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NORTH AMERICA'S CRITICAL-MINERAL POWERHOUSE

Webinar - July 2025

Presentation Overview

- SHAAKICHIUWAANAN – AN INCREDIBLE PIECE OF GEOLOGY
- CAESIUM - MAJOR GLOBAL DISCOVERY CONFIRMED
  - DISCOVERY INCLUDES SIGNIFICANT SCALE AND HIGH GRADE
  - A FUTURE CAESIUM DEVELOPMENT OPPORTUNITY, GROWING APPLICATIONS IN THE SOLAR INDUSTRY INDICATE POTENTIAL FOR INCREASED DEMAND
- LITHIUM - DEMAND BUILDING AND MARKET DEVELOPMENTS
- PMET SUMMARY – INVESTMENT TAKEAWAYS

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Project Overview

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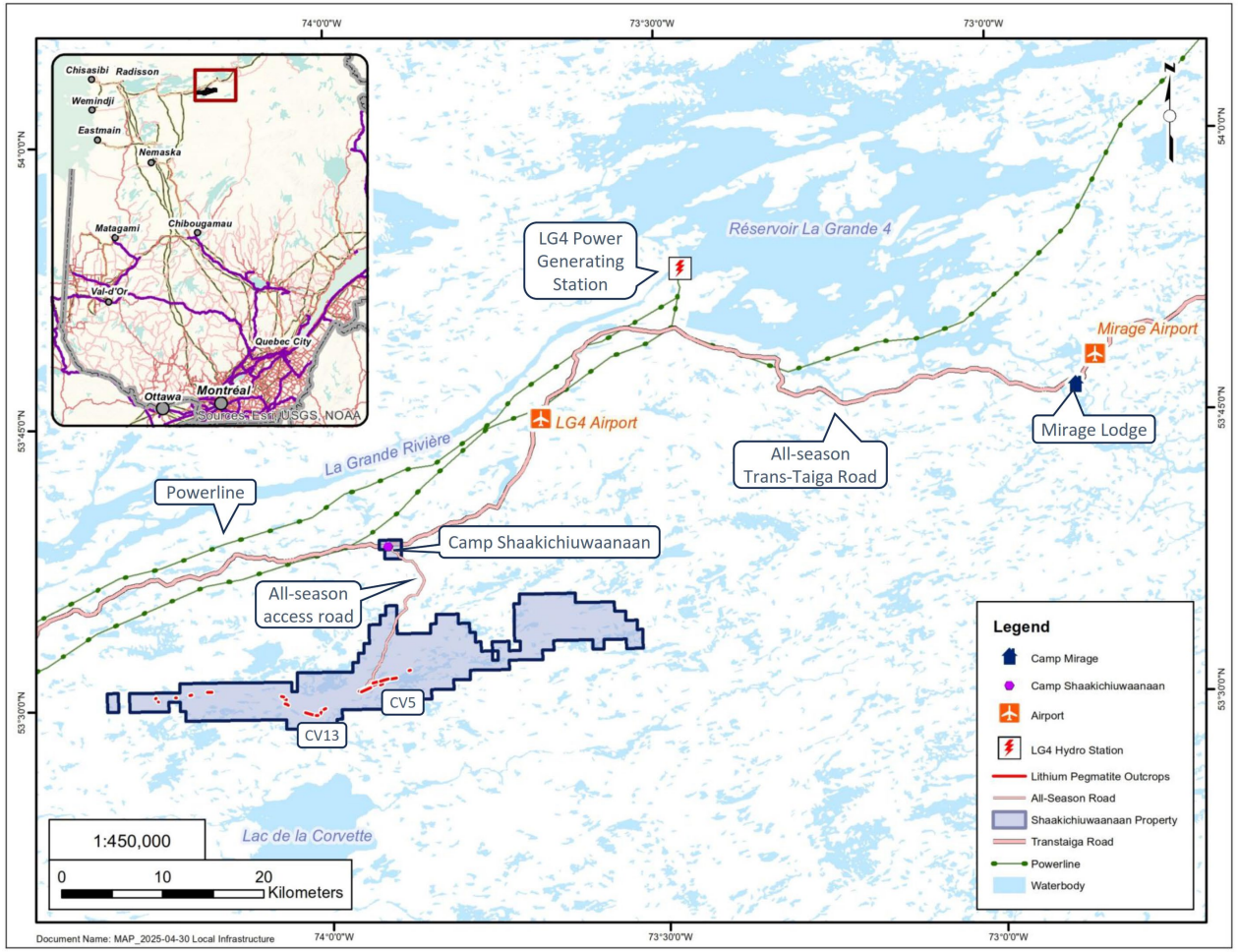
- **Located in the James Bay region of Quebec, in close proximity to high quality and critical road and power infrastructure, our hard rock critical-mineral project is globally significant.**
- **Our Shaakichiuwaanaan Project is:**
  - The **8th largest lithium pegmatite resource** in the world and the **largest** in the Americas, high in grade and of significant scale positioned to underwrite North American and European supply chains.
  - The world's **largest pollucite-hosted caesium pegmatite resource**, with such scale that it has potential global ramifications for caesium demand and use-cases.
    - Caesium carbonate currently trades at approximately USD$120/kg [1].
    - Caesium metal currently trades for approximately US$2,540/oz (or ~US$81 per gram[1]).
  - **One of the largest tantalum pegmatite resources** in the world.
    - Tantalum ore currently trades for approximately USD$78/lbs[1].



Shaakichiuwaanaan Property and regional infrastructure.

1. Excluding VAT, Price Sourcing – Shanghai Metals Market (caesium metal price assumes conversion from troy ounce to grams).

Largest Pollucite (Caesium) Pegmatite Resource in the World

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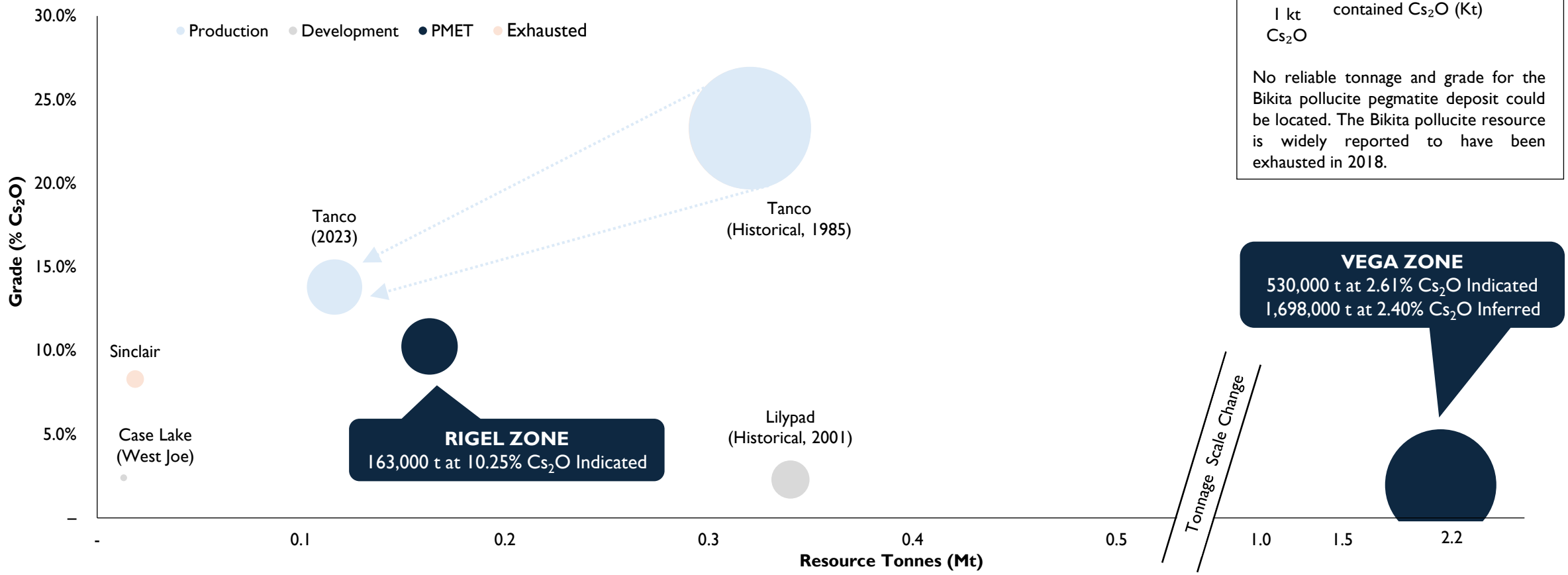
Pollucite-Hosted Caesium Pegmatite Mineral Resources by Grade and Tonnage



No reliable tonnage and grade for the Bikita pollucite pegmatite deposit could be located. The Bikita pollucite resource is widely reported to have been exhausted in 2018.

Mineral Resource data sourced through July 11, 2025, from corporate disclosure. Deposit/Project data presented includes the total caesium zone resource tonnage. Mineral Resources are presented on a 100% basis. Data is presented for all documented in-situ pollucite-hosted caesium pegmatite deposits/projects to the knowledge of the Company. Mineral Resources for the Rigel and Vega zones (Effective Date of June 20, 2025) are hosted within the CV13 Pegmatite's open-pit conceptual mining shape and modelled based on a 0.50% Cs2O grade constraint. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. See slide 17 for further details.

Caesium Discovery – Incredible Scale[1]

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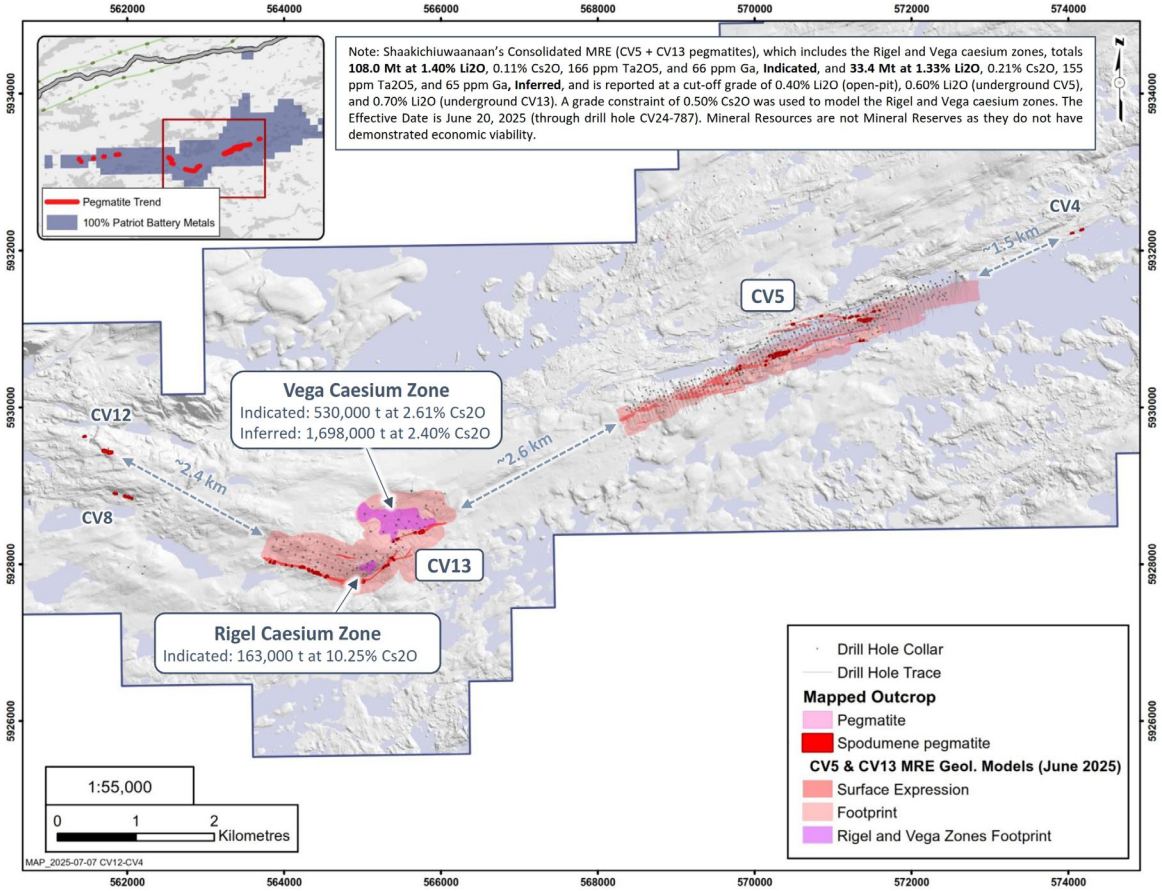
- **World's largest pollucite-hosted caesium pegmatite deposit confirmed at the Shaakichiuwaanaan Project**
  - **Rigel Caesium Zone**
    - Indicated: **163,000 t at 10.25% Cs_2O**, 1.78% Li_2O, and 646 ppm Ta_2O_5.
  - **Vega Caesium Zone**
    - Indicated: **530,000 t at 2.61% Cs_2O**, 2.23% Li_2O, and 172 ppm Ta_2O_5.
    - Inferred: **1,698,000 t at 2.40% Cs_2O**, 1.81% Li_2O, and 245 ppm Ta_2O_5.
  - CV13 total contained caesium content of **30.5 kt Cs_2O** Indicated and **40.8 kt Cs_2O** Inferred, highlighting its scale and global significance.
- **High-grade caesium** - an exceptionally rare and valuable critical metal discovered at the CV13 Pegmatite, hosted in pollucite.



Plan view footprints of the Vega and Rigel caesium zone geological models based on a 0.5% Cs_2O grade constraint within the wider CV13 Pegmatite body.

Footnote 1 *Refer to Press Release, July 20, 2025 "World's Largest Pollucite-Hosted Caesium Pegmatite Mineral Resource Defined at Shaakichiuwaanaan"*

Why is Caesium Important?

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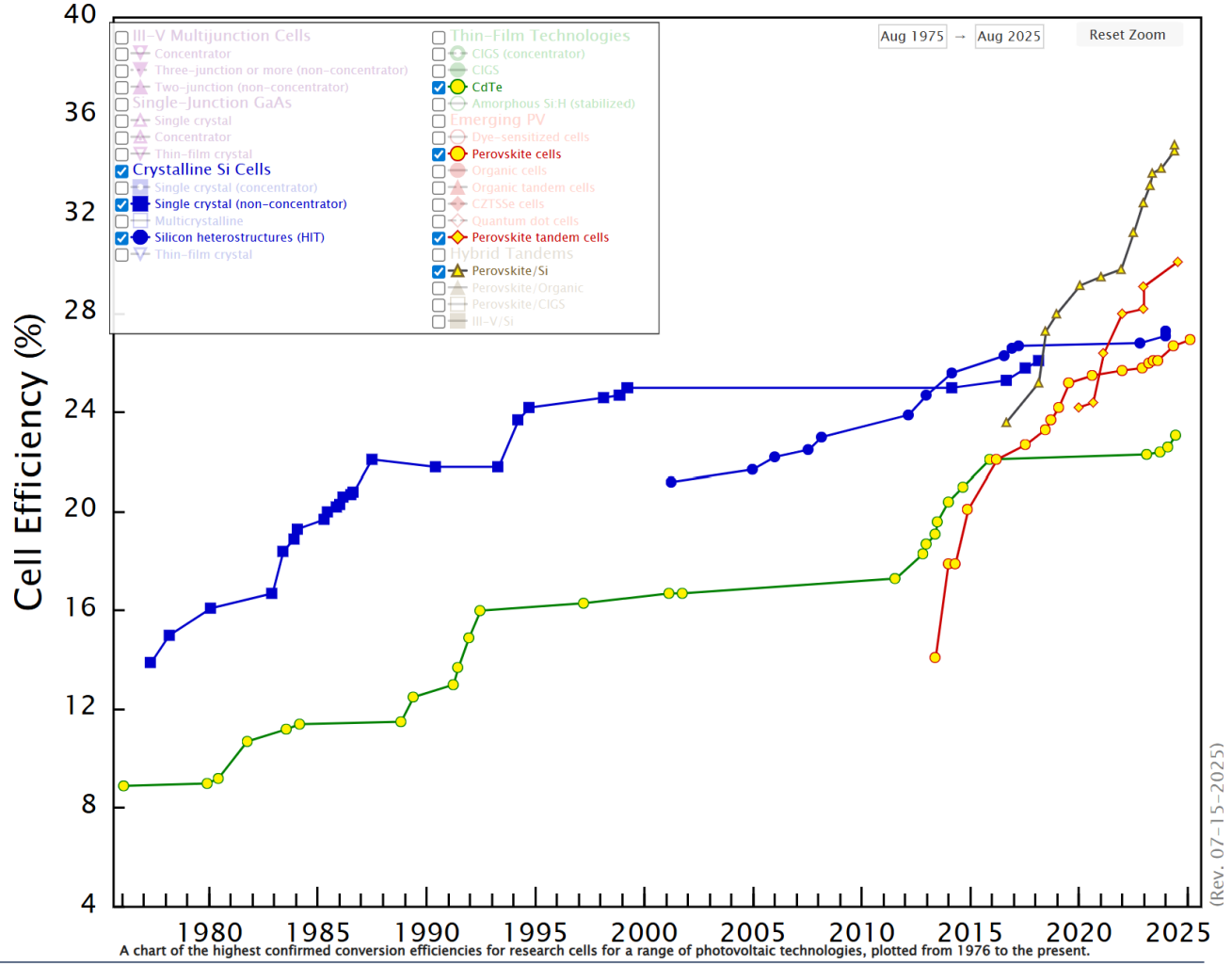
- Caesium applications are currently focused on the medical industry (Medical Imaging, i.e. MRI machines), heavy media for the O&G industry, atomic clocks and GPS (two critical defense uses).
- However, emerging application in the **solar panel industry** could prove to be a game-changer in **improving panel efficiency, stability and life span, potentially leading to increased demand for caesium**.
- **Efficiency improvements of almost 35%** have been seen in R&D for thin-film solar panels using a perovskite structure with caesium.
  - Blue and Green = current technologies (silicon and cadmium telluride (CdTe) panels)
  - Red and Gold = emerging caesium perovskite panels
  - Efficiency levels already higher after approximately only 10 years of R&D with caesium perovskite.



Source: NREL (U.S. Department of Energy's primary national laboratory for energy systems). *https://www.nrel.gov/pv/interactive-cell-efficiency*

Largest Lithium Pegmatite Resource in the Americas

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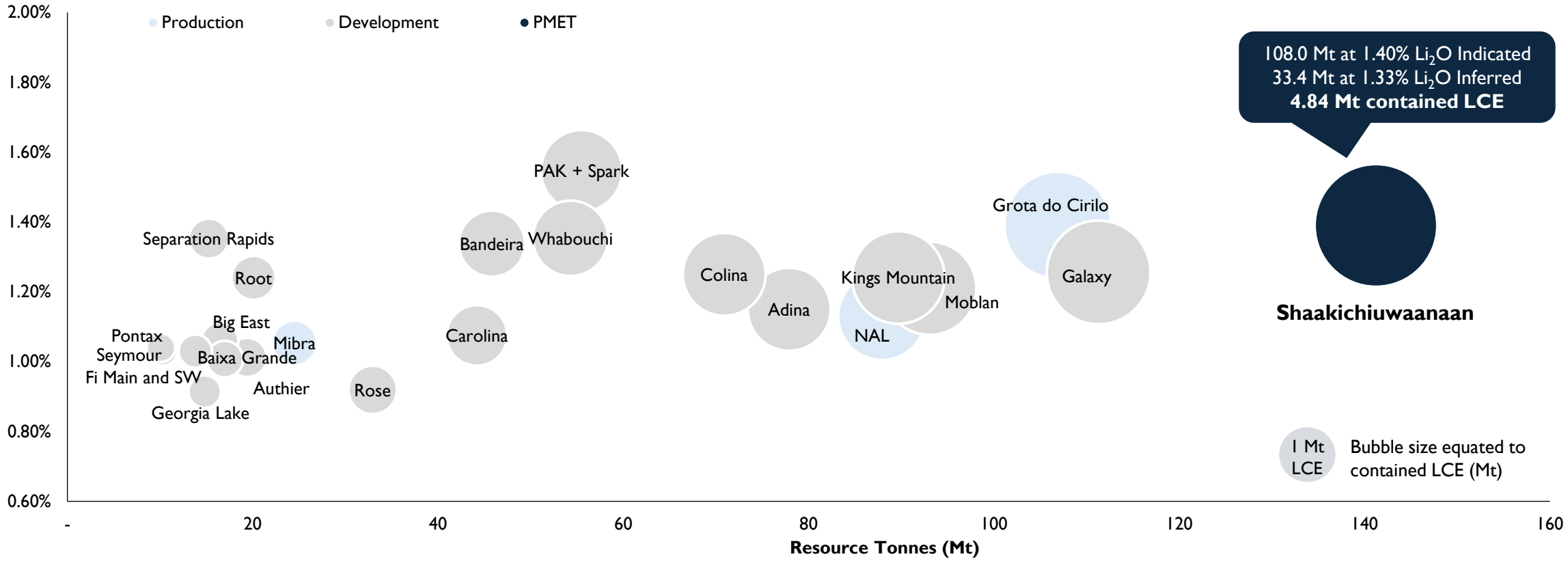
Lithium Pegmatite Mineral Resource by Grade and Tonnage



Mineral Resource data sourced through July 11, 2025, from corporate disclosure of NI 43-101, JORC, or equivalent regulatory body. Deposit/Project data presented includes the total resource tonnage. Mineral resources are presented on a 100% basis and inclusive of reserves where applicable. Data is presented for all pegmatite deposits/projects >10 Mt and >0.65% Li_2O head grade. Shaakichiuwaanaan's Consolidated MRE (CV5 + CV13 pegmatites), which includes the Rigel and Vega caesium zones, totals 108.0 Mt at 1.40% Li2O, 0.11% Cs2O, 166 ppm Ta2O5, and 66 ppm Ga, Indicated, and 33.4 Mt at 1.33% Li2O, 0.21% Cs2O, 155 ppm Ta2O5, and 65 ppm Ga, Inferred, and is reported at a cut-off grade of 0.40% Li2O (open-pit), 0.60% Li2O (underground CV5), and 0.70% Li2O (underground CV13). Mineral resources are not mineral reserves as they do not have demonstrated economic viability. See Slides 15 and 16 for further details.

Consensus Too Cautious On Lithium Demand?

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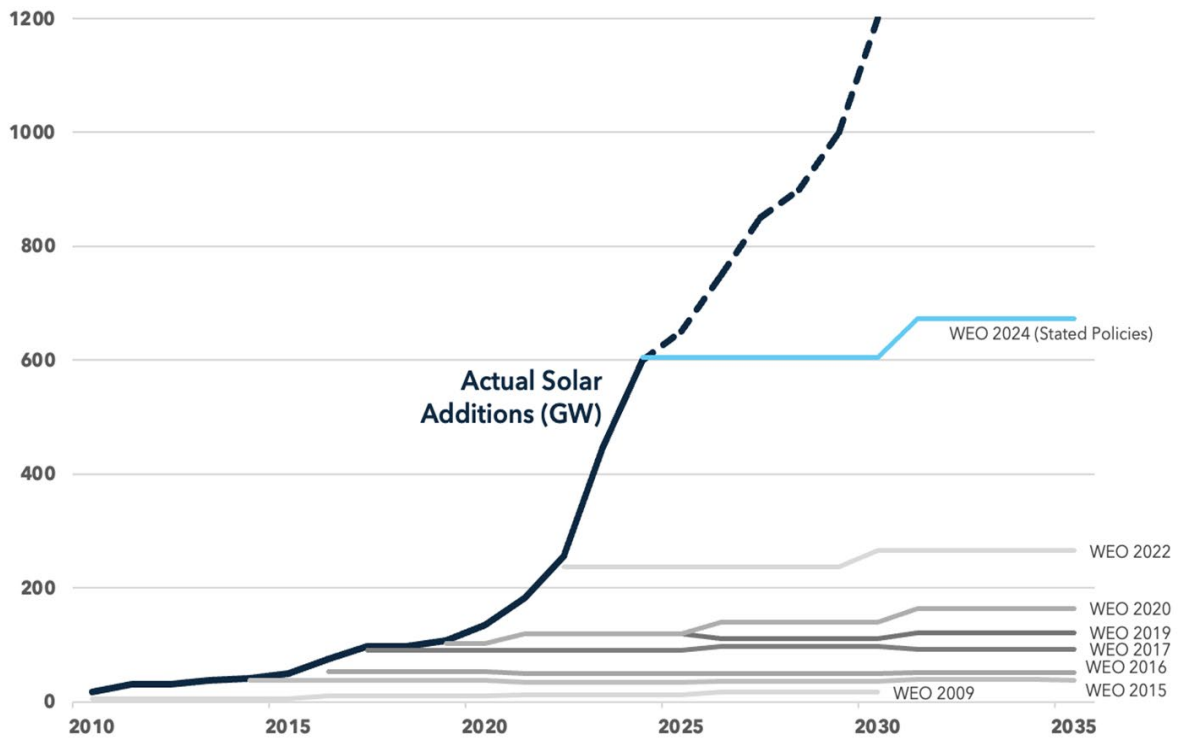
- **Lithium demand continues to gain momentum**, mainly due to EV sales growth and Battery Energy Storage Systems (BESS) installations.
- Globally, H1 2025 battery demand is **+34% YoY** to 667 GWh. Most **sell side analysts** are targeting only **14-20%** lithium demand growth[1] in 2025.
- **BESS installations increasing almost 50% in H1 2025.**
  - IEA expects a tripling of renewable power by 2030 vs 2024, with 80% being solar, a perfect match for BESS.
  - On average, **actual solar installations have been 3-4x higher than their five-year forecasts (see graph to the right).[2]**
  - We think analysts are underestimating BESS like they underestimated solar power growth.
- **Caesium could enable faster solar power adoption, and this could lead to more BESS (and lithium) demand.**



Source: 1. Rho Motion. 2. Arcane Capital Advisors, IEA

BESS Demand Surging

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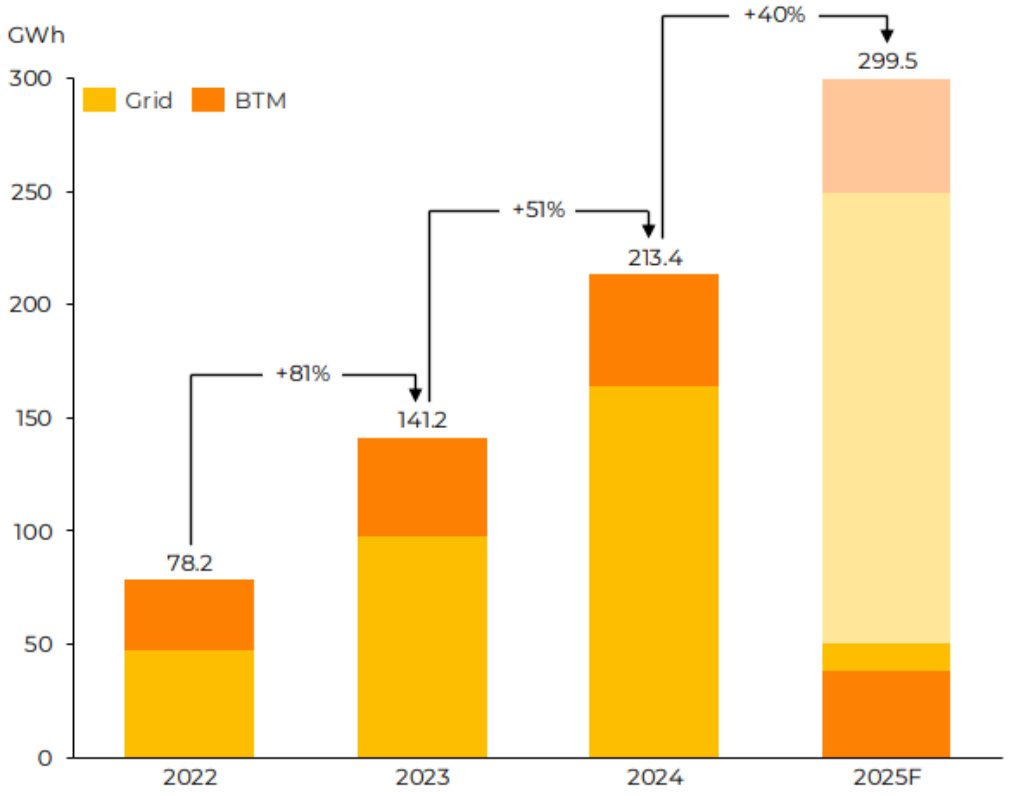
- **2025 BESS GWh installed capacity growth YTD at 49% vs expected growth globally at 40% for 2025.**
  - Battery Energy Storage Systems (BESS) installation grew by **51% YoY** in 2024, reaching more than 213 GWh. This was enabled due to lower LFP cell costs.
  - To give a sense of scale, the expected GWh deployment in 2025 for BESS is almost as much as EV deployments in 2021 (330 GWh).
- Full year BESS **pipeline at 412 GWh.**
- **59 GWh** entered the project pipeline in June 2025, 226% higher YoY.

BESS installed capacity outlook by storage type, new additions



Source: Rho Motion Battery Energy Stationary Storage Outlook, Q2 2025.

BESS Demand Surging

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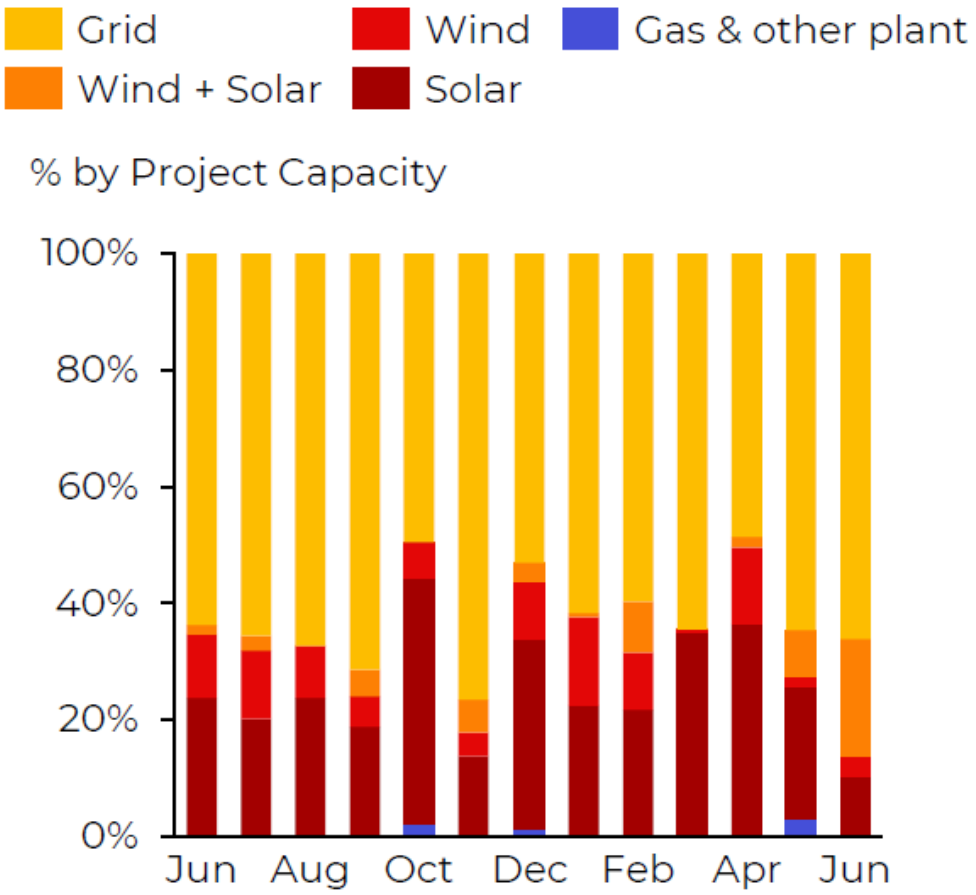
- **By increasing efficiency significantly, caesium could then, in turn, increase BESS demand. This would be a positive driver of lithium consumption, another key Shaakichiuwaanaan mineral.**
  - Operational BESS project exclusively paired with solar, in the last year, ranged between 10% and approximately 45%.
  - BESS battery chemistry in June was 99% LFP.



Source: Rho Motion Battery Energy Stationary Storage Assessment, July 2025.

PROVEN MANAGEMENT TEAM WITH A TRACK RECORD OF PROJECT DELIVERY AND VALUE CREATION

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Ken Brinsden
B.Eng. (Mining), MAUSIMM, MAICD
CEO, President, Director

YEARS
Over 30 years

EXPERIENCE
CEO & MD, Pilbara Minerals

ACHIEVEMENTS
Developed Pilbara Minerals from exploration to production on the ASX 50

Natacha Garoute
CPA, LLB
CFO

YEARS
Over 20 years

EXPERIENCE
CFO, Champion Iron Ore

CFO & Corporate Secretary, Roxgold

ACHIEVEMENTS
Extensive experience in Quebec in financial and capital markets, raised

$1B + financing for developers and producers

Frédéric Mercier-Langevin
Eng., M.Sc
COO/CDO

YEARS
Over 20 years

EXPERIENCE
COO, Wesdome Gold Mines, General Mine Manager, Agnico Eagle

ACHIEVEMENTS
Led IBA negotiations with First Nations as COO, ramped up from commissioning to production a 380koz/annum gold mine.

Darren L. Smith
M.Sc., P. Geo
Executive Vice President, Exploration

YEARS
Over 20 years

EXPERIENCE
Strong focus on rare earth elements, and rare metals (Li, Ta, Nb). Director, VP Exploration, and Sr. Technical Advisor for several junior mineral exploration companies

ACHIEVEMENTS
Instrumental to the discovery of the Ashram (REE-F) and CV5-CV13 (Li-Cs-Ta) Deposits; Project development; QP/CP

Alex Eastwood
BEc, LLB
Executive Vice President, Commercial

YEARS
Nearly 30 years

EXPERIENCE
Chief Commercial & Legal Officer, Pilbara Minerals

ACHIEVEMENTS
Key executive of Pilbara Minerals from exploration to production on the ASX 50

Olivier Caza-Lapointe
Head of Investor Relations

YEARS
Over 15 years

EXPERIENCE
Executive Director — Institutional Sales, CIBC; equity trading, CDPQ

Director
Blair Way

Independent Directors
Pierre Boivin (Chairman)
Mélissa Desrochers
Brian Jennings

PMET Summary - Investment Takeaways

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An emerging developer of critical minerals into the European and North American Supply Chains.

Largest hard rock lithium deposit in the Americas, with high grades, simple mineralogy, and a strategic partner, located in the James Bay region of Quebec, Canada.

Future potential for high-grade/value by-products of caesium, tantalum and gallium.

Large scale lithium pegmatite resource[3] of 4.84 Mt of contained LCE, open in multiple directions with a 6.9 km strike and **considerable exploration upside.**

~C$69m[1] strategic investment from Volkswagen Group to fund exploration, development and to complete the ESIA and Feasibility Study for Lithium (“**FS**”)

Offtake with **PowerCo SE (“PowerCo”)**, a subsidiary of Volkswagen, for **100ktpa of SC5.5,** representing **~25% of estimated Stage 1** and **~ 12.5% of estimated combined Stage 1 and 2** production[2]

Potential for **additional cornerstone project funding from Volkswagen Group to support the final investment decision (“Project FID”)** in return for additional offtake on **mutually agreeable terms**

Highly experienced management team with proven track record of delivering projects including lithium.

Outstanding PEA project economics driven by estimated low cash cost of operations – **US$560/t (FOB Bécancour)**[4]

PEA supporting a **24-year LOM** with estimated C$2.9B NPV, 34% after-tax return and 3.6 years payback.[2]

FS for Lithium expected for completion in Q3 2025.

*Notes: **1**. Canadian equivalent amount which is based on gross proceeds of US$48 million paid at closing and based on a USDCAD exchange rate of 1.4310 as at January 20, 2025. **2**. Based on estimated production for Stage 1 of 400ktpa SC5.5 and Stage 2 combined production of 800ktpa SC5.5 outlined in the Company’s “NI 43-101 Technical Report Preliminary Economic Assessment for the Shaakichiuwaanaan Project” dated August 21, 2024, prepared by Todd McCracken, P.Geo., Hugo Latulippe, P.Eng., Shane Ghouralal, P.Eng., MBA, Luciano Piciacchia, P.Eng., Ph.D, Ryan Cunningham, M.Eng., P.Eng. and Nathalie Fortin, P.Eng., M.Env., which is available on SEDAR+. **3**. Shaakichiuwaanaan (CV5 & CV13) Mineral Resource Estimate (108.0 Mt at 1.40% Li2O, 0.11% Cs2O, 166 ppm Ta2O5, and 66 ppm Ga, Indicated, and 33.4 Mt at 1.33% Li2O, 0.21% Cs2O, 155 ppm Ta2O5, and 65 ppm Ga, Inferred) is reported at a cut-off grade of 0.40% Li2O (open-pit), 0.60% Li2O (underground CV5), and 0.70% Li2O (underground CV13) with an Effective Date of June 20, 2025 (through drill hole CV24-787). Mineral resources are not mineral reserves as they do not have demonstrated economic viability. 4. Total cash operating cost (FOB Bécancour) includes mining, processing, site administration, and product transportation to Bécancour. It is a non-IFRS measure, and when expressed per tonne, a non-IFRS ratio. Please refer to “Non-IFRS and other financial measures” for further information on these measures, in its news released dated August 21, 2024. See additional disclosure on Slide 15.*

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Thank you

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NI 43-101 Mineral Resource Statement

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Consolidated MRE

Conceptual Mining Constraint	Pegmatite	Classification	Tonnes (t)	Li_2O (%)	Cs_2O (%)	Ta_2O_5 (ppm)	Ga (ppm)	Contained LCE (Mt)
Open-Pit	CV5	Indicated	97,757,000	1.39	0.09	163	66	3.35
Underground			4,071,000	1.08	0.06	186	66	0.11
		Total	**101,828,000**	**1.38**	**0.09**	**164**	**66**	**3.46**
Open-Pit	CV5	Inferred	5,745,000	1.16	0.09	163	61	0.17
Underground			8,153,000	1.24	0.07	136	60	0.25
		Total	**13,898,000**	**1.21**	**0.08**	**147**	**60**	**0.41**
Open-Pit	CV13	Indicated	5,996,000	1.89	0.60	201	76	0.28
Underground			167,000	0.85	0.06	132	60	0.00
		Total	**6,163,000**	**1.86**	**0.59**	**199**	**76**	**0.28**
Open-Pit	CV13	Inferred	18,020,000	1.44	0.32	168	70	0.64
Underground			1,462,000	1.05	0.08	75	55	0.04
		Total	**19,482,000**	**1.41**	**0.30**	**161**	**69**	**0.68**
	CV5 + CV13	**Indicated**	**107,991,000**	**1.40**	**0.11**	**166**	**66**	**3.75**
		Inferred	**33,380,000**	**1.33**	**0.21**	**155**	**65**	**1.09**

Caesium Zone MRE

Caesium Zone	Classification	Tonnes (t)	Cs_2O (%)	Li_2O (%)	Ta_2O_5 (ppm)	Contained Cs_2O (t)
Rigel	Indicated	163,000	10.25	1.78	646	16,708
	Inferred	-	-	-	-	-
Vega	Indicated	530,000	2.61	2.23	172	13,833
	Inferred	1,698,000	2.40	1.81	245	40,752
Rigel + Vega	**Indicated**	**693,000**	**4.40**	**2.12**	**283**	**30,541**
	Inferred	**1,698,000**	**2.40**	**1.81**	**245**	**40,752**

The Consolidated MRE cut-off grade is variable depending on the mining method and pegmatite (0.40% Li_2O open-pit, 0.60% Li_2O underground CV5, and 0.70% Li_2O underground CV13). A grade constraint of 0.50% Cs_2O was used to model the Rigel and Vega caesium zones, which are entirely within the CV13 Pegmatite's open-pit mining shape. The Effective Date of the MREs is June 20, 2025 (through drill hole CV24-787). Mineral Resources are not Mineral or Ore Reserves as they do not have demonstrated economic viability.

PEER COMPARISON INFORMATION – LITHIUM PEGMATITE MINERAL RESOURCES (AMERICAS)

Company	Project	Stage	Inclusive of Reserves	Mineral Resources						Information Source(s)
				Measured		Indicated		Inferred		
				Mt	%Li_2O	Mt	%Li_2O	Mt	%Li_2O	
Patriot Battery Metals Inc.	Shaakichiuwaanaan	Development	-	–	–	108.0	1.4%	33.4	1.3%	TSX announcement dated July 20, 2025
Sigma Lithium Corporation	Grota do Cirilo	Production	Y	45.8	1.4%	47.4	1.4%	13.7	1.4%	Investor Presentation April 2025
Rio Tinto Ltd.	Galaxy	Development	Y	–	–	55.4	1.2%	55.9	1.3%	Arcadium 2023 10-K
Sayona Mining Ltd. 60% / Investissement Québec 40%	Moblan	Development	Y	6.0	1.5%	59.1	1.2%	28.0	1.1%	ASX announcement dated August 27, 2024
Albemarle Corporation	Kings Mountain	Development	-	–	–	46.8	1.4%	42.9	1.1%	SEC filing dated February 15, 2023
Sayona Mining Ltd. (pending merger with Piedmont Lithium Inc.)	NAL	Production	Y	0.9	1.1%	71.1	1.1%	15.8	1.1%	ASX announcement dated August 27, 2024
Winsome Resources Ltd.	Adina	Development	-	–	–	61.4	1.1%	16.5	1.2%	ASX announcement dated May 28, 2024
Pilbara Minerals Ltd.	Colina	Development	-	28.6	1.3%	38.6	1.2%	3.6	1.1%	ASX announcement dated May 30, 2024
Frontier Lithium Inc. 92.5% / Mitsubishi Corporation 7.5%	PAK + Spark	Development	-	16.4	1.6%	20.5	1.5%	18.6	1.5%	Definitive Feasability Study dated 28, May 2025
Rio Tinto Ltd. 50% / Investissement Québec 50%	Whabouchi	Development	Y	–	–	46.0	1.4%	8.3	1.3%	S-K 1300 Technical Report dated September 8, 2023
Lithium Ionic Corp.	Bandeira	Development	Y	3.4	1.4%	23.9	1.3%	18.6	1.3%	Press release dated May 6, 2025
Sayona Mining Ltd. (pending merger with Piedmont Lithium Inc.)	Carolina	Development	Y	–	–	28.2	1.1%	15.9	1.0%	Press release dated October 21,2021
Critical Elements Lithium Corporation	Rose	Development	Y	–	–	30.6	0.9%	2.4	0.8%	TSX announcement dated August 29, 2023
AMG Lithium GmbH	Mibra	Production	-	3.4	1.0%	16.9	1.1%	4.2	1.0%	Euronext announcement dated April 3, 2017
Green Technology Metals Ltd.	Root	Development	-	–	–	10.0	1.3%	10.1	1.1%	ASX announcement dated April 3, 2025
Li-FT Power Ltd.	Big East	Development	-	–	–	–	–	16.5	1.1%	TSXV announcement dated October 1, 2024
SCR-Sibelco NV 60% / Avalon Advanced Materials Inc. 40%	Separation Rapids	Development	-	4.3	1.3%	8.7	1.4%	2.3	1.5%	TSX announcement dated February 27, 2025
Sayona Mining Ltd. (pending merger with Piedmont Lithium Inc.)	Authier	Development	Y	6.0	1.0%	8.1	1.0%	2.9	1.0%	ASX announcement dated April 14, 2023
Lithium Ionic Corp.	Baixa Grande	Development	-	1.1	1.2%	5.4	1.1%	12.9	1.0%	Press release dated January 14, 2025
Li-FT Power Ltd.	Fi Main and SW	Development	-	–	–	–	–	13.8	1.0%	TSXV announcement dated October 1, 2024
Rock Tech Lithium Inc.	Georgia Lake	Development	Y	–	–	10.6	0.9%	4.2	1.0%	TSX announcement dated November 15, 2022
Green Technology Metals Ltd.	Seymour	Development	-	–	–	6.1	1.3%	4.1	0.7%	ASX announcement dated November 17, 2023
Cygnus Metals Ltd. 51% / Stria Lithium Inc. 49%	Pontax	Development	-	–	–	–	–	10.1	1.0%	ASX announcement dated August 14, 2023

Note: Mineral resources are presented on a 100% basis and inclusive of reserves where noted. Estimates may have been prepared under different estimation and reporting regimes and may not be directly comparable. Patriot Battery Metals accepts no responsibility for the accuracy of peer mineral resource data as presented. Details on the tonnes, category, grade, and cut-off for mineral resources of each company noted herein are found within the respective information sources provided.

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Mineral Resource data sourced through July 11, 2025, from corporate disclosure of NI 43-101, JORC, or equivalent regulatory body. Deposit/Project data presented includes the total resource tonnage. Mineral resources are presented on a 100% basis and inclusive of reserves where applicable. Data is presented for all pegmatite deposits/projects >10 Mt and >0.65% Li_2O head grade. Shaakichiuwaanaan's Consolidated MRE (CV5 + CV13 pegmatites), which includes the Rigel and Vega caesium zones, totals 108.0 Mt at 1.40% Li2O, 0.11% Cs2O, 166 ppm Ta2O5, and 66 ppm Ga, Indicated, and 33.4 Mt at 1.33% Li2O, 0.21% Cs2O, 155 ppm Ta2O5, and 65 ppm Ga, Inferred, and is reported at a cut-off grade of 0.40% Li2O (open-pit), 0.60% Li2O (underground CV5), and 0.70% Li2O (underground CV13). Mineral resources are not mineral reserves as they do not have demonstrated economic viability. See Slide 18 for further details.

PEER COMPARISON INFORMATION – LITHIUM PEGMATITE MINERAL RESERVES (AMERICAS)

Company	Project	Stage	Mineral Reserves				Information Source(s)
			Proven		Probable		
			Mt	%Li_2O	Mt	%Li_2O	
Patriot Battery Metals Inc.	Shaakichiuwaanaan	Development	–	–	–	–	
Sigma Lithium Corporation	Grota do Cirilo	Production	39.9	1.3%	36.4	1.3%	Investor Presentation April 2025
Rio Tinto Ltd.	Galaxy	Development	–	–	37.3	1.3%	Arcadium 2023 10-K
Sayona Mining Ltd. 60% / Investissement Québec 40%	Moblan	Development	–	–	34.5	1.4%	ASX announcement dated November 19, 2024
Albemarle Corporation	Kings Mountain	Development	–	–	–	–	
Sayona Mining Ltd. (pending merger with Piedmont Lithium Inc.)	NAL	Production	0.2	1.1%	19.9	1.1%	ASX announcement dated November 19, 2024
Winsome Resources Ltd.	Adina	Development	–	–	–	–	
Pilbara Minerals Ltd.	Colina	Development	–	–	–	–	
Frontier Lithium Inc. 92.5% / Mitsubishi Corporation 7.5%	PAK + Spark	Development	16.2	1.6%	14.9	1.4%	Definitive Feasability Study dated 28, May 2025
Rio Tinto Ltd. 50% / Investissement Québec 50%	Whabouchi	Development	10.5	1.4%	27.7	1.3%	S-K 1300 Technical Report dated September 8, 2023
Lithium Ionic Corp.	Bandeira	Development	2.3	1.2%	14.9	1.2%	Bandeira Lithium Project Araçuaí–Itinga NI 43-101 Feasibility Study Technical Report
Sayona Mining Ltd. (pending merger with Piedmont Lithium Inc.)	Carolina	Development	–	–	18.3	1.1%	ASX announcement dated November 19, 2024
Critical Elements Lithium Corporation	Rose	Development	–	–	26.3	0.9%	TSX announcement dated August 29, 2023
AMG Lithium GmbH	Mibra	Production	–	–	–	–	
Green Technology Metals Ltd.	Root	Development	–	–	–	–	
Li-FT Power Ltd.	Big East	Development	–	–	–	–	
SCR-Sibelco NV 60% / Avalon Advanced Materials Inc. 40%	Separation Rapids	Development	–	–	–	–	
Sayona Mining Ltd. (pending merger with Piedmont Lithium Inc.)	Authier	Development	6.2	0.9%	5.1	1.0%	ASX announcement dated November 19, 2024
Lithium Ionic Corp.	Baixa Grande	Development	–	–	–	–	
Li-FT Power Ltd.	Fi Main and SW	Development	–	–	–	–	
Rock Tech Lithium Inc.	Georgia Lake	Development	–	–	7.3	0.8%	TSX announcement dated November 15, 2022
Green Technology Metals Ltd.	Seymour	Development	–	–	–	–	
Cygnus Metals Ltd. 51% / Stria Lithium Inc. 49%	Pontax	Development	–	–	–	–	

Note: Mineral reserves are presented on a 100% basis. Estimates may have been prepared under different estimation and reporting regimes and may not be directly comparable. Patriot Battery Metals accepts no responsibility for the accuracy of peer mineral resource data as presented. Details on the tonnes, category, grade, and cut-off for mineral resources of each company noted herein are found within the respective information sources provided.

Mineral Reserve data sourced through July 11, 2025, from corporate disclosure of NI 43-101, JORC, or equivalent regulatory body. Deposit/Project data presented includes the total reserve tonnage. Data is presented for all pegmatite deposits/projects >10 Mt and >0.65% Li_2O head grade.

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PEER COMPARISON INFORMATION – POLLUCITE-HOSTED CESIUM PEGMATITE MINERAL RESOURCES (GLOBAL)

Company	Project	Stage	Mineral Resources						Comments	Information Source(s)
			Indicated		Inferred		Historical			
			Tonnes	% Cs_2O	Tonnes	% Cs_2O	Tonnes	% Cs_2O		
Sinomine Resource Group Co., Ltd.	Tanco (1985)	Production	-	-	-	-	320,000	23.3	In-situ caesium zone pegmatite resources as of 1985	Mineral Inventory File No. 187, Government of Manitoba
Sinomine Resource Group Co., Ltd.	Tanco (2023)	Production	-	-	116,080	13.85%	-	-	In-situ caesium zone pegmatite resources as of 2023. Classification not clear.	2023 Annual Report
Patriot Battery Metals Inc.	Rigel	Development	163,000	10.25%	-	-	-	-		TSX announcement dated July 20, 2025
Patriot Battery Metals Inc.	Vega	Development	530,000	2.61%	1,698,000	2.40%	-	-		TSX announcement dated July 20, 2025
SCR-Sibelco NV (60%) / Avalon Advanced Materials (40%)	Lilypad	Historical	-	-	-	-	340,000	2.29%	Historical resource, 2001	TSXV announcement dated October 14, 2020
Pioneer Resources Ltd.	Sinclair	Exhausted (2019)	-	-	-		18,629	8.30%	Historical production numbers	ASX announcement dated June 8, 2020
Power Metals Corp.	Case Lake (West Joe)	Development	-	-	13,000	2.40%	-	-		TSXV announcement dated June 5, 2025

Note: Mineral resources are presented on a 100% basis. Estimates may have been prepared under different estimation and reporting regimes and may not be directly comparable. Patriot Battery Metals accepts no responsibility for the accuracy of peer mineral resource data as presented. Details on the tonnes, category, grade, and cut-off for mineral resources of each company noted herein are found within the respective information sources provided.

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Mineral Resource data sourced through July 11, 2025, from corporate disclosure. Deposit/Project data presented includes the total caesium zone resource tonnage. Mineral Resources are presented on a 100% basis. Data is presented for all documented in-situ pollucite-hosted caesium pegmatite deposits/projects to the knowledge of the Company. Mineral Resources for the Rigel and Vega zones (Effective Date of June 20, 2025) are hosted within the CV13 Pegmatite's open-pit conceptual mining shape and modelled based on a 0.50% Cs2O grade constraint. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability

IMPORTANT INFORMATION

This presentation is dated July 21st, 2025, and has been prepared by Patriot Battery Metals Inc (**Company**) and is authorised for release by Managing Director, Ken Brinsden.

CAUTIONARY STATEMENTS

The Preliminary Economic Assessment (**PEA**) referred to in this presentation is a preliminary technical, conceptual and economic study of the potential viability of developing the Shaakichiuwaanaan Project by constructing a concentrate processing facility on site. The PEA referred to in this presentation is conceptual, at scoping study level only, which is based on a lower level of technical assessment that is not sufficient to support the estimation of mineral reserves and is inherently uncertain. The PEA has an accuracy of ± 25-30% only to determine potential viability. It does not have the same level of detail, precision and confidence to determine technical and economic viability as a pre-feasibility study (**PFS**) or definitive feasibility study (**FS**). Further exploration and evaluation work and appropriate studies are required before the Company will be in a position to estimate any mineral reserves or to provide any assurance of an economic development case.

Approximately 75% of the Life of Mine production is in the Indicated Mineral Resource category and 25% is in the Inferred Mineral Resource Category. The use of Inferred Mineral Resources in the PEA is not the determining factor in the viability of the Shaakichiuwaanaan Project. The Inferred Mineral Resource is considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves and is not the determining factor in the viability of the Shaakichiuwaanaan Project. Inferred Mineral Resources are that part of the mineral resource for which quantity and grade, or quality are estimated on the basis of limited geologic evidence and sampling, which is sufficient to imply but not verify grade or quality continuity. Inferred Mineral Resources may therefore not be converted to mineral reserves. Whilst both the CIM Code and JORC Code provide that it is reasonably expected, though not guaranteed, that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration, in accordance with ASX Listing Rule 5.16.4, there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target in the PEA will be realized. Accordingly, there is no certainty that the PEA or its conclusions will be realized

The PEA is based on the material assumptions outlined in the Company's news release dated August 21, 2024. These include pricing assumptions and assumptions about the availability of funding including the availability of tax credits under CTM-ITC and cash flow from Stage 1 operations which are not guaranteed. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the PEA will be achieved, In accordance with ASX's guidance on scoping studies, the Company makes the following statements.

To achieve the range of outcomes indicated in the PEA, funding in the order of $869.7 million is required for Stage 1 and $503.8 million for Stage 2, representing a total of $1,373.5 million (including contingency, pre-operating expenditure and assuming no CTM-ITC nor Stage 1 cashflow becomes available). Despite the Company having a track record of raising funds, investors should note that there is no certainty that the Company will be able to raise funding when needed. However, the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this presentation and believes that it has a "reasonable basis" to expect it will be able to fund the development of the Project based on the assumed long-term pricing and on a staged development approach (and therefore staged funding strategy), which involves a combination of potential strategic partnering, strategic debt, equity financing, potential operating cashflows, tax credits and funding from available government infrastructure funds. It is possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares. It is also possible that the Company could pursue other strategies to provide alternative funding options. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the PEA.

The Mineral Resources underpinning the production target in the PEA have been prepared by a competent person in accordance with the requirements of the JORC Code. The Competent Person's Statement is found on page 40 of this presentation.

Please refer to the "Disclaimer for Forward Looking Information" for more information regarding assumptions and risks surrounding forward looking statements contained herein.

DISCLAIMER FOR FORWARD-LOOKING INFORMATION

This presentation contains "forward-looking statements" within the meaning of applicable securities laws. Forward-looking statements are included to provide information about management's current expectations and plans that allows investors to have a better understanding of the Company's business plans and potential financial performance and condition.

All statements other than statements of historical fact included are forward-looking statements. Forward-looking statements are typically identified by words such as "next", "upside", "potential", "additional", "LOM", "expected", "will", "target", "to be", "payback period", "estimated", "approval process", "growth", "surging", "become" and similar words or expressions. Forward-looking statements include, but are not limited to, statements concerning: the feasibility study, including the timing of its completion; the Company's position in the market, notably in North America; the demand for critical minerals such as caesium and lithium and Evs; the estimation of Mineral Resources; the preliminary economic assessment, notably those under the investment highlights or takeaways , and the results of the PEA discussed in this presentation, including, without limitation, project economics, financial and operational parameters; expected next steps in the development of the Shaakichiuwaanaan Project, including timing for potential commencement of construction and first production of concentrate; expected LOM; the timing for completion of the Feasibility Study; the progress on EIS and permits for development; the mining approval process; the baseline data collection and the potential funding of the Shaakichiuwaanaan Project.

Forward-looking statements are based upon certain assumptions and other important factors that, if untrue, could cause the actual results, performance or achievements of the Company to be materially different from future results, performance or achievements expressed or implied by such information or statements. There can be no assurance that such information or statements will prove to be accurate. Key assumptions upon which the Company's forward-looking statements are based include without limitation, assumptions regarding development and exploration activities including exploration targets which are only conceptual in nature; the timing, extent, duration and economic viability of such operations, including any mineral resources or reserves identified thereby; the accuracy and reliability of estimates, projections, forecasts, studies and assessments; the Company's ability to meet or achieve estimates, projections and forecasts; the availability and cost of inputs; the price and market for outputs; foreign exchange rates; taxation levels; the timely receipt of necessary approvals or permits; the ability to meet current and future obligations; the ability to obtain timely financing on reasonable terms when required; the current and future social, economic and political conditions; and other assumptions and factors generally associated with the mining industry; the total funding required and timeline to complete the FS for the Shaakichiuwaanaan Project; the ability of the Company to achieve the final investment decision for the Shaakichiuwaanaan Project; the economic feasibility of the Shaakichiuwaanaan Project; the ability of the Company to finance the development of the Shaakichiuwaanaan Project on commercially viable terms; receipt of all permits necessary to construct and operate the Shaakichiuwaanaan Project; the ability of the Company to produce lithium at the Shaakichiuwaanaan Project to satisfy its obligations under the Offtake.

Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Forward-looking statements are also subject to risks and uncertainties facing the Company's business, any of which could have a material adverse effect on the Company's business, financial condition, results of operations and growth prospects. Some of the risks the Company faces and the uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements include, among others, requirements for additional capital, operating and technical difficulties in connection with mineral exploration and development activities; actual results of exploration activities, including on the Shaakichiuwaanaan Project; the estimation or realization of mineral reserves and mineral resources; the timing and amount of estimated future production; the costs of production, capital expenditures, the costs and timing of the development of new deposits, requirements for additional capital; the costs and timing of the development of new deposits; requirements for additional capital; future prices of spodumene; changes in general economic conditions; changes in the financial markets and in the demand and market price for commodities; lack of investor interest in future financings; the Company's ability to secure permits or financing for the completion of construction activities; and the Company's ability to execute on plans relating to the Company's Shaakichiuwaanaan Project. In addition, readers are directed to carefully review the detailed risk discussion in the Company's most recent Annual Information Form filed on SEDAR+, which discussion is incorporated by reference in this presentation, for a fuller understanding of the risks and uncertainties that affect the Company's business and operations.

Although the Company believes its expectations are based upon reasonable assumptions and has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated or implied in such statements. As such, these risks are not exhaustive; however, they should be considered carefully. If any of these risks or uncertainties materialize, actual results may vary materially from those anticipated in the forward-looking statements found herein. Due to the risks, uncertainties, and assumptions inherent in forward-looking statements, readers should not place undue reliance on forward-looking statements.

The forward-looking statements contained herein are made only as of the date hereof. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by applicable law. The Company qualifies all of its forward-looking statements by these cautionary statements.

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IMPORTANT INFORMATION

QUALIFIED/COMPETENT PERSONS

The information in this presentation that relates to the PEA, Consolidated MRE and Caesium Zone MRE for the Shaakichiuwaanaan Property/Project is based on, and fairly represents, information compiled by Mr. Darren L. Smith, M.Sc., P.Geo., who is a Qualified Person as defined by National Instrument 43-101, and Competent Person as defined by JORC, and member in good standing with the Ordre des Géologues du Québec (Geologist Permit number 1968), and with the Association of Professional Engineers and Geoscientists of Alberta (member number 87868). Mr. Smith has reviewed and approved the technical information in this presentation.

Mr. Smith is Vice President of Exploration for Patriot Battery Metals Inc. and holds common shares, RSUs, and PSUs in the Company. Mr. Smith has sufficient experience, which is relevant to the style of mineralization, type of deposit under consideration, and to the activities being undertaken to qualify as a Competent Person as described by the JORC Code, 2012..

The PEA for the Shaakichiuwaanaan Project has been completed by BBA Inc. and Primero Group Americas Inc, both independent consulting firms based in Montréal, Québec, Canada. The independent Competent Person, as defined under JORC, and Qualified Person, as defined by NI 43-101 for the Shaakichiuwaanaan PEA and Mineral Resource Estimate are:

Hugo Latulippe, a Professional Engineer registered with the Ordre des Ingénieurs du Québec (**OIQ**). Mr. Latulippe is a mining engineer and Principal Engineer for Mining and Geology at BBA Inc. and takes responsibility for the mining aspects of the Shaakichiuwaanaan PEA Press Release dated August 21, 2024. Luciano Piciacchia, a Professional Engineer registered with the OIQ. Mr. Piciacchia is a geotechnical engineer and Principal Geotechnical Engineer at BBA Inc.. Mr. Piciacchia takes responsibility for the infrastructure aspects of the Shaakichiuwaanaan PEA Press Release dated August 21, 2024. Shane K. A. Ghouralal, P.Eng, MBA, a Professional Engineer registered with the Professional Engineers Ontario and Professional Engineers and Geoscientists of Newfoundland and Labrador. Mr. Ghouralal is a mining engineer and Senior Mining Consultant at BBA Inc.. Mr. Ghouralal takes responsibility for the financial modelling and economic analysis aspects of the Shaakichiuwaanaan PEA Press Release dated August 21, 2024. Mr. Cunningham is a processing engineer and Process Engineering Manager for Primero Group Americas Inc. Mr. Cunningham takes responsibility for the processing aspects of the Shaakichiuwaanaan PEA Press Release dated August 21, 2024. Todd McCracken, P.Geo., Director - Mining & Geology - Central Canada, BBA Engineering Ltd is a Professional Geologist with the Ordre des Géologues du Québec. Mr. McCraken takes responsibility for the Mineral Resource Estimate aspects of the Shaakichiuwaanaan PEA Press Release dated August 21, 2024. The Effective Date of the Mineral Resource Estimate is August 21, 2024 (through drill hole CV24-526).

Mr. Latulippe, Mr. Piciacchia, Mr. Ghouralal, Mr. Cunningham, and Mr. McCraken have sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity they are undertaking to qualify as a Competent Person as such term is defined in the JORC Code (2012 edition) and a Qualified Person (as such term is defined in NI 43-101.

THE INFORMATION IN THIS PRESENTATION WITH RESPECT TO THE PEA was first released by the Company in its news release dated August 21, 2024, titled "PEA Highlights Shaakichiuwaanaan Project as a Potential North American Lithium Raw Materials Supply Base". The Company confirms that all material assumptions underpinning the production target and forecast financial information derived from the production target in the PEA news release continue to apply and have not materially changed.

IMPORTANT INFORMATION IN THIS PRESENTATION WITH RESPECT TO THE CONSOLIDATED MINERAL RESOURCE ESTIMATE was reported by the Company in accordance with ASX Listing Rule 5.8 on August 5, 2024 and July 21, 2025. The Company confirms it is not aware of any new information or data that materially affects the information included in the announcements and that all material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original market announcements.

CURRENCY: Unless otherwise indicated all references to $ or CA$ in this release are to Canadian dollars. A foreign exchange rate of US$ of 0.76US$/CA$ has been used over the life of mine.

NON-IFRS AND OTHER FINANCIAL MEASURES

This presentation includes non-IFRS financial measures and non-IFRS financial ratios. The Company believes that these measures provide additional insight, but these measures are not standardized financial measures prescribed under IFRS and therefore should not be confused with or used as an alternative for performance measures calculated according to IFRS. Furthermore, these measures should not be compared with similarly titled measures provided or used by other issuers.

The non-IFRS financial measures and non-IFRS financial ratios used in this presentation and common to the mining industry are defined below:

EBITDA: EBITDA is a non-IFRS financial measure which is comprised of net income or loss from operations before income taxes, finance expense – net, depreciation and amortization. This measure is used by the Company to show anticipated operating performance, by eliminating the impact of non-operational or non-cash items.

Cash operating costs at site and cash operating costs at site per tonne: Cash operating costs at site is a non-IFRS financial measure which includes mining, processing, and site administration. Cash operating costs at site per tonne is a non-IFRS financial ratio which is calculated as cash operating costs at site divided by anticipated production expressed in tonnes. These measures capture the important components of the Company's anticipated production and related costs and are used to indicate anticipated cost performance of the Company's operations.

Total cash operating costs (FOB Bécancour) and total cash operating costs per tonne (FOB Bécancour): Total cash operating costs (FOB Bécancour) is a non-IFRS financial measure which includes mining, processing, site administration, and product transportation to Bécancour. Total cash operating costs (FOB Bécancour) per tonne is a non-IFRS financial ratio which is calculated as total cash operating costs (FOB Bécancour) divided by anticipated production expressed in tonnes. These measures capture the important components of the Company's anticipated production and related costs and are used to indicate anticipated cost performance of the Company's operations.

All-in sustaining cost (AISC) and AISC per tonne: All-in sustaining cost is a non-IFRS financial measure which includes mining, processing, site administration, and product transportation to Bécancour and sustaining capital. All-in sustaining cost per tonne of spodumene concentrate is a non-IFRS financial ratios which is calculated as all-in sustaining cost divided by anticipated production expressed in tonnes. These measures capture the important components of the Company's anticipated production and related costs and are used to indicate anticipated cost performance of the Company's operations.

The Company does not currently have operations and therefore does not have historical equivalent measures to compare and cannot perform a reconciliation with historical measures.

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DISCLAIMER FOR FORWARD-LOOKING INFORMATION

QUALIFIED/COMPETENT PERSONS

This presentation contains "forward-looking information" or "forward-looking statements" within the meaning of applicable Securities Laws. d

All statements, other than statements of present or historical facts, are forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and assumptions and accordingly, actual results could differ materially from those expressed or implied in such statements. You are hence cautioned not to place undue reliance on forward-looking statements. Forward-looking statements are typically identified by words such as "plan", "development", "growth", "continued", "intentions", "expectations", "strategy", "opportunities", "anticipated", "trends", "potential", "outlook", "ability", "additional", "on track", "prospects", "viability", "estimated", "reaches", "enhancing", "strengthen", "target", "will", "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. In particular and without limitation, this presentation contains forward-looking statements pertaining to the development of the ceasium market,and of the demand for tithium; the scale of our (i) lithium pegmatite resource, (ii) pollucite-hosted caesium pegmatite resource, and (iii) tantalum pegmatite resource; the price for caesium, the potential of the development of the Company's Shaakichiuwaanaan Property; the potential for resource growth through continued drill exploration; the Company's intentions with respect to its business and operations; the Company's potential position in the markets and industries it operates in; the perceived merit and further potential of the Company's properties; the results and conclusion from the PEA; the feasibility study, including the timing of release; exploration results and potential for production at the Company's properties including in the manner anticipated by the PEA and within agreed specification under applicable offtake terms; exploration targets; budgets and forecasted cash flows and return on capital; strategic plans; permitting or other timelines; and government regulations and relations.

Key assumptions upon which the Company's forward-looking information is based include, without limitation, the total funding required to bring the Shaakichiuwaanaan Project to production, the Company's ability to raise additional financing when needed and on reasonable terms; the Company's ability to achieve current exploration, development and other objectives concerning the Company's properties; the Company's ability to source services, materials and consumables in the future necessary for the development and operation of the Shaakichiuwaanaan Project on commercially viable terms; the Company's expectation that the current price and demand for lithium, caesium and other commodities will be sustained or will improve; the Company's ability to obtain requisite licences and necessary governmental approvals; the Company's ability to attract and retain key personnel; general business and economic conditions, including competitive conditions in the markets in which the Company operates.

Some of the risks the Company faces and the uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements include, among others, the Company's ability to execute on plans relating to its Shaakichiuwaanaan Project, including the timing thereof; the Company's ability to generate revenue and future capital requirements; the Company's profitability in the short or medium term; mineral resource estimation risks; exploration, development and operating risks and costs; the Company's dependence upon the Shaakichiuwaanaan Property; the titles to the Company's mineral properties being challenged or impugned; the Company receiving and maintaining licences and permits from appropriate governmental authorities; environmental and safety regulations; land access risk; access to sufficient used and new equipment; maintenance of equipment; the Company's reliance on key personnel; the Company's ability to obtain social acceptability by First Nations with respect to its Shaakichiuwaanaan Project; the Company's reliance on key business relationships; the Company's growth strategy; the Company's ability to obtain insurance; occupational health and safety risks; adverse publicity risks; third party risks; disruptions to the Company's business operations; the Company's reliance on technology and information systems; litigation risks; tax risks; unforeseen expenses; public health crises; climate change; general economic conditions; commodity prices and exchange rate risks; lithium demand; volatility of share price; public company obligations; competition risk; dividend policy; policies and legislation; force majeure; and changes in technology.

Although the Company believes its expectations are based upon reasonable assumptions and has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. As such, these risks are not exhaustive; however, they should be considered carefully. If any of these risks or uncertainties materialize, actual results may vary materially from those anticipated in the forward-looking statements found herein. Due to the risks, uncertainties and assumptions inherent in forward-looking statements, readers should not place undue reliance on forward-looking statements.

Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Forward-looking statements are also subject to risks and uncertainties facing the Company's business, any of which could have a material adverse effect on the Company's business, financial condition, results of operations and growth prospects. Some of the risks the Company faces and the uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements include, among others, the ability to execute on plans relating to the Company's Project, including the timing thereof. In addition, readers should review the detailed risk discussion in the Company's most recent Annual Information Form filed on SEDAR+ for a fuller understanding of the risks and uncertainties that affect the Company's business and operations.

The forward-looking statements contained herein are made only as of the date hereof. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by applicable law. The Company qualifies all of its forward-looking statements by these cautionary statements.

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