalon Advanced Materials Inc.</u>
(TSX: AVL | OTCQB: AVLNF), talks to InvestorIntel's Tracy Weslosky about Avalon's recent surge in stock price and volume after announcing their letter of intent with Rock Tech Lithium to collaborate on the development of a North American lithium process facility.

Avalon's announcement has attracted a lot of industry attention. "This is the fifth media interview I've done to talk about that news release," Don told Tracy. "Avalon and Rock Tech have long been aspiring producers of lithium from resources in northern Ontario," he continued, "and we had this shared vision of how this centrally located processing facility would make a lot of sense for us to collaborate to create different lithium products and serve different markets."

"The demand for lithium battery materials is escalating," he continued, "with plans to establish EV and battery manufacturing capacity here. The interest is building all the time and is

accelerating now with government policy," Don told Tracy. "And the push for more rapid adoption of electric vehicle technologies is obviously creating new demand with government providing incentives to get these new facilities started."

Don went on to describe how with Rock Tech's German-based management's connections in Europe, this arrangement to collaborate on a new lithium process facility will help Avalon grow its business both in Europe and North America.

Don Bubar is recognized as one of the global experts on rare earths and lithium in particular, and sees an exciting "opportunity to put a processing facility in a central location close to transportation infrastructure and access to market for the product."

In the interview Don also provides an update on Avalon's Nechalacho Rare Earth Elements Property, and its deal with Australia's Vital Metals. "They are pretty much ready to go," he said, as soon as pandemic conditions allow. "The idea all along is for them to take advantage of the small, relatively easy to process resource called the T-Zone," he continued, "and once you get that production and supply chain started then we could be in a position to scale it up."

To watch the full interview, <u>click here</u>.

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