



# Shaakichiuwaanaan - North America's Next Lithium Powerhouse

# Investor Day Presentation

September 2024

# IMPORTANT INFORMATION

This presentation 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 Shaakichiwaanaan 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  $\pm 25\text{-}30\%$  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 Shaakichiwaanaan 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 Shaakichiwaanaan 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 elsewhere in this presentation and 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.

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 information" or "forward-looking statements" within the meaning of applicable securities laws and other statements that are not historical facts. Forward-looking statements are included to provide information about management's current expectations and plans that allows investors and others 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 in this presentation, regarding the Company's strategy, future operations, technical assessments, prospects, plans and objectives of management are forward-looking statements that involve risks and uncertainties. Forward-looking statements are typically identified by words such as "plan", "expect", "estimate", "intend", "anticipate", "believe", 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. Forward-looking statements in this presentation include, but are not limited to, statements concerning: the estimation of Mineral Resources and the realization of such mineral estimates; expectations with respect to updating the Inferred Mineral Resources to Indicated Mineral Resources with infill drilling; the preliminary economic assessment, notably those under the highlights, and the results of the PEA discussed in this presentation, including, without limitation, project economics, financial and operational parameters such as expected throughput, production, processing methods, cash costs, all-in sustaining costs, other costs, capital expenditures, free cash flow, NPV, IRR, payback period and life of mine, upside potential, opportunities for growth and expected next steps in the development of the project, including timing for potential commencement of construction and first production of concentrate; the potential to utilize existing infrastructure, expertise and maintenance practices in connection with production from the project, and the expected benefits thereof, expected LOM, engagement with stakeholders, permitting activities; availability and applicability of tax relief as provided in existing legislation; the availability of various tax credits for the Company; the timing of a feasibility study; the potential for new partners to associate themselves with the Company; the Company's position in the market, notably in North America; the release date and content of the technical report pertaining to the MRE and the PEA; and the potential funding of the Project.

Forward-looking information is 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 information is 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.

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 Shaakichiwaanaan 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; 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 Shaakichiwaanaan 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 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.

Forward-looking statements contained herein are presented for the purpose of assisting investors in understanding the Company's business plans, potential financial performance and condition and may not be appropriate for other purposes.

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.



# IMPORTANT INFORMATION

## QUALIFIED/COMPETENT PERSONS

The information in this presentation that relates to the Preliminary Economic Assessment, Mineral Resource Estimate, Exploration Target, and exploration results for the Shaakichiwaanaan 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 and options 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 Preliminary Economic Assessment ("PEA") for the Shaakichiwaanaan 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 ("CP"), as defined under JORC, and Qualified Person ("QP"), as defined by NI 43-101 for the Shaakichiwaanaan PEA and MRE 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 Shaakichiwaanaan 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 and takes responsibility for the infrastructure aspects of the Shaakichiwaanaan PEA Press Release dated August 21, 2024. Shane K. A. Ghouralal, P.Eng, MBA, a Professional Engineer registered with the Professional Engineers Ontario ("PEO") and Professional Engineers and Geoscientists of Newfoundland and Labrador ("PEGNL"). 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 Shaakichiwaanaan 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 Shaakichiwaanaan 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. McCracken takes responsibility for the MRE aspects of the Shaakichiwaanaan 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. McCracken have sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity he is 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. "PEA Highlights Shaakichiwaanaan 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 - THE MINERAL RESOURCE ESTIMATE IN THIS RELEASE** was reported by the Company in accordance with ASX Listing Rule 5.8 on August 5, 2024. The Company confirms it is not aware of any new information or data that materially affects the information included in the announcement and that all material assumptions and technical parameters underpinning the estimates in the announcement 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 announcement.

**CURRENCY AND FX ASSUMPTIONS:** Unless otherwise indicated all references to \$ or CA\$ in this release are to Canadian dollars and references to US\$ are to US 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 and EBITDA by revenues: 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. EBITDA by revenues is a non-IFRS financial ratio which is calculated as EBITDA divided by anticipated revenues. These measures are 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 ratio 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.
- Free cash flow: Free cash flow is a non-IFRS financial measure defined as cash provided from operating activities, less cash outlays for capital, and taxes. This measure is used by the Company to measure the anticipated cash flow available to the Company.

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.

A technical report prepared in accordance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") will be filed on SEDAR+ by September 19, 2024.

## EXPLORATION TARGETS

This presentation refers to an Exploration Target on slide 9 for the Shaakichiwaanaan Property of:

**146 to 231 Mt at 1.0 to 1.5% Li2O.**

The potential quantity and grade of the Exploration Target are conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the Exploration Target being delineated as a Mineral Resource.

In accordance with clause 17 of the JORC Code, the Exploration Target has been determined based on the

interpretation of a consolidated dataset of surface rock sample descriptions and assays, outcrop mapping and descriptions, drill hole logs and core sample assays, geophysical surveys, and remote sensing data. The Exploration Target is exclusive of (i.e., does not include) the Shaakichiwaanaan Mineral Resource and only considers the CV Lithium Trend and immediately proximal areas. The Exploration Target has been presented as an approach to assess the potential endowment of the Project or the potential to host additional Mineral Resources of lithium pegmatite, subject to the success of future mineral exploration at the Property, and outside of that already defined.

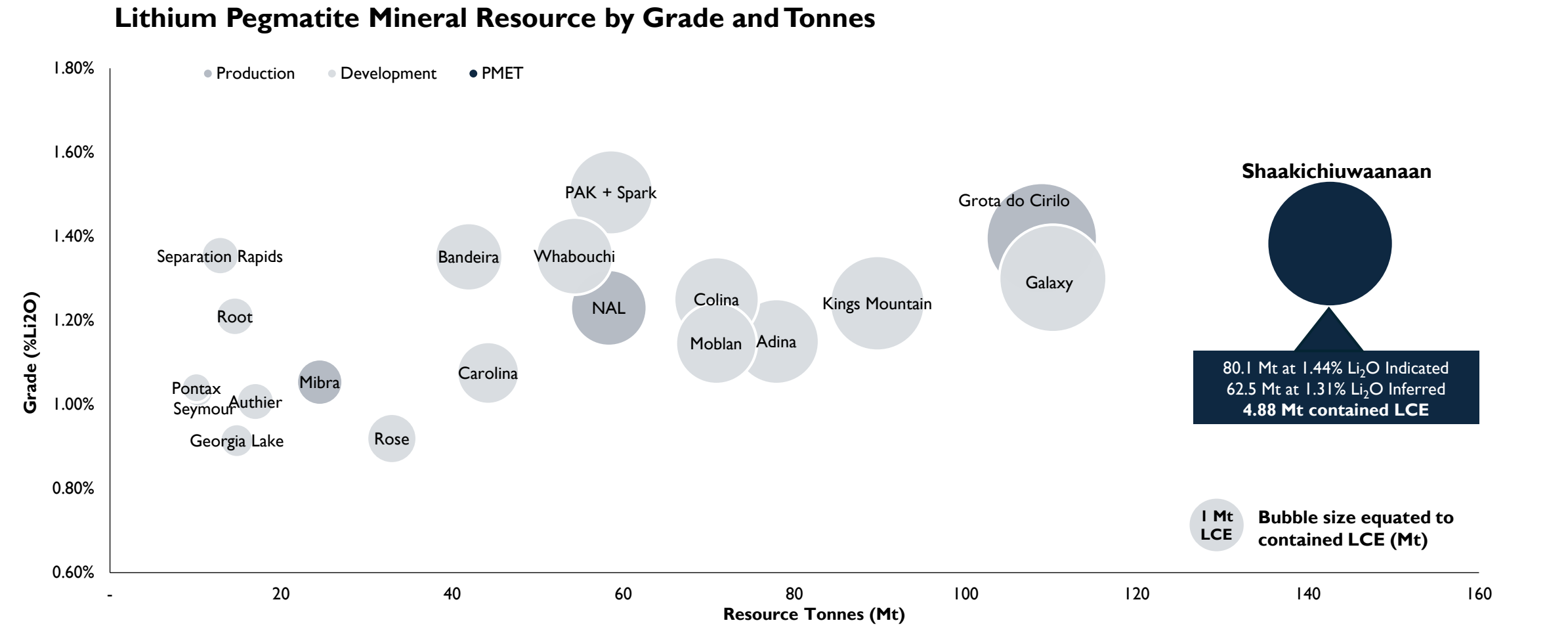
The Exploration Target has been completed by BBA Engineering Ltd. ("BBA"), a consultant independent of the Company. The basis on which the quantity and grade of the Exploration Target has been determined includes a review and interpretation of an extensive Property-scale dataset of surface rock sample descriptions and assays (>1,500 grab, chip, and channel samples), pegmatite outcrop mapping and descriptions (>1,000 outcrops/observations), drill hole logs and core sample assays, geophysical surveys (magnetics, IP-resistivity), and remote sensing data (LiDAR and orthophoto). BBA's method of determination included a detailed review of the consolidated dataset followed by 3D modelling to create a conceptual volume for all implied LCT pegmatite bodies within, and proximal to, the CV Lithium Trend. To estimate a tonnage the pegmatite specific gravity ("SG") used was approximately 2.626 based on the same linear regression formula as the latest MRE (SG= 0.0688x Li2O% + 2.625). An associated grade was then applied. The implied tonnage of each volume was then reduced by a factor to account for the likelihood of being mineralized at a reasonable grade, which was then further discounted to arrive at a final range of tonnage and lithium grade. The estimated tonnage was then rounded to the nearest million tonnes and the grade rounded to the nearest 0.1% Li2O. The 3D modelling of the implied pegmatite volumes was also constrained by the known spodumene pegmatite clusters at the Property, including their interpreted corridors of potential along strike. The volumes were further capped at a vertical depth from surface of 200 m. The areas of the CV Lithium Trend with defined Mineral Resources (i.e., the CV5 and CV13 pegmatites, a collective 6.9 km of trend) were not included in the determination of the Exploration Target..

The Company intends to test the validity of the Exploration Target over a several year period, starting in 2025, through systematic diamond drilling of the known spodumene pegmatite clusters and corridors between and proximal. Systematic diamond drilling (NQ core size) of the known spodumene pegmatite clusters and corridors between and proximal, which collectively form the basis of the Exploration Target, will be the primary method of exploration.



# 1 Geology / Resources

# Largest Lithium Pegmatite Resource in the Americas



Source: Mineral Resource Estimate ("MRE") data sourced through July 2024 from corporate disclosure in accordance with NI 43-101, JORC, or equivalent regulatory body. Deposit/Project data presented includes the total resource tonnage for all deposits/projects >10 Mt and >0.65% Li<sub>2</sub>O head grade. Shaakichiuwaanaan (CV5 & CV13) MRE (80.1 Mt at 1.44% Li<sub>2</sub>O and 163 ppm Ta<sub>2</sub>O<sub>5</sub> Indicated, and 62.5 Mt at 1.31% Li<sub>2</sub>O and 147 ppm Ta<sub>2</sub>O<sub>5</sub> ppm Inferred) is reported at a cut-off grade of 0.40% Li<sub>2</sub>O (open-pit), 0.60% Li<sub>2</sub>O (underground CV5), and 0.80% Li<sub>2</sub>O (underground CV13) with an Effective Date of June 27, 2024 (through drill hole CV24-526). Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. See Appendix page 37 "NOTES PEER COMPARISON INFORMATION - resources" for further details.

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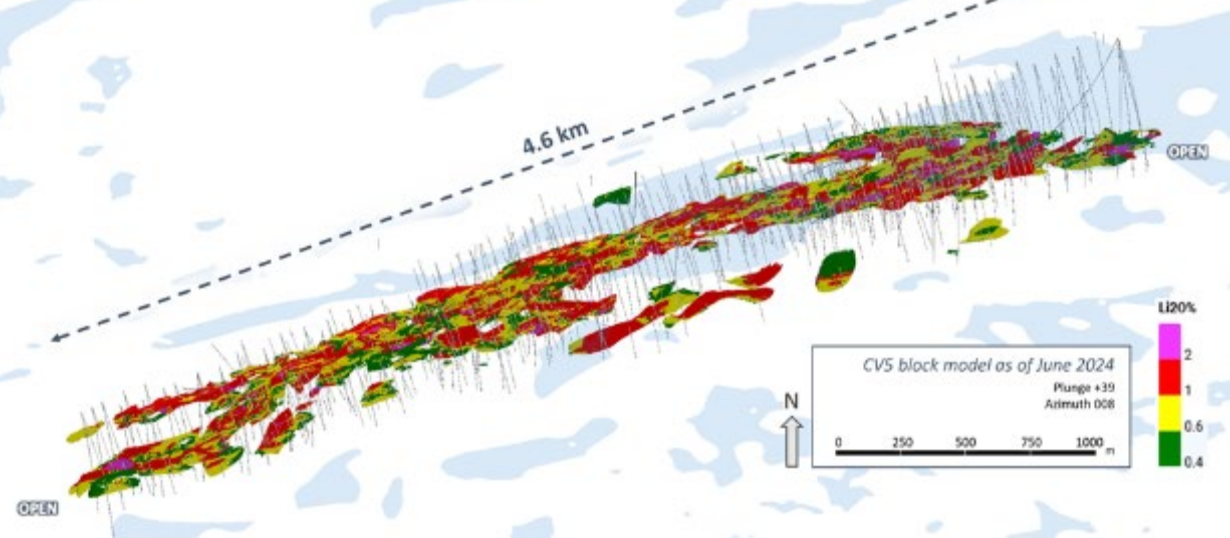
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PMET

# Mineral Resource

- The PEA is underpinned by the CV5 Spodumene Pegmatite component of Shaakichiuwaanaan updated Mineral Resource Estimate which was released on August 5, 2024
- Largest Lithium Pegmatite Mineral Resource Estimate in the Americas and 8<sup>th</sup> largest in the world<sup>1</sup>
- Cut-off grade is 0.4% Li<sub>2</sub>O open pit, 0.6% Li<sub>2</sub>O underground at CV5
- CV5 Pegmatite component is supported by 344 holes (129,673 m) and 11 outcrop channels (63 m)

**Oblique view of the CV5 Spodumene Pegmatite Block Model (classified material unconstrained) (not to scale)**



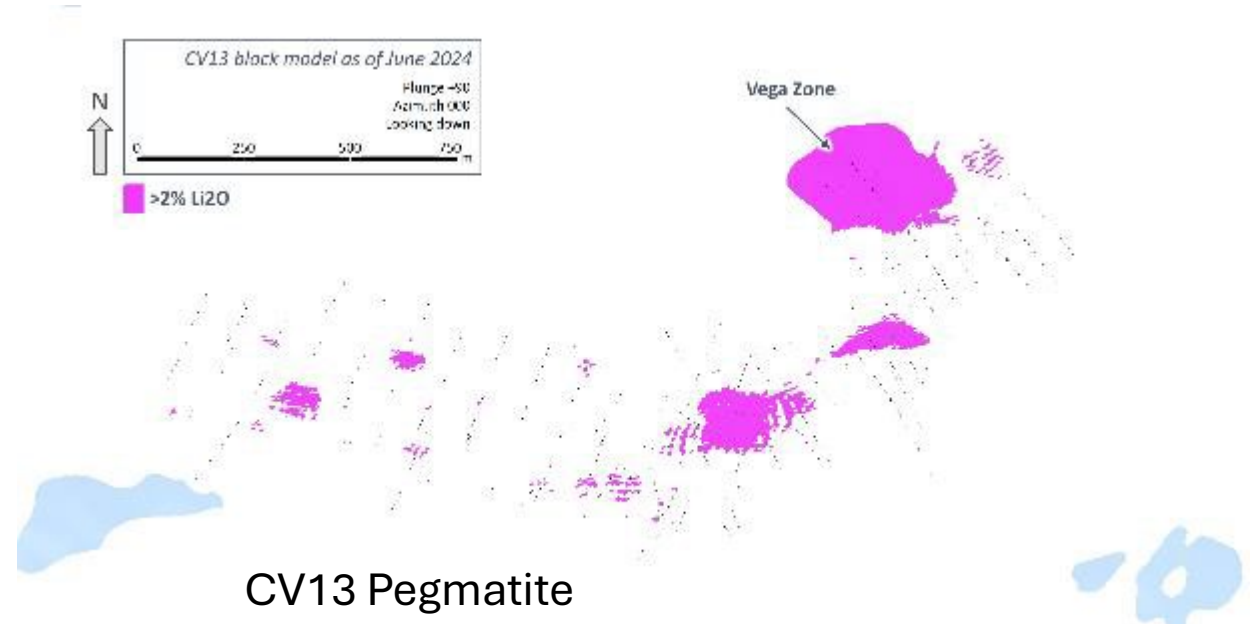
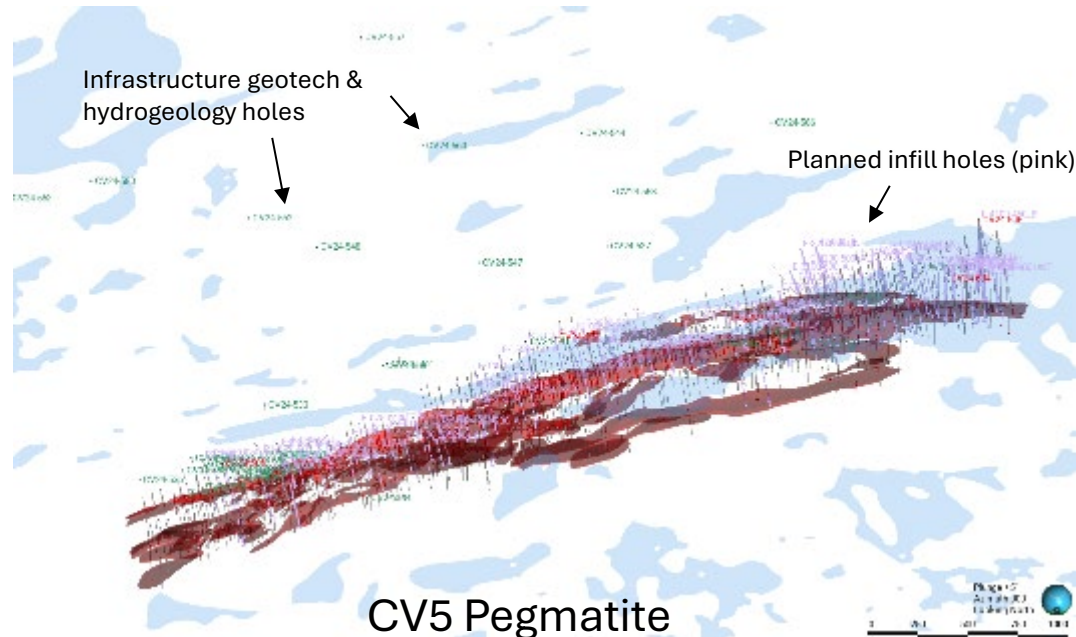
Pegmatite		Classification	Tonnes (Mt)	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> (ppm)	Contained Li <sub>2</sub> O (Mt)	Contained LCE (Mt)
Included in the PEA	CV5	Indicated	78.6	1.43%	162	1.13	2.79
		Inferred	43.3	1.25%	161	0.54	1.34
CV13 not included in PEA	CV13	Indicated	1.5	1.62%	195	0.02	0.06
		Inferred	19.1	1.46%	115	0.28	0.69

Notes: 1. Refer to Slide 5 “Largest Lithium Pegmatite Resource in the Americas” and Appendix (Slide 43) for supporting data .



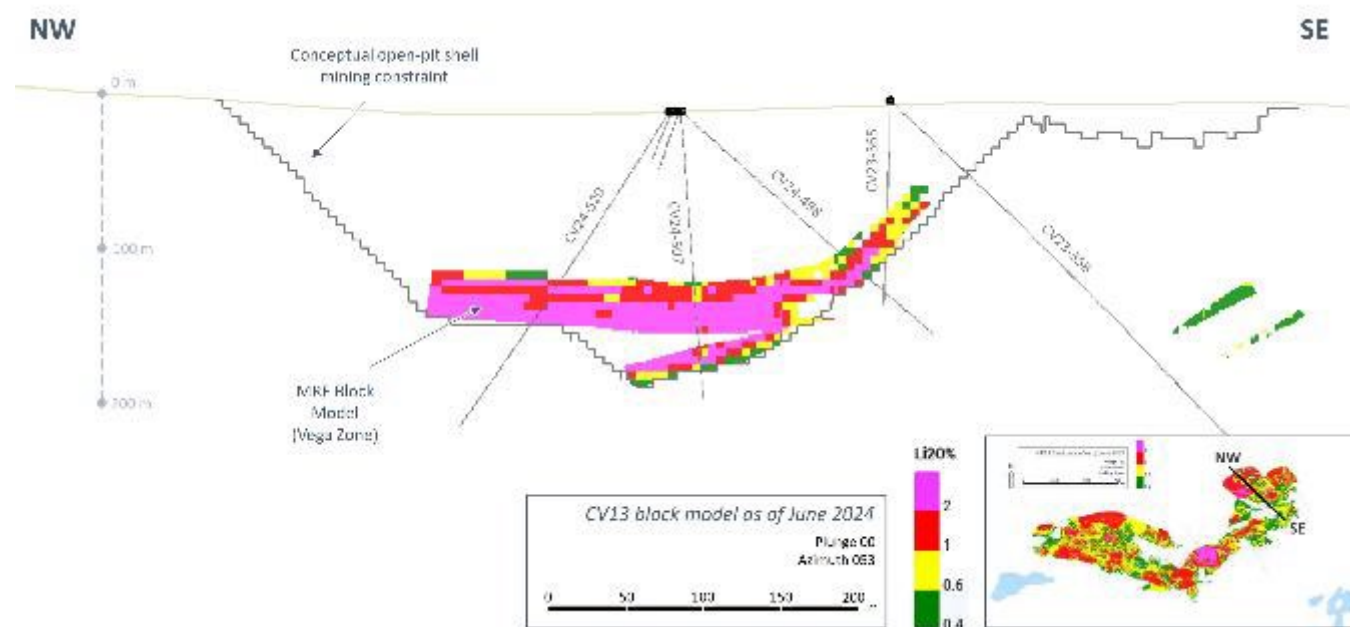
# Summer-Fall 2024 Exploration

- Drilling began in June and is planned to continue through mid Oct – total of ~55,000 m anticipated
  - Continued infill at CV5 to support conversion of Inferred to Indicated classification to underpin Feasibility Study
  - Geotechnical, geomechanical, and hydrogeological drilling in support of Feasibility Study
  - Step out drilling at CV13 as follow-up to high-grade Vega Zone discovery



# High-Grade Discovery at CV13 – Vega Zone<sup>1</sup>

- New high-grade spodumene pegmatite zone discovered at CV13:
  - 34.4 m at 2.90% Li<sub>2</sub>O, including 21.9 m at 3.58% Li<sub>2</sub>O (CV24-470), **discovery hole**.
  - 51.7 m at 1.77% Li<sub>2</sub>O, including 9.7 m at 5.16% Li<sub>2</sub>O (CV24-525).
  - 35.3 m at 2.40% Li<sub>2</sub>O, including 17.4 m at 3.12% Li<sub>2</sub>O (CV24-520).
  - Mineralization at shallow depth (starting at ~100 m vertical depth from surface) with a near-horizontal orientation, and open in multiple directions.



Cross-section of the CV13 Spodumene Pegmatite block model (Vega Zone), with conceptual open-pit constraint shapes

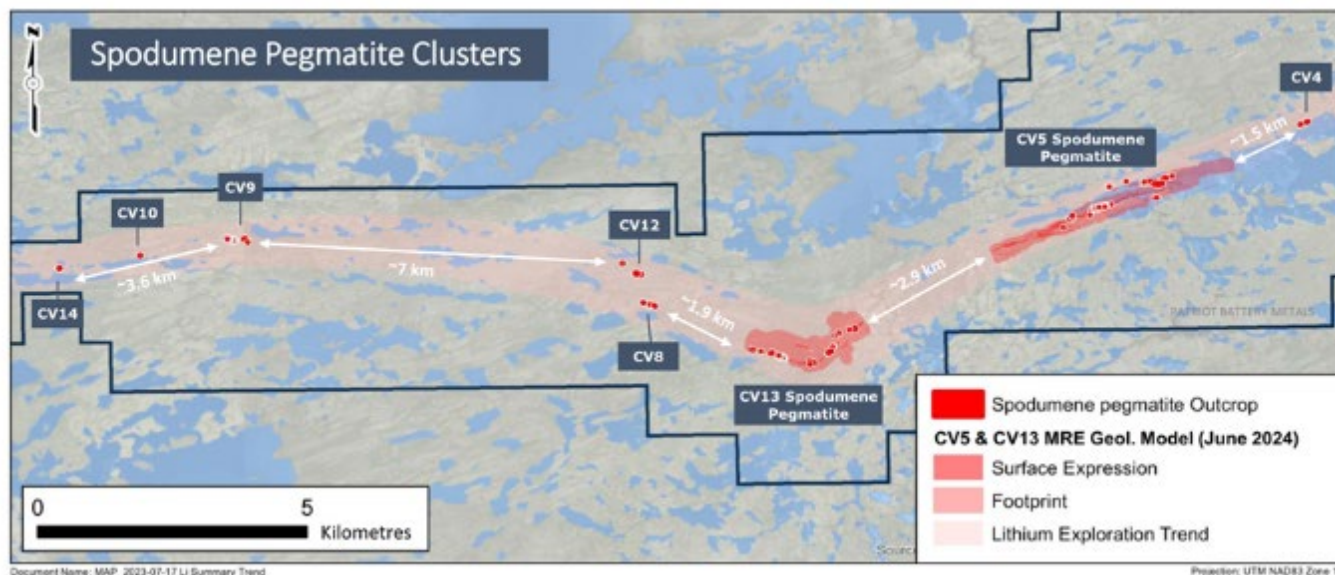
Notes: 1. Refer to Press Release, 6 May 2024, "New High-Grade Zone Discovered at CV13 – 33.4 m at 2.90% Li<sub>2</sub>O, including 21.9 m at 3.58%, Corvette"



# Exploration Target<sup>1</sup>

- Significant Exploration Target outlines the potential for additional tonnage at the Shaakichiuwaanaan Property
  - **146 to 231 Mt at 1.0 to 1.5% Li<sub>2</sub>O.**

*The potential quantity and grade of the Exploration Target are conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the Exploration Target being delineated as a Mineral Resource. The Exploration Target has been determined based on the interpretation of a consolidated dataset of surface rock sample descriptions and assays, outcrop mapping and descriptions, drill hole logs and core sample assays, geophysical surveys, and remote sensing data. The Company intends to test the validity of the Exploration Target over a several year period, starting in 2025, through systematic diamond drilling of the known spodumene pegmatite clusters and corridors between and proximal.*

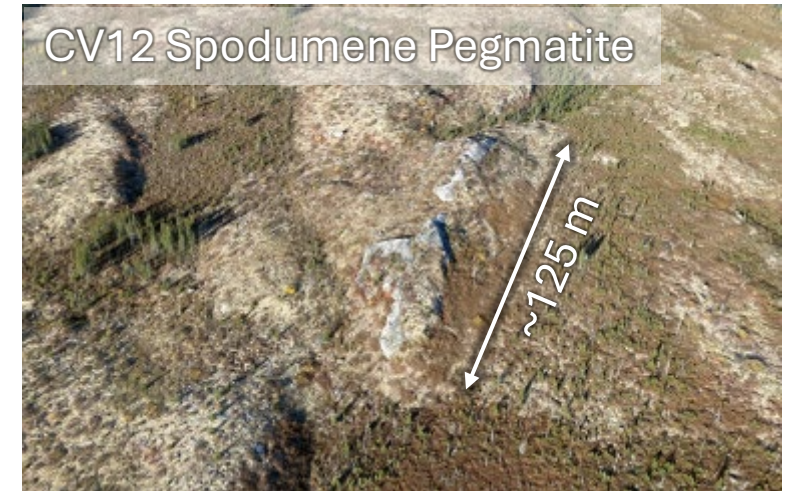
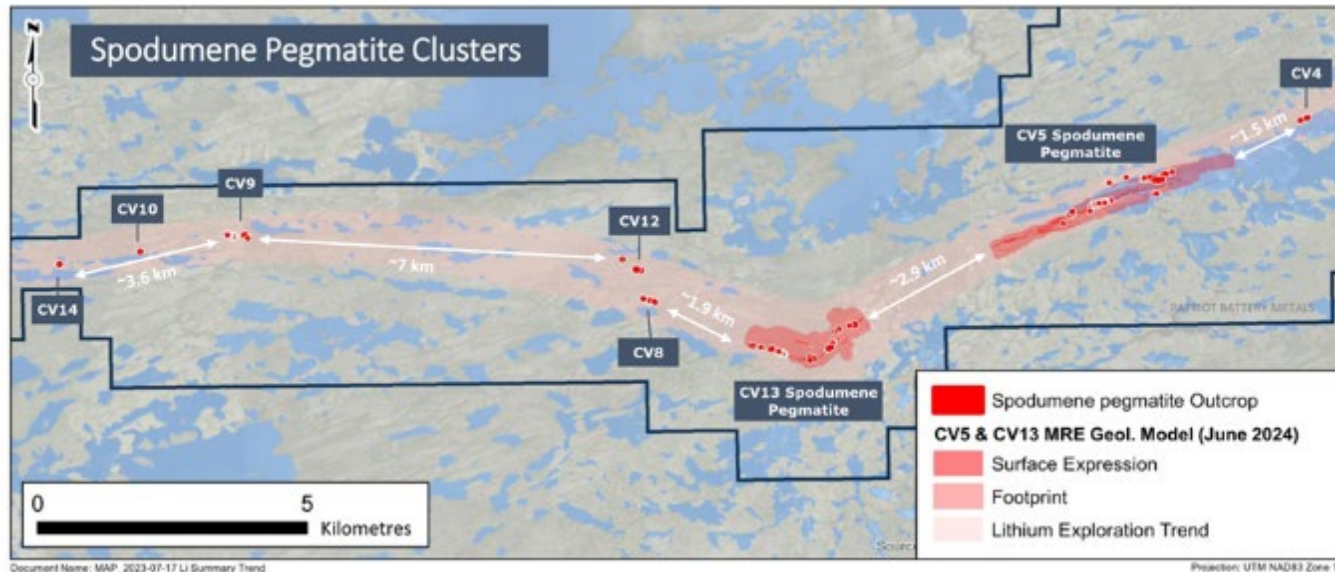


- Exploration Target is in addition to (i.e., does not include) the Shaakichiuwaanaan Mineral Resource Estimate announced concurrently.
- Exploration Target only considers the CV Lithium Trend and immediately proximal areas.
- Completed by BBA Engineering Ltd., a consultant independent of the Company.

<sup>1</sup> Please refer to news release 'Exploration Target for the Shaakichiuwaanaan Lithium Project Outlines District Scale Opportunity, Quebec, Canada' dated August 5<sup>th</sup>, 2024.

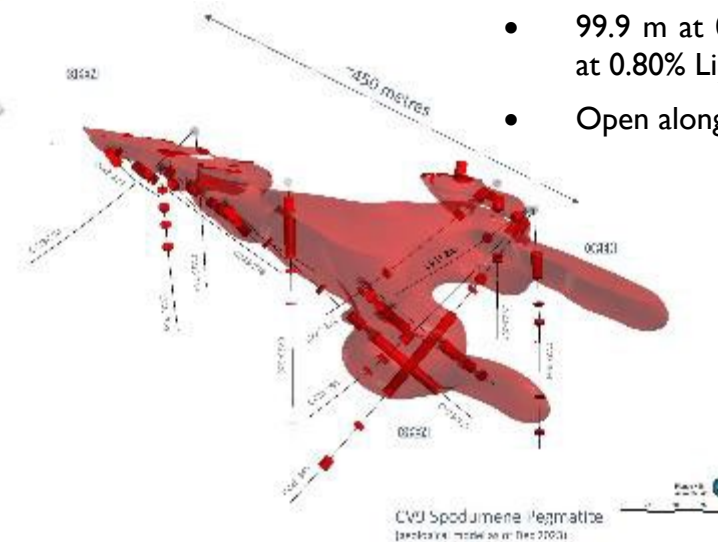
# Planned 2025 Exploration

- Up to approximately 80,000 m of drilling anticipated to 31 Dec 2025
  - Continued delineation of CV5 & CV13 along strike and to depth, & initial testing of proximal corridors
  - Initial drill testing of other spodumene pegmatite clusters, including CV4, CV8, CV12, and CV9



## CV9 Spodumene Pegmatite

- 99.9 m at 0.39%  $\text{Li}_2\text{O}$ , including 30.6 m at 0.80%  $\text{Li}_2\text{O}$  (CV23-345).
- Open along strike and to depth





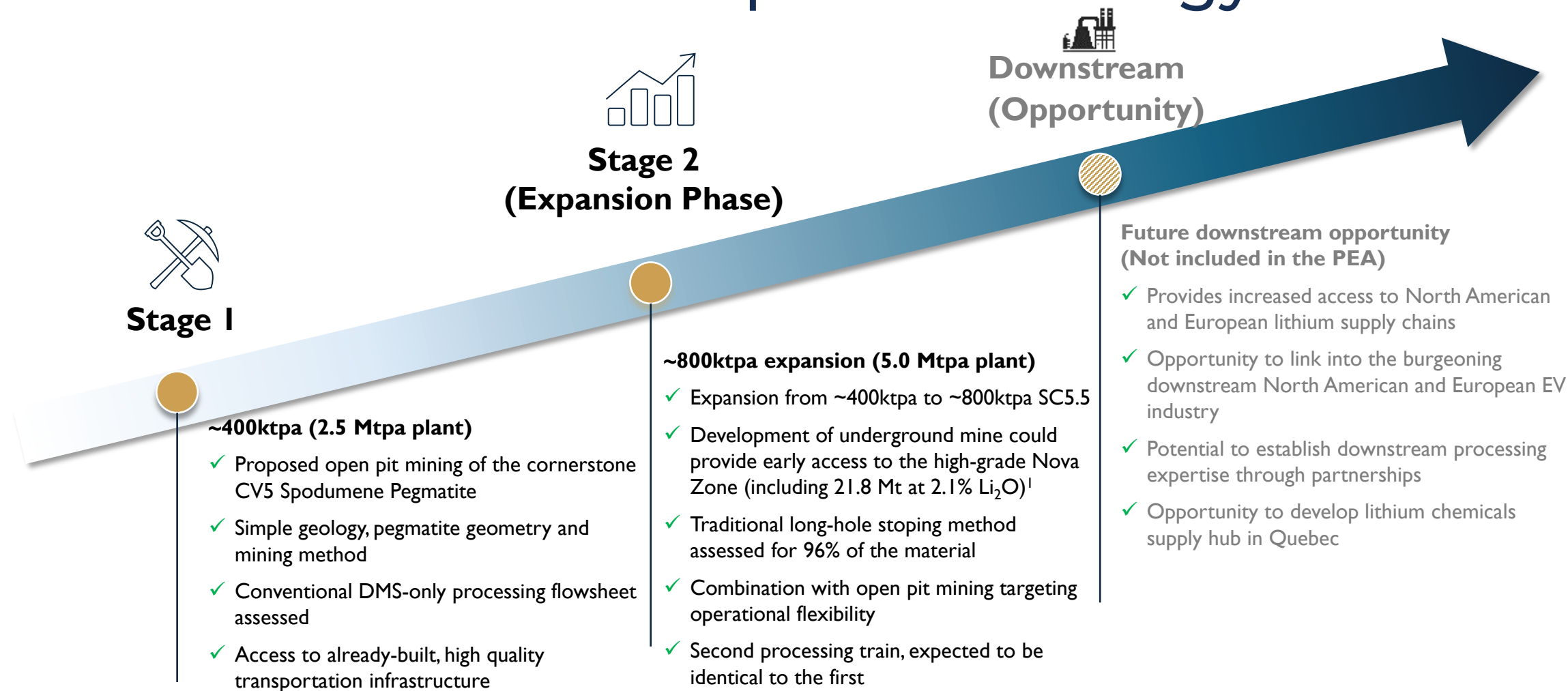
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## PEA Highlights





# Patriot's Phased Development Strategy



Notes: 1. The Nova Zone is a subset of the CV5 Resource, proposed to be accessed via the same underground mining method targeting the overall PEA underground Resource of 39.8Mt @ 1.54% Li<sub>2</sub>O (70% is Indicated, 30% is Inferred Resource category respectively).

# PEA Overview

**PEA highlights the Shaakichiuwaanaan<sup>1</sup> Project as a potential North American lithium raw materials supply base**



## Preliminary Economics

After-tax NPV<sub>8% Real</sub> of C\$2.9 billion and after-tax IRR of 34%

PEA by independent consultants, BBA and Primero



## Hybrid Mine Plan

Stage 1 open-pit followed by a Stage 2 hybrid underground-open pit expansion

Underground expansion provides early access to the high-grade Nova Zone<sup>2</sup>



## PEA Shows the Potential to Become 4<sup>th</sup> Largest Hard-Rock Lithium Mine<sup>3</sup>

~800ktpa SC5.5 steady-state production targeted via a phased Stage 1 (400ktpa) and Stage 2 (400ktpa) potential development



## Phased Development Approach Considered

Staged development strategy potentially lowers upfront Capex. Stage 1 net Capex of C\$640m<sup>4</sup> (US\$487m), with Stage 2 potentially funded through internal cashflow<sup>5</sup>



## Funding Strategy

Strong inbound interest from a range of tier 1 lithium supply chain participants regarding investment, offtake and downstream partnerships



## Upside Opportunities

Opportunity to enhance returns through resource expansion, optimized mining to access high-grade Nova Zone<sup>2</sup> earlier, and additional cost-saving measures

Notes: 1. 1. Pronounced Shaa-gi-chi-waa-naa (formally known as the Corvette Project). 2. The Nova Zone is a subset of the CV5 Resource, proposed to be accessed via the same underground mining method targeting the overall PEA underground Resource of 39.8Mt @ 1.54% Li2O (70% is Indicated, 30% is Inferred Resource category respectively). 3. Refer to slide 44, "NOTES PEER COMPARISON INFORMATION – PRODUCTION CAPACITY". 4. Stage 1 Net Capex includes capex of C\$599M, plus contingency of \$163M less estimated CMT-ITC tax credits of \$121M (excludes pre-production opex of C\$108M). 5. Cashflows from Stage 1 would be dependent (amongst other things) on reaching nameplate capacity on Stage 1, applicable pricing at the time of production/expansion and the overall economic viability of the Stage 1 operations and its cashflows, which are not guaranteed. The PEA is only a preliminary economic assessment based on mineral resources which are not reserves and there is no certainty that the PEA assessment, including Stage 1 cashflows, can be realized. Mineral resources that are not ore reserves do not demonstrate economic viability



# PEA Highlights

**After-Tax NPV<sub>8% Real</sub>**

**C\$2.9 Billion**

(US\$2.2 Billion)  
US\$1,375/t (SC5.5 FOB Bécancour)<sup>1</sup>

**After-Tax IRR**

**34%**

**Stage I Net Capex**

**C\$640 Million<sup>2</sup>**

(US\$487 Million)

**Payback Period**

**3.6 Years**

Estimated break-even spodumene price (SC6) of US\$587/t (on EBITDA basis)<sup>3</sup>

**Estimated Mine Life**

**24 Years**

Targeting FID in 2027 and commissioning from late 2028

**Target Annual Production**

**~800ktpa<sup>4</sup>**

~400ktpa Stage I production with Stage 2 expansion to reach ~800ktpa

**Total Cash Operating Costs**

**US\$560/t<sup>5</sup>**

(FOB Bécancour)

**AISC**

**US\$593/t<sup>6</sup>**

Notes 1. Spodumene price assumption based on recent market indicators and technical reports. Price forecasts are typically presented on a 6% Li2O spodumene basis, for the purpose of this PEA the Company's pricing assumption has been calibrated to SC5.5 by adjusted for lithium content on pro rata basis (equivalent to US\$1,500 SC6). 2. Stage I Net Capex includes capex of C\$599M, plus contingency of \$163M less estimated CMT-ITC tax credits of \$121M, excludes pre-production opex of C\$108m. 3. Calculated on a fully ramped 800ktpa, EBITDA, FOB Bécancour basis. 4. Based on full production of 800ktpa from Yr 4 – 18 5. 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 21 August, 2024, "PEA Highlights Shaakichiuwaanaan Project as a Potential North American Lithium Raw Materials Supply Base" 6. All-in sustaining costs ("AISC") includes mining, processing, site administration, and product transportation costs to Bécancour and sustaining capital over the LOM per unit of concentrate produced during the LOM. 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 21 August, 2024, "PEA Highlights Shaakichiuwaanaan Project as a Potential North American Lithium Raw Materials Supply Base"..



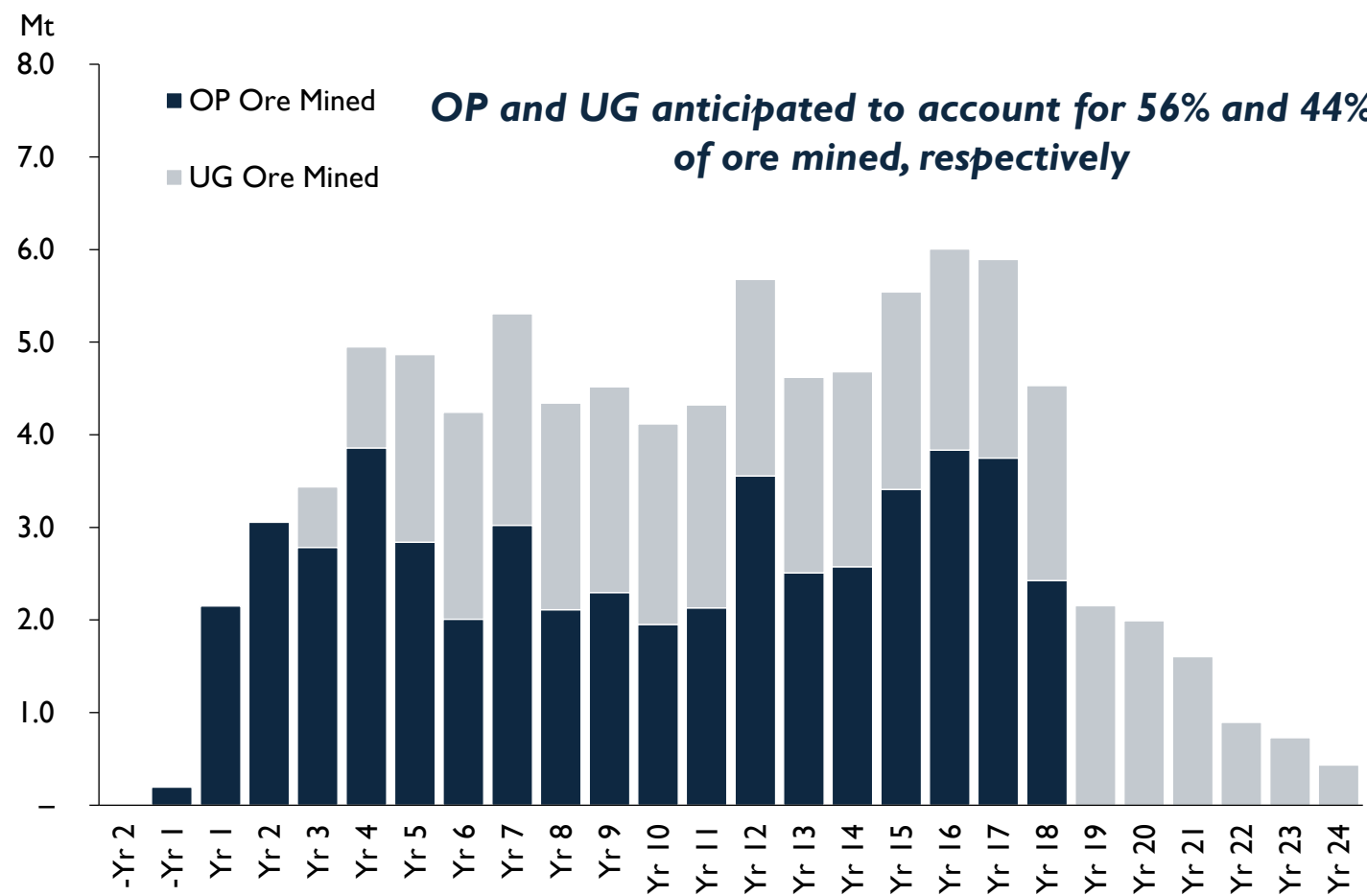
# 3

## Mining, Processing and Infrastructure



# Mine Plan

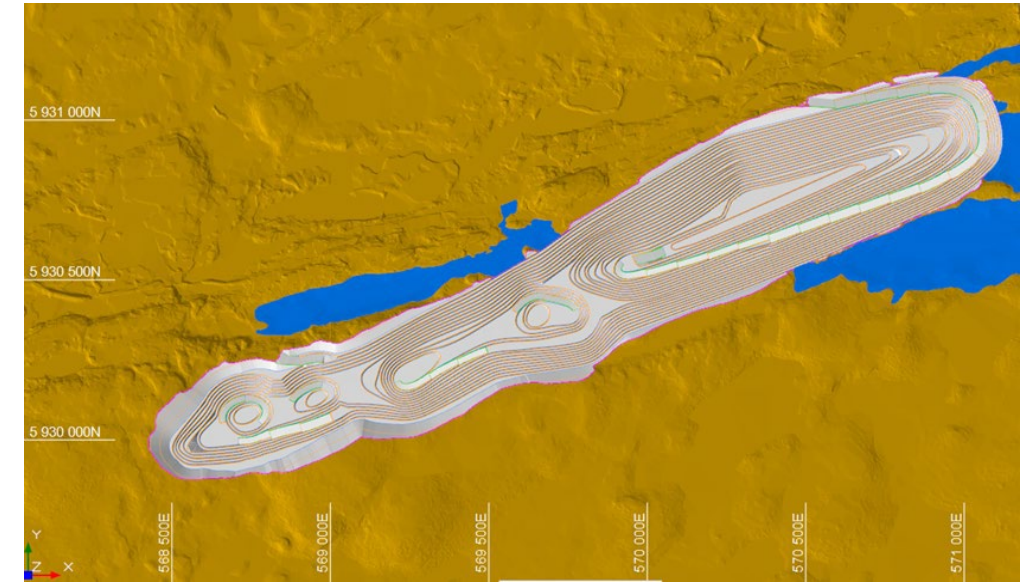
- Hybrid mine plan which aims to use both open pit and underground (UG) mining methods
- **UG benefits relative to open pit only:**
  - ✓ It could bring forward the high-grade Nova Zone
  - ✓ Reduces the environmental footprint helping to facilitate the permitting process
  - ✓ Potential for a more balanced feed grade that could be modified if market conditions change
- **Open pit:** Traditional drill and blast, truck and shovel mining method
  - ✓ Low strip ratio (3.7:1) when matched with UG
- **Underground:** Traditional long-hole stoping method for 96% of the material and long-hole longitudinal retreat method for the remaining 4% of material is modelled in the PEA



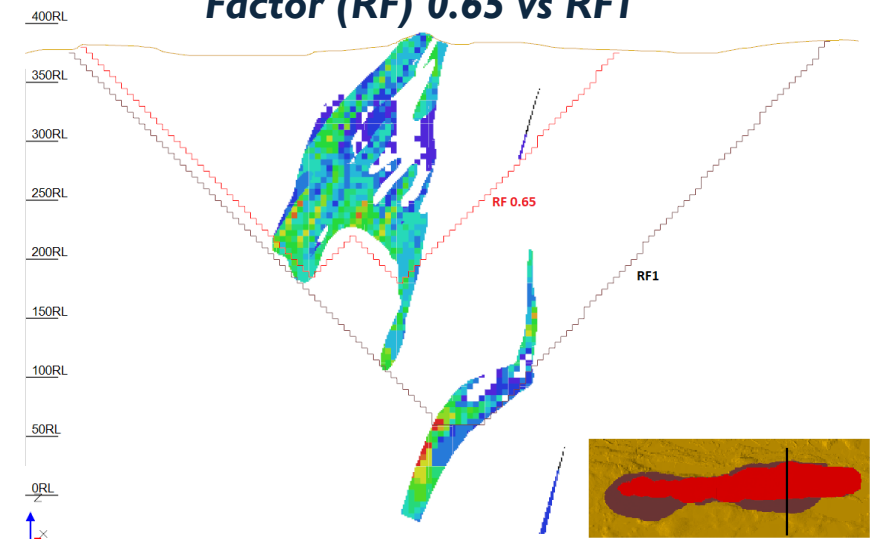
# Open-Pit Mining

- Pit shell optimization resulted in a range of shells for a range of prices, including the base price of US\$1,375 per tonne SC5.5 (RF 1). The selected pit shell, for the purpose of guiding the pit design, was generated at an SC5.5 price of US\$894 (RF 0.65)
  - ✓ The increment of mineralized material between the selected pit shell (RF 0.65) and the shell generated at a price of US\$1,375 per tonne SC5.5 (RF 1) has a high incremental strip ratio of over 10, which reduces the incremental profitability of the high RF shells.
  - ✓ Choosing the RF 0.65 shell for design is a defensive strategy that potentially gives the Project more robust economic outcomes
- The pit is expected to be mined using a traditional drill and blast, truck and shovel mining method
  - ✓ The open pit has been designed to accommodate 200 t class dump trucks
- **There is no interaction between the Stage 1 pit in the western extension and Lake 001, and as such this pit can be commenced prior to any drainage of Lake 001 occurring**
  - ✓ A 100 m long main levy and diversion channel is required to divert water and allow an area of Lake 001 to be drained such that Stage 2, Stage 3 and Stage 4 can be mined
  - ✓ The final wall in the northeast end of the ultimate pit is approximately 300 m southwest of the main levy. This levy and diversion channel will be constructed in the pre-production year

## CV5 PEA Pit Design



## Pit Shell Isometric View Cross-section - East Side, Revenue Factor (RF) 0.65 vs RF1

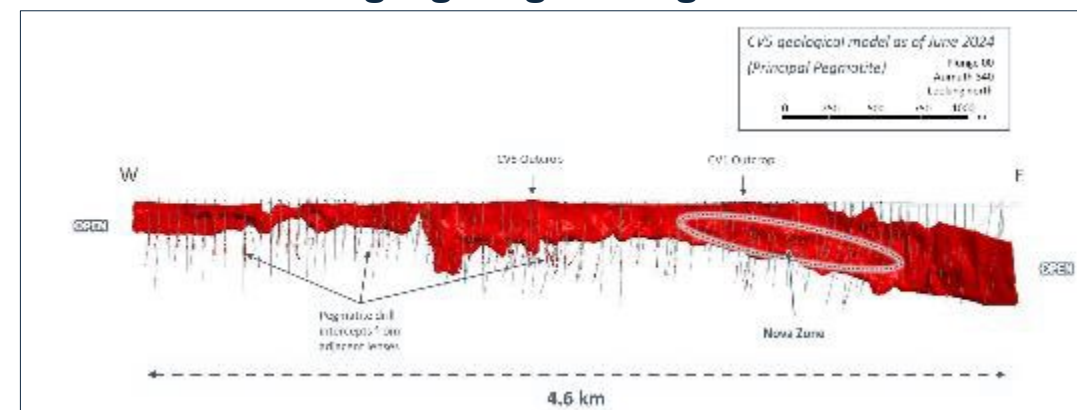




# UG - High-grade Mining Potential

- **Selectively targeting high-grade mining areas has the potential to reduce costs during periods of lower lithium pricing, improving optionality of the mine**
  - ✓ While a higher-grade, smaller scale scenario has not been considered within the PEA, the Company is evaluating this approach in the FS under consideration as one of the options that could be deployed in the future, in response to a lower pricing environment
- Mining and processing a higher grade has the effect of increasing the ‘yield-to-product’ derived from processing the Resource. That is, more concentrate is produced by processing the same tonnage for the effect of increased grade and increasing spodumene recovery as the processed grade increases
  - ✓ Using the PEA processing metrics it is estimated that site costs would reduce by approximately 35-45% via processing 2.1% Li<sub>2</sub>O grade as compared to the PEA LOM average grade of 1.31% Li<sub>2</sub>O
- Within the Resource, the PEA has determined that there is underground inferred and indicated mineral resource of approximately 21.8 Mt (diluted & recovered) at 2.10% Li<sub>2</sub>O (93% is Indicated and 7% is Inferred)
  - ✓ This resource has the potential to be targeted to reduce costs in a lower pricing environment

**CV5 Side View Highlighting the High-Grade Nova Zone**



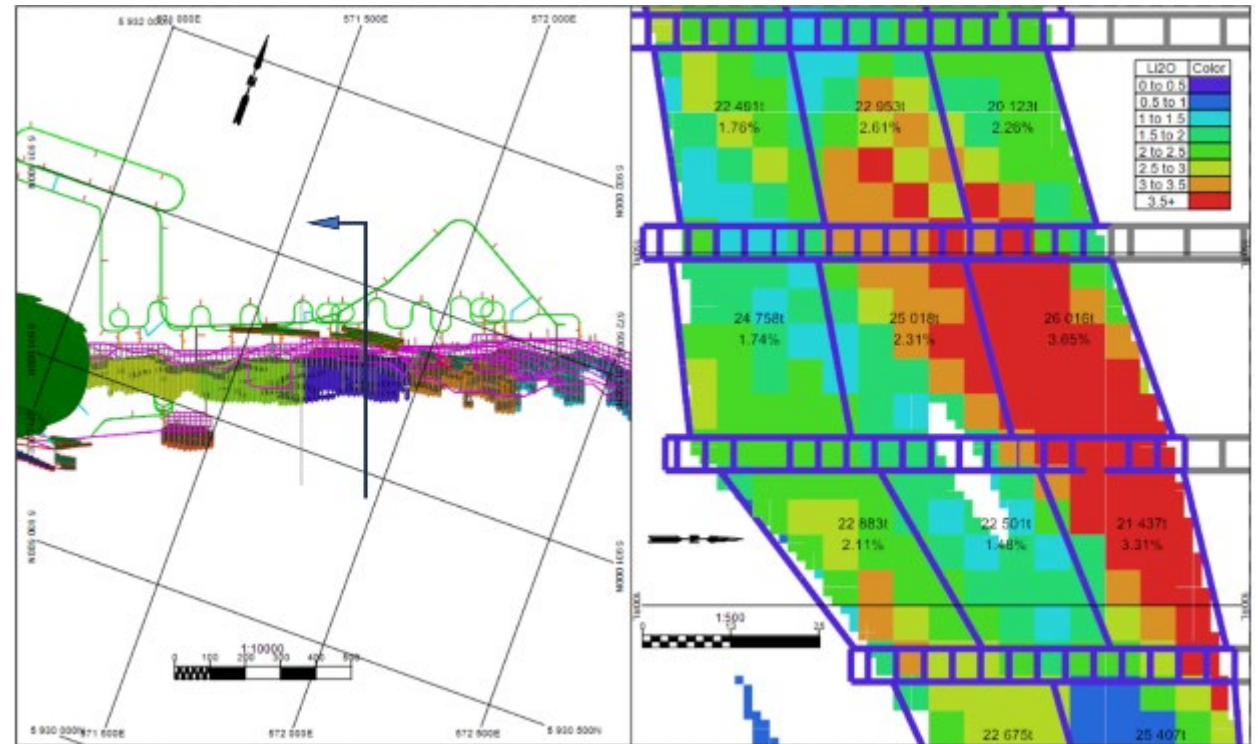
**Diluted Recovered U/G Mineral Resource Per Grade Bin**

Grade Bins (Li <sub>2</sub> O%)	Tonnes per Grade Bin (Mt)	Avg. Grade per Grade Bin (Li <sub>2</sub> O%)	Cumulative Tonnes (Mt)	Cumulative Grade (Li <sub>2</sub> O%)
0.0 to 0.7	4.1	0.21%	39.8	1.54%
0.7 to 0.9	2.4	0.77%	35.7	1.70%
0.9 to 1.1	3.9	0.95%	33.3	1.76%
1.1 to 1.3	3.8	1.14%	29.4	1.87%
1.3 to 1.5	3.8	1.33%	25.6	1.98%
1.5 to 1.7	4.3	1.52%	21.8	2.10%
1.7 to 1.9	4.1	1.71%	17.5	2.24%
1.9 to 2.1	3.2	1.90%	13.4	2.40%
2.1 to 2.3	2.8	2.09%	10.1	2.55%
2.3 to 2.5	2.0	2.28%	7.3	2.73%
2.5 to 2.7	1.5	2.47%	5.3	2.91%
2.7 to 2.9	1.1	2.66%	3.8	3.09%
2.9+	2.7	3.26%	2.7	3.26%
<b>Grand Total</b>	<b>39.8</b>	<b>1.54%</b>	<b>-</b>	<b>-</b>

# UG - High-grade Mining Potential

- **The hybrid approach potentially provides significant flexibility, allowing access to higher-grade zones as needed, which is essential for maximizing Project value while balancing the processing plant throughput and grade and maintaining resource quality**
  - ✓ In the Eeyou Istchee region, underground mining is successfully being deployed at the Éléonore Gold Mine and a hybrid of underground and open pit mining was used at the Stornoway Diamond Mine
  - ✓ The hybrid approach is also expected to reduce project risk throughout the commodity price cycle by allowing more immediate access to higher grade underground areas earlier in the mine plan and significantly reducing the project footprint and the impact to fish and fish habitat thereby reducing the fish compensation requirements
- **Underground mining facilitates selective mining of high-grade zones, which in turn may position the Company with a competitive advantage in relation to lower operating costs**
  - ✓ The ability to pivot between different mining methods allows for consistent mill feed quality and recovery rates, enhancing the Project's potential economic robustness and long-term viability

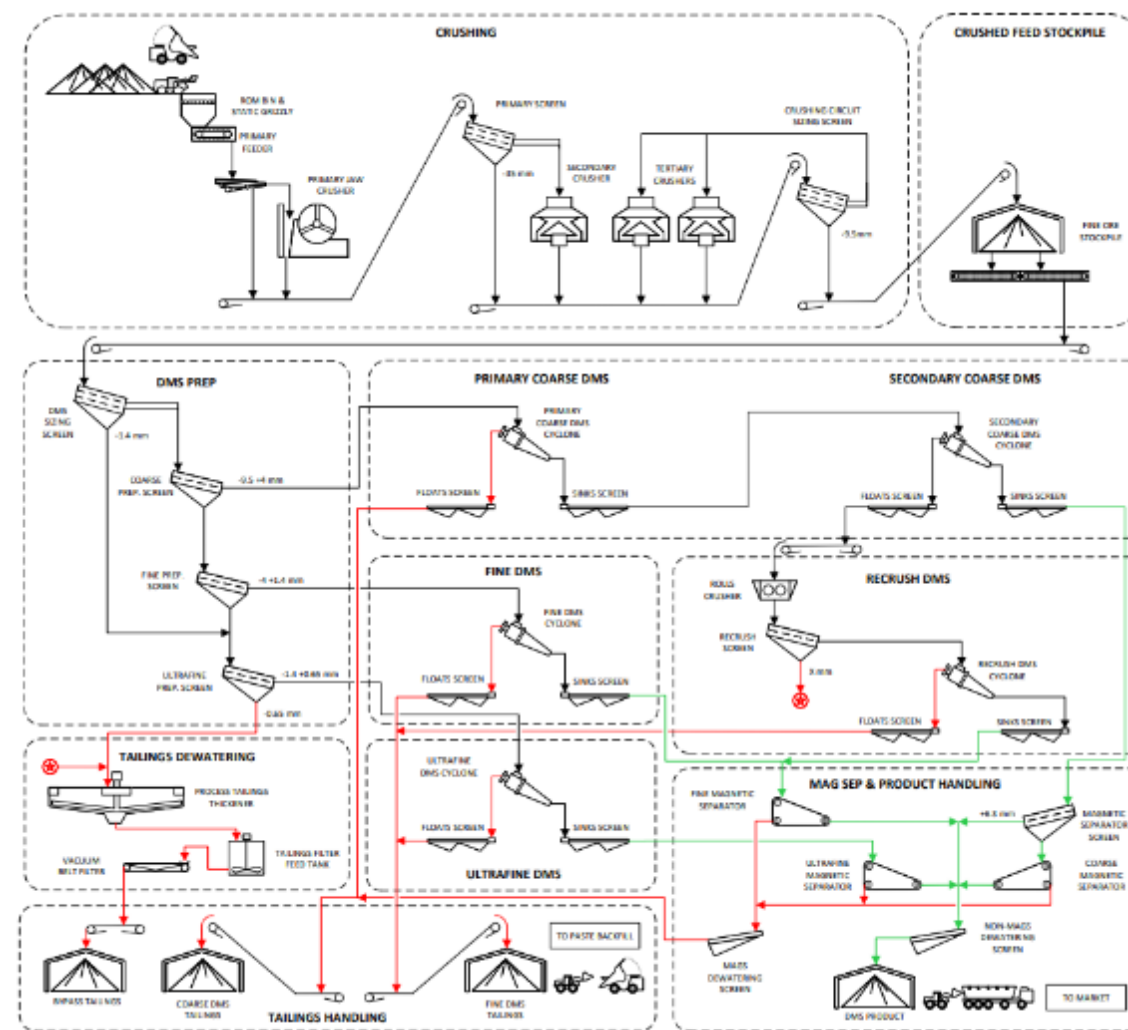
*Example of Nova Zone Stope Tonnes and Li2O% Grade*



# Processing and Recovery

- Simple **DMS-only** processing plant
- Phased approach could see the installation of a **2.5Mtpa<sup>1</sup> processing plant in Stage 1** and another **2.5Mtpa processing plant** to run in parallel in **Stage 2**
- The conceptual processing flowsheet includes firstly a **crushing plant**, followed by a **DMS-only processing plant**, and finally dewatering prior to the various **output streams** reporting to their respective handling areas
- Average LOM recovery rate expected to be **69.5%<sup>2</sup>**

Notes: 1. The 2.5 Mtpa is the processing plant's feed tonnage capacity. 2. The LOM recovery is based on the average feed grade during the period of full production, i.e. Years 4 to 18, feed grade of 1.31 % Li<sub>2</sub>O.



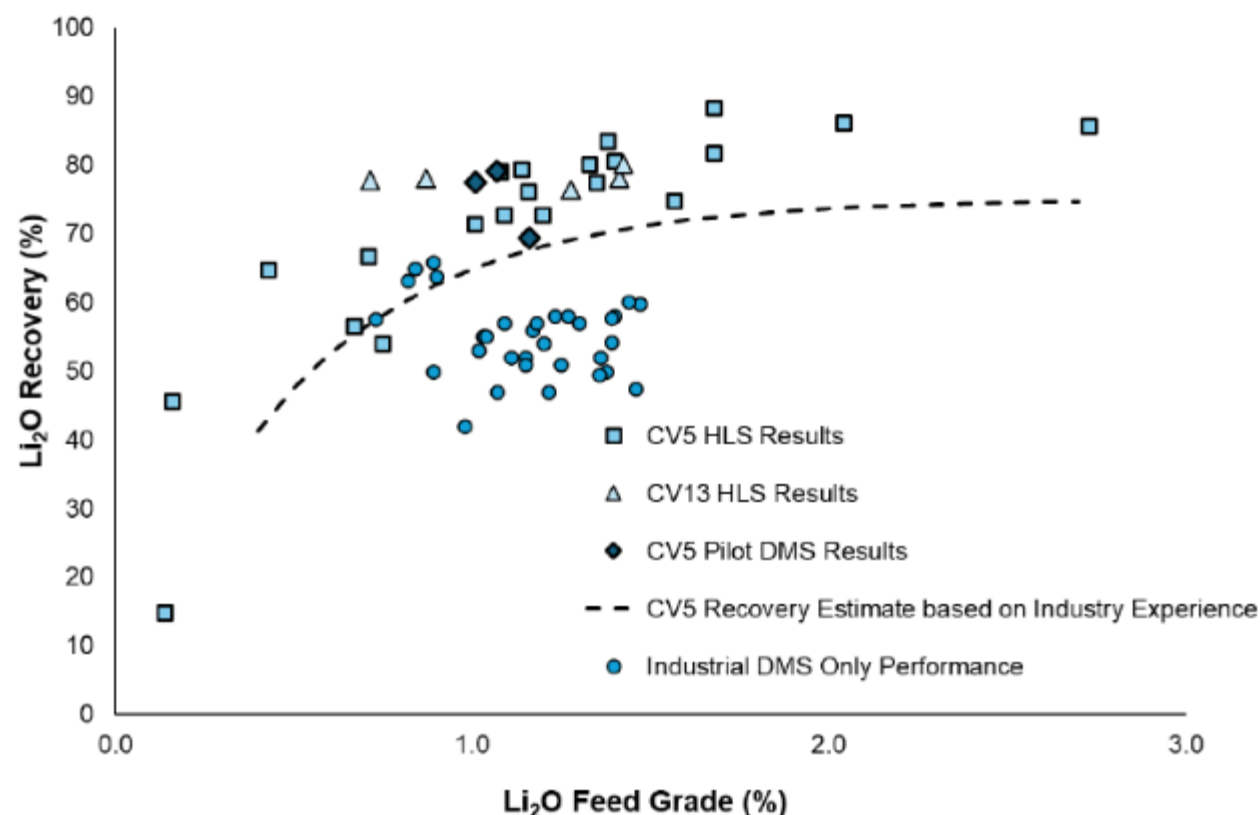


# Simple Minerology & Metallurgy

## Both CV5 and CV13 — Potentially Processable at the same Plant

- **Consistently large spodumene crystals** (potentially from the same source)
- Representative testwork done across the pegmatite
- **Coarse-grained** spodumene liberates effectively at ~6.5 mm and ~9.5 mm crush sizes
- **Low  $\text{Fe}_2\text{O}_3$**  present, ~0.65% in concentrate: iron is key impurity to evaluate
- Metallurgical test work indicates a **>5.5%  $\text{Li}_2\text{O}$**  spodumene concentrate at **high recovery (~70%)** may be produced using only Dense Media Separation (DMS)

*Metallurgical Test Work Recovery (global) Results & Industry  
Based Recovery Estimates for 3 x Size Range DMS Process Plant*



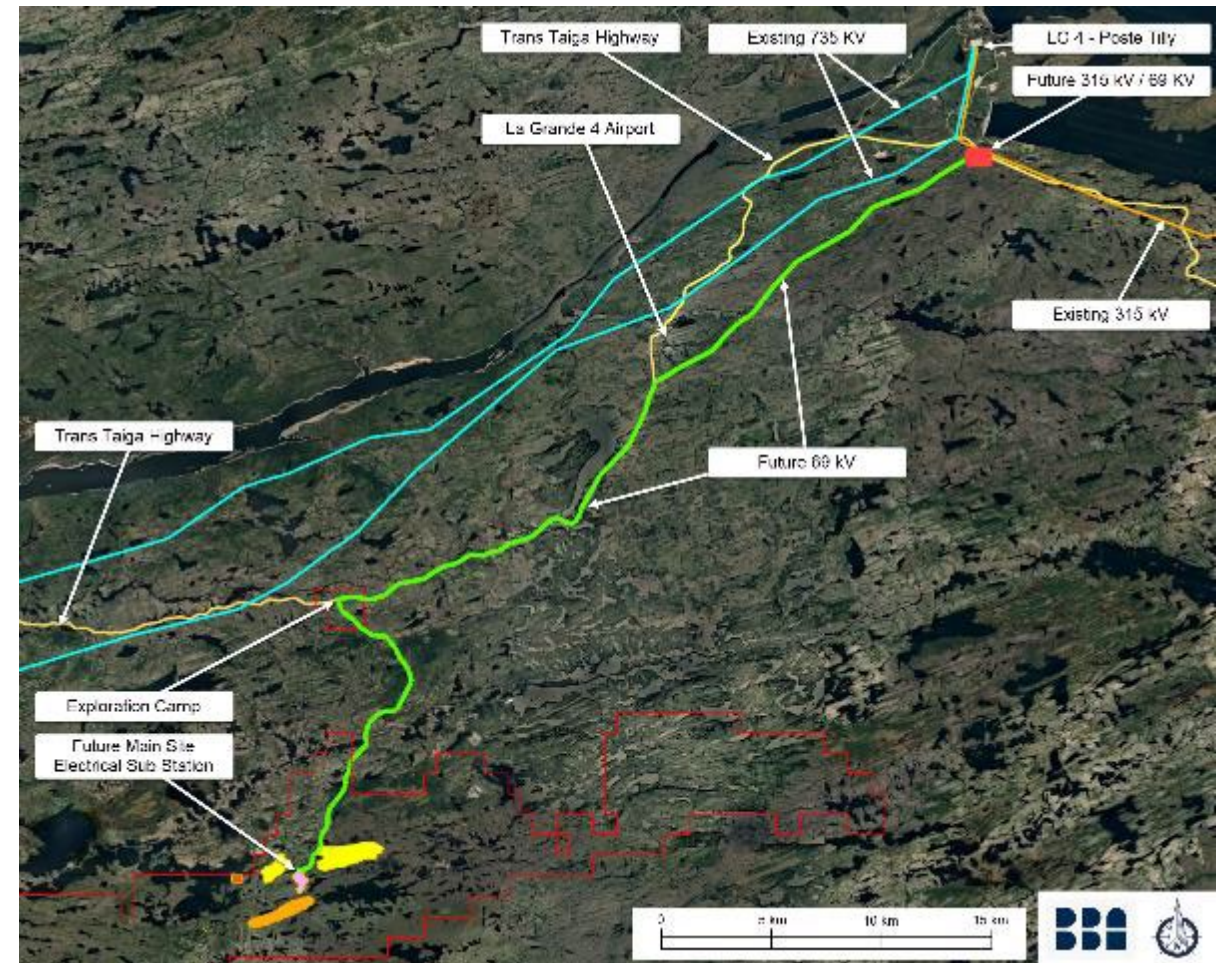
# Infrastructure

- **Power**

- Low-carbon footprint, low-cost and mainly renewable electricity sourced from Hydro-Québec
- The electrical substation will be located at approximately 55 km south of the Hydro-Québec's 315 KV Tilly substation

- **Transportation Infrastructure**

- Access to already-built, high quality transportation infrastructure with potential future improvements in the region
- Accessible by all-season road extending ~17 km to the south of the all-season Trans-Taiga Road
- Spodumene concentrate will be trucked to Matagami Transshipment Centre (834 km southwest of the mine) and then transported via rail to Bécancour



# Infrastructure Upside, La Grande Alliance

- **Road between Renard Mine and the Trans-Taiga<sup>1</sup>**
  - During Years 6-15 of LGA plan, a proposed road extension between the Renard Mine and the Trans-Taiga Road is envisioned
  - This key piece of infrastructure could reduce trucking considerably, resulting in significant cost savings and a reduction in CO<sub>2</sub> emissions
- **Railroad Extension from Matagami to the Trans-Taiga Road<sup>2</sup>**
  - The LGA plans to extend the railroad from Matagami to the Trans-Taiga junction with the BDH in two phases, which could eliminate the need for an additional 540 km of trucking
  - This extension would not only reduce logistical costs but also decrease the Project's carbon footprint, aligning with our commitment to green energy and sustainability
- **James Bay Port Development<sup>3</sup>**
  - During Phase 3 of the LGA plan (Years 16-30), the development of a port in James Bay is proposed. Sea freight options could further reduce logistics costs. Utilizing a port for transportation could enhance the Project's economic efficiency, providing an alternative shipping route that supports sustainable practices



Notes: 1. Refer to the Route 167 - Mine Renard to Trans-Taiga Road document available on the LGA website: <https://www.lagrandealliance.quebec/>. 2. Details of the proposed railroad network can be found in the Proposed-Rupert-La-Grande-Rail document available on the LGA website: <https://www.lagrandealliance.quebec/>. 3. Information about the proposed port and infrastructure improvements is available in the La Grande Alliance\_Résumé-D\_Rail-Route-Billy-Diamond document available on the LGA website: <https://www.lagrandealliance.quebec/>



# Shaakichiuwaanaan Camp

**The camp is located at KM270 on the Trans-Taiga Road**

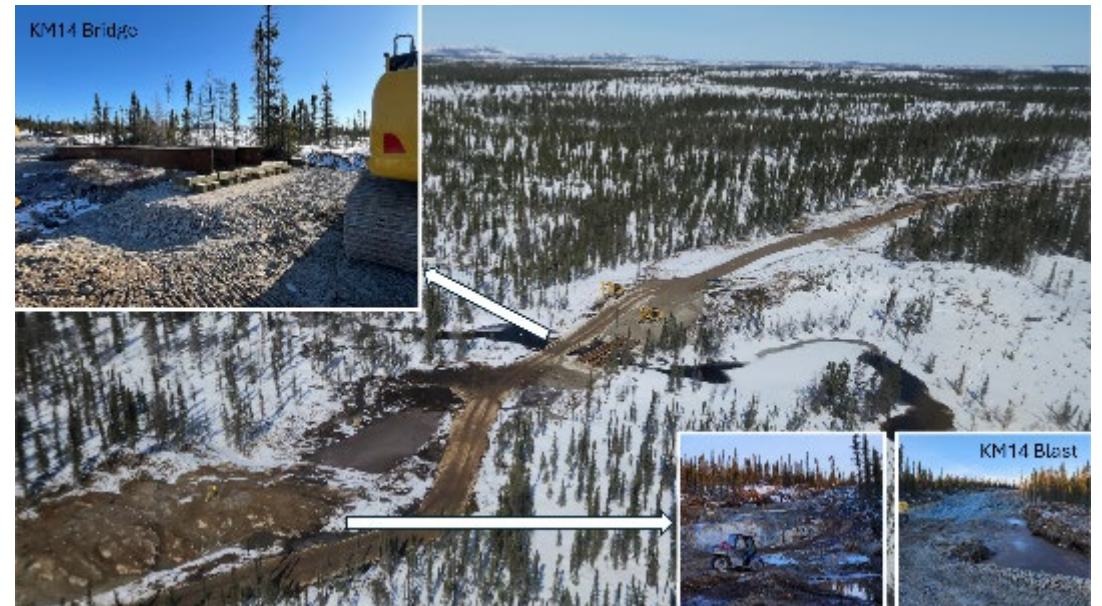
The camp is a **critical** infrastructure considering upcoming closure of **Mirage Outfitters** in Q4 2024 and includes the following facilities:

- 80 room camp for Phase I; expansion to a total of 150 rooms planned for summer 2024.
- Camp facilities include dormitories, kitchen/dining facility, office space, nurse stations, recreation complex.
- Heated workshop for mechanical support of equipment.
- Core management and storage with fuel facility and potable water supply.



# All Weather Road

- The All-Season Access Road extends south from KM270 on the Trans-Taiga Road a distance of ~20 km south to the CV5 deposit
- The road is a critical investment and will **enable significant cost savings** on future drilling and exploration expenditures
- The road includes three bridges (ranging from 30 feet to 100 feet in length) and 12 culvert installations
- The road has been constructed to MRNF Class 4 standards and will provide safe reliable access to the CV5 deposit during the entire development phase of the project





# 3

## Permitting and Community/First Nations Engagement





# Cree Engagement



- Recent site celebrations / ceremony and feast
  - Approximately 40 community members, including the Tallyman and his family
  - The entire site team
- Camp Shaakichiuwaanaan
  - The name means climbing a hill or a mountain (hills/mountains)
  - As chosen by the Tallyman, his family and supported by the broader Cree community

# Shaakichiuwaanaan: Impact Assessment Process

## Provincial Assessment & Review Procedure

- All mining projects located south of the 55<sup>th</sup> parallel, in the territory is governed by the James Bay and Northern Quebec Agreement (“JBNQA”)
- COMEX – Environmental and Social Impact Review Committee. Bipartite Quebec-Cree body, responsible for reviewing projects south of the 55<sup>th</sup> parallel. Comprised of 2 members appointed by the Cree and 3 members appointed by Quebec.

## Federal HADD

- Formal Federal authorization process (referred to as HADD) managed by the Department of Fisheries & Oceans (“DFO”) to obtain a permit when a fish bearing waterbody is impacted
- Partially draining the lake to access the CV5 Pegmatite requires a HADD



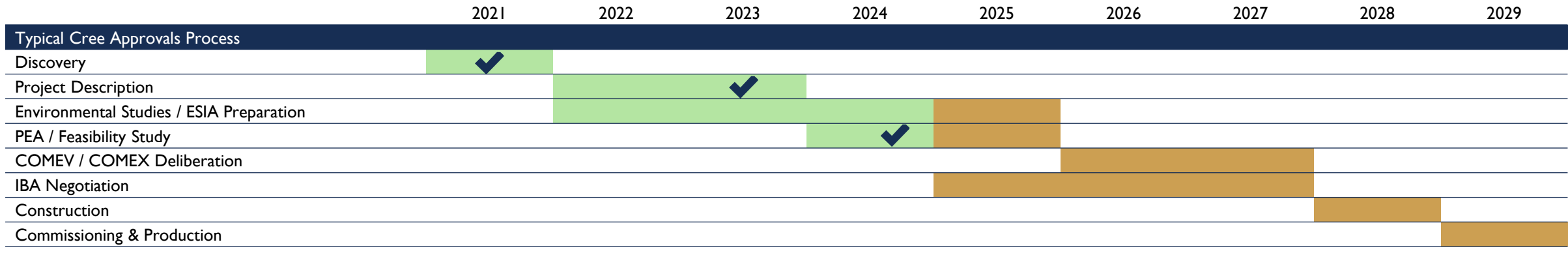
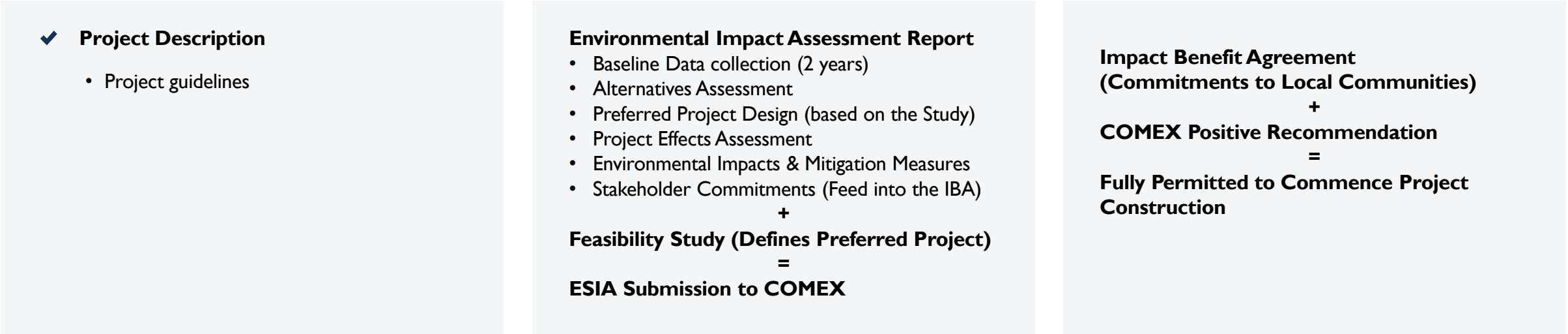
# Environmental Baseline Work

	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23	Q1 24	Q2 24	Q3 24	Q4 24	Q1 25	Q2 25	Q3 25	Q4 25
Baseline Study Work	Completed		Completed				Completed/Planned				Planned			
Geochemistry														
Soils														
Hydrology & bathymetry														
Surface water quality														
Hydrogeology & groundwater														
Vegetation & wetlands														
Fish & fish habitat														
Large mammals														
Avian wildlife														
Other (soundscape, light, etc.)														
Archeological														
Key														
Completed														
Planned														

Gantt chart of Environmental baseline work completed to date and planned to support the submission of the ESIA



# Mining Approval Process





# 2

## Market Commentary

# Supply Ramping up at a cost...

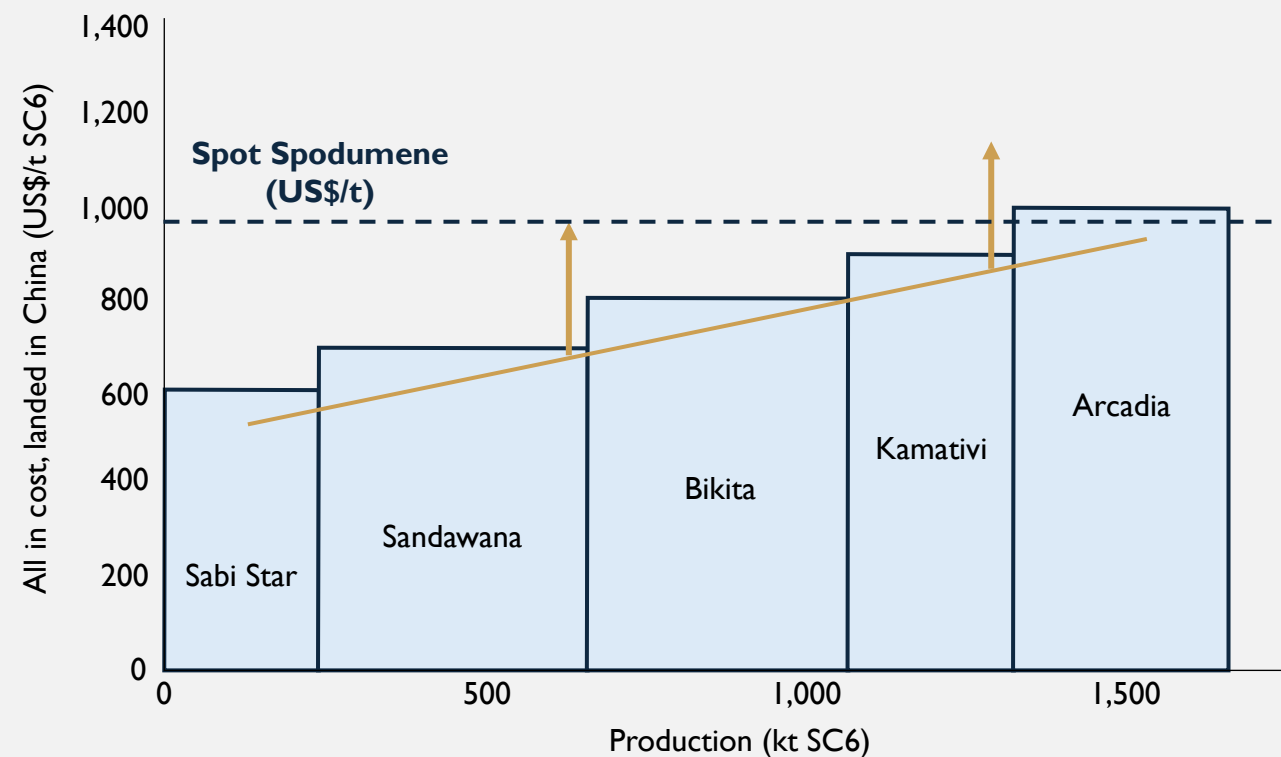
- Supply-side response from the Chinese producers has been successful in the last couple of years, however it has come at a significant cost
- Just one example, look at Zimbabwe:

Some inciteful analysis...

“...a source of supply growth, but it **comes with a catch**.....These include **ability to reach nameplate capacity** (engineering, mining and plant build quality), **lower concentrate grades** (2023 avg of 2.9%), **higher costs** (lower output, inflation, fuel and logistics) and **increased sovereign challenges** (capital gains tax changes from 5% to 20%, changes export permits). So while we see the potential of Zimbabwean supply, and upgrade our long-term output, we also believe **near-term capacity is somewhat overstated and this supply tends to be clustered at the top end of the cost curve.**”

*Canaccord Genuity, July 2024*

## Zimbabwe – Hard Rock Cost of Production



Source: Company reports, Canaccord Genuity estimates (July 2024).

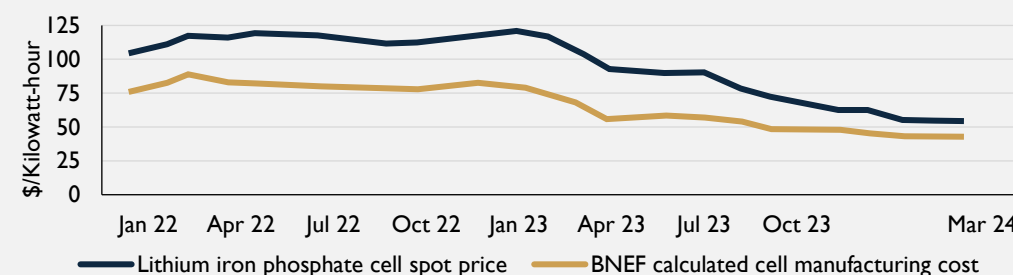


# Demand at a Tipping Point

- Chinese dominance of New Energy industries is becoming increasingly clear, with its leading position in the lithium-ion supply chain growing
- Lithium Iron Phosphate (LFP) cells in China are now at a very price competitive level, having halved in sale-price in the last 12 months
  - As cell prices drop the addressable market for the batteries increases, driven by EV's and then applications in static energy storage
  - EVs are now price competitive in the US market, with the cheapest 300-mile range EV cheaper than the average US car price
  - End consumer prices for ESS batteries have materially improved over the last 12 months
- Geopolitical risk is escalating, and we believe Shaakichiuwaanaan is a potential solution for the continued 'friendshoring' trend of western world supply

## Battery margins are being squeezed

*China sell spot prices and manufacturing costs*

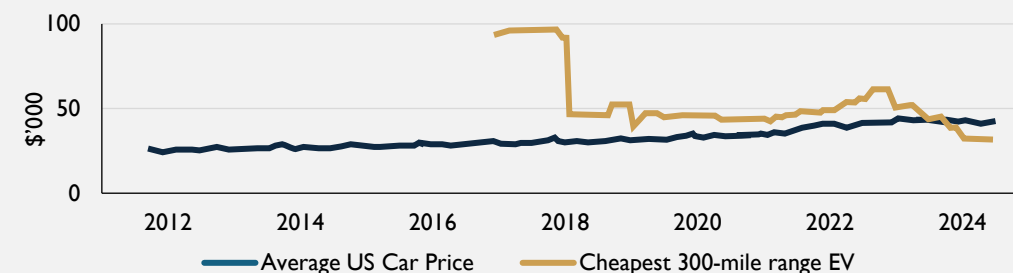


Source: BloombergNEF

Note: The cell mentioned here is prismatic format and excludes taxes. LFP spot price comes from the ICC Battery price database. Estimated cell manufacturing cost is for LFP cells and uses the BNEF BattMan cost model.

## EVs Pass a Key Measure of Price Parity in US

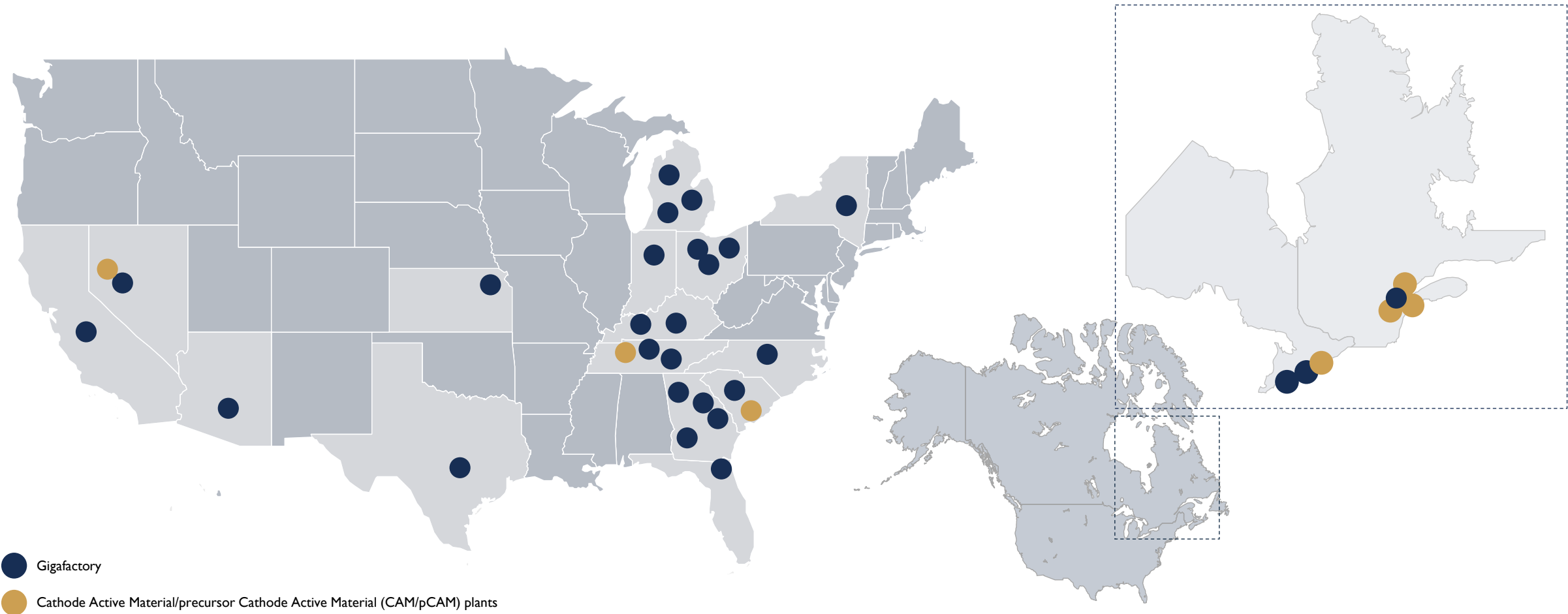
*Several 300-mile range EVs now cost less than the average new car*



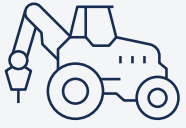
Source: Bloomberg Green, Edmunds.

Note: EV prices don't include government incentives.

# North American Downstream Landscape



# Exploration, Resource Growth and Project Delivery



## Continue to Drill

- ✓ Extend CV5 westward to CV13
- ✓ Infill drilling at CV5
- ✓ Drill CV13
- Drill the CV8, CV9, CV10, and CV12 spodumene pegmatite clusters



## Exploration/ Development

- Surface work on the remaining prospective trend yet to be assessed
- Discover and drill new spodumene pegmatite clusters
- Continue to advance infrastructure like all-weather road and camp to support activities on site



## Community

- Build and enhance relationships with Chisasibi and the Cree Nation
- **Ensure local participation:**
  - Employment
  - Business opportunities
  - Environmental data collection and traditional knowledge



## Develop CV5

- ✓ Upgraded CV5 mineral resource estimate
- ✓ Completed preliminary economic assessment (PEA)
- Progress EIS and permits for development
- Become a long-term lithium supplier in North America











# Appendices

## Corporate Snapshot

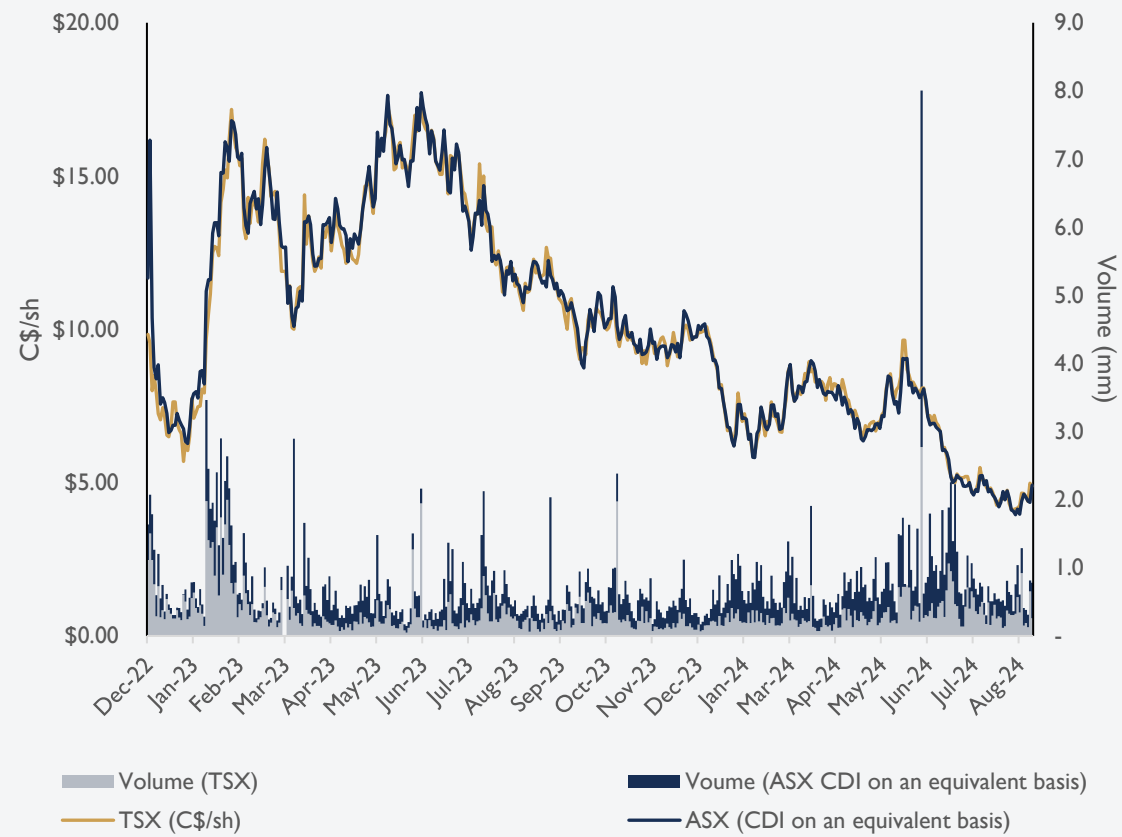


# PROVEN MANAGEMENT TEAM WITH A TRACK RECORD OF VALUE CREATION

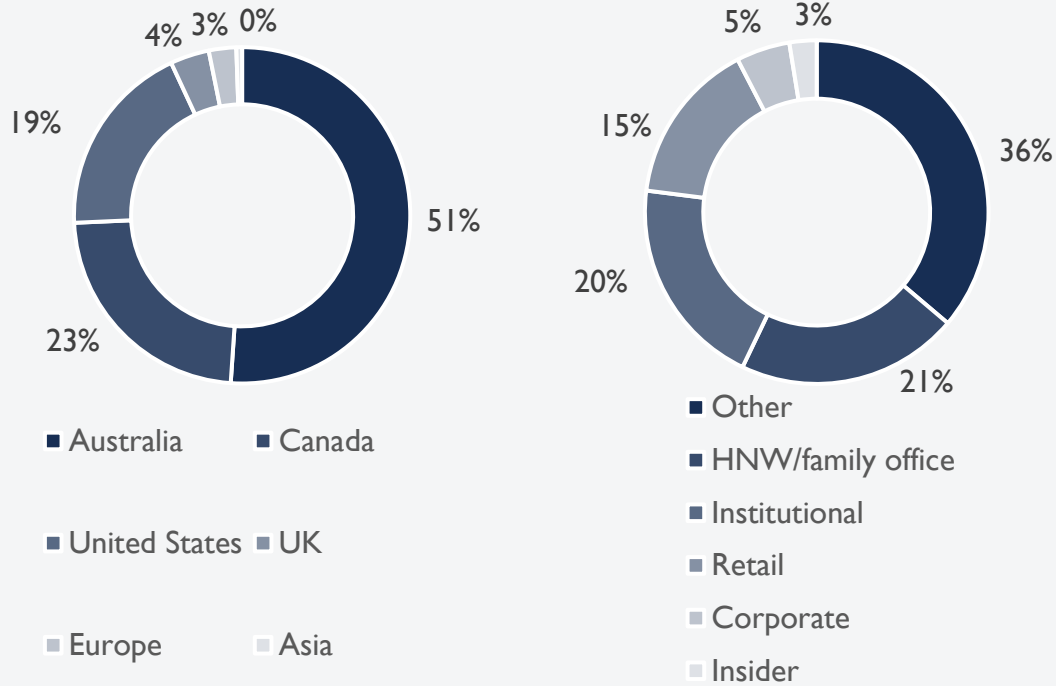
						Investor Relations	
							
<b>Ken Brindsen</b> B.Eng. (Mining), MAUSIMM, MAICD <b>CEO, President, Director</b>	<b>Natacha Garoute</b> CPA, LLB <b>CFO</b>	<b>Alex Eastwood</b> BEd, LLB <b>Executive Vice President, Commercial</b>	<b>Darren L. Smith</b> M.Sc., P.Geo. <b>Executive Vice President, Exploration</b>	<b>Alix Drapack</b> P.Eng., MBA, ICD.D <b>Executive Vice President, ESG</b>	<b>Greg Barfoot</b> M.Eng., MBA <b>Executive Vice President, Project Development</b>	<b>Bradley Seward</b> <b>Vice President, Investor Relations, Australia</b>	<b>Olivier Caza-Lapointe</b> <b>Head of IR North America</b>
<b>YEARS</b> Over 30 years	<b>YEARS</b> Over 20 years	<b>YEARS</b> Nearly 30 years	<b>YEARS</b> Nearly 20 years	<b>YEARS</b> Over 20 years	<b>YEARS</b> Over 25 years	<b>YEARS</b> Nearly 10 years	<b>YEARS</b> Over 15 years
<b>EXPERIENCE</b> CEO & MD, Pilbara Minerals	<b>EXPERIENCE</b> CFO, Champion Iron Ore CFO & Corporate Secretary, Roxgold	<b>EXPERIENCE</b> Chief Commercial & Legal Officer, Pilbara Minerals	<b>EXPERIENCE</b> Strong focus on rare earth elements, and rare metals (Li, Ta, Nb)	<b>EXPERIENCE</b> Chief Sustainability Officer, Osisko Mining	<b>EXPERIENCE</b> Project Management at BHP, SNC Lavalin and Fluor	<b>EXPERIENCE</b> Equity Research, Syndication and Sales, Macquarie; Equity Research, Institutional Sales, Canaccord Australia (Patersons)	<b>EXPERIENCE</b> Executive Director — Institutional Sales, CIBC; equity trading, CDPQ
<b>ACHIEVEMENTS</b> Developed Pilbara from exploration to production on the ASX 50	<b>ACHIEVEMENTS</b> Extensive experience in Quebec in financial and capital markets, raised \$1B + financing for developers and producers	<b>ACHIEVEMENTS</b> Key executive of Pilbara from exploration to production on the ASX 50	<b>ACHIEVEMENTS</b> Discovered Ashram (REE) and Corvette (Lithium); Project development; QP	<b>ACHIEVEMENTS</b> Extensive experience in Quebec in H&S, HR, indigenous and community relations and project permitting	<b>ACHIEVEMENTS</b> Oversaw over \$6.5 B of total invested capital across various commodities, locations and technical challenges	<b>Independent Directors</b> <b>Pierre Boivin (Chairman)</b> <b>Mélissa Desrochers</b> <b>Brian Jennings</b>	

# CORPORATE SNAPSHOT

## Trading Update



## Shareholder Register





# CORPORATE SNAPSHOT

## Trading Update

Pro-Forma Equity Raise	CAD (m)
Basic Shares Outstanding	141.1
Dilutive Securities	11.1
Fully Diluted Shares	152.2
Market Cap (as of Aug 30) :	\$598
Cash (as of June 30 <sup>th</sup> )	\$102
Potential Cash from FDITM Options & other	\$6.1

## Analyst Coverage





# Appendix Mineral Resource & Peer Comparison

# Mineral Resource Statement

Pegmatite	Classification	Tonnes	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> (ppm)	Contained Li <sub>2</sub> O (Mt)	Contained LCE (Mt)
CV5 & CV13	Indicated	80,130,000	1.44	163	1.15	2.85
	Inferred	62,470,000	1.31	147	0.82	2.03

- Mineral Resources were prepared in accordance with National Instrument 43-101 – Standards for Disclosure of Mineral Projects (“NI 43-101”) and the CIM Definition Standards (2014). Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. This estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, economic, or other relevant issues.
  - The independent Competent Person (CP), as defined under JORC, and Qualified Person (QP), as defined by NI 43-101 for this estimate is Todd McCracken, P.Geo., Director – Mining & Geology – Central Canada, BBA Engineering Ltd. The Effective Date of the estimate is June 27, 2024 (through drill hole CV24-526).
  - Estimation was completed using a combination of ordinary kriging and inverse distance squared (ID<sup>2</sup>) in Leapfrog Edge software with dynamic anisotropy search ellipse on specific domains.
  - Drill hole composites at 1 m in length. Block size is 10 m x 5 m x 5 m with sub-blocking.
  - Both underground and open-pit conceptual mining shapes were applied as constraints to demonstrate reasonable
- prospects for eventual economic extraction. Cut-off grades for open-pit constrained resources are 0.40% Li<sub>2</sub>O for both CV5 and CV13, and for underground constrained resources are 0.60% Li<sub>2</sub>O for CV5 and 0.80% Li<sub>2</sub>O for CV13. Open-pit and underground Mineral Resource constraints are based on a spodumene concentrate price of US\$1,500/tonne (6% basis FOB Bécancour) and an exchange rate of 0.76 USD/CAD.

  - Rounding may result in apparent summation differences between tonnes, grade, and contained metal content.
  - Tonnage and grade measurements are in metric units.
  - Conversion factors used: Li<sub>2</sub>O = Li x 2.153; LCE (i.e., Li<sub>2</sub>CO<sub>3</sub>) = Li<sub>2</sub>O x 2.473, Ta<sub>2</sub>O<sub>5</sub> = Ta x 1.221.
  - Densities for pegmatite blocks (both CV5 & CV13) were estimated using a linear regression function (SG = 0.0688x Li<sub>2</sub>O% + 2.625) derived from the specific gravity (“SG”) field measurements and Li<sub>2</sub>O grade. Non-pegmatite blocks were assigned a fixed SG based on the field measurement median value of their respective lithology.



# Sensitivity Analysis

Cut-off grade sensitivity analysis defines **significant tonnage at very high grade**, primarily reflecting the Nova and Vega zone discoveries at CV5 and CV13, respectively.

- At a 1.5% Li<sub>2</sub>O COG for the **CV5** Pegmatite, there is a total of **30.4 Mt at 2.09% Li<sub>2</sub>O** Indicated and **13.6 Mt at 1.99% Li<sub>2</sub>O** Inferred.
- At a 1.5% Li<sub>2</sub>O COG for the **CV13** Pegmatite, there is a total of **0.7 Mt at 2.20% Li<sub>2</sub>O** Indicated and **6.6 Mt at 2.47% Li<sub>2</sub>O** Inferred.

<sup>1</sup> Shaakichiwaanaan (CV5 & CV13) Mineral Resource Estimate (80.1 Mt at 1.44% Li<sub>2</sub>O and 163 ppm Ta<sub>2</sub>O<sub>5</sub> Indicated, and 62.5 Mt at 1.31% Li<sub>2</sub>O and 147 ppm Ta<sub>2</sub>O<sub>5</sub> ppm Inferred) is reported at a cut-off grade of 0.40% Li<sub>2</sub>O (open-pit), 0.60% Li<sub>2</sub>O (underground CV5), and 0.80% Li<sub>2</sub>O (underground CV13) with an Effective Date of June 27, 2024 (through drill hole CV24-526). Mineral resources are not mineral reserves as they do not have demonstrated economic viability. Refer to press release dated 5 August 2024.

Cut-off grade (%)	CV5 Spodumene Pegmatite				CV13 Spodumene Pegmatite			
	Indicated		Inferred		Indicated		Inferred	
	Tonnes ≥ cut-off	Average grade (Li <sub>2</sub> O) ≥ cut-off (%)	Tonnes ≥ cut-off	Average grade (Li <sub>2</sub> O) ≥ cut-off (%)	Tonnes ≥ cut-off	Average grade (Li <sub>2</sub> O) ≥ cut-off (%)	Tonnes ≥ cut-off	Average grade (Li <sub>2</sub> O) ≥ cut-off (%)
0.1	93,530,000	1.24	47,240,000	1.17	1,540,000	1.59	21,490,000	1.33
0.2	85,290,000	1.34	44,450,000	1.24	1,530,000	1.60	20,650,000	1.38
0.3	81,040,000	1.40	43,000,000	1.27	1,520,000	1.61	19,830,000	1.42
0.4	78,560,000	1.43	41,470,000	1.30	1,510,000	1.62	19,060,000	1.47
0.5	76,260,000	1.46	39,940,000	1.34	1,490,000	1.63	18,120,000	1.52
0.6	73,820,000	1.49	38,190,000	1.37	1,460,000	1.65	17,040,000	1.58
0.7	70,760,000	1.53	35,620,000	1.42	1,430,000	1.68	15,920,000	1.65
0.8	66,940,000	1.57	33,000,000	1.48	1,380,000	1.71	14,650,000	1.73
0.9	62,290,000	1.63	30,200,000	1.53	1,320,000	1.75	13,340,000	1.81
1.0	57,130,000	1.69	26,590,000	1.61	1,270,000	1.78	12,020,000	1.91
1.1	51,360,000	1.76	23,460,000	1.69	1,180,000	1.84	10,730,000	2.01
1.2	45,690,000	1.84	20,540,000	1.77	1,080,000	1.90	9,600,000	2.11
1.3	40,170,000	1.92	17,910,000	1.84	950,000	1.98	8,470,000	2.23
1.4	35,070,000	2.00	15,520,000	1.92	830,000	2.08	7,410,000	2.35
1.5	30,400,000	2.09	13,590,000	1.99	700,000	2.20	6,570,000	2.47
1.6	26,160,000	2.17	11,290,000	2.07	550,000	2.37	5,820,000	2.59
1.7	22,360,000	2.26	9,390,000	2.16	420,000	2.59	5,220,000	2.69
1.8	19,040,000	2.35	7,720,000	2.25	350,000	2.77	4,790,000	2.78
1.9	16,140,000	2.44	6,040,000	2.36	290,000	2.97	4,430,000	2.85
2.0	13,570,000	2.53	4,990,000	2.45	250,000	3.12	4,070,000	2.93

This table should not be interpreted as a Mineral Resource. The table presents the sum of the open-pit and underground constrained and classified resources at the same cut-off. The data is presented to demonstrate the Mineral Resource tonnage and grade sensitivity to various cut-off grades. The selected cut-off grade for the base case is 0.40% Li<sub>2</sub>O with the revenue factor 1 pit shell constraint for CV5 and CV13, with a 0.60% Li<sub>2</sub>O and 0.80% Li<sub>2</sub>O underground cut-off grade for CV5 and CV13, respectively.

## NOTES PEER COMPARISON INFORMATION – RESOURCES (SLIDE 5)

Company	Project	Stage	Reserves (Mt LCE)			Resources (Mt LCE) — Inclusive of Reserves				Information Source(s)
			Proven	Probable	Total Reserves	Measured	Indicated	Inferred	Total Resources	
AVZ Minerals	Manono (75%)	Feasibility	2.0	2.0	4.0	4.0	11.0	10.0	25.0	ASX Announcement dated January 31, 2024
Azure Minerals	Andover (60%)	Pre-Resource	—	—	—	—	—	—	—	ASX Announcement dated March 29, 2022
Core Lithium	Finniss	C&M	0.2	0.2	0.4	0.2	0.7	0.6	1.5	ASX Announcement dated April 11, 2024
Critical Elements	Rose	Feasibility	—	0.6	0.6	—	0.7	0.0	0.7	Critical Elements August 2023 Updated Feasibility Study
Frontier Lithium	PAK	Pre-Feas	—	0.8	0.8	0.1	1	1.1	2.2	Frontier Lithium Press Release dated May 31, 2023
Liontown	Kathleen Valley	Construction	0.1	2.2	2.3	0.6	3.8	0.9	5.3	ASX Announcement dated November 11, 2021
Liontown	Buldania	Resource	—	—	—	—	0.2	0.1	0.4	ASX Announcement dated November 8, 2019
MinRes	Wodgina (40%)	Producing	0.01	2.3	2.3	—	2.6	0.5	3.1	ASX Announcement dated September 22, 2023
MinRes	Mt Marion (50%)	Producing	0.00	0.6	0.6	—	0.9	0.1	1.1	ASX Announcement dated February 21, 2024
Piedmont	Carolina	Feasibility	—	0.5	0.5	—	0.8	0.4	1.2	Piedmont Lithium Press Release dated December 14, 2021
Piedmont	NAL (25%)	Producing	0.01	0.1	0.1	0.01	0.2	0.3	0.4	Sayona Mining ASX Announcement dated April 14, 2023
Piedmont	Authier (25%)	Producing	0.04	0.04	0.1	0.04	0.1	0.02	0.1	Authier Lithium Project Updated DFS dated October 2019; Sayona Mining 2022 Half-Year Report
Pilbara Minerals	Pilgangoora	Producing	0.7	5.7	6.2	0.7	8.9	2.0	11.9	ASX Announcement dated August 24, 2023
Pilbara Minerals	Altura	Restart	0.2	0.8	1.0	0.2	0.9	0.1	1.2	Altura Mining 2019 Annual Report
Sayona Mining	NAL (75%)	Producing	0.02	0.4	0.4	0.02	0.6	0.8	1.3	ASX Announcement dated April 14, 2023
Sayona Mining	Authier (75%)	Producing	0.1	0.1	0.2	0.1	0.2	0.1	0.3	Authier Lithium Project Updated DFS dated October 2019; Sayona Mining 2022 Half-Year Report
Sayona Mining	Moblan (60%)	Feasibility	0.1	0.1	0.2	0.1	0.8	0.3	1.2	ASX Announcement dated April 17, 2023
Sigma Lithium	Grota do Cirilo	Producing	1.0	1.0	1.9	1.6	1.7	0.5	3.8	Sigma Lithium Press Release dated January 31, 2024
Patriot Battery	CV5	Resource	—	—	—	—	2.9	2.0	4.9	Patriot Battery Metals Press Release dated August 5, 2024

*Note: Lithium reserves & resources only; shown on an attributable 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 reserves & resource data as presented. Details on the tonnes, category, grade, and cut-off for mineral resources and/or reserves of each company noted herein are found within the respective information source link provided.*

# NOTES PEER COMPARISON INFORMATION – PRODUCTION CAPACITY (SLIDE 13)

Name	Ticker	Project Name	Stage	Degree of Study	Price Assumption (US\$/t SC6)	Mine Life	Information Source - Current Production Capacity	Information Source - Planned Expanded Capacity
Pilbara Minerals	PLS	Pilgangoora	Production				ASX announcement dated July 24, 2024	ASX announcement dated March 29, 2023
MinRes	MIN	Bald Hill	Production				ASX announcement dated July 26, 2024	ASX announcement dated February 21, 2024
Arcadium Lithium	ALTM	Nemaska	Development	PFS	\$2,597	34		S-K 1300 Technical Report dated September 8, 2023
AVZ	AVZ	Manono	Development	DFS	\$699	30		ASX announcement dated November 17, 2022
Critical Elements	CRE	Rose	Development	FS	\$2,359	17		Press Release dated August 29, 2023
Ganfeng	002460	Goulamina	Development	DFS	\$978	22		ASX announcement dated December 6, 2021
Sayona	SYA	NAL	Production				ASX announcement dated July 25, 2024	ASX announcement dated June 21, 2023
Piedmont	PLL	Carolina Lithium	Development	BFS	\$900	11		ASX announcement dated December 15, 2021
Liontown	LTR	Kathleen Valley	Production	DFS	\$1,392	23	ASX announcement dated November 11, 2021	ASX announcement dated November 11, 2021
Core Lithium	CXO	Finniss	Care & Maintenance					ASX announcement dated September 30, 2022
Atlantic Lithium	ALL	Ewoyaa	Development	DFS	\$1,695	12		ASX announcement dated April 16, 2024
IGO	IGO	Greenbushes	Production				ASX announcement dated June 30, 2024	ASX announcement dated February 27, 2024
MinRes	MIN	Wodgina	Production				ASX announcement dated July 26, 2024	ASX announcement dated February 21, 2024
MinRes	MIN	Mt Marion	Production				ASX announcement dated July 26, 2024	ASX announcement dated February 21, 2024
Arcadium Lithium	ALTM	Galaxy	Development	FS	\$2,022	19		ASX announcement dated September 25, 2023
Wesfarmers	WES	Mt Holland	Development	FS	\$550	50		Technical Report released April 25, 2022
Latin Resources	LRS	Salinas	Development	PEA	\$1,853	11		ASX announcement dated August 15, 2024
Arcadium	ALTM	Mt Cattlin	Production				NYSE announcement dated February 22, 2024	NYSE announcement dated February 22, 2024
AMG Critical Materials	AMG	Mibra	Production				AMG Lithium Resources	AMG Lithium Resources
Savannah Resources	SAV	Mina do Barroso	Development	Scoping Study	\$1,597	14		Press release dated June 12, 2023
Develop Global	DVP	Dome North	Development	Scoping Study	\$1,579	7		ASX announcement dated February 7, 2023
Global Lithium	GLI	Manna	Development	Scoping Study	\$2,727	10		ASX announcement dated February 14, 2023
Sayona	SYA	Moblan	Development	DFS	\$1,990	21		ASX announcement dated February 20, 2024
Green Technology	GTI	Seymour	Development	PEA	\$2,213	15		ASX announcement dated December 7, 2023
Sibanye Stillwater	SSW	Keliber	Development	PFS	\$1,042	16		Sibanye Stillwater - Keliber Lithium Project
Rock Tech	RCK	Georgia Lake	Development	PFS	\$1,600	9		Rock Tech Lithium - Projects
Lithium Ionic	LTH	Bandeira	Development	FS	\$2,484	14		Lithium Ionic - Projects
Albemarle	ALB	Kings Mountain	Development	n/a	n/a	10		Albemarle Kings Mountain Mine Project Overview Factsheet - June 2024
Sigma	SGML	Grota do Cirilo	Production				Sigma Lithium Investor Presentation - June 2024	Sigma Lithium Investor Presentation - June 2024
Patriot	PMET	Shaakichiwaanaan	Development	PEA	\$1,500	24		Patriot Battery Metals Press Release dated August 21, 2024





# Thank you

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