



# Building Canada's rare earth supply chain

VITAL METALS  
(ASX: VML | OTCQB: VTMXF)

February 2023



# Disclaimer

This presentation provides an overview of prospective rare earth projects (“the Projects”) and development opportunities and contains “forward looking statements”. Forward-looking statements are all statements other than statements of historical fact included in this presentation including and without limitation those regarding the Projects’ strategy, financial positions, plans and identification of additional resources and reserves. Such forward looking statements are subject to risk factors associated with exploration, development and the acquisitions of mining tenements and involve known and unknown risks, uncertainties and other factors. These risk factors could have a material effect on the operating, financial performance and achievements of the Projects and may cause the actual results to be materially different from any future operating, financial performance and achievements expressed or implied in the forward-looking statements contained in this presentation.

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## ASX LISTING RULE INFORMATION

This presentation contains information relating to Mineral Resource Estimates for the Nechalacho Project extracted from an ASX market announcement reported previously and published on the ASX platform on 14 February 2023, titled “Vital achieves 26% increase in Tardiff Mineral Resource Tonnes and 19% increase in contained NdPr”. 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.

## REFERENCES

1. ASX announcement dated 14 February 2023 titled “Vital achieves 26% increase in Tardiff Mineral Resource tonnes and 19% increase in contained NdPr” [https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02631023-6A1136237?access\\_token=83ff96335c2d45a094df02a206a39ff4](https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02631023-6A1136237?access_token=83ff96335c2d45a094df02a206a39ff4)



# Company Overview



## BUILDING CANADA'S RARE EARTHS SUPPLY CHAIN

- Updated Tardiff Mineral Resource Estimate of 119Mt @ 1.4% TREO including 0.35% NdPr for 416,000 tonnes of contained NdPr
- Initiated a 5,500 metre drilling campaign at Nechalacho
- Commenced Preliminary Economic Assessment Study at Nechalacho
- Hosted Canada's Prime Minister Trudeau at our Saskatoon processing site in January 2023

## CAPITAL STRUCTURE

ASX Code	VML
Shares on Issue	5,306.1M
Options on Issue	475.5M
Share Price (at 20 Feb 2023)	A\$0.024
Market Capitalisation	A\$127.3M
Cash (as at 31 Dec 2022)	A\$30M



### MAJOR SHAREHOLDERS

Lionhead Resources Fund entities	750M	14.1%
Transocean Private Investments Pty Ltd	208M	3.9%

# Board & Management



**RICHARD CROOKES**  
**Interim Non-Executive  
Chairman**

Mr Crookes is managing partner of Lionhead Resources (LHR) and chairman of the Investment Committee. He has more than 35 years of experience as both an operator and investor. Mr Crookes holds a BSc in Geology.



**JOHN DORWARD**  
**Managing Director & CEO**

Mr Dorward is a finance and resources executive with nearly 20 years' experience. Former President, CEO and Director of Roxgold Inc (TSX: ROXG | OTCQX: ROGFF), acquired for US\$884M in 2021.



**PAUL QUIRK**  
**Non-Executive Director**

Mr Quirk is a partner at Lionhead Resources and is responsible for originating new investment opportunities. He holds a B.Comm from the Northeastern University in Accounting and Finance.



**JAMES HENDERSON**  
**Non-Executive Director**

Mr Henderson has more than 35 years' experience in advising emerging companies relating to corporate transactions and strategies, including corporate advice, financial and corporate structuring, capital raisings and commercial negotiations.



**LISA RILEY**  
**Non-Executive Director**

Ms Riley has nearly 30 years of experience in global capital markets, finance, mining advisory and government relations in Canada and Latin America.

**EBEN VISSER**  
**Chief Operating Officer**

Mr Visser is a project delivery executive with experience in completing development stage projects. He has 15+ years of experience in navigating complex projects in Canada, the USA, South America, India and Africa.

**DAMON COLBERT**  
**Chief Financial Officer**

Mr Colbert has more than 20 years' experience in finance, business and banking. Previous roles include Head of Finance at Axicom Pty Ltd and Group Financial Controller at The Star Entertainment Group (ASX: SGR).

**LOUISA MARTINO**  
**Company Secretary**

Ms Martino has provided company secretarial and accounting services to ASX-listed companies for ~10 years. Previously she assisted with company compliance (ASIC and ASX) and capital raising for a corporate finance company.

**Our Recent Board and  
Management appointments  
provide skills and experience  
which position Vital for rare  
earths project development  
and execution**

# Nechalacho Project, Canada

## DEVELOPING A GLOBALLY SIGNIFICANT RARE EARTHS PROJECT

Updated MRE for Tardiff of 1.67 million tonnes TREO with 416,000t contained NdPr

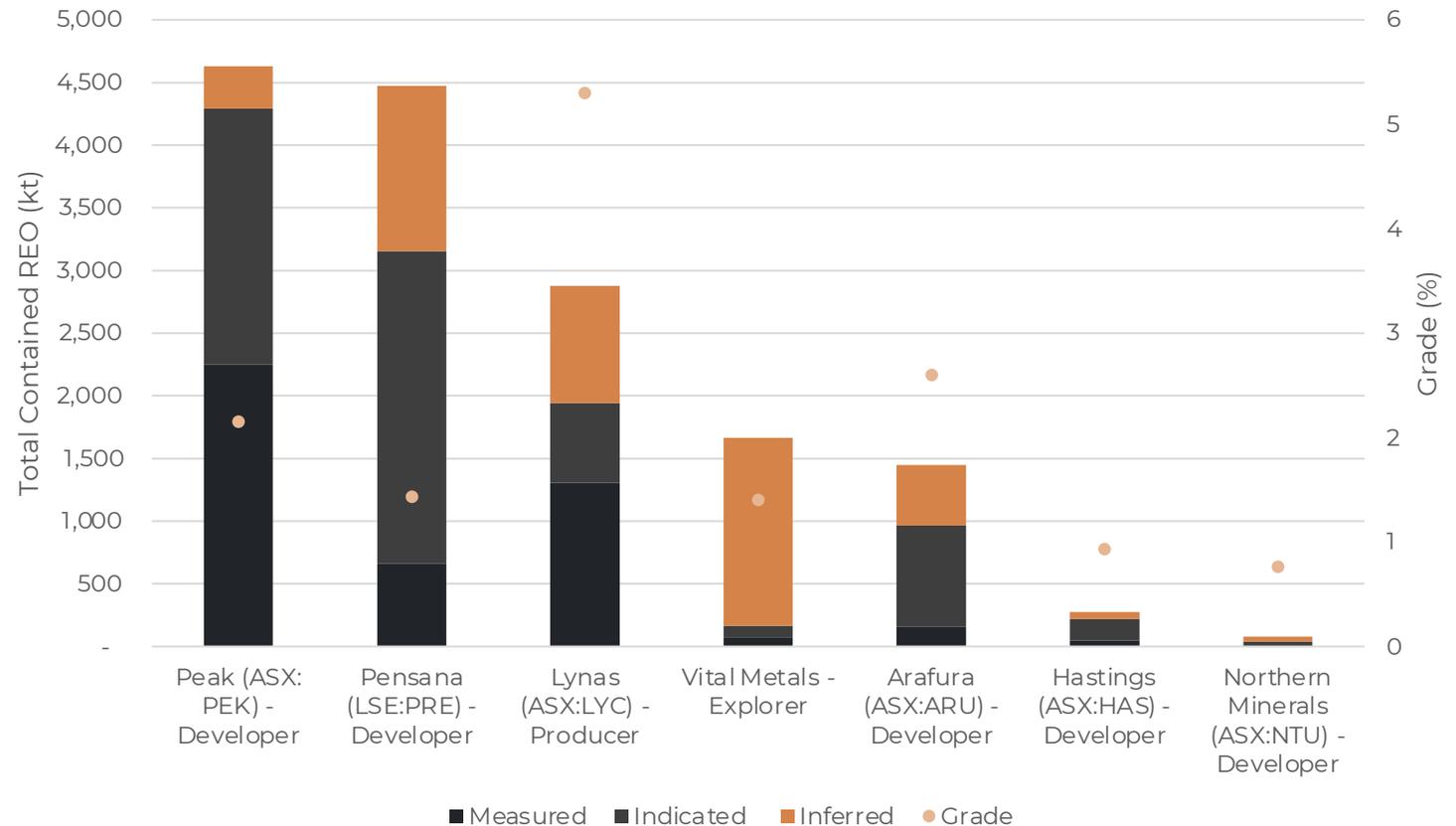
Strategically located to serve global markets – US, Europe

Vital is building a long-life rare earths business through a staged development approach

Small-scale mining at North T deposit with development of larger Tardiff deposit to follow

Initial Economic Assessment for development of Tardiff underway

Vital Metals Peer Comparison

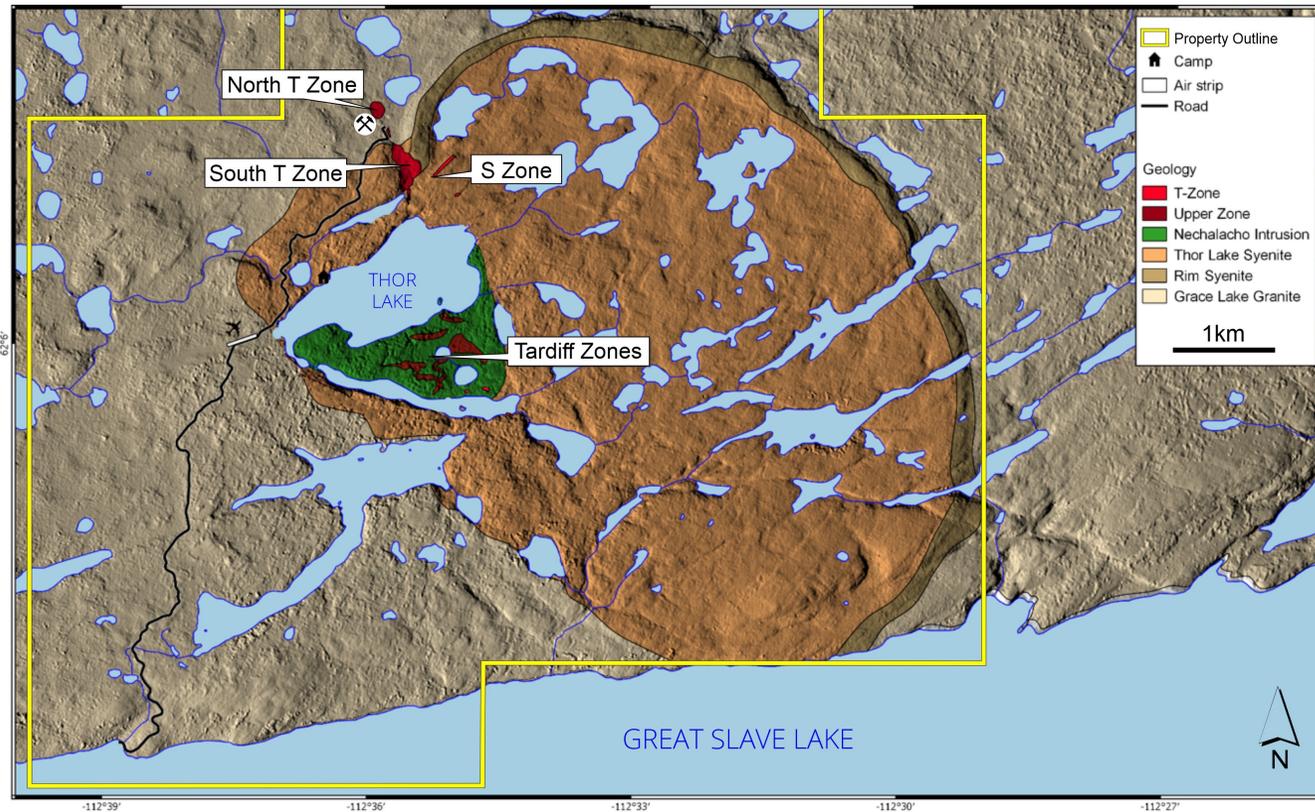


Producer – Product mined  
 Developer – Feasibility study completed  
 Explorer - Resource announced (Tardiff deposit)

Source – Company reports, see Appendix 1

# Tardiff deposit, Nechalacho

## ECONOMIC ASSESSMENT TO POSITION TARDIFF FOR DEVELOPMENT



Tardiff deposit offers opportunity for large-scale, long-life rare earths production

Tardiff Upper Zone has a global MRE of 119.0 million tonnes at 1.4% TREO

Initial economic assessment to be based on updated MRE – due Q3 CY23

Tardiff Definitive Feasibility Study (“DFS”) will follow

5,500m drilling program initiated at Nechalacho

# Nechalacho Exploration Drilling Underway

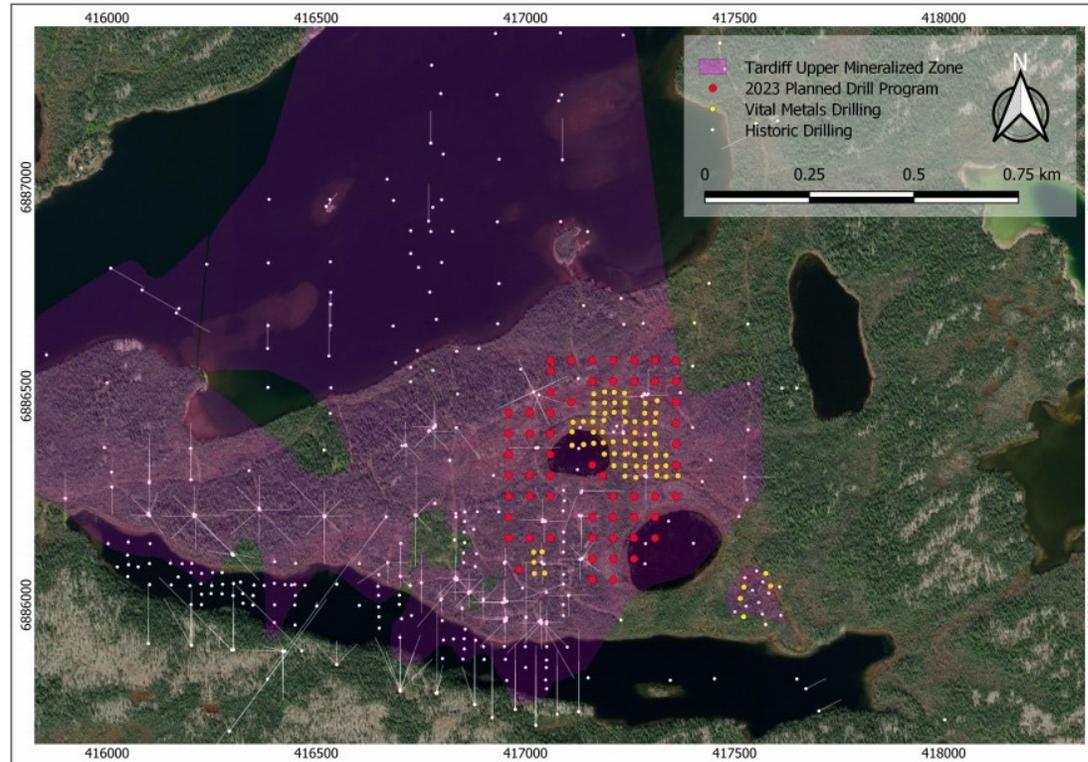
## DRILLING DESIGNED TO INCREASE MRE CONFIDENCE

Two drill rigs mobilised to Nechalacho

5,500m of diamond drilling planned

Infill component designed to increase confidence in Inferred portion of the recently updated MRE to M&I

Exploration targets around extending high-grade North T and underlying Xenotime Target



# Processing Facility, Saskatoon



Canadian Prime Minister Justin Trudeau tours the Saskatoon facility with Vital's MD John Dorward in January 2023

Custom-built facility in Saskatoon's rare earths "hub"

We are completing the calcine circuit in Q3 to produce an intermediate rare earth oxide product

Finalisation of construction (leaching, purification, precipitation circuits) expected in 2024



# Canada's First Rare Earth Mining Company

VML is value adding in Canada and has a strong growth outlook

## NECHALACHO RARE EARTH MINE

## SASKATOON RARE EARTH REFINERY

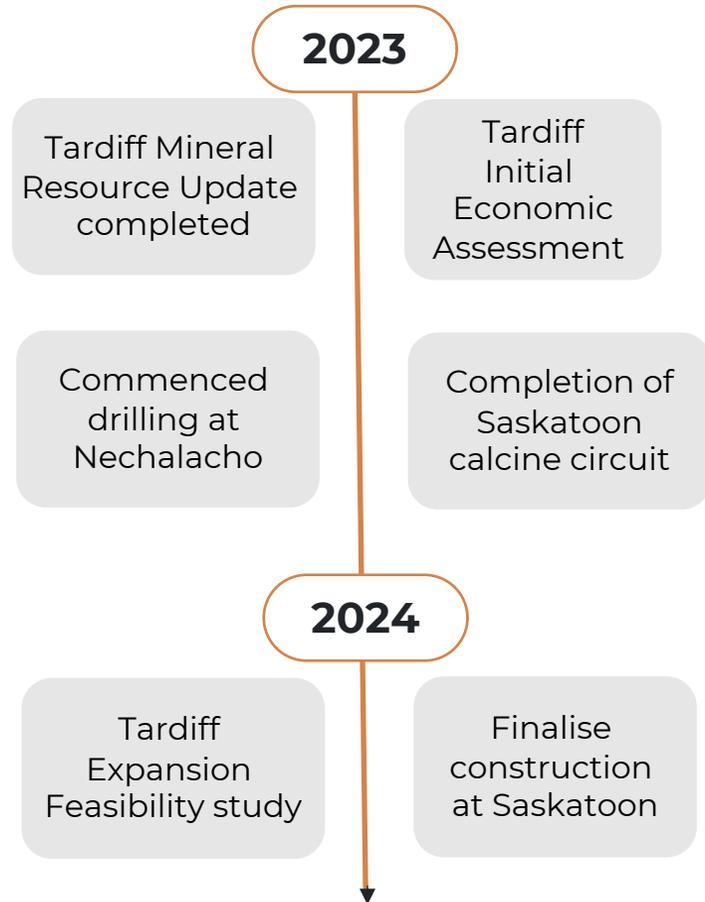
Potential to be one of the largest sources of NdPr in the Western world	Upgrades concentrate into a mixed rare earth carbonate – for sale to customers
Drilling underway to target conversion of Inferred to M&I	Under construction – calcine circuit to be completed in 2023
Exploration targets around high-grade North T and Xenotime prospects to be advanced	Low risk modular growth options. Strategically located near service providers.
Economic study for Tardiff underway.	Initial plant capacity is 500t, scalable to 1,000t of contained NdPr.



**Initial economic assessment due Q3 2023 targeting higher rare earth production rates**

# Catalysts for growth

Significant Organic  
Growth, Material News Flow



# Building relationships to benefit communities & Canada

Nechalacho is the first mine in Canada being mined by the land's traditional owners

Sensor-based ore sorting at Nechalacho reduces environmental impact – no tailings

More than 80% of our Nechalacho & Yellowknife employees are residents of Canada's North, and more than 70% are indigenous

Strong local procurement from 160 local suppliers

We continue to build government relations and community engagement

We received Federal govt funding for water quality testing program

We are a Member of the Mining Association of Canada



# Contact Us

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**John Dorward**  
Managing Director

vital@vitalmetals.com  
+61 2 8823 3100



# Appendix 1 – Peer Comparison Data

Company	Contained REO (kt)				Grade (% TREO)	Stage of Development	Market Capitalisation (\$M)*
	Measured	Indicated	Inferred	Total			
Peak (ASX: PEK) <sup>1</sup>	2,250	2,040	340	4,630	2.2	Developer	129.2
Pensana (LSE:PRE) <sup>2</sup>	664	2,490	1,320	4,474	1.4	Developer	249.9
Lynas (ASX:LYC) <sup>3</sup>	1,307	633	937	2,877	5.3	Producer	7,693.1
Vital Metals (ASX: VML)	73	91	1,502	1,666	1.4	Explorer	122.0
Arafura (ASX:ARU) <sup>4</sup>	157	810	483	1,450	2.6	Developer	1,330.4
Hastings (ASX:HAS) <sup>5</sup>	48	172	57	277	0.9	Developer	329.4
Northern Minerals (ASX:NTU) <sup>6</sup>	1	38	42	81	0.8	Developer	213.3

<sup>1</sup> Peak Rare Earths Limited 2022 Annual Report

<sup>2</sup> Pensana Plc 2022 Annual Report

<sup>3</sup> Lynas Rare Earths Limited 2022 Annual Report

<sup>4</sup> Arafura Rare Earths Limited 2022 Annual Report

<sup>5</sup> Hastings Technology Metals Limited ASX Announcement dated 6 February 2023

<sup>6</sup> Northern Minerals Limited ASX Announcement dated 10 October 2022

\* Market capitalization is calculated using the last traded price on the relevant exchange on 24 February 2023 and a GBP to AUD exchange rate of 0.5668

NB: There is no certainty that further work carried out by VML will lead to achieving the same size, shape, grade or form of any comparison deposit. The VML project is in a different stage of development and significant further exploration is required to be undertaken to further prove or disprove any comparison.