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An Introduction to Ucore Rare Metals Inc. & its ALASKA2023 Critical Metals Business Plan

UAF / DGGS CORE-CM Conference

January 18, 2022

UNIVERSITY OF ALASKA FAIRBANKS

STATE OF ALASKA — DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

American Critical-Metals Independence Starts Here

CAUTIONARY NOTES & DISCLAIMERS

This presentation includes certain statements that may be deemed "forward-looking statements". All statements in this presentation (other than statements of historical facts) that address future business development, technological development and/or acquisition activities (including any related required financings), timelines, litigation outcomes, events, or developments that the Company expects, are forward-looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance or results and actual results or developments may differ materially from those in forward-looking statements. The Company has assumed that it will be able to procure or retain additional partners and/or suppliers, in addition to the wholly owned Innovation Metals Corp. ("IMC"), as suppliers for Ucore's expected future Alaska Strategic Metals Complex ("SMC"). Ucore has also assumed that sufficient external funding will be found to prepare a new National Instrument 43-101 ("NI 43-101") technical report that demonstrates that the Bokan Mountain Rare Earth Element project ("Bokan") is feasible and economically viable for the production of both REE and co-product metals at the then prevailing market prices based upon assumed customer off-take agreements. Ucore has also assumed that sufficient external funding will be secured to develop the specific engineering plans for the Alaska SMC and its construction. Factors that could cause actual results to differ materially from those in forward-looking statements include, without limitation: IMC failing to protect its intellectual property rights associated with the RapidSX™ technology; the RapidSX™ technology failing to demonstrate commercial viability in large commercial-scale applications; Ucore not being able to procure additional key partners or suppliers for the Alaska SMC; Ucore not being able to raise sufficient funds to fund the specific design and construction of the Alaska SMC and/or the continued commercial rollout of RapidSX™ technology; adverse capital-market conditions; unexpected due-diligence findings; the emergence of alternative superior metallurgy and metal-separation technologies; the inability of Ucore and/or IMC to retain its key staff members; a change in the legislation in Alaska and/or in the support expressed by the Alaska Industrial Development and Export Authority ("AIDEA") regarding the development of Bokan and/or the Alaska SMC; the availability and procurement of any required interim and/or long-term financing that may be required; and general economic, market or business conditions.

For more information about Ucore Rare Metals Inc., please see the information that is available on SEDAR (www.sedar.com). Please also see the risk disclosures that are found in Ucore's most recent Management Discussion & Analysis document (filed on November 25, 2021).

For more information about Ucore's mineral resources and related technical information regarding the Bokan Project, please see Ucore's NI 43-101 technical report (a preliminary economic assessment) filed on SEDAR on March 14, 2013 and Ucore's mineral resource update filed on SEDAR on October 15, 2019. Information about the quantity and grades of the indicated and inferred mineral resources are described in these documents and are available therein. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Qualified Person: Michael L. Schrider, P.E., VP & COO of Ucore, has approved the scientific and technical content of this presentation and is the Qualified Person responsible for its accuracy. Mr. Schrider, is a registered professional engineer in the State of Louisiana, holds a BS degree in engineering from the University of New Orleans and a MEng in mining engineering (mineral process emphasis) from The University of Arizona.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined by the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this presentation.

UCORE - INTRODUCTION

Alaska SMC, LLC

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Innovation Metals Corp.

RapidSX™

IMC's **proprietary, environmentally sound**, and **21st century critical metals separation technology platform** founded on time-tested SX technology for **REE, Li, Co, Ni, et al.**

UCORE – ALASKA2023 OBJECTIVE

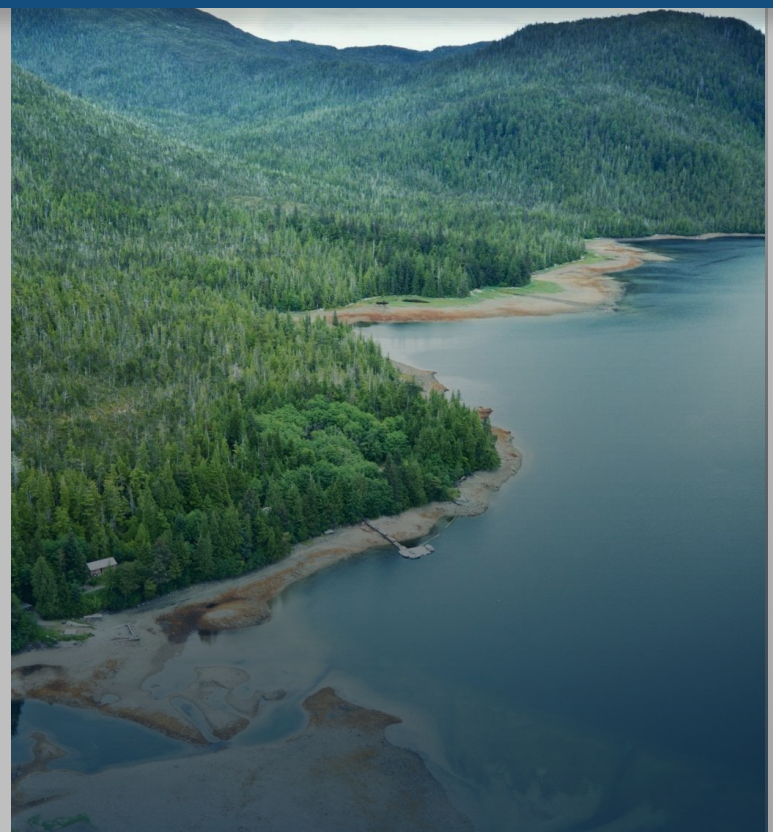
Work to Establish a Comprehensive North American-centric Rare Earth Element Supply Chain

Near-Term:

- REE separation technology IP acquisition & development - C $18+ million invested to date
- Develop NA REE resource alliances, processing capability, and downstream strategic partnerships to ensure a comprehensive domestic supply chain

Long-Term:

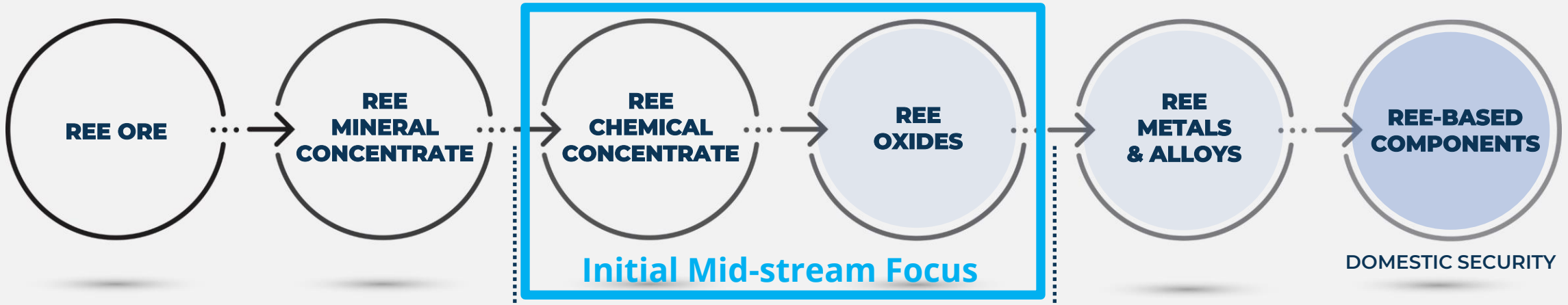
- Established an HREE resource at the Bokan-Dotson Ridge REE Project in Southeast Alaska
  - Obtained US $145 million AIDEA bond mine financing authorization from AK legislature
  - C $35+ million invested to date to explore, validate & establish an NI 43-101 PEA*



**A PEA is preliminary in nature; it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.*

UCORE - RETAINING NORTH AMERICAN MANUFACTURING

Ucore's Plan of a North American REE Supply Chain



Mine & Mill

US Allied Mineral Concentrate

Bokan Project

Other Sources

Processing Plants

US Allied Chemical Concentrate

Alaska SMC

Other SMCs

IMC RapidSX™ Licensing

Downstream Operations

Strategic Partners:

Offtakes

Metal/Alloys

Magnets

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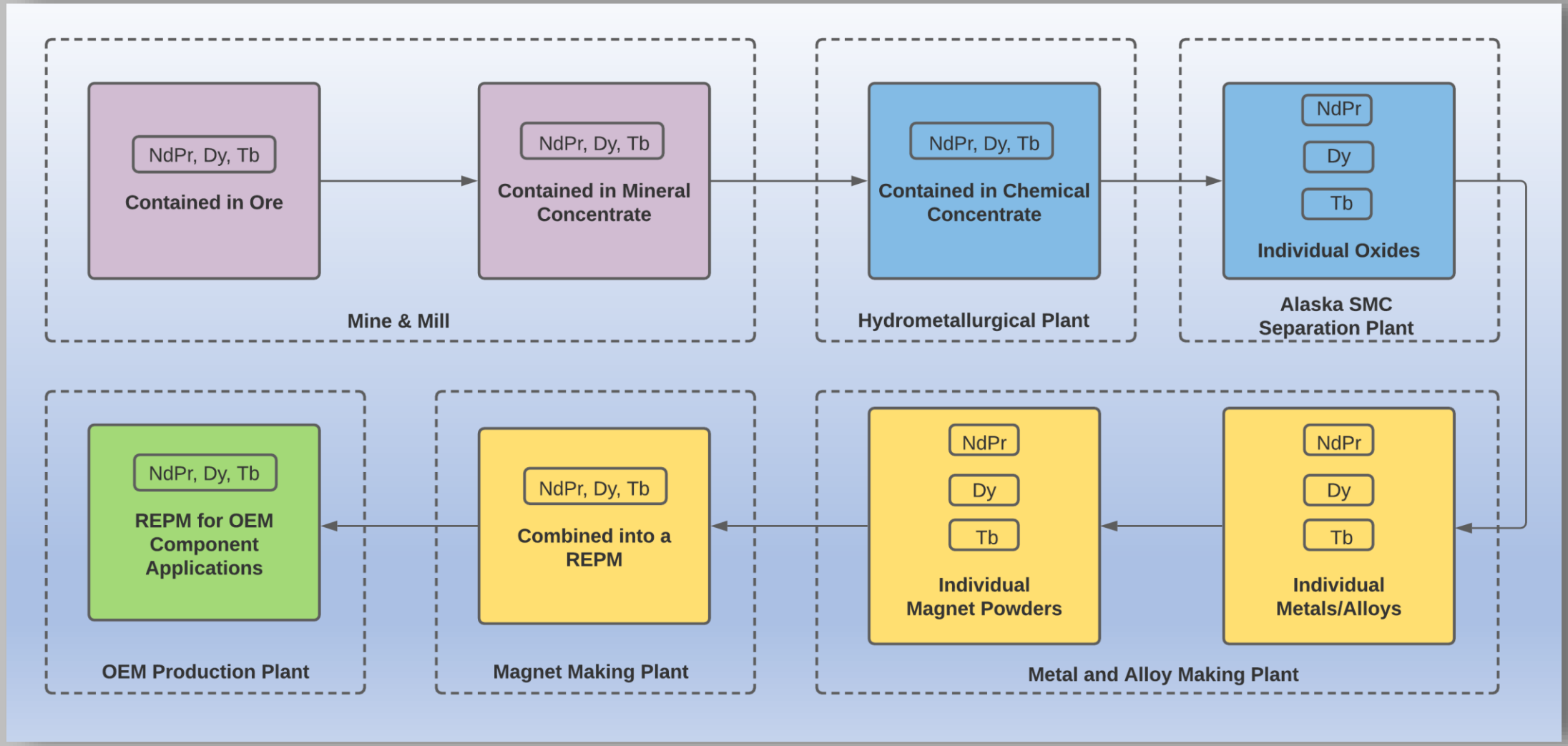
Simplified Flow Chart following NdPr, Dy & Tb Elements from Mine to Vehicle



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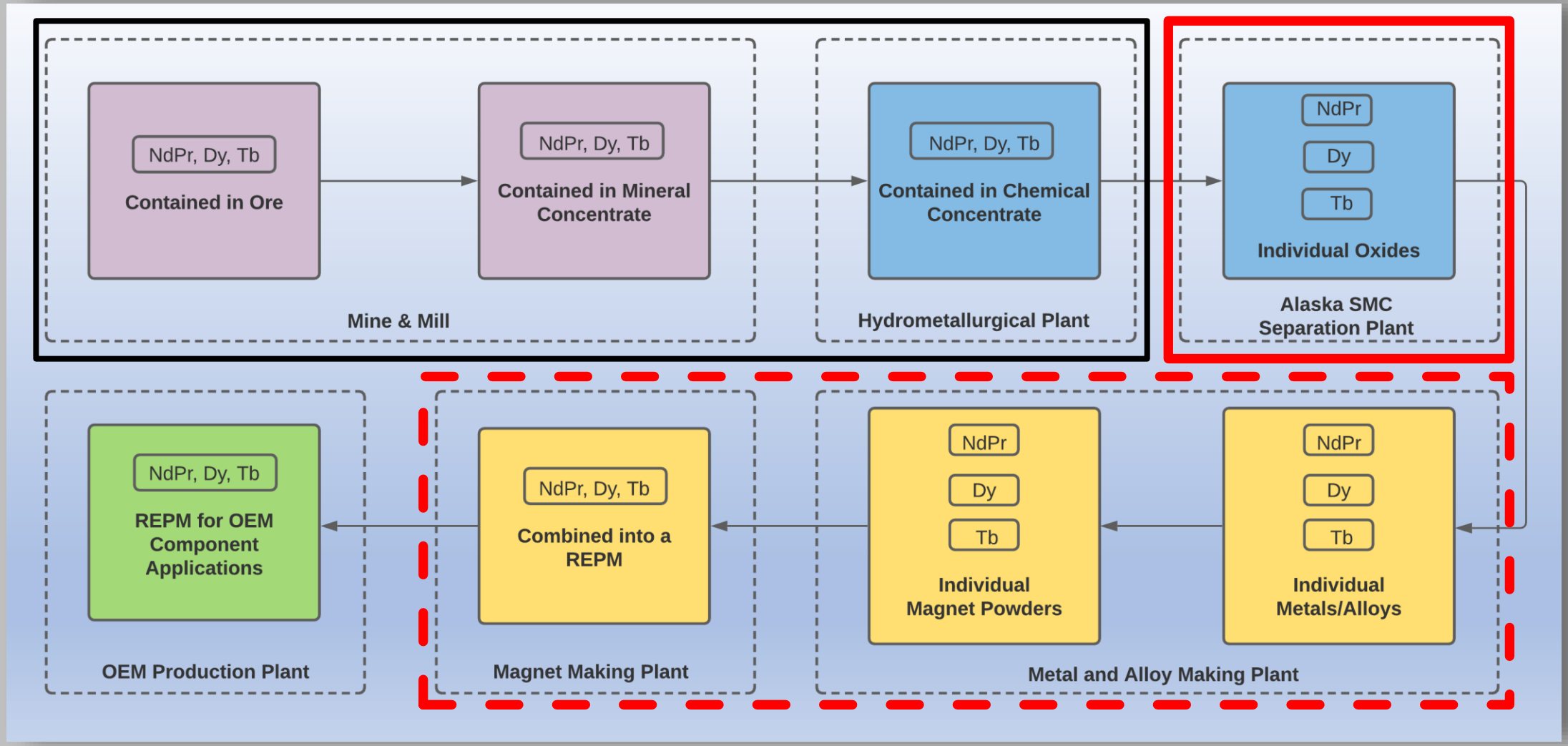


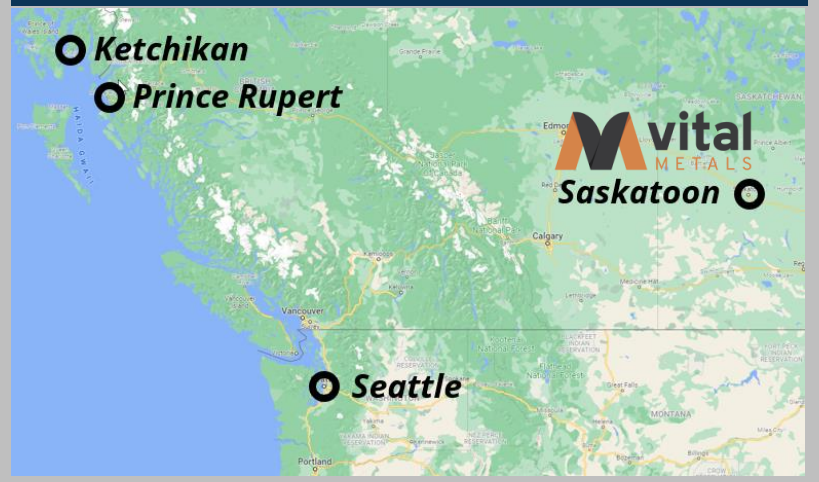
ALASKA2023 BUSINESS MODEL

Alaska Strategic Metals Complex

A Planned 2,000 tpa HREE & LREE Separation & Purification Facility for the Production of REO

- First Bokan component
- Anchor tenant of NRDC w/ Southeast Conference
- US-allied feedstocks
- Expandable to 5,000 tpa TREO (ex-cerium and yttrium)
- Founded on RapidSX™

US or Allied Feedstock will Transit Through Seattle or Prince Rupert



Artist Rendering

Targeted for Ketchikan

- Worldwide shipping corridor
- Proximity to other REE deposits in Alaska and Canada
- Closest Alaska port to Seattle and Prince Rupert
- Existing work force & infrastructure

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Working with numerous prospective partners for various sources of project funding:

- Debt Financing (**AIDEA**, **DOE LPO**, et al.), **OEM** Offtake Pre-Purchase & Supply Agreements, USG Matching Grant Funds, Lease Back Arrangement with **Southeast Conference**, Other Funding

Community and stakeholder engagement to ensure prudent environmental, social and corporate governance (ESG) activities

- **Southeast Conference** outreach
- **Ketchikan Gateway Borough**
- **University of Alaska Southeast** – workforce development training

ALASKA2023 BUSINESS MODEL

Alaska SMC Products

Alaska Strategic Metals Complex

Designed for the EV industry:

- Term/quantity of supply
- Predictable price
- Exacting Quality Assurance / Quality Control

Economics

- Competitive with China's REO producers
- Secure long-term supply and offtake agreements

CORE-CM – Suggested Focus Areas

- **A Strengthened REO Market for La, Ce, & Y**
- **NA Metal/Alloy Making**
- **NA Magnet Making**
- **Streamline Mine Permitting**

A Focused Production Effort on:

- **Praseodymium (Pr) oxide**
- **Neodymium (Nd) oxide**
- **Terbium (Tb) oxide**
- **Dysprosium (Dy) oxide**

The four primary rare earth oxides used to produce NdFeB Permanent Magnet Synchronous Motors

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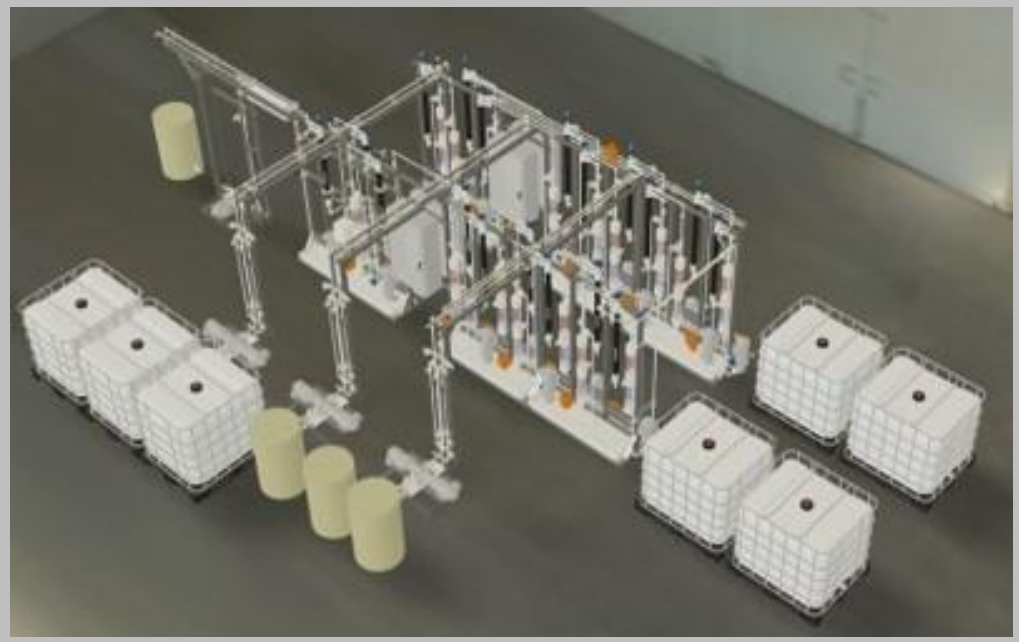
INNOVATION METALS CORP.

RapidSX™ is a Transformative REE Separation Technology

RapidSX™ Critical Metals Technology

Key Advantages vs. Conventional SX:

	RapidSX™	Conventional SX
Performance & Efficiency		
Commercial Purity	Yes	Yes
REE Recovery Rates	High	High
Processing Time	Rapid	Slow
Time to Equilibrium	Days	Several Weeks
CAPEX		
Equipment Cost	Low	High
Physical Footprint	Low	Very High
Separation Staging	Low	Very High
OPEX		
Metal Inventory/WIP	Low	High
Organic Volumes	Low	High
Labour	Low	High
Power Consumption	Low	High



Commercial Opportunities

- IMC Licensing

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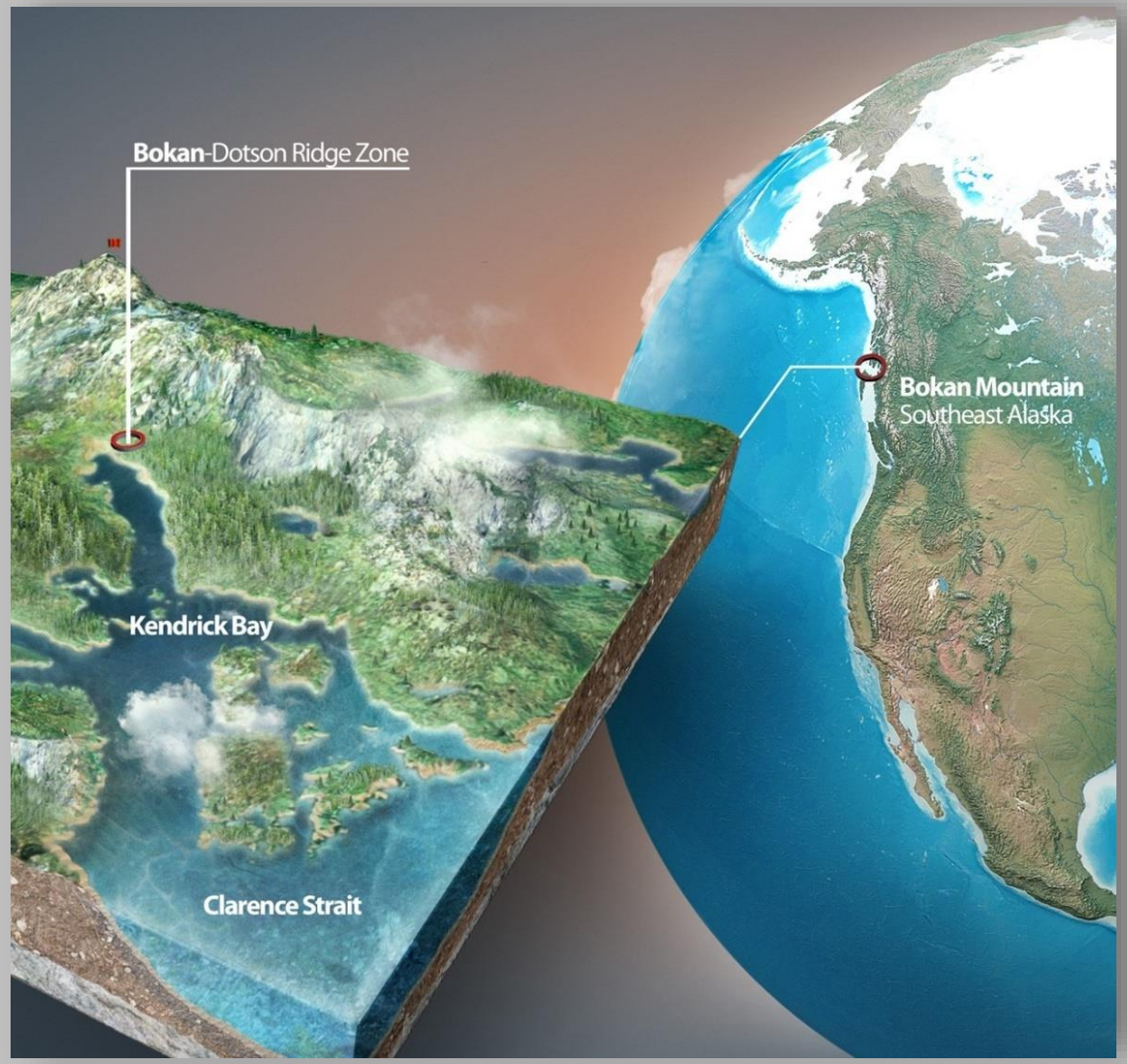
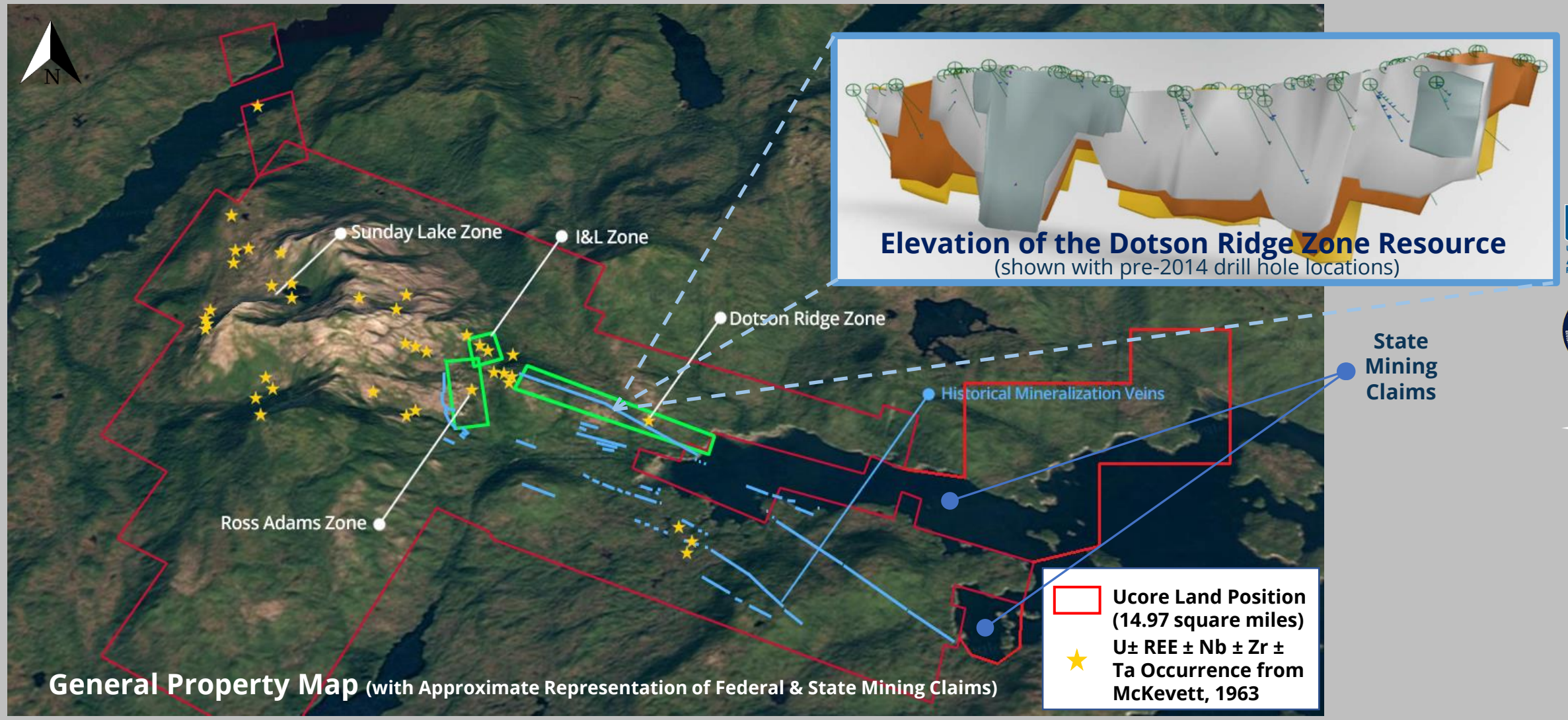
Bokan-Dotson Ridge REE Project Prince of Wales Island, Alaska

The Bokan-Dotson Ridge Zone resource estimate:

- 100% ownership rights
- Remains open down-dip and along strike
- Further exploration planned for Summer ’22 and concurrent with initial mining
- Next steps - PFS and/or FS (to include the co-products of beryllium, zirconium, niobium & hafnium), detailed mine design, and permitting
- The highest grade HREE resource in the US, disclosed per NI 43-101



The Bokan Mountain Complex & the Dotson Ridge Zone Resource



Elevation of the Dotson Ridge Zone Resource
(shown with pre-2014 drill hole locations)

General Property Map (with Approximate Representation of Federal & State Mining Claims)

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Questions?

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