

# SEARCH MINERALS INC.

A mining and technology company building stable,  
sustainable access to the Rare Earth Elements that will power  
our future

CORPORATE PRESENTATION  
JUNE 2021

TSX-V: SMY  
OTCQB: SHCMF

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# THE FUTURE IS GREEN



Canada targeting net-zero by 2050, with green jobs and technology playing a major role in COVID economic recovery



EU aiming for net-zero by 2050; 10+ EU countries phasing out internal combustion engines and aiming for 100% green energy by 2040



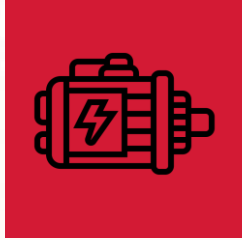
\$1.7 trillion investment in green technology; Executive Order to secure domestic Rare Earths (Canada is deemed domestic in the Executive Order)



Major investments in electric vehicle technology from legacy and next-gen automakers; rapid growth in battery needs

## WHAT WILL IT TAKE TO BUILD THAT FUTURE?

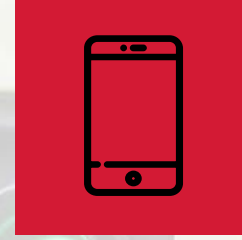
# RARE EARTH ELEMENTS (REEs) ARE USED IN...



Electric vehicle mobility  
and traction motors



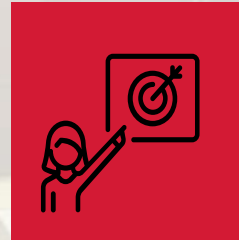
Wind turbines



Computers, phones,  
and devices



Medicine and  
dentistry



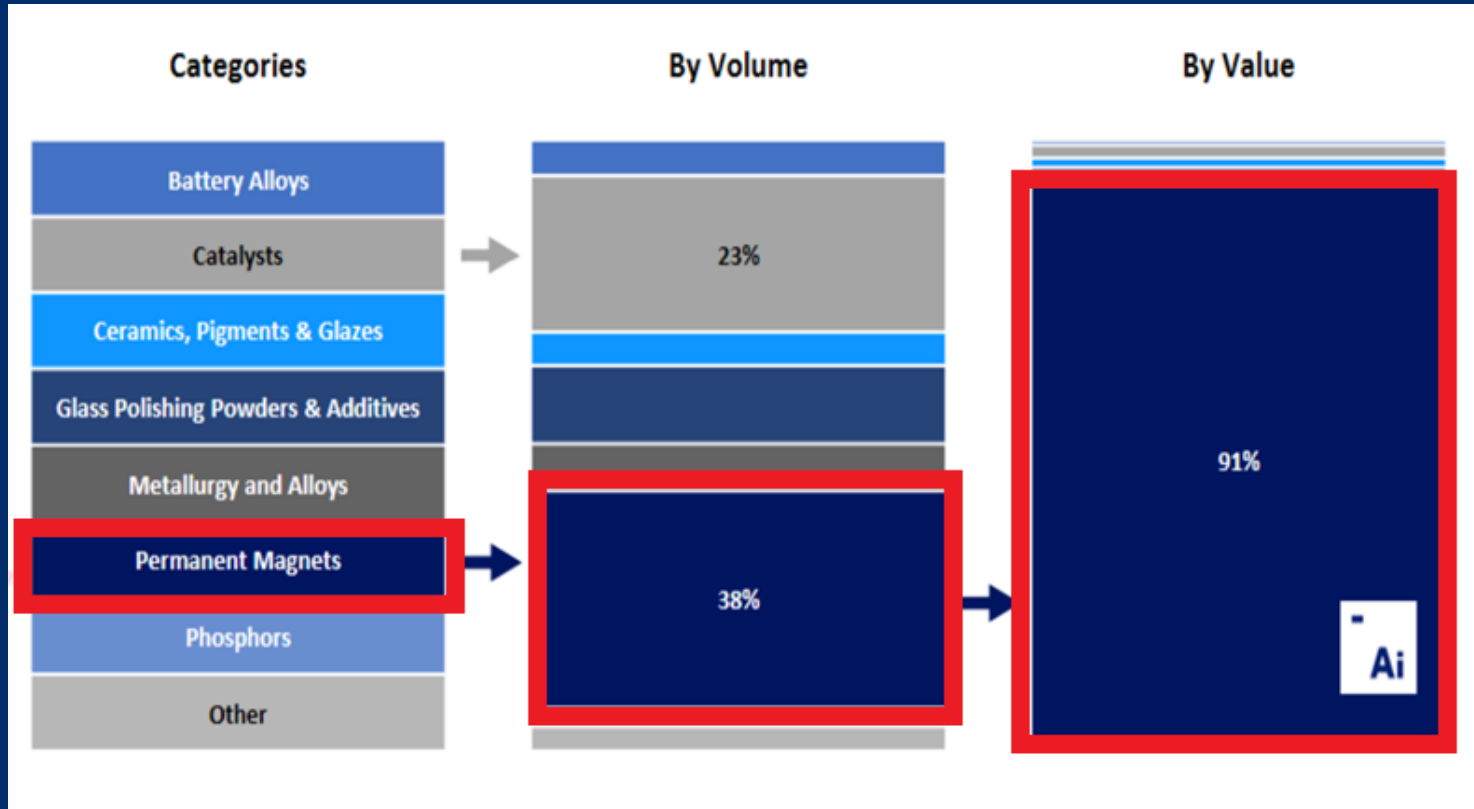
Defence technology



Hundreds of other  
applications

Yet despite their growing importance, the North American and European REE supply chain is tenuous. In the next decade, REE demand will increase significantly, and a stable supply chain will be essential.

# PERMANENT MAGNETS – VALUE OF RARE EARTH SUPPLY CHAIN



*“The value of global magnet rare earth oxide consumption will rise five-fold by 2030, from US\$ 2.98B this year to US\$15.65B at end of the decade (2030)”*

*Adamas Intelligence*

*“Global shortage of neodymium, praseodymium, and didymium oxide will collectively rise to 16,000 tonnes in 2030, an amount equal to roughly three-times Lynas Corporation’s annual output, or three-times MP Material’s annual output of neodymium and praseodymium oxide”*

*Adamas Intelligence*

Adamas Intelligence – Rare Earth Magnet Market Outlook 2030

**Search Minerals resources contain the permanent magnet rare earth elements (Neodymium, Praseodymium, Dysprosium and Terbium)**



# Development of a World Class Critical Rare Earth Element District SE Labrador, Canada

More than a Mining Company



**Rare Earth Elements**  
Nd Pr  
Dy Tb

**Permanent Magnets**

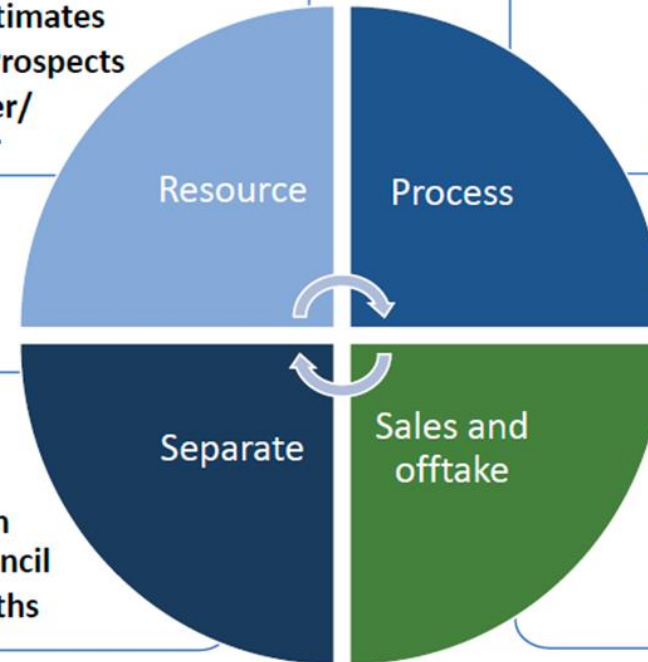


## Strong Support

- ✓ Community
- ✓ Indigenous
- ✓ Newfoundland/Labrador
- ✓ Federal Government

- District scale opportunity – 63 km long
- 2 Resources Estimates
- 3 Exploration Prospects
- Dr. Randy Miller/  
Suzanne Butler

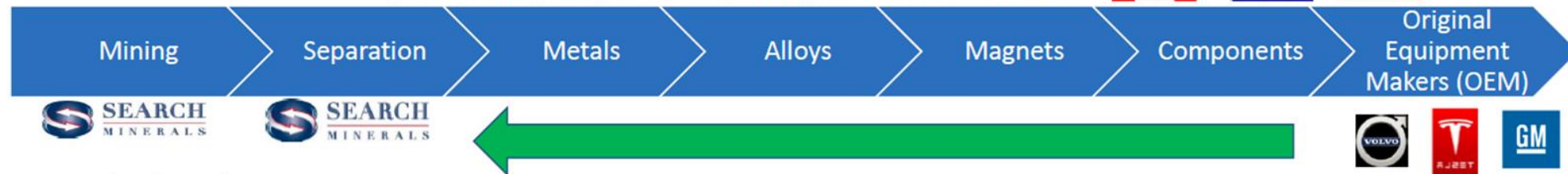
- Proprietary Direct Extraction Technology – 2 pilot plants completed
- Low Capex / Opex
- Dr. David Dreisinger



- MOU:
- Saskatchewan Research Council
- USA Rare Earths

- Product available for end users
- Secure Supply Chain

## PARTICIPATING IN THE RARE EARTH SUPPLY CHAIN



[www.searchminerals.ca](http://www.searchminerals.ca)



**SEARCH**  
MINERALS

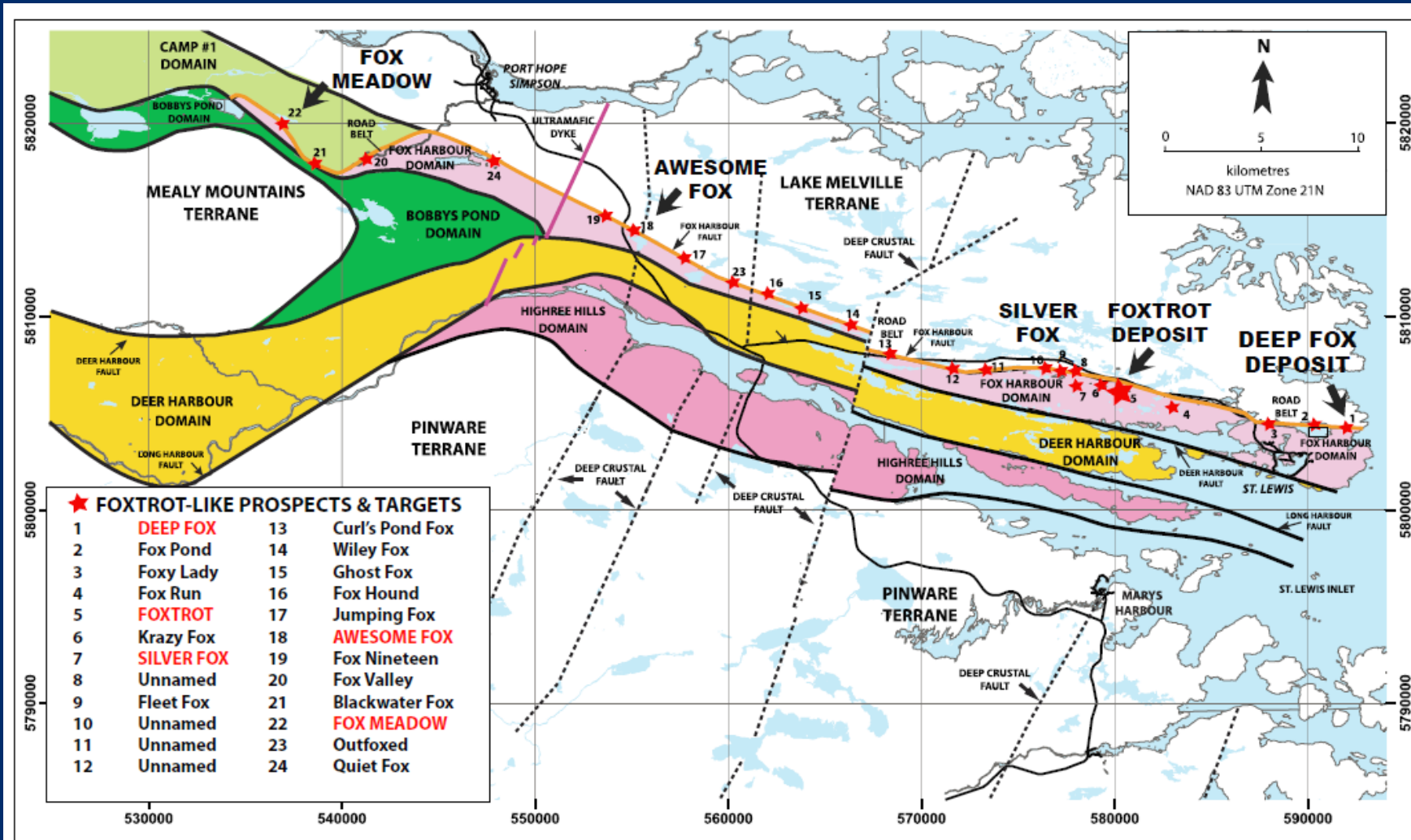
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# LOCATION – OUR BUILDING AND FACILITIES IN THE COMMUNITY



# DISTRICT-SCALE OPPORTUNITY



## MAJOR DISCOVERIES

- Foxtrot (April 2016 PEA)
- Deep Fox (November 2019)
- Fox Meadow
- Silver Fox
- Awesome Fox

## INFRASTRUCTURE

- On tidewater, connected to Trans-Labrador Highway, and local airstrip
- 3 local communities: St. Lewis, Mary's Harbour, Port Hope Simpson



# FOXTROT AND DEEP FOX RESOURCE ESTIMATE

## Foxtrot Resource Estimate

- No further drilling required until bankable feasibility study
- Surface expression – 400m x 10m
- Open at depth

**TOTAL TONNAGE: 15,586,000**

CLASSIFICATION	Cut-off \$NSR	TONNAGE (TONNES)	Dy (ppm)	Dy <sub>2</sub> O <sub>3</sub> (ppm)	Nd (ppm)	Nd <sub>2</sub> O <sub>3</sub> (ppm)	Pr (ppm)	Pr <sub>6</sub> O <sub>11</sub> (ppm)	LREE %	LREO %	HREE %	HREO %	TREE %	TREO %
<b>OPEN PIT</b>														
INDICATED	\$165	4,129,000	177	203	1,393	1,625	372	449	0.69	0.83	0.17	0.2	0.86	1.03
*INFERRED	\$165	228,000	179	206	1,378	1,607	368	445	0.68	0.82	0.17	0.2	0.85	1.02
<b>UNDERGROUND</b>														
INDICATED	\$260	3,263,000	209	240	1,602	1,868	429	518	0.78	0.94	0.19	0.23	0.97	1.17
*INFERRED	\$260	1,730,000	201	231	1,602	1,868	430	520	0.8	0.96	0.19	0.23	0.99	1.19
TOTAL INDICATED		7,392,000	191	219	1,485	1,732	397	480	0.73	0.88	0.18	0.21	0.91	1.09
*TOTAL INFERRED		1,958,000	199	228	1,576	1,838	423	511	0.79	0.94	0.18	0.22	0.97	1.17

RPA, 2016: Search Minerals Inc. Technical report on the Foxtrot Project in Labrador, Newfoundland and Labrador Canada. NI 43-101 Report prepared by Masun, K.M., Weir, I.C. and Goode, J.R. April 1, 2016 (filed on SEDAR May 2, 2016).

## Deep Fox Resource Estimate

- Up to 15% higher grades than Foxtrot
- Surface expression – 400m x 30m
- Open at depth

			Average Grade					
Classification	Cut-off	Tonnage	Pr	Nd	Dy	Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub>	Dy <sub>2</sub> O <sub>3</sub>
	C\$/t NSR	000s	ppm	ppm	ppm	ppm	ppm	ppm
Indicated	≥140	2,329	403	1,486	206	487	1,739	237
Inferred	≥140	3,902	357	1,323	181	432	1,548	208

Mineral Resource Estimate for the Deep Fox Project as of September 26, 2019

# FOXTROT – Preliminary Economic Assessment (2016)

## FOXTROT PEA FINANCIALS (\$CDN)

Plant Capacity	1,000 tpd production rate / 4.9 Mt over 14 years
Pre-Tax NPV <sub>10%</sub> and IRR	\$93 million and 22%
After-Tax NPV <sub>10%</sub> and IRR	\$48 million and 16.7%
Payback Period	Pre-tax 3.5 years, After-tax 4.4 years
Gross Revenue LOM	\$1.7 billion
CAPEX	\$152 million for startup with a \$33M contingency

### Rare Earth Element Production Rates

Data from PEA – April 2016 – Deep Fox Production not included – 1,000 t/d production rate – produce 3211 T of Mixed Rare Earth Oxide Per Year

	Magnet Making Rare Earths			
	Pr	Nd	Tb	Dy
Distribution (% of Total REE)	4.4%	15.9%	0.3%	1.9%
Yearly Production (t)	142	511	10	60

	Others Rare Earth Elements										
	Y	La	Ce	Sm	Eu	Gd	Ho	Er	Tm	Yb	Lu
Distribution (% of Total REE)	11.6%	18.7%	39.8%	2.8%	0.1%	2.1%	0.3%	0.9%	0.3%	0.7%	0.1%
Yearly Production (t)	373	602	1,277	90	4	68	11	30	9	22	3

**Cautionary Note:** The preliminary economic assessment is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them to enable them to be categorized as mineral reserves and there is no certainty that the preliminary economic assessment will be realized. Mineral resources that are not mineral reserves do not have a demonstrated economic viability.

## IMPROVED ECONOMICS OF PROJECT WITH UPDATED PRELIMINARY ECONOMIC ASSESSMENT REPORT EXPECTED DEC 2021

- Increase production rate to 2000 tonnes per day
- Increase recoveries from optimized pilot plant process
- Increase revenue from higher grades at Deep Fox
- Extend mine life with material from Deep Fox and Foxtrot to a central processing facility
- Decrease costs with reduced re-agents

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# PATENTED, SCALABLE TECHNOLOGY

- Patented proprietary process for direct REE extraction reduces capital and operating costs compared to traditional methods
- Environmentally friendly process produces only dry, stackable residue–no wet tailings ponds
- Search, ACOA, and InnovateNL dedicated \$3M to pilot plant, proving ability to generate high-purity, refinement-ready product at scale
- MOUs signed with Saskatchewan Research Council and USA Rare Earth for further refining collaboration



# RECENT MAGNETIC BENEFICIATION WORK

LIMS - Low intensity magnetic separator



WHIMS – Wet High Intensity Magnetic separator

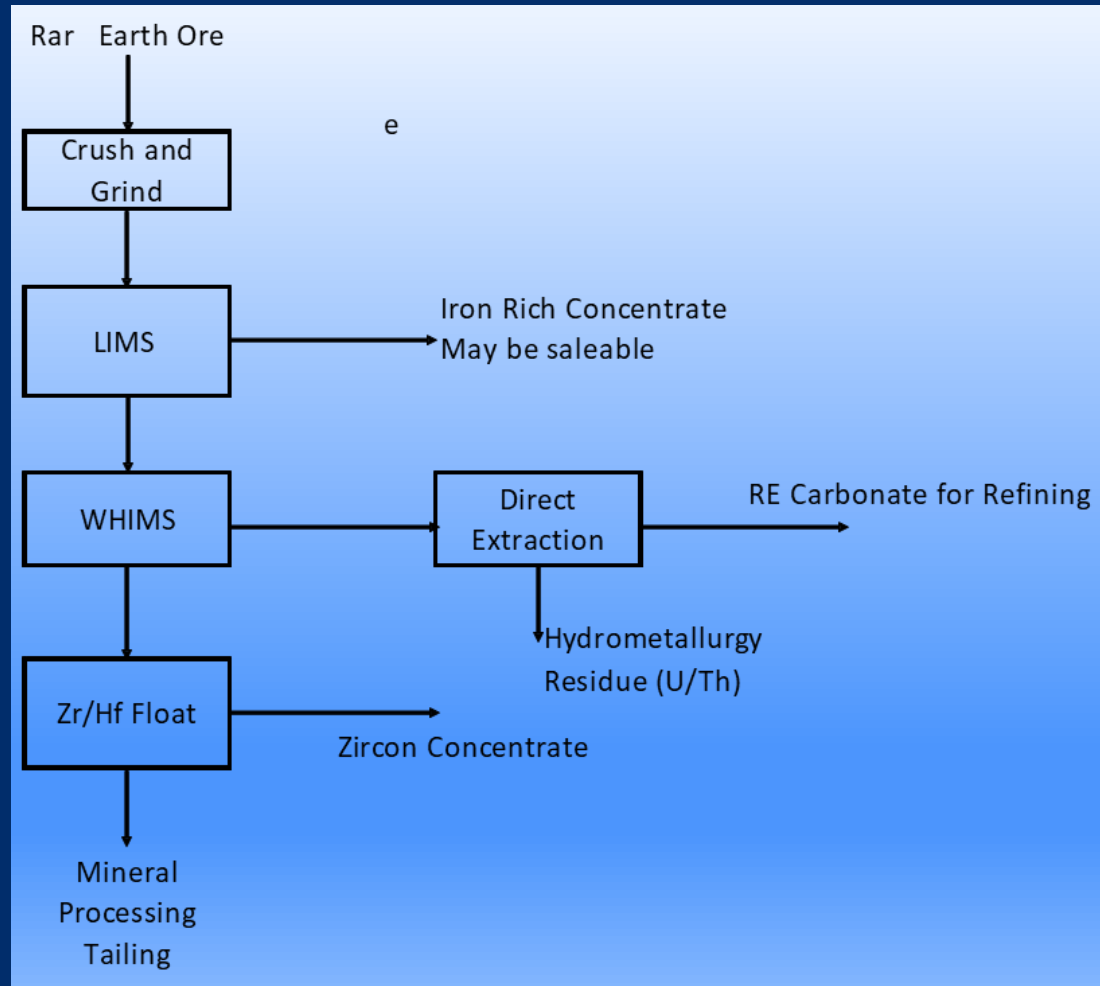


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# PROPOSED FLOW SHEET

Search mineralization (Foxtrot, Deep Fox, Fox Meadow, Silver Fox) responds to magnetic separation



## FOUR PROPOSED STREAMS FROM SAME MATERIAL

LIMS – Iron Rich Concentrate (Ferro Magnetic material) contains 95.4% Fe<sub>2</sub>O<sub>3</sub> (as magnetite) in 6.6% of original weight

WHIMS – Rare Earth element concentrate contains 27.7% of original weight containing 4.52% TREO with 93.4% TREO recovery

FLOTATION – Zircon Concentrate (optional)

WASTE - WHIMS tailing contains 65.7% of the original weight

# ADVANTAGE WITH MAGNETIC WORK

- Smaller footprint for Direct Extraction processing facility – lower capital and operating costs
- Potential revenue stream for iron concentrate and zircon concentrate
- Grinding and magnetic separation can be set up at each deposit and transporting the higher grade concentrate- lower volume of the REE material to central processing
- Could strategically locate Direct Extraction with access to deep water port, chemical and reagents access, technical work force, shipping routes for finished products



# OUR HISTORY AND PARTNERSHIPS



**2013-14**

Bench-scale proof of concept supported by Atlantic Canada Opportunities

**2019**

Optimization of pilot plant and refinement of patented metallurgy approach

**Future**

Investment will support construction of our demonstration plant and industrial-scale buildout

**2016-17**

Pilot Plant supported by Newfoundland and Labrador Tourism, Culture, Industry, and Innovation

**2020**

Collaboration agreements with Saskatchewan Research Council and USA Rare Earth, LCC to receive mixed rare earth carbonate from Search Minerals for further separation

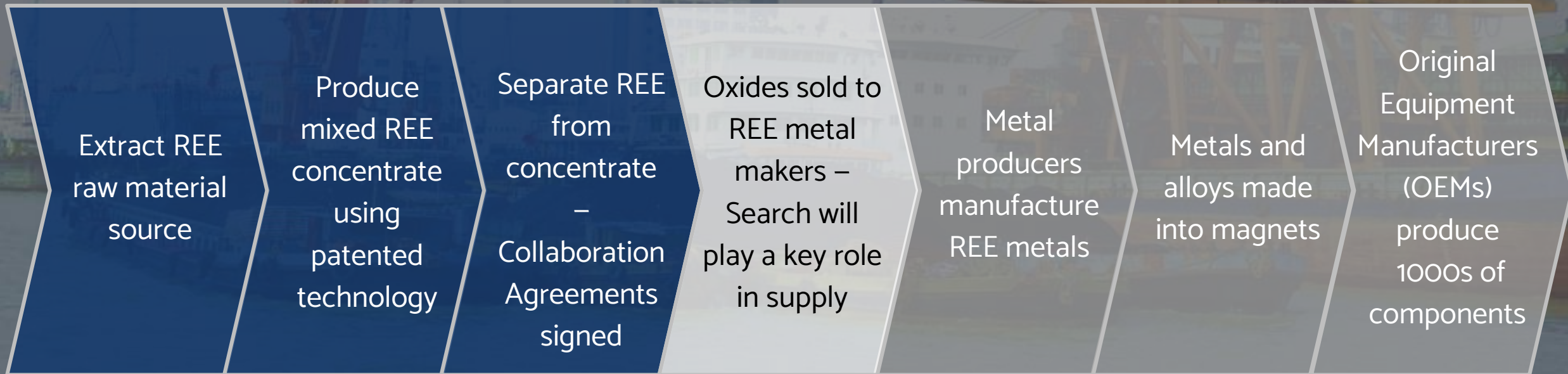


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# WHERE SEARCH FITS IN THE REE SUPPLY CHAIN

Search Minerals fills these important upstream categories...

...providing valuable resources to sell and to build out the supply chain.



Search Minerals will help ensure this supply chain in a stable, sustainable jurisdiction.

# RECENT DEVELOPMENTS: STRONGER FINANCIAL POSITION, BETTER VALUATION

DATE	EVENT
January 2021	<ul style="list-style-type: none"> <li>• Raised \$534,000 via private placement at \$0.06 per unit</li> <li>• Zirconium recovery testing leads to potential flowsheet enhancements for Foxtrot/Deep Fox/Fox Meadow</li> </ul>
February - March 2021	<ul style="list-style-type: none"> <li>• Received \$150,900 with warrant exercise</li> <li>• Completed \$1,750,000 private placement at \$0.07 per unit</li> </ul>
April 2021	<ul style="list-style-type: none"> <li>• Completed \$ 2,520,000 – at \$ 0.18 per share - flow through funding</li> <li>• Results from magnetic separation testing to produce rare earth concentrates</li> </ul>
June 2021	<ul style="list-style-type: none"> <li>• Commenced 7000m drill program on Deep Fox property</li> <li>• Sign Mining agreement for Two Tom Property</li> <li>• Sign Binding LOI for Two Tom Property and Mann #1</li> <li>• Selected to participate in Government of Canada Accelerated Growth Service Initiative</li> <li>• Engaged Environmental baseline for Deep Fox and Foxtrot.</li> <li>• Engaged geotechnical work for Deep Fox open pit</li> <li>• Commenced trading on the OTCQB Venture Market under Symbol: SHCMF</li> </ul>



# COMPETITIVE ADVANTAGE

<b>Resource and excellent infrastructure</b>	<ul style="list-style-type: none"> <li>• 63km long by 2km wide Critical Rare Earth Element District</li> <li>• 2 – 43-101 Resource Estimates (Foxtrot/Deep Fox), 3 more advanced prospects, 20+ potential prospects</li> <li>• Trans-Labrador Highway through District, on tidewater, 3 nearby communities, local airstrip</li> </ul>
<b>Low opex</b>	<ul style="list-style-type: none"> <li>• No fly-in camp required – local workforce</li> <li>• Patented processing technology lowers environmental and reagents costs</li> </ul>
<b>Low capex</b>	<ul style="list-style-type: none"> <li>• Existing infrastructure, scalable processing plan, technical simplicity, and open-pit mining</li> </ul>
<b>Metallurgy solved</b>	<ul style="list-style-type: none"> <li>• Patented extraction process which produces a high purity mixed rare earth oxide concentrate/carbonate</li> </ul>
<b>Right relationships</b>	<ul style="list-style-type: none"> <li>• Strong federal, provincial, local government and indigenous support</li> <li>• Technical collaboration agreements with Saskatchewan Research Council and USA Rare Earth</li> </ul>
<b>Right people</b>	<ul style="list-style-type: none"> <li>• Experienced leadership team with strong backgrounds in business, REE geology, and REE metallurgy</li> </ul>
<b>Right direction</b>	<ul style="list-style-type: none"> <li>• Aligns with needs of growing green economy, creates a sustainable supply chain, and benefits from expanding REE market and policies</li> </ul>

# THE FUTURE: OUR STRATEGIC PLAN



# OUR LEADERSHIP TEAM



**Greg Andrews**  
President and  
CEO, Director

Mr. Andrews received his Bachelor of Commerce, Finance from the University of Calgary. He has over 20 years of experience in strategic planning, financial and administrative management consulting to public and private companies. He has also held various directorships in TSX Venture listed companies since 1993, including those involved in mining, oil and gas, technology and biotechnology.



**Dr. Randy Miller, PhD, P.Geo**  
Vice-President,  
Exploration

Dr. Miller holds a Ph.D. in Geology from the University of Toronto. He has extensive experience studying rare earth elements including field mapping and supervision of diamond drilling on the Strange Lake deposit in NW Labrador for the Iron Ore Company of Canada. He spent 12 years with the Newfoundland and Labrador Geological Survey as their Rare Earth Specialist, and his work has informed the basis of Search Mineral's REE exploration program in Labrador.



**Dr. David Dreisinger, PhD.**  
Vice-President, Metallurgy,  
Director

Dr. Dreisinger holds the position of Industrial Research Chair, Hydrometallurgy at the University of British Columbia where he has been a Professor since 1988. He has participated in 19 U.S. patents, many of which inform Search's extraction processes. He is also a director of Polymet Mining Corp. and Search Minerals and holds officer positions with Search Minerals Inc. and Trimetals Mining Inc.



**Matthew Anderson, CPA**  
Chief Financial  
Officer

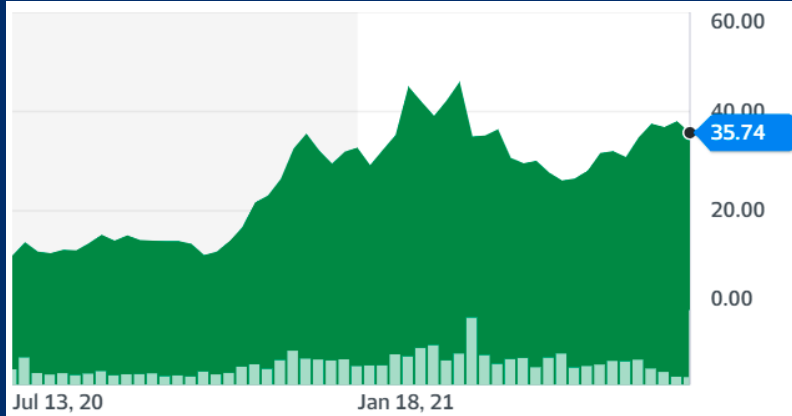
Mr. Anderson holds a Bachelor of Commerce degree from McGill University. He obtained his Chartered Accountant designation in 2008 while articling at a large accounting firm. He currently works with Malaspina Consultants Inc., a company providing consulting and administrative services to junior resource companies.



# MARKET CAPITALIZATION OF PEER GROUP

## MP Materials Corp. (MP)

NYSE - NYSE Delayed Price. Currency in USD



Market Cap: \$ 6.12B US  
(July 13/21)

In Production

Third Quarter 9 months Sept 30, 2020

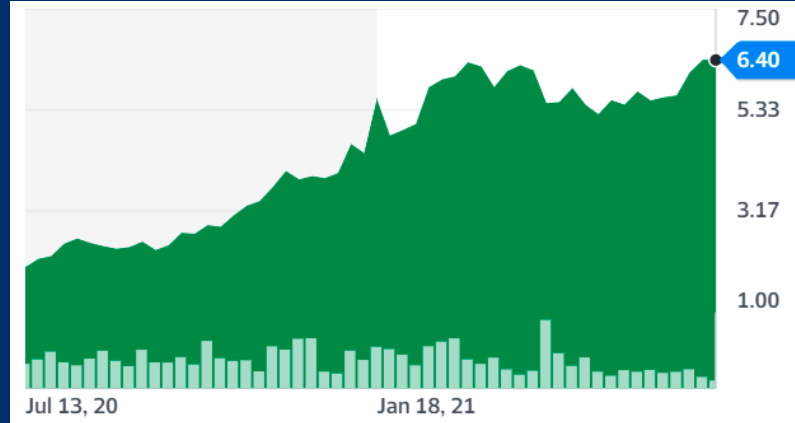
REO sales (Mt's) 28,047

Total Realized Price (\$/m) \$ 85.0

MP Materials – Form 8-k – Nov 23, 2020

## Lynas Rare Earths Limited (LYC.AX)

ASX - ASX Delayed Price. Currency in AUD



Market Cap: \$ 4.29B US  
(July 13/21)

In Production

Year ended June 30, 2020

Sales Volume (REOt) 2020 14,562t

Sales (A\$/m) \$ 305.1

Nd/Pr production (REOt) 4,656

Lynas Annual Report - June 30, 2020

## Australian Strategic Materials Ltd (ASM.AX)

ASX - ASX Delayed Price. Currency in AUD



Market Cap: \$ 740.5M US  
(July 13/21)

Not in Production



**SEARCH MINERALS MARKET CAP**  
~\$ 68M CDN (July 13/21)

**TSX-V: SMY**  
**OTCQB: SHCMF**

# CORPORATE INFORMATION

## Shareholder Information

May 31, 2021

Listed: TSX:V:SMY

Market Cap: 49.0M

Shares O/S: 326,367,018

Warrants: 83,285,988

Options: 23,950,000

Fully diluted O/S: 433,603,006

## Management

Greg Andrews, President & CEO

Dr. David Dreisinger, VP Metallurgy

Dr. Randy Miller, VP Exploration

Matthew Anderson, CFO

## Legal

DuMoulin Black

## Auditors

Mao & Ying

Insiders Participation	% Ownership
InCoR Holdings	~ 38.0 %
Mgmt and Directors	~ 4.5 %
<b>Total</b>	<b>~ 42.5 %</b>

## Directors

Greg Andrews

Dr. David Dreisinger

George Molyviatis

Jocelyn Bennett

Leo Power

## Partners and Consultants

ACOA

Newfoundland Industry, Energy, Technology

Saskatchewan Research Council

NRCAN

NunatuKavut Community Council

USA Rare Earth

SGS Canada

Halyard Engineering

# A SECURE, SUSTAINABLE FUTURE

**Contact:**

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Tel: 604.998.3432



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