



August 21, 2024 – Vancouver, BC, Canada

August 22, 2024 – Sydney, Australia

PEA Highlights Shaakichiuwaanaan Project as a Potential North American Lithium Raw Materials Supply Base

PEA outlines the potential for a competitive and globally significant high-grade lithium project targeting up to ~800 ktpa spodumene concentrate

CAUTIONARY STATEMENTS REGARDING THE PEA

The Preliminary Economic Assessment (PEA) referred to in this announcement 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 announcement 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 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 categorised 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 realised.

The PEA is based on the material assumptions outlined elsewhere in this announcement. 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 I 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 news release 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" section at the end of this document for more information regarding assumptions and risks surrounding forward looking statements contained herein.

HIGHLIGHTS

- Preliminary Economic Assessment (PEA) completed by independent consultants, BBA and Primero, outlining a preliminary base case scenario for a staged development of the cornerstone CV5 Spodumene Pegmatite, via both open pit and underground mining methods.
- High-grade Nova Zone¹ (including 21.8 million tonnes at 2.1% Li₂O of which 93% is Indicated, 7% is Inferred Resource category respectively) to be targeted and prioritised via underground mining methods, allowing direct access to higher grade material and minimizing the environmental footprint.
- At the targeted Stage 2 production rate of ~800 ktpa² spodumene concentrate, this would potentially position Patriot as the 4th largest spodumene concentrate producer globally³.
- Potential pre-tax net present value ("NPV")_{8%} of \$4.7 billion (US\$3.6 billion) and after-tax NPV_{8%} of \$2.9 billion (US\$2.2 billion) with a pre-tax internal rate of return ("IRR") of 38% (after-tax IRR of 34%) at US\$1,375 per tonne (SC5.5, FOB Bécancour basis).
- Payback period of 3.6 years at an assumed average lithium price of US\$1,375 per tonne (SC5.5, FOB Bécancour basis) or US\$1,500 per tonne (SC6, FOB Bécancour basis), with life of mine ("LOM") of up to 24 years.
- Targeting to become a North American top-tier, lower cost producer with an estimated average LOM cash operating cost⁴ at site of \$510 per tonne (US\$387) and total cash operating

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 39.8 Mt @ 1.54% Li₂O (70% is Indicated, 30% is Inferred Resource category respectively).

² The annual production rate of ~800 ktpa is calculated considering the period of full production, i.e. Years 4 to 18 – see Figure 34.

³ See Figure 2.

⁴ Cash operating cost at site includes mining, processing and site administration expenses calculated on an SC5.5 basis. They are non-IFRS financial measures, and when expressed per tonne, non-IFRS ratios. Refer to "Non-IFRS and other financial measures" for further information on these measures.

cost free-on-board (“FOB” Bécancour)¹ of \$736 per tonne (US\$560)².

- An estimated break-even SC6 price (on a fully ramped 800 ktpa, EBITDA, FOB Bécancour basis) of US\$587/t highlights the potentially viable nature of the Shaakichiuwaanaan Project throughout the lithium price cycle.
- Estimated to indicatively generate approximately \$8.3 billion in Project Cash Flow (unlevered) over LOM.
- Average annual EBITDA³ anticipated to be in the order of \$850M and annual FCF⁴ of \$515M at an assumed spodumene price of US\$1,375 per tonne (SC5.5, FOB Bécancour basis).
- Phased development strategy with anticipated Stage 1 capital expenditure estimate of \$761M (US\$579M) for the first 400 ktpa capacity including contingency and Net Capex of \$640M (US\$487M) leveraging the proposed 30% Canadian Clean Technology Manufacturing – Investment Tax Credit (“CTM-ITC”)⁵.
- Estimated Stage 2 expansion Capex of \$504M (US\$383M) including contingency and Net Capex of \$408M (US\$310M) leveraging the proposed CTM-ITC, to reach a production capacity of ~800 ktpa of spodumene concentrate per year.
- The combined net cost⁶ to reach nameplate production for both Stage 1 and Stage 2 is estimated to be approximately \$608M (US\$462M) taking into account funding that could come from both cash flows from Stage 1 and proposed CMT-ITC tax credits.
- Process plant feed rate following Stage 2 expansion at an average of ~4.5 Mtpa⁷ via simple DMS-only process; average LOM lithia recovery of 69.5%; spodumene concentrate grade at 5.5% Li₂O.
- Access to existing, high quality transportation infrastructure with potential future improvements in the region combined with a low-carbon footprint, low cost and mainly renewable electricity source.
- Tier I, stable mining jurisdiction of Eeyou Istchee James Bay region of Québec (under modern land claims agreement – James Bay Northern Quebec Agreement “JBNQA”) combined with a strong relationship with the Cree Nation of Chisasibi, Cree Nation Government and all stakeholders.
- The Eeyou Istchee James Bay region’s unique Examination Committee “COMEX” permitting process, with its well-defined guidelines, ensures a structured and clear path to project approval, fostering strong community and stakeholder engagement.
- Significant opportunities to enhance returns through further resource expansion, optimized

¹ Total cash operating cost (FOB Bécancour) includes mining, processing, site administration, and product transportation to Bécancour calculated on an SC5.5 basis. They are non-IFRS financial measures, and when expressed per tonne, non-IFRS ratios. Refer to “*Non-IFRS and other financial measures*” for further information on these measures.

² Refer to Table 4 – Cash Operating Costs.

³ 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 annual EBITDA is calculated considering the period of full production (i.e., Years 4 to 18). Refer to “*Non-IFRS and other financial measures*” for further information on these measures.

⁴ FCF is a non-IFRS financial measure defined as cash provided from operating activities, less cash outlays for sustaining capital, and less taxes. The annual FCF is calculated considering the period of full production (i.e., Years 4 to 18). Refer to “*Non-IFRS and other financial measures*” for further information on these measures.

⁵ The CTM-ITC (enacted on June 20, 2024) provides for up to 30% of the cost of the investment in eligible property used for eligible activities through a refundable investment credit mechanism – see Table 3 for a full breakdown of the capital cost estimate.

⁶ The combined net cost includes Capex, Opex during pre-production of \$108.3M, estimated CMT-ITC tax credits of \$216.7M, contingency of \$242.8M and potential cash flow during expansion of \$548.7M – see Table 3 for a full breakdown of the capital cost estimate.

⁷ The average process plant feed rate of ~4.5 ktpa is calculated considering the period of full production, i.e. Years 4 to 18.

mining to further prioritise access to the high-grade Nova Zone earlier and additional cost-saving measures indicate transformative potential.

- The Company will consider progressing a Feasibility Study, which among other options may include a trade-off study for a smaller high-grade focused development scenario, to optimise the project in the event of a lower price environment.
- The Project remains on track with FID targeted in CY27, indicatively paving the way for the construction to progress through CY28 and first production commencing in early CY29.

MANAGEMENT COMMENT

Ken Brinsden, President, CEO, & Managing Director for the Company, said: *“Although studies are still at an early stage the potential outcomes of the PEA for the Shaakichiuwaanaan Project highlights the opportunity for Patriot Battery Metals to become a global lithium leader and a key supplier of lithium raw materials to the emerging North American and European battery materials supply chain.*

“The PEA outlines a staged development pathway for Shaakichiuwaanaan, commencing with an initial 400 ktpa production capacity which is intended to allow us to leverage the key competitive advantages of this world-class deposit to provide lithium raw materials in emerging western markets.

“Importantly, the resources to be mined include a high-grade component in the Nova Zone that creates an opportunity for a potentially resilient project, while also giving us considerable flexibility in terms of how we progress Shaakichiuwaanaan. This flexibility and scalability could allow us to adapt nimbly to evolving market conditions, while continuing to grow the resource base.

“As we consider moving to the Feasibility Study stage, the Project’s anticipated low operating costs and expected IRA-compliant high-quality lithium product could make us an ideal partner for downstream players, making this a highly strategic asset in the future lithium landscape. There is also strong inbound interest from strategic partners to support Stage 1 funding, alongside potential access to Government funding mechanisms.

“The Shaakichiuwaanaan Project is potentially well positioned to anchor the North American lithium supply chain, meeting demand for decades to come, in the process targeting significant returns for all our stakeholders while maintaining a strong emphasis on sustainability and limited environmental impact,” Mr. Brinsden added.

Patriot Battery Metals Inc. (“Patriot” or the “Company”) (**TSX: PMET**) (**ASX: PMT**) (**OTCQX: PMETF**) (**FSE: R9GA**), is pleased to announce the results of a Preliminary Economic Assessment (“PEA”) for the Shaakichiuwaanaan Project (the “Project” or the “Property”) (formerly known as Corvette), located in the Eeyou Istchee James Bay region of Québec, Canada.

The PEA outlines a scenario for the staged development of the cornerstone CV5 Spodumene Pegmatite via both open pit and underground mining methods, thereby maximizing earlier access to the high-grade Nova Zone. This scenario provides optionality and flexibility to unlock the potential of the Shaakichiuwaanaan Project to become a leading lithium raw materials supplier in North America.

This study is based on the CV5 Pegmatite component of the recently announced updated Shaakichiuwaanaan Mineral Resource Estimate (“MRE”), which is the largest known lithium pegmatite Mineral Resource in the Americas and the 8th largest globally (see news release dated August 5, 2024).

Although no final investment decision has been reached for the Shaakichiuwaanaan Project, the compelling economic potential presented in the PEA, coupled with the expected straightforward nature of the Project in terms of geology, pegmatite geometry, mining methodology and processing, supports the Company considering to progress a Feasibility Study (“FS”). If a FS is progressed, it would be targeted for completion during the September quarter 2025, in parallel with the submission of the Project Environmental and Social Impact Assessment “ESIA” documentation.

It is contemplated that a trade-off study would also be undertaken at the early stage of a FS to explore the potential advantages of further prioritizing a potentially smaller scale underground development to access the high-grade Nova Zone within CV5, during the Stage I development¹. This study will aim to further define and optimise the Project’s potential economic returns and potentially create flexibility to increase the plant feed grade during periods of possible lower pricing outcomes. Higher plant feed grades could improve the yield-to-product, thereby directly correlating to lower unit production costs. This strategy has the potential to deliver a more financially resilient project in a low-price scenario, ensuring more sustainable returns and operations through the lithium price cycles.

A technical report prepared in accordance with National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (“NI 43-101”) including the PEA and the MRE will be filed on SEDAR+ by September 19, 2024.

Unless otherwise indicated, all references to “\$” or “CA\$” in this release are to Canadian dollars and references to “US\$” in this release are to US dollars. A foreign exchange conversation rate of US\$ of 0.76US\$/CA\$ has been used over the LOM.

¹ The PEA contemplates Stage I as being open pit mining only, with the Stage 2 expansion phase focusing on underground mining to access the Nova Zone in parallel to the open pit mining. The trade-off study included in the FS will explore the advantages of bringing forward the underground mining operation as part of the Stage I development.

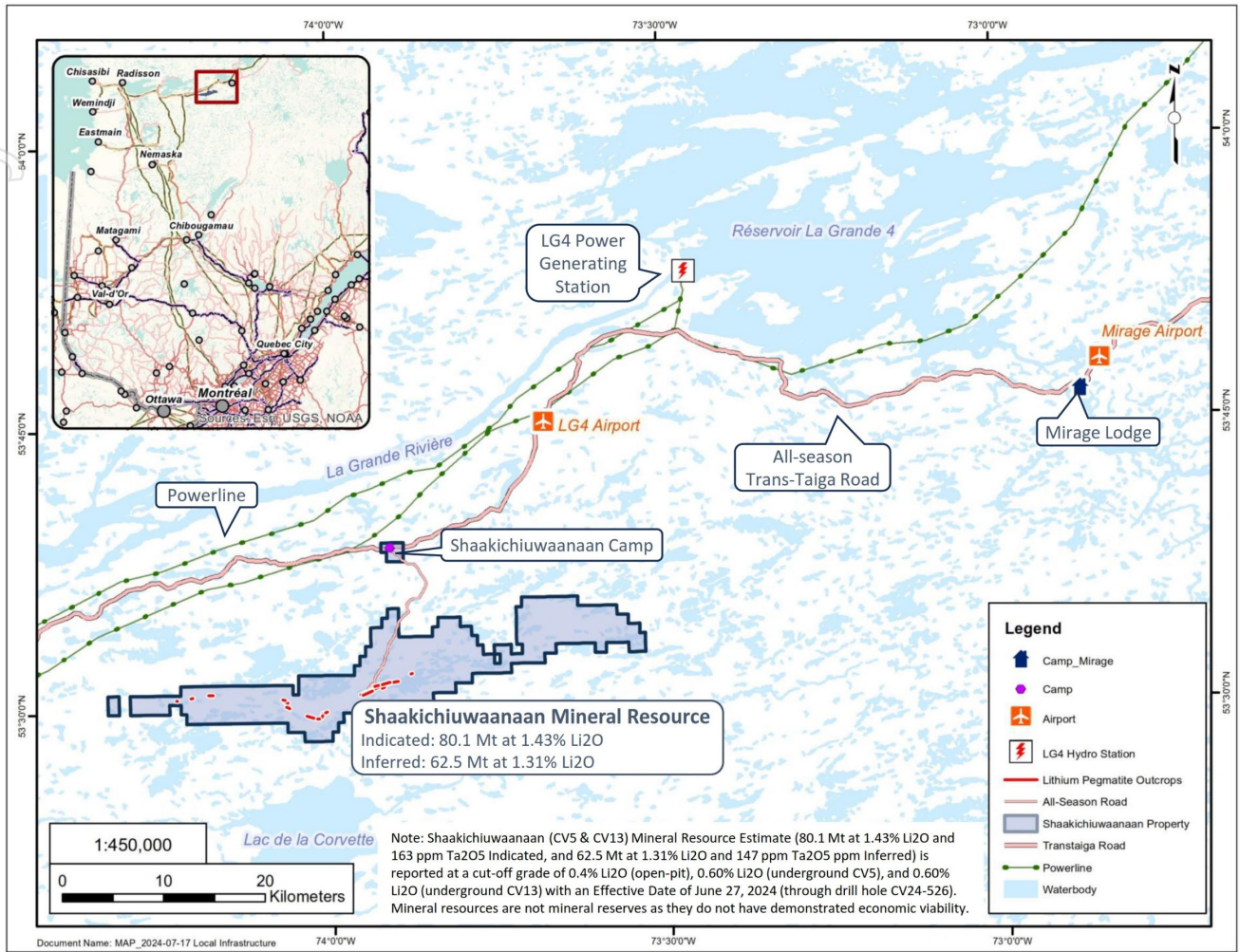


Figure 1: Shaakichiuwaanaan Property and Regional Infrastructure

PRELIMINARY ECONOMIC ASSESSMENT (PEA) SUMMARY

Cautionary Statement: *The PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them. 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 not be converted to mineral reserves. It is reasonably expected, though not guaranteed, that the majority of Inferred mineral resources could be upgraded to Indicated mineral resources with continued exploration. Accordingly, there is no certainty that the preliminary economic assessment will be realized.*

EXECUTIVE SUMMARY

The PEA for the Shaakichiuwaanaan Project highlights its economic potential and strategic advantages, potentially positioning it among the largest producers¹ and as a top-tier low-cost producer of lithium. The PEA outlines a promising staged development scenario for the cornerstone CV5 Pegmatite deposit, utilizing both open pit and underground mining methods, to ensure earlier access to the high-grade Nova Zone.

Using DMS only processing a 5.5% Li₂O spodumene concentrate will be targeted in both the Stage 1 and Stage 2 expansion production scenarios. The concentrate will be transported by road and rail to Bécancour, where the base case assumes it to be converted to lithium chemicals by the customer(s) or otherwise loaded at the Bécancour port facilities for seaborne trade.

As announced on August 5, 2024, Shaakichiuwaanaan hosts the largest known lithium pegmatite Mineral Resource in the Americas and the 8th largest known globally. Based on the preliminary economic results of the PEA for the proposed development of the CV5 Spodumene Pegmatite, the Company will consider advancing the Project to the FS level, which if progressed is expected to be completed in the September Quarter 2025. The Company's strategy will emphasize resource growth and a phased development approach, ensuring flexibility and scalability to adapt to market conditions.

The PEA incorporates a staged development strategy, with Stage 1 targeting production capacity of ~400 ktpa of spodumene concentrate with an estimated Initial Net Capex of \$640M (US\$487M)², including contingency and proposed CTM-ITC tax credits.

This first stage lays a solid foundation for the Project to commence production, with a subsequent Stage 2 expansion aimed at doubling the production capacity to ~800 ktpa. The Stage 2 expansion has an estimated Net Capex of \$408M (US\$310M) including contingency and proposed CTM-ITC tax credits³. The combined net cost requirement to reach nameplate production for both Stage 1 and Stage 2 is estimated to be approximately \$608M (US\$462M)⁴ taking into account cash flows from Stage 1 and proposed CMT-ITC tax credits.

The Company will only commit to development after considering the economic conditions that prevail or are foreseeable at the time that an initial production decision, or when a subsequent expansion decision is made. That said, through the publication of this preliminary economic assessment, the Company believes the Shaakichiuwaanaan Project has the potential to be a long-life lithium asset with unique competitive characteristics.

Staged development also opens the opportunity for the expansion capacity to be funded partly or entirely through internal cash flows expected to be generated from Stage 1. This will be further assessed in any future FS.

With the production scenario outlined in the PEA, the Shaakichiuwaanaan Project could become one

¹ Refer to Figure 2.

² The Net Capex excludes Opex during pre-production of \$108.3M and assumes eligibility for a tax credit of \$121.1M under the CTM-ITC legislation. Stage 1 has Capex of \$761M which excludes CTM-ITC credits and pre-production opex – see Table 3 for a full breakdown of the capital cost estimate.

³ The Net Capex estimate of \$408M assumes eligibility for a tax credit of \$95.6M under the CTM-ITC legislation. Stage 2 expansion has Capex of \$503.9M excluding CTM-ITC credits – see Table 3 for a full breakdown of the capital cost estimate.

⁴ The combined net cost includes Capex, Opex during pre-production of \$108.3M, estimated CMT-ITC tax credits of \$216.7M, contingency of \$242.9M and cash flow during expansion of \$548.7M – see Table 3 for a full breakdown of the capital cost estimate.

of the largest spodumene producers in the world¹ at the completion of the Stage 2 expansion phase, and potentially the largest spodumene producer in the Americas, offering production of SC5.5 spodumene concentrate in a stable jurisdiction.

Financial estimates in the PEA are based on a long-term weighted average spodumene concentrate price of US\$1,375/t (SC5.5 – FOB Bécancour basis), which currently sits above spot pricing, but is derived from market price forecasts by independent reporting agencies, banking commodities analyst reports and recently published technical reports.

The PEA demonstrates the potential for robust economics, highlighted by a combined after-tax NPV_{8%} of \$2.9 billion (US\$2.2 billion) and after-tax IRR of 34%. The Project's mine life is projected at 24 years, based on a total extracted Mineral Resource of 66% of total resources defined at CV5, generating significant net cash flows with capital payback achieved in 3.6 years.

Further analysis of the preferred project mining methodology for CV5 will be a key component of any proposed FS activities. The FS would seek to determine the most economic approach for mining the resource, based on the PEA's hybrid mining method (inclusive of both open pit and underground mining methods) for the base scope.

The FS would also include an early trade-off study that will evaluate accelerated development of the higher-grade Nova Zone, with the aim of bringing it into production as early as possible. Increasing the feed grade to the processing facility from a higher-grade zone is expected to be directly correlated to lower process plant production costs, and therefore earlier access to the Nova Zone potentially creates greater resilience to lower product pricing outcomes.

The Company's PEA mining strategy has adopted both open-pit and underground mining methods and was designed to gain earlier underground access to the high-grade Nova Zone in the northeast area of the CV5 Pegmatite than would be possible with just open pit mining. This approach has the potential to reduce the Project's operational footprint, potentially simplifying the approval process by decreasing the open pits strip ratio and therefore minimizing waste deposition at surface. The open pit strip ratio during the proposed PEA LOM scenario is estimated to be a low 3.7:1.

The mining strategy is further complemented by ramping up production in low-strip, higher-grade areas of the open pit(s), which also serves to de-risk project execution, ensuring stable production in the initial years. This phased and incremental expansion is designed to allow for managed growth and adaptability, which the Company would expect could be further enhanced by accessing the Nova Zone earlier in the mine's development.

Additionally, the strategy adopted in the PEA aligns with positioning the Company to support downstream chemical conversion in Québec, reflecting its commitment to integrating the value chain and enhancing local economic benefits.

Furthermore, this strategy has the potential to establish the Company as a key player in the development of a global North America & Europe supply chain for lithium, helping to meet the rising demand for locally sourced, high-quality lithium products which are compliant with the United States *Inflation Reduction Act* ("IRA"). While focusing on Québec, the Project's attributes would potentially make it attractive for downstream partners globally, potentially capable of producing significant

¹ Refer to Figure 2.

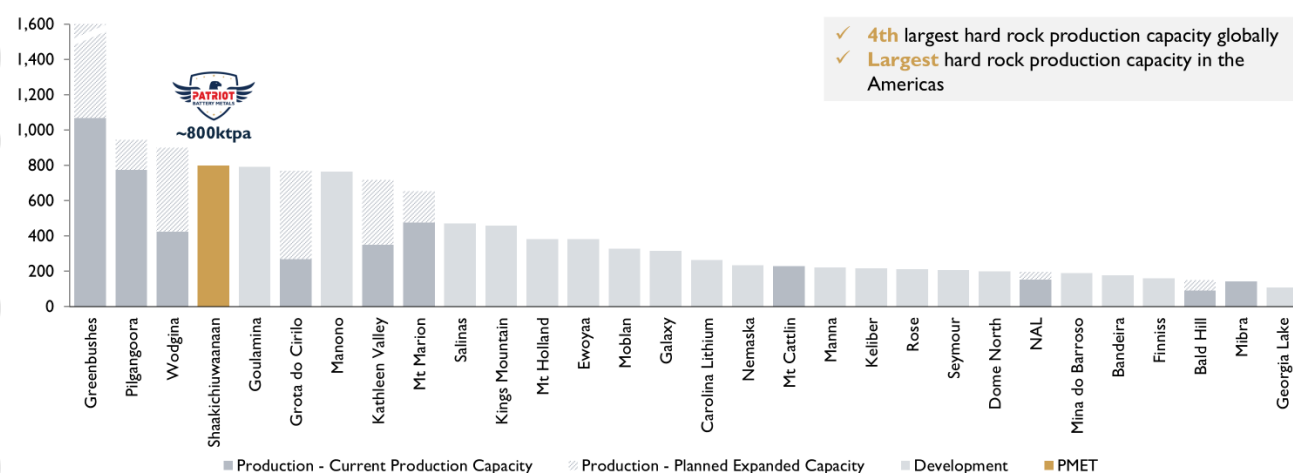
volumes steadily for decades under various market conditions.

Considering the economic potential outlined in the PEA, the Project is now advancing to its next phase of development – with a FS being considered for completion in the September Quarter 2025. Continued drilling will aim to complete additional mineral resource upgrades from the Inferred to Indicated categories to support the FS, expand the size of the existing Mineral Resource base and explore new exploration targets, further optimizing the value of the Shaakichiuwaanaan Project.

TARGETED SHAAKICHUWAANAAN SPODUMENE CONCENTRATE PRODUCTION CAPACITY

Global Positioning of Hard Rock Lithium Assets

Spodumene Concentrate Production (ktpa SC5.5)



✓ 4th largest hard rock production capacity globally
 ✓ Largest hard rock production capacity in the Americas

Source: Company disclosures. Notes: Production figures have been adjusted on a SC5.5 basis. Greenbushes and Pilgangoora production capacity excludes expansions pending FID (i.e. Chemical Grade Plant 4 & P2000, respectively). Greenbushes production capacity (~2,000ktpa) exceeds axis range.

Figure 2: Shaakichiuwaanaan Spodumene Concentrate Production

(See Appendix 2 for the various Company filings as of August 16, 2024, as supporting data production capacity both current and planned)

LONG-TERM LITHIUM PRICE ASSUMPTIONS

Price forecasts are typically presented in the market on a 6% Li₂O spodumene concentrate (“SC6”) basis. For the purpose of this PEA the Company’s pricing assumption has been calibrated to SC5.5 by adjusting for lithium content on a pro rata basis. The PEA assumes the product will be converted to lithium chemicals in Bécancour by the customer(s), or otherwise loaded to vessels for seaborne trade and therefore the forecast price is presented on a FOB Bécancour basis.

The PEA uses a long-term weighted average spodumene price assumption of US\$1,375 (SC5.5, FOB Bécancour basis) per tonne. This assumed price is supported by recent market price forecasts from independent reporting agencies, banking commodities analyst reports and company disclosures and recently published technical reports, which indicate spodumene prices generally cluster around US\$1,300–US\$1,500 per tonne for 5.5% spodumene concentrate. Therefore, a price assumption for the PEA within this range is considered to fairly represent foreseeable longer-run market conditions applicable to the project development scenario, as compared to current spot pricing of Spodumene Concentrate US\$760/t (SC6, FOB Australia basis -15/08/24).

Globally, demand for lithium remains robust, primarily fuelled by the electric vehicle (“EV”) sector. Global EV sales growth reached 20% in H1 2024, with EV market share rising to 17.8% in 2023 and projected to reach 20% of all car sales in 2024, combining BEV and PHEV passenger cars. Additionally, energy storage systems and consumer electronics continue to contribute significantly to overall demand. In 2024, globally, lithium demand for energy storage systems (“ESS”) should be around 200,000 US tons (compared to 1.5 M US tons for Ev’s), a threefold increase in 4 years and representing the demand of the EV market from 2019. More importantly, the United States is the 2nd largest battery storage market and doubled in size in 2023.¹

Despite sufficient chemical capacity supporting China’s domestic consumption and export markets, refining capacity limitations in Western markets could affect the availability of battery-grade lithium products compliant with Western legal framework like the IRA and European Battery Passport process. This presents a strategic opportunity for Patriot, with its North American, potentially IRA-compliant sourced spodumene, to become a key player in the ex-China battery supply chain.

For instance, an IRA-compliant country or trading partner must have a free trade agreement with the U.S., adhere to high environmental and labour standards, ensure a stable and secure supply chain and comply with U.S. regulatory guidelines. These criteria promote sustainable practices and strategic supply chain security.

In a similar vein, the European Union’s Battery Passport initiative aims to enhance the sustainability and transparency of the battery supply chain. It mandates that batteries, particularly those used in Evs, carry a digital passport containing essential information about their lifecycle. This includes data on sourcing, production, usage and recycling processes. The initiative promotes responsible sourcing of raw materials, reduces environmental impact, and ensures compliance with social and environmental standards. By providing detailed traceability, the Battery Passport fosters consumer trust, facilitates recycling and supports the circular economy. It also aligns with the EU’s broader Green Deal goals, driving innovation and sustainability in the battery industry.

The importance of IRA and Battery Passport-compliant (“BPC”) material and the challenges for some industry participants to comply with those restrictions puts the Shaakichiuwaanaan Project in a unique position.

These factors and the desire in Western markets for IRA and BPC compliant product further support the decision to use a long-term spodumene price assumption of US\$1,375 (SC5.5, FOB Bécancour) per tonne in our PEA, reflecting a balanced and strategic approach to future market conditions and project viability.

ECONOMIC ANALYSIS

The Shaakichiuwaanaan Project is expected to yield an average annual production run-rate of ~800,000² tpa of SC5.5 after commissioning both the initial Stage 1 and Stage 2 expansion phases. Based on this production rate and over the mine life, the Project generates an estimated after-tax NPV_{8%} of \$2.9 billion (US\$2.2 billion) and after-tax IRR of 34% which is derived using an assumed average life of mine spodumene concentrate price of US\$1,375 (FOB Bécancour) for SC5.5.

¹ IEA Report, Global EV Outlook 2024, <https://www.iea.org/reports/global-ev-outlook-2024/trends-in-electric-cars>

² The annual production rate of ~800 ktpa is calculated considering the period of full production, i.e. Years 4 to 18 – see Figure 34.

The financial summary and key physical parameters of the Project are provided in the following tables:

Table 1: Summary of Estimated Project Economics

Financial Results	Unit	CA\$	US\$
Long term price assumption (SC5.5 – FOB Bécancour basis)	\$/t	1,809	1,375
Pre-Tax NPV _{0%}	\$	13,299	10,107
Pre-Tax NPV _{8%}	\$	4,699	3,571
After-Tax NPV _{0%}	\$	8,308	6,314
After-Tax NPV _{8%}	\$	2,937	2,232
Pre-Tax IRR	%	38	
After-Tax IRR	%	34	
Payback Period	year	3.6	

Table 2: Estimated Production Metrics

Key Metrics	Unit	Value
Stage 1 Construction and Ramp Up Phase	year	2
Stage 2 Expansion Construction and Ramp Up Phase	year	2
Years of operations	year	24
Open Pit		
Resource mined	Mt	50.5
Waste mined (including pre-strip)	Mt	188.6
Total tonnes mined	Mt	239.0
LOM open pit strip ratio (waste tonnes: resource tonnes)	Mt	3.7
Underground		
Resource mine	Mt	39.8
Total		
Total resource (Open Pit + Underground) mined and processed	Mt	90.2
Average DMS process plant feed rate ¹	Mtpa	4.5
Average Li ₂ O recovery	%	69.5
Average feed grade	%	1.31
Spodumene Concentrate	Mt	14.9
Spodumene Concentrate grade	%	5.5
Annual production rate ²	ktpa	800

¹ The average process plant feed rate of ~4.5 ktpa is calculated considering the period of full production, i.e. Years 4 to 18.

² The annual production rate of ~800 ktpa is calculated considering the period of full production, i.e. Years 4 to 18 – see Figure 34.

CAPITAL COST ESTIMATE

Table 3: Summary of Estimated Capital Expenditures

Capital Expenditure	Stage I Capital Cost (M\$)	Expansion Capital (M\$)	Combined Phases (M\$)	LOM Sustaining Capital (M\$)	Total Cost (M\$)
General	142.1	9.0	151.1	-	151.1
Mine and stockpiles	148.4	29.8	178.2	256.4	434.6
Process	124.6	124.6	249.2	26.0	275.2
Terminals (truck and train)	8.5	-	8.5	-	8.5
Other services and facilities	14.3	-	14.3	-	14.3
Underground mine lateral development	-	110.9	110.9	203.4	314.3
Underground mine infrastructure & paste plant	-	71.3	71.3	144.1	215.4
Fish habitat compensation	20.1	-	20.1	-	20.1
Indirect cost	140.5	78.2	218.7	-	218.7
Subtotal	598.5	423.8	1,022.3	629.9	1,652.2
Contingency	162.9	80.0	242.9	21.5	264.4
Total Capex	761.4	503.9	1,265.2	651.4	1,916.6
Clean Technology Manufacturing (CTM) Investment Tax Credit (ITC) ¹	(121.1)	(95.6)	(216.7)	(13.5)	(230.2)
Net Capex	640.3	408.2	1,048.5	637.9	1,686.4
Pre-Production Opex	Stage I Capital Cost (M\$)	Expansion Capital (M\$)	Combined Phases (M\$)	LOM Sustaining Capital (M\$)	Total Cost (M\$)
Pre-production cost for process plant	26.0	-	26.0	-	26.0
Mine preproduction/preparation	82.3	-	82.3	-	82.3
Totals and Cash Flow	Stage I Capital Cost (M\$)	Expansion Capital (M\$)	Combined Phases (M\$)	LOM Sustaining Capital (M\$)	Total Cost (M\$)
Net Total Pre-Production Opex + Capex	748.6	408.2	1,156.8	637.9	1,794.7
Cash flow during expansion ²	-	(548.7)	(548.7)	-	(548.7)
Net Total Pre-Production Opex and Capex + Estimated Cash Flow	748.6	(140.5)	608.1	637.9	1,246.0
Gross Total Pre-Production Opex + Capex Without Tax Credit	869.7	503.8	1,373.5	651.4	2,024.9

¹ PMET may be eligible for CTM-ITC (Investment Tax Credit). This legislation has been enacted on June 20, 2024. There is no guarantee the Company will be able to access the ITC. If the ITC does not become available, the total capex including contingency will increase by the amounts shown in this row.

² Cashflows from Stage I would be dependent (amongst other things) on reaching nameplate capacity on Stage I, applicable pricing at the time of production/expansion and the overall economic viability of the Stage I 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 I cashflows, can be realized. Mineral resources that are not ore reserves do not demonstrate economic viability.

Management proposes to adopt a phased capital expenditure strategy to ensure financial prudence and adaptability.

Capital Expenditure

The development strategy for the Shaakichiuwaanaan Project outlined in the PEA employs a staged capital expenditure strategy, based on scalability to match customers chemical capacity and prevailing economic conditions. This approach ensures that initial infrastructure investments support future expansion while optimizing financial efficiency. The staged development strategy seeks to leverage initial cash flows from Stage 1 operations to fully fund subsequent expansions in Stage 2, potentially reducing reliance on external financing.

Stage 1

It is anticipated that Stage 1 of the development will require an initial Net Capex of \$640M (US\$487M)¹, including contingency and proposed CTM-ITC tax credits. This phase includes building infrastructure to a scale that supports the Stage 2 Expansion Phase, which has been identified as a potentially cost-efficient strategy at the PEA level. While this strategy has been identified as cost-efficient, the infrastructure will need to be subject to further analysis and optimization during the FS to ensure it is being built in the most effective and cost-efficient manner.

General infrastructure includes the main access road, bridge, electrical powerline, and accommodation camp, all designed to serve both the Pre-production and Expansion Phases. Additionally, the Mine and Stockpiles category encompasses the garage, fuel station, and stockpile area, while the Process category includes capital expenditures for the first production train with a capacity of 2.5 Mtpa. An overall contingency has been applied to all direct and indirect costs and is expected to decrease as estimates are refined through detailed design engineering. Further detailed assessment of eligibility for the 30% CTM-ITC investment tax credit could potentially further reduce the overall cost. Refer to section on Funding Strategy below for further information on CTM-ITC. This strategic initial investment sets a solid foundation for future expansion and enhances the project's long-term viability.

Expansion Phase (Stage 2)

It is anticipated that the Stage 2 Expansion Phase, which includes focusing on developing the underground mine, will require estimated Net Capex of \$408M (US\$310M) including contingency and proposed CTM-ITC tax credits². This phase assumes it could potentially be funded through estimated internal cash flows generated from Stage 1, totalling \$549M. These cashflows would be dependent (amongst other things) on the Project reaching nameplate production capacity on Stage

¹ The Net Capex of \$640M excludes Opex during pre-production of \$108.3M and assumes a tax credit of \$121.1M under the proposed CTM-ITC legislation. Stage 1 has total Capex of \$761M which excludes CTM-ITC credits and pre-production opex – see Table 3 for a full breakdown of the capital cost estimate.

² The Net Capex estimate of \$408M assumes a tax credit of \$95.6M under the proposed CTM-ITC legislation. Stage 2 expansion has total Capex of \$503.9M excluding CTM-ITC credits - see Table 3 for a full breakdown of the capital cost estimate.

I, applicable pricing at the time of production/expansion and the overall economic viability of the Stage I operation and its cashflows, which are not guaranteed¹.

The Expansion Phase includes costs exclusively related to the construction and development of the underground mine, the expansion of the second train of the processing plant, and their related indirect costs and contingencies. Development of the underground mine will begin in Year I, one year after the commencement of open pit operations. All the expansion capital allocated to the processing plant is for building the second phase (Train 2), which is identical to the first.

CASH OPERATING COSTS²

Table 4: Estimated Cash Operating Costs (SC5.5 – FOB Bécancour basis)

Financials Results	CA\$/t	US\$ ^a /t
Mining	305	232
Processing	99	75
Site Administration	106	81
Cash Operating Cost at Site^b	510	387
Transportation cost	226	173
Total Cash Operating Cost (FOB Bécancour)^c	736	560
Sustaining Capital	44	33
All-In Sustaining Cost – (FOB Bécancour)^d	780	593

^a Exchange rate of 0.76US\$/CA\$.

^b Cash operating cost at site includes mining, processing, and site administration, it is a non-IFRS measure, and when expressed per tonne, a non-IFRS ratio. Refer to “*Non-IFRS and other financial measures*” for further information on these measures.

^c 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. Refer to “*Non-IFRS and other financial measures*” for further information on these measures.

^d 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, and excludes Royalties. It is a non-IFRS measure, and when expressed per tonne, a non-IFRS ratio. Refer to “*Non-IFRS and other financial measures*” for further information on these measures.

Mining

With a strong focus on sustainability, minimizing surface disturbance and accessing high-grade zones earlier in the mining profile, management proposes adopting a hybrid method inclusive of both open pit and underground mining methods. The hybrid method emerged as the optimal choice, balancing economic efficiency with environmental considerations (e.g., reduced Project footprint), and respecting our First Nations partners.

This hybrid approach 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.

¹ The PEA is only a preliminary economic assessment based on mineral resources which are not ore reserves and there is no certainty that the PEA assessment, including Stage I cashflows, can be realised. Mineral resources that are not ore reserves do not demonstrate economic viability including in respect of those Stage I cashflows.

² Refer to “*Non-IFRS and other financial measures*” for further information on these measures.

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.

Initially, open pit mining will be employed at the southwest end of the CV5 Pegmatite, accounting for approximately 56% of the LOM total production target. This method provides efficient access to near-surface and low-strip mineralization, ensuring a steady and cost-effective supply of material to the processing facilities.

As operations progress, and in parallel to continued open pit mining, the Project is expected to then transition to underground mining to extract the remaining 44% of the LOM production target. This method targets high-grade mineralized zones, minimizing surface footprint including disturbance to local water bodies.

The hybrid development of both open pit and underground areas is anticipated to give the Project significant development flexibility and optionality, allowing access to higher-grade zones as needed. This resilience is crucial in challenging market conditions, providing the benefits of a multi-asset mine.

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.

Figure 3 illustrates the high-grade stopes within the Nova Zone, located near the surface between a depth of 200 m and 500 m. This zone, with grades exceeding 2.5% Li_2O , is targeted first in the underground mining sequence in Stage 2 to enhance project economics (additional high-grade stope figures are provided in the mining section of the Appendix).

The large crystal structures are anticipated to allow for easy recovery using dense media separation ("DMS") only. By mining the open pit and the Nova Zone simultaneously, a higher DMS Plant feed grade could be expected to be achieved, providing a competitive advantage, especially in a lower spodumene price environment. The Nova Zone is also well defined as approximately 93% of the mineralized material in this zone is classified as Indicated Resources.

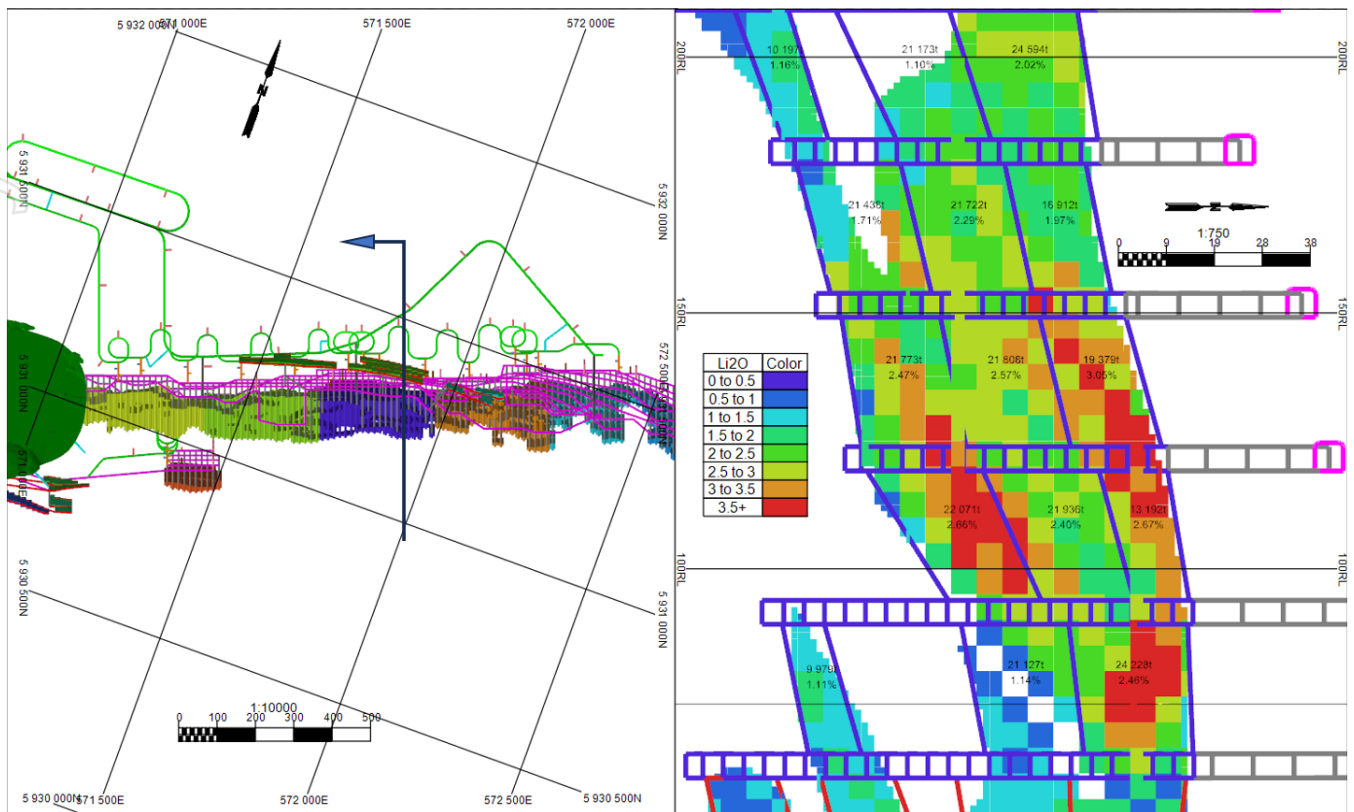


Figure 3: Example of Nova Zone Stope Tonnes and Li₂O% Grade

This strategic advantage underscores Patriot’s commitment to responsible and sustainable mining practices while maximizing resource extraction. 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 (see below).

High-Grade Mining Potential

Subsets of the Shaakichiuwaanan CV5 Resource under consideration in this PEA are high-grade, but in particular within the ‘Nova Zone’¹ as proposed to be mined underground. Selectively targeting the high-grade mining areas has the potential to reduce costs during periods of lower lithium pricing, improving the 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.

¹ Approximately 93% of the mineralized material in the Nova Zone is classified as Indicated Resource. 7% as Inferred Resource.

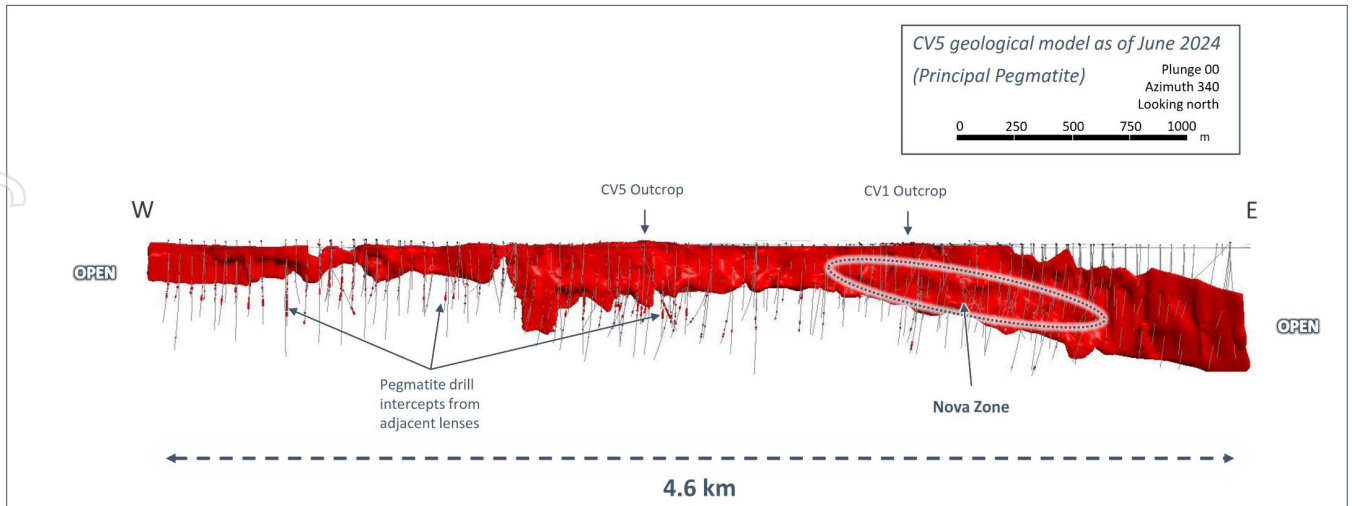


Figure 4: CV5 Long Section Highlighting the High-Grade Nova Zone

Table 5 further illustrates Patriot’s unique position in the underground setting to have the flexibility to adopt various mining approaches in response to changing market conditions. Within the Resource, the PEA has determined that there is underground mineral resource of approximately 21.8 Mt (diluted & recovered) at 2.10% Li₂O per the grade bins shown in Table 5. This resource has the potential to be targeted to reduce costs in a lower pricing environment.

Table 5: Diluted Recovered U/G Resource Per Grade Bin

Grade Bins (Li ₂ O%)	Tonnes per Grade Bin (Mt)	Avg. Grade per Grade Bin (Li ₂ O%)	Cumulative Tonnes (Mt)	Cumulative Grade (Li ₂ 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%
Grand Total	39.8	1.54%	-	-

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 resource tonnes at increased grade and increasing overall spodumene recovery as the processed grade increases. Using the PEA processing metrics (outlined below and in the Appendices) it is estimated that site costs would reduce by approximately 35-45% via processing 2.1% grade as compared to the PEA LOM average grade of 1.33%.

Processing

The PEA uses a DMS-only process for resource beneficiation, selected for its processing simplicity and efficiency in commissioning and ramp-up. By adopting the DMS-only approach, the Project benefits from lower operating expenses due to the reduced complexity and energy requirements. This streamlined process is expected to enhance economic efficiency and aligns with the commitment to sustainable and responsible mining practices.

This design incorporates two parallel production lines at a feed design capacity of 2.5 Mtpa each, a plant size that has been repeatedly and successfully built and operated in the spodumene industry. Additionally, the DMS process generates a minimal quantity of dry-stacked tailings, further enhancing the Project's efficiency and reducing waste management requirements.

The DMS-only flowsheet has been validated by extensive metallurgical testwork conducted by SGS Canada and supervised by Primero, both with extensive experience in lithium processing operations.

The testwork to date (summarised in Figure 5) has confirmed that the coarse spodumene is the dominant lithium mineral, achieving concentrate grades of over 5.5% Li_2O with global lithium recoveries in HLS testing ranging from 70% to 85% (for feed grades in the range 1.0% to 1.5% Li_2O respectfully).

The Shaakichiuwaanaan pegmatites have repeatedly shown excellent processing performance, generating high recoveries at the target concentrate grade. This ease of processing is attributed to the consistently large spodumene crystals found in the CV5 Pegmatite. The robust recoveries exhibited across a range of feed lithium grades is a key differentiator for the Project.

The testwork results from both HLS and DMS of the CV5 material, the expected recovery curve from a 3-size range DMS plant (processing Shaakichiuwaanaan pegmatites) and, for reference, recoveries from other operating DMS-only plants (as compiled by external consultants, Primero) are shown comparatively in Figure 5. The project's higher expected recovery (compared with other DMS-only operations) is due to the wide size range being treated (9.5 to 0.65 mm), the quality of the material (large spodumene grains with a narrow grain size distribution) and the three size range DMS plant (which lessens the impact of particle size effect in the DMS process).

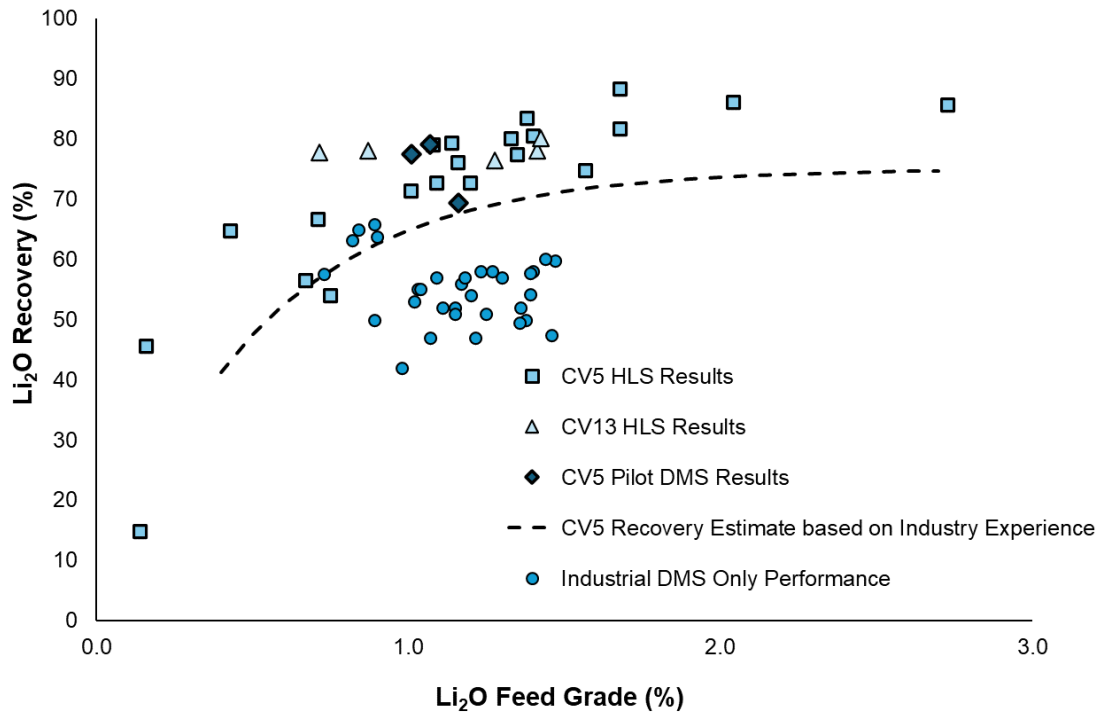


Figure 5: Metallurgical Test Work Recovery (global) Results & Industry Based Recovery Estimates for 3 x Size Range DMS Process Plant

By achieving high recoveries with a simpler DMS process design, the Shaakichiuwaanaan Project positions itself with a competitive advantage in the lithium market. Figure 5 shows the majority of other operating DMS-only plants ('Industrial DMS Only Performance'), achieving recovery rates well below the estimated Shaakichiuwaanaan Project DMS lithia recovery performance from test work to date.

Site Support Costs

The PEA proposes operations under a fly-in fly-out ("FIFO") model, which is reflected in the projected site administrative costs. This model ensures that the necessary mining expertise is readily available on-site, contributing to higher initial administrative expenses.

The Company's development vision includes building local capacity and including a model that leverages the skills and talents of the local community, including our First Nations partners. This strategy aims to foster greater community involvement, localizing economic benefits and ultimately reducing administrative costs. By investing in local training and development, the Project will not only enhance its economic efficiency but also strengthen its commitment to sustainable and responsible mining practices.

Infrastructure

The Project benefits from being close to significant existing infrastructure, including all-season road access direct to the CV5 Pegmatite, which connects to the regional provincial network, as well as hydro powerline infrastructure and the LG-4 hydroelectric dam complex located ~50 km from CV5. Power costs to site are estimated in this PEA to be \$0.05 kW/h. The provincial power rate is very low when compared to other global mining jurisdictions and may further increase Shaakichiuwaanaan's competitive advantage during challenging lithium market cycles.

The PEA for the Project considers a comprehensive array of infrastructure to ensure smooth and efficient operations. Key facilities include garages for mining fleets, light vehicles, and highway trucks, as well as administrative offices, dry rooms, warehouses, and auxiliary buildings. These support structures are essential for day-to-day operations, maintenance, and administrative activities.

In addition, the site will include extensive waste rock and rejects management systems, complete with ditching and pond systems for effective water management. Fresh water wells and water treatment plants ensure a reliable supply of water.

The site infrastructure also includes an electrical substation and overhead powerlines to connect to Hydro-Québec's renewable energy grid. Further essential facilities include an emulsion plant, explosive storage magazines, fuel storage pads, refueling stations, and a permanent workers camp to accommodate construction and operational personnel. The Matagami Transshipment Centre is also a key logistical hub, facilitating the efficient transport of materials and resources.

Energy

The Shaakichiuwaanaan Project is set to benefit from low-cost, green renewable energy provided by Hydro-Québec. The Project's proximity to existing Hydro-Québec infrastructure ensures a reliable and sustainable power supply. A new 69 kV transmission line will be constructed to connect the site to the 315 kV Tilly substation, located approximately 55 km away.

This connection should provide ample capacity, with a new electrical substation at the site offering a firm capacity of over 30 MVA, meeting the Project's estimated power consumption of 25.7 MW. The use of Hydro-Québec's renewable electrical energy aligns with our commitment to sustainability and reduces the Project's carbon footprint considerably compared to a fossil fuel supported alternative.

Moreover, the energy consumption for the Project would be relatively low for a hard rock spodumene project, due to the adoption of a DMS only process, which is less energy-intensive compared to traditional flotation methods. This contributes to lower operational expenses and further enhances the Project's environmental credentials. The combination of efficient energy use and sustainable sourcing positions the Shaakichiuwaanaan Project as an environmentally responsible venture.

Final access to power will be subject to both further engineering assessment and application and approvals to access the Hydro-Québec system.

Transport

The CV5 Pegmatite is situated approximately 13.5 km south of the regional and all-weather Trans-Taiga Road and is accessible year-round by all-season road. Therefore, the existing transportation infrastructure provides a solid foundation for efficient logistics. Highway trucks will transport spodumene concentrate approximately 834 km along the existing all-season regional road network to the Transshipment Centre in Matagami, QC, where it will be transferred to railcars for rail transport to Bécancour via Canadian National Railway's extensive North American railroad network.

Further to the base case transport approach, as outlined above, there are other opportunities for optimization that may help reduce transport costs and expenses. For example, the Project stands to benefit from infrastructure projects under La Grande Alliance between the Cree Nation and the Government of Québec, such as the connection between the Renard Mine and the Trans-Taiga Road, which could positively impact project logistics and reduce costs by reducing the road transport distance significantly. For more detail on the strategy on optimizing transportation and reducing costs, refer to the Key Opportunities section of this announcement.

The strategic choices made in mining, processing, site support, infrastructure, energy, and transport collectively are expected to result in highly competitive operating costs for the Shaakichiuwaanaan Project. These potential cost advantages are driven by economies of scale, the simplicity of the DMS process, and the ability to selectively mine high-grade zones. Additionally, the access to low-cost green energy from Hydro-Québec and the benefits from regional infrastructure projects further enhance cost efficiency.

EBITDA¹ LITHIUM PRICE SENSITIVITY ANALYSIS

Sensitivity analysis was completed to determine the impact of various factors on the Project economics. It indicates that the Project is most influenced by spodumene prices. For every US\$200/t (SC6 basis) increase in the spodumene concentrate price, the PEA shows that annual EBITDA increased by CA\$187.3M.

For this PEA the Company's pricing assumption has been calibrated to SC5.5 by adjusting for lithium content on a pro rata basis. The spodumene price used is US\$1,375/tonne (SC5.5% FOB Bécancour basis) equivalent to US\$1,500/tonne (SC6 FOB Bécancour basis).

¹ EBITDA is a non-IFRS financial measure and ratio which is comprised of net income or loss from operations before income taxes, finance expense – net, depreciation and amortization. This annual EBITDA is calculated considering the period of full production (i.e., Years 4 to 18). Refer to “Non-IFRS and other financial measures” for further information on these measures.

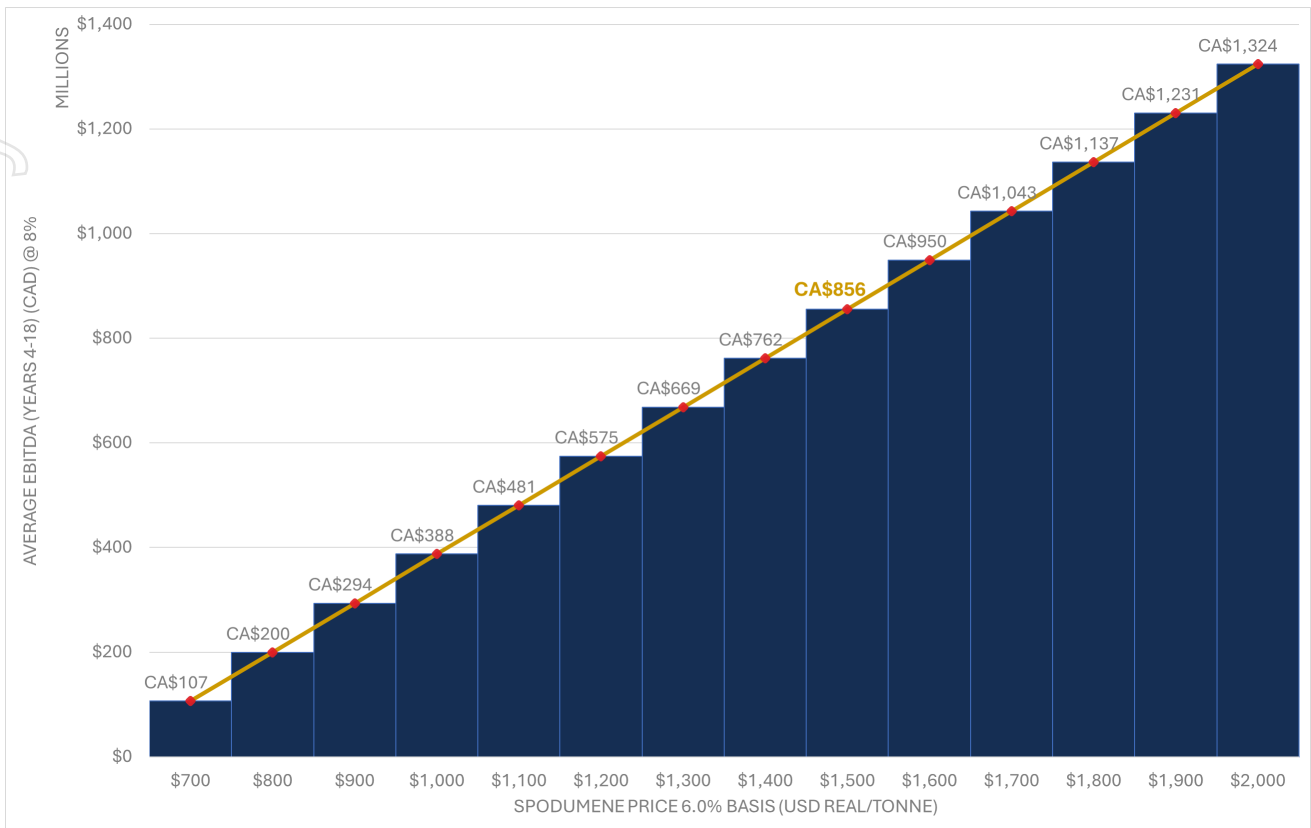


Figure 6: EBITDA Sensitivity to Spodumene Concentrate Price (SC6, FOB Bécancour basis) US\$/t real

Importantly, the PEA estimates EBITDA of CA\$106M at US\$700/t (SC6, FOB Bécancour basis) approximating current spot prices for Spodumene Concentrate of US\$760/t (PLATTS SC6, FOB Australia 15/08/24), with the project generating positive EBITDA as low as approximately US\$600/t (SC6, FOB Bécancour basis).

NPV SENSITIVITY ANALYSIS

Sensitivity analysis was completed to determine the impact of various factors on the Project NPV. It indicates that the Project is most influenced by spodumene prices. For every US\$200/t (SC6 basis) increase in the spodumene concentrate price, the post-tax project NPV_{8%} increased by CA\$820M. This highlights the upside potential and strong economic leverage the Project holds in a rising market environment.

Current market conditions (as defined by current spot pricing of Spodumene Concentrate US\$760/t (SC6, FOB Australia basis -15/08/24) are not representative of recent market price forecasts on a long-term basis from independent reporting agencies, banking commodities analyst reports and company disclosures and recently published technical reports, which indicate spodumene prices generally cluster around US\$1,300–US\$1,500 per tonne for 5.5% spodumene concentrate¹. The Company has used US\$1,375/t (SC5.5 FOB Bécancour basis) (which equates to approximately US\$1,500/t (SC6 FOB Bécancour basis)), in its PEA with the project estimated to be NPV accretive at levels well below this price. Refer to Figure 7.

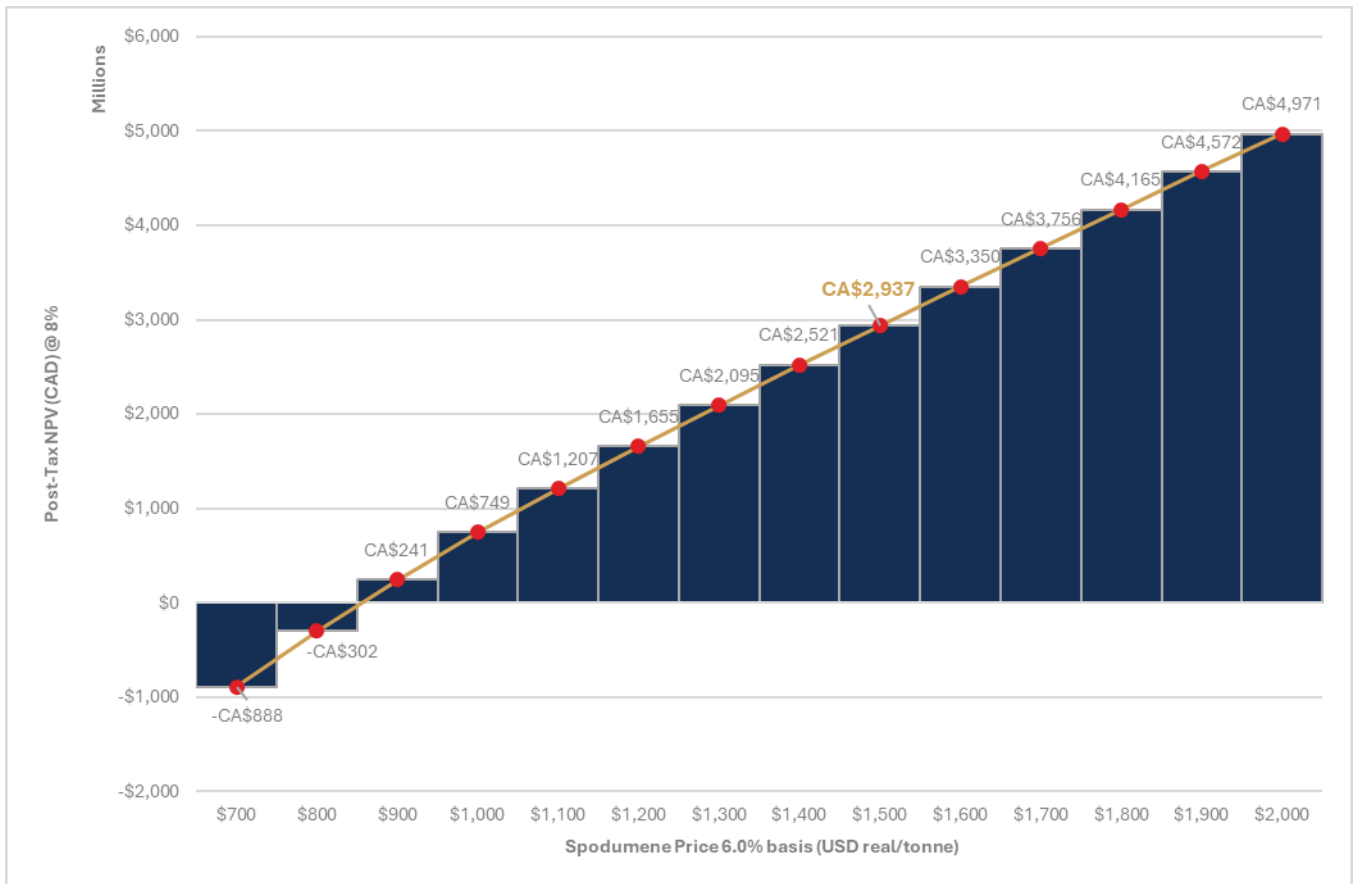


Figure 7: NPV Sensitivity to Spodumene Concentrate Price (SC6, FOB Bécancour basis) US\$/t real

The PEA demonstrates on a preliminary basis that NPV is estimated to remain accretive, even with a significant increase in total Project capital costs. This financial resilience indicates the Project's potentially strong financial framework.

¹ Refer Appendix I – Lithium Market and Commodity Price Assumptions

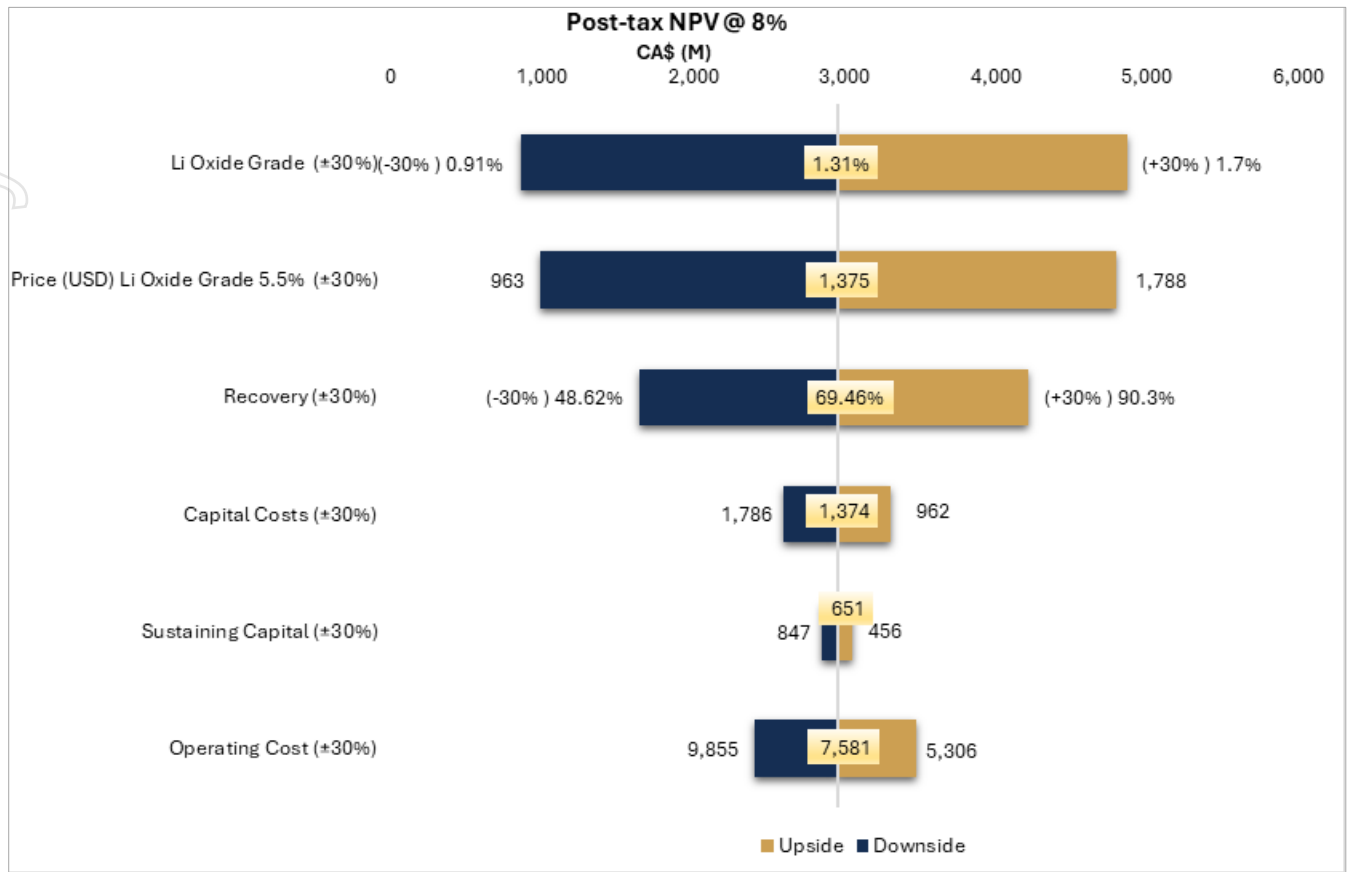


Figure 8: Sensitivity Analysis (+/- 30%)

In addition to a favourable NPV at long-term price estimates, the Project can yield substantial EBITDA¹ and FCF¹ after the Stage 2 expansion phase and commissioning. The combination of the hybrid mining method, low strip ratio open pit(s), the DMS only processing pathway, and low-cost renewable energy anticipated from Hydro-Québec provides significant flexibility and resilience.

This approach allows for consistent mill feed quality and recovery rates, minimizes operational expenses, and enhances overall Project economics.

¹ EBITDA and FCF are non-IFRS measures. Refer to “Non-IFRS and other financial measures” for further information on these measures.

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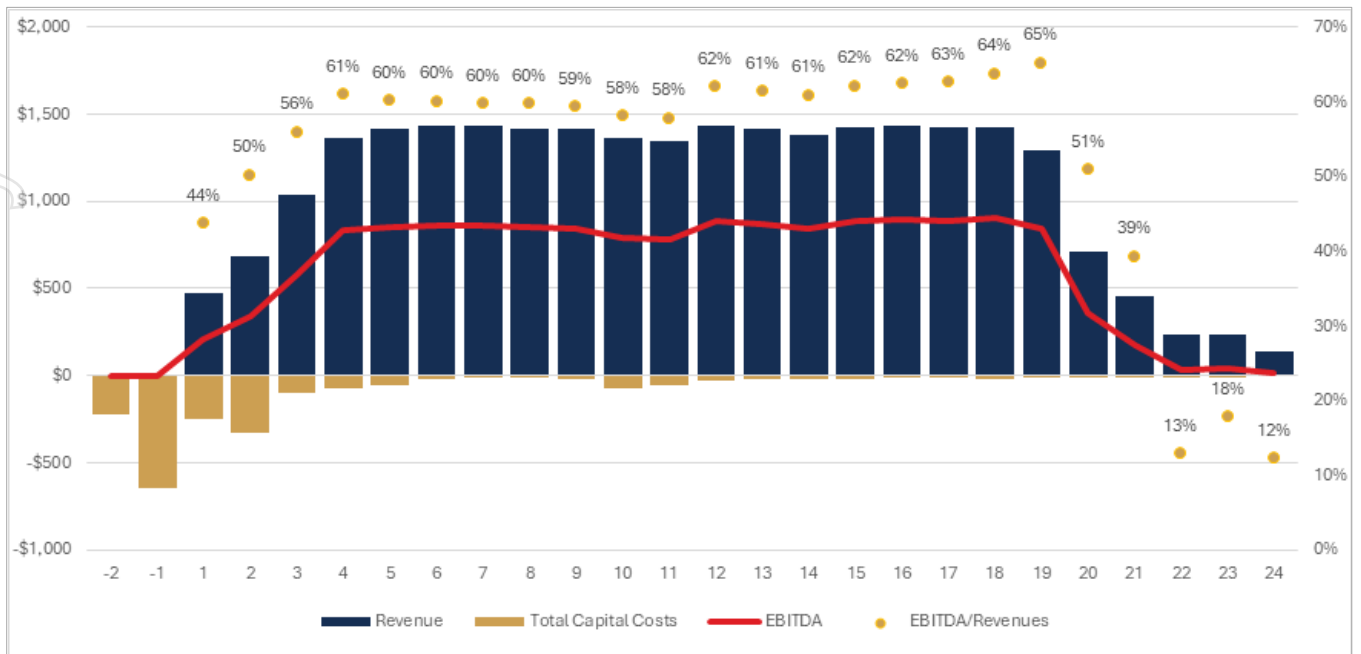


Figure 9: EBITDA

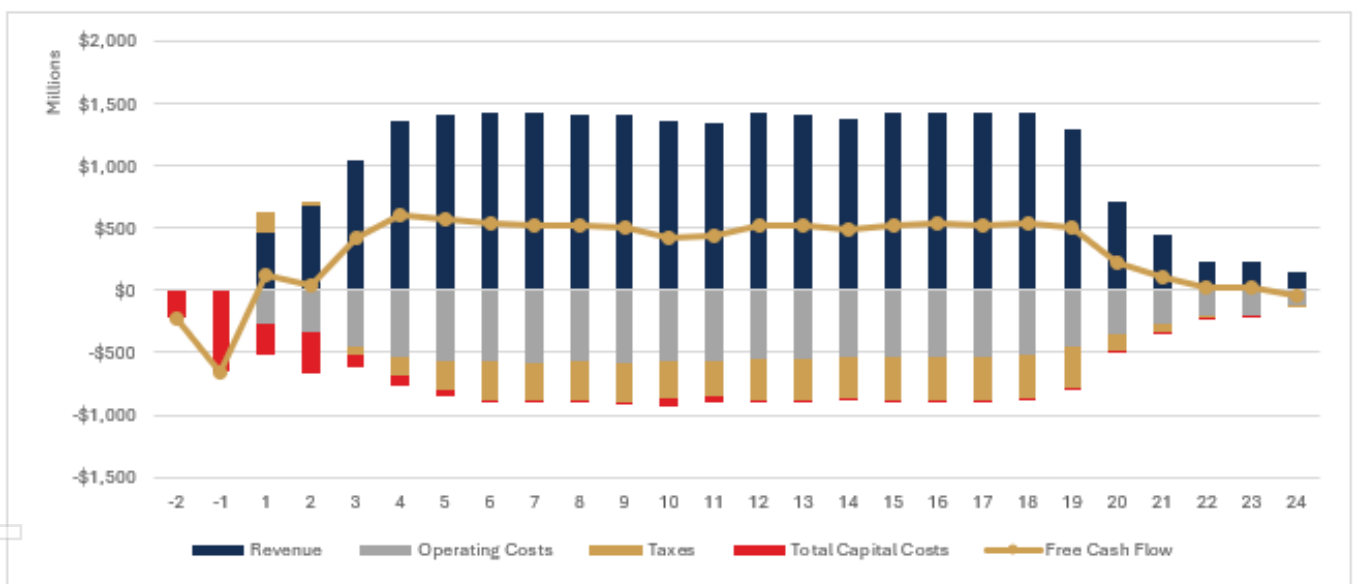


Figure 10: Annual Cashflows

The Project's potential to generate significant cash flows and withstand market volatility is a key advantage. This potential resilience to market volatility is expected to attract midstream and downstream participants in the industry supply chain who are seeking a stable supply of spodumene concentrate for decades, irrespective of market conditions. By ensuring a constant feed the Shaakichiuwanaan Project strengthens its position as a reliable and valuable long-term partner in the lithium supply chain.

KEY OPPORTUNITIES:

Given the results of this PEA, the Company will now consider the progress of a FS, with the potential of reaching a final investment decision for the Project in 2027. This demonstrates the Company's commitment to optimizing the Project and maximizing shareholder value.

This section outlines key opportunities with the potential to further enhance Project efficiency and sustainability.

- **Optimise early access via underground to the Nova zone:** Providing access to the potential in higher-grade process plant feed and lower operating costs earlier in the production cycle.
- **Increase Mineral Resources:** Focus on increasing Mineral Resources and mine life through further exploration of the Project and surrounding zones like CV13, including its high-grade Vega Zone. Each additional year of plant feed is expected to Project economics and optimize the mine plan.
- **Optimize underground development:** Increase Stope Size and reduce lateral development for cost savings.
- **Mining Fleet Optimization:** Consider the use of autonomous trucks and optimize truck size.
- **Optimized Material Handling:** Improve material handling systems to reduce equipment reliance.
- **Backfill alternatives vs Paste fill Plant:** Trade-off study needed to identify the optimal solution.
- **Project Schedule Optimization:** Streamline project schedules and further refine the phased approach to optimize capital and operational expenditure.
- **Decarbonisation:** Study alternatives for heating methods.
- **Labour Costs:** Develop local capacity to reduce the FIFO model and establish an integrated operations centre with a strong on-site presence.
- **Addition of bolt-on tantalum recovery circuit:** The Project contains a significant tantalum component that is anticipated to be recoverable from the spodumene concentrate tailings.
- **Valorizing lithium in DMS tailings:** The DMS middlings and undersize still contain a meaningful amount of lithium which may be recoverable later in the mine-life through the addition of a flotation circuit.
- **Meet with La Grande Alliance Stakeholders:** During early FS phase, meet with First Nations and government stakeholders with a goal to optimize the transportation of Shaakichiuwaanaan Project concentrate. Specifically, to investigate the timing of planned highway 167 expansion in La Grande Alliance's Feasibility Study to determine the potential reduced cost of haulage of concentrate, from site to next stage of processing at Bécancour Quebec.

OPTIMIZE DOWNSTREAM LOGISTICS

The Shaakichiuwaanaan Project stands to benefit significantly from La Grande Alliance (“LGA”) Memorandum of Understanding (“MOU”) between the Cree Nation and Québec government. This 30-year, 3-phase infrastructure plan aims to connect, develop and protect the Eeyou Istchee / James Bay territory and includes several key projects that can reduce traffic on the Billy Diamond Highway (“BDH”), drastically reduce transportation costs and CO₂ emissions and enhance the Project’s overall sustainability, all while building on the Company’s relationship with the Crees.

La Grande Alliance



- Plan to protect, connect and develop the Eeyou-Istchee Baie-James territory.

Phase 1: Years 1-5



Phase 2: Years 6-15



Phase 3: Years 16-30



<https://www.lagrandealliance.quebec/program/>

LEGEND
□ Phase 10 □ Phase 20 □ Phase 30 | Itinerary — Rail ⇄

Connection between Renard Mine and Trans-Taiga Road:

- 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 CO₂ emissions. In addition, this road would reduce traffic on the BDH from the Shaakichiuwaanaan Project and other projects in the region. As the BDH is the only route for Crees to access their communities, increased traffic due to the cumulative effects of numerous projects has become a major concern for project development in the region. The extension of Route 167 would decrease traffic by providing an alternate route for concentrate and supply transport. This initiative demonstrates the commitment to improving infrastructure in the Eeyou Istchee region, which can positively impact logistics for the Shaakichiuwaanaan Project.
- Refer to the Route 167 - Mine Renard to Trans-Taiga Road document available on the LGA website: <https://www.lagrandealliance.quebec/>

Railroad Extension from Matagami to the Trans-Taiga Road (junction with the BDH & TT at KM541):

- 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. During Phase 1 (Years 1-5), the railway from Matagami to Rupert River would be established. During Phase 2 (Years 6-15), the railway would be extended between Rupert River and the -Trans Taiga junction with the BDH at KM541. 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.
- 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>.

James Bay Port Development:

- During Phase 3 of the LGA plan (Years 16-30), the development of a port in James Bay is proposed. Although it may not be available year-round, 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.
- 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>.

These infrastructure improvements align with the Project's goals of cost efficiency and sustainability. They also underscore the strategic importance of the partnership with the Cree community, recognizing the meaningful role the Crees play in infrastructure in Eeyou Istchee and fostering local economic development and ensuring the Project's success in the long term.

The potential incorporation of the LGA infrastructure plan into the Shaakichiuwaanaan Project highlights the potential for significant reduction in traffic on the BDH and therefore transportation cost reductions and enhanced sustainability. By leveraging these improvements, the Project can reduce CO₂ emissions, contribute to the green economy, and showcase the critical importance of partnering with the Cree Nation. These advancements are expected to provide substantial benefits, making the Shaakichiuwaanaan Project a model of cost-efficient and sustainable mining operations.

FUNDING STRATEGY

The Project has the potential to be the largest known lithium project in North America and could support decades-long production as a high-quality raw material supplier in the North American supply chain. Patriot is progressing a phased development intended to optimize equity returns and reduce the upfront funding requirement. The Company aims to identify the most cost-effective and value-enhancing funding package to benefit both the Company and its shareholders.

- **Stage I phase:** Phased development strategy with anticipated Stage I funding requirement of \$870M (US\$661M) for the first 400 ktpa capacity including contingency and pre-production Opex, with potential funding solutions which could include a combination of debt, strategic and listed equity and government programs.

- **Stage 2 expansion:** Additional 400 ktpa to reach an aggregate 800 ktpa spodumene project which may possibly be funded through internal cash flows generated from the Stage 1 Operation. Cashflows from Stage 1 supporting Stage 2 funding would be dependent on (amongst other things) 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 guaranteed¹.

Refer to Figure 11 for an indicative potential funding structure.

Further, the Project has attracted strong interest from Tier 1 lithium supply chain participants, including lithium converters, OEMs, and trading houses. The Company is preliminary in exploring a range of funding options intermingled with potential downstream collaboration.

CTM-ITC Tax Credits and other government supports

The Company and its tax advisors have reviewed the initial capital budget for the Project in conjunction with the CTM-ITC first introduced in the 2023 Canadian Federal Budget and enacted on June 20, 2024. As contemplated, the tax credit would provide for up to 30% of the cost of the investment in eligible property used for eligible activities through a refundable investment credit mechanism.

Based on the review, the Company and its tax advisors estimate that up to \$790M of expected costs associated with the Project may be deemed eligible under the aforementioned tax credit, leading to a potential refundable investment tax credit of approximately \$217M before the end of the expansion phase. There is no guarantee the Company will be able to access all or part of the CTM-ITC. If it does not become available at all, the total Capex for stages 1 and 2 (including contingency) will increase by \$217M (see Table 3).

In addition, the Project stands to benefit from Québec's new tax holiday for large investment projects, offering substantial tax relief on capital investment. This incentive is expected to enhance the financial attractiveness of the Shaakichiuwaanaan Project and has been incorporated in the tax routing. Based on the location of the Project and planned eligible investment expenditures, the new tax holiday could provide income tax savings of \$146M over the first 5 year of production.

Potential participation from provincial and federal institutions, along with various infrastructure and critical minerals initiatives offered by the Canadian government, further supports the Project's funding strategy. Institutions such as the Critical Minerals Infrastructure Fund, Export Development Canada, the Canadian Infrastructure Bank and Investissement Québec have historically supported mining projects throughout all economic cycles and currently have government mandates to accelerate the development of critical mineral mining projects.

This ecosystem enhances the Project's funding prospects and aligns with North American and European priorities for sustainable and strategic development.

¹ 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.

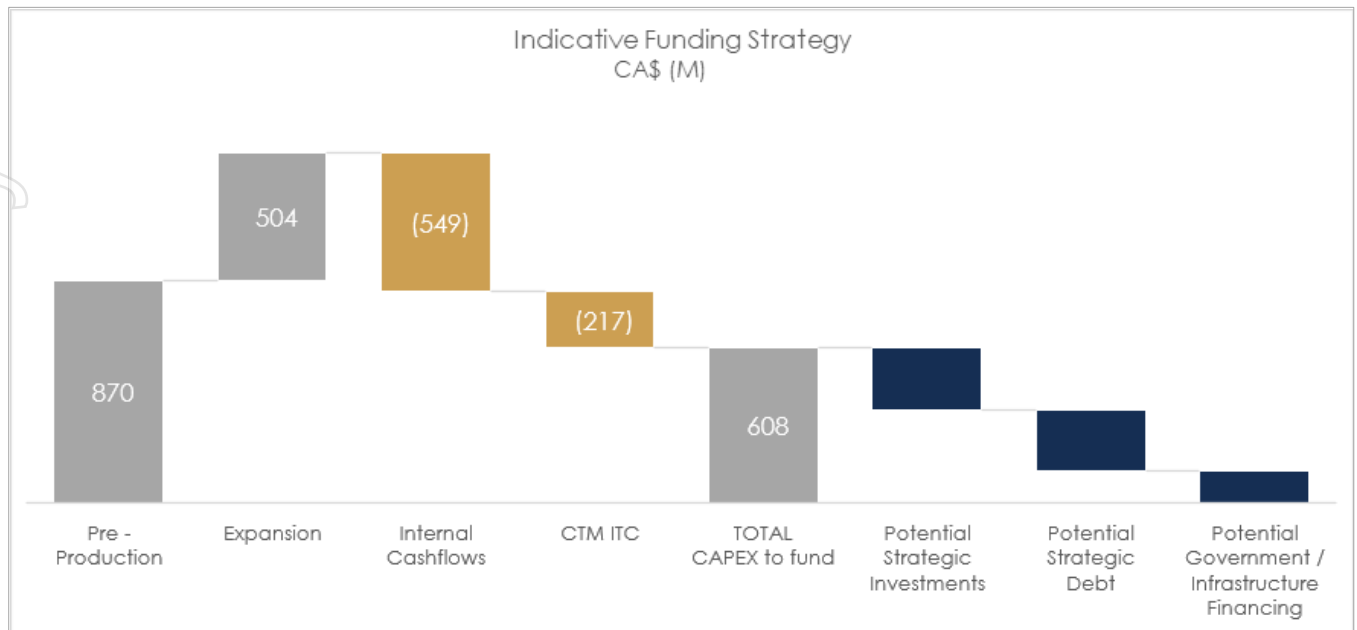


Figure 11: Indicative Potential Funding Structure¹

By leveraging a strategic combination of debt, equity, government programs and internal cash flows, the Company believes that it is possible to advance the Project as anticipated.

CONCLUSION

The PEA for the Shaakichiuwaanaan Project highlights its potential to become a leading global lithium producer, enhancing shareholder value while potentially minimizing dilution. By leveraging strategic partnerships and a staged development approach, the Company aims to establish a robust presence in the North American lithium supply chain.

This integrated strategy, supported by government incentives and careful financial planning, targets the long-term sustainability and viability of the Project, positioning it as a cornerstone for the future of lithium raw materials supply to the North American and European markets.

With a clear path to advance directly to a FS and an intention to reach a Final Investment Decision by 2027, the Company is committed to unlocking the full potential of the Shaakichiuwaanaan Project. This next phase of development will continue to focus on enhancing economic returns.

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

¹ Refer to Table 3 for relevant details.

QUALIFIED/COMPETENT PERSON

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 Mineral Resource Estimate is August 21, 2024 (through drill hole CV24-526).

The statements relating in this Press Release that relates to the mining section presented in the Appendix I is based on information compiled by BBA Inc. and reviewed by Hugo Latulippe, who is 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., a consulting firm based in Montréal, Québec, Canada. Mr. Latulippe takes responsibility for the mining aspects of the Shaakichiuwaanaan PEA Press Release as a CP. Mr. Latulippe has 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 CP, Mr. Latulippe, has reviewed the Shaakichiuwaanaan PEA Press Release and has given his consent to the inclusion in the report of the matters based on his information in the form and context within which it appears.

The statements relating in this Press Release that relates to the project infrastructure section presented in the Appendix I is based on information compiled by BBA Inc. and reviewed by Luciano Piciacchia, who is a Professional Engineer registered with the OIQ. Mr. Piciacchia is a geotechnical engineer and Principal Geotechnical Engineer at BBA Inc., a consulting firm based in Montréal, Québec, Canada. Mr. Piciacchia takes responsibility for the infrastructure aspects of the Shaakichiuwaanaan PEA Report as a CP. Mr. Piciacchia has sufficient experience relevant to the style of project 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 CP, Mr. Piciacchia, has reviewed the Shaakichiuwaanaan PEA Report and has given his consent to the inclusion in the report of the matters based on his information in the form and context within which it appears.

The statements relating in this Press Release that relates to the financial and economic analysis section presented in the Appendix I is based on information compiled by BBA Inc. and reviewed by Shane K. A. Ghouralal, P.Eng, MBA, who is 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., a consulting firm based in Montréal, Québec Canada. Mr. Ghouralal takes responsibility for the financial modelling and economic analysis aspects of the Shaakichiuwaanaan PEA Report as a CP. Mr. Ghouralal has 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 CP, Mr. Ghouralal, has reviewed the Shaakichiuwaanaan PEA Report and has given his consent to the inclusion in the report of the matters based on his information in the form and context within which it appears.

The statements relating in this Press Release that relates to the processing section presented in the Appendix I is based on information compiled by Primero Group Americas Inc. and reviewed by Ryan Cunningham P. Eng., who is a Professional Engineer registered with the OIQ. Mr. Cunningham is a processing engineer and Process Engineering Manager for Primero Group Americas Inc., a consulting firm based in Montréal, Québec, Canada. Mr. Cunningham takes responsibility for the processing aspects of the Shaakichiuwaanaan PEA Report as a CP. Mr. Cunningham has sufficient experience relevant to the style of mineralization, type of deposit and processing methodology 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 CP, Mr. Cunningham, has reviewed the Shaakichiuwaanaan PEA Report and has given his consent to the inclusion in the report of the matters based on his information in the form and context within which it appears.

APPENDIX I – SUMMARY OF PRELIMINARY ECONOMIC ASSESSMENT

INTRODUCTION

The Shaakichiuwaanaan Property (the “Property” or “Project”) is located approximately 220 km east of Radisson, QC, and 330 km west of the Cree Nation of Chisasibi, QC. The northern border of the Property’s primary claim grouping is located within approximately 6 km to the south of the Trans-Taiga Road and powerline infrastructure corridor (Figure 12) The La Grande-4 (“LG4”) hydroelectric dam complex is located approximately 40 km north-northeast of the Property. The CV5 Spodumene Pegmatite, part of the Shaakichiuwaanaan MRE, is located central to the Property, approximately 13.5 km south of KM270 on the Trans-Taiga Road and is accessible year-round by all-season road. The CV13 Spodumene Pegmatite is located approximately 3 km west-southwest of CV5.

The Property is comprised of 463 CDC mineral claims that cover an area of approximately 23,710 ha with the primary claim grouping extending dominantly east-west for approximately 51 km as a nearly continuous, single claim block. All claims are registered 100% in the name of Lithium Innova Inc., a wholly owned subsidiary of the Company.

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

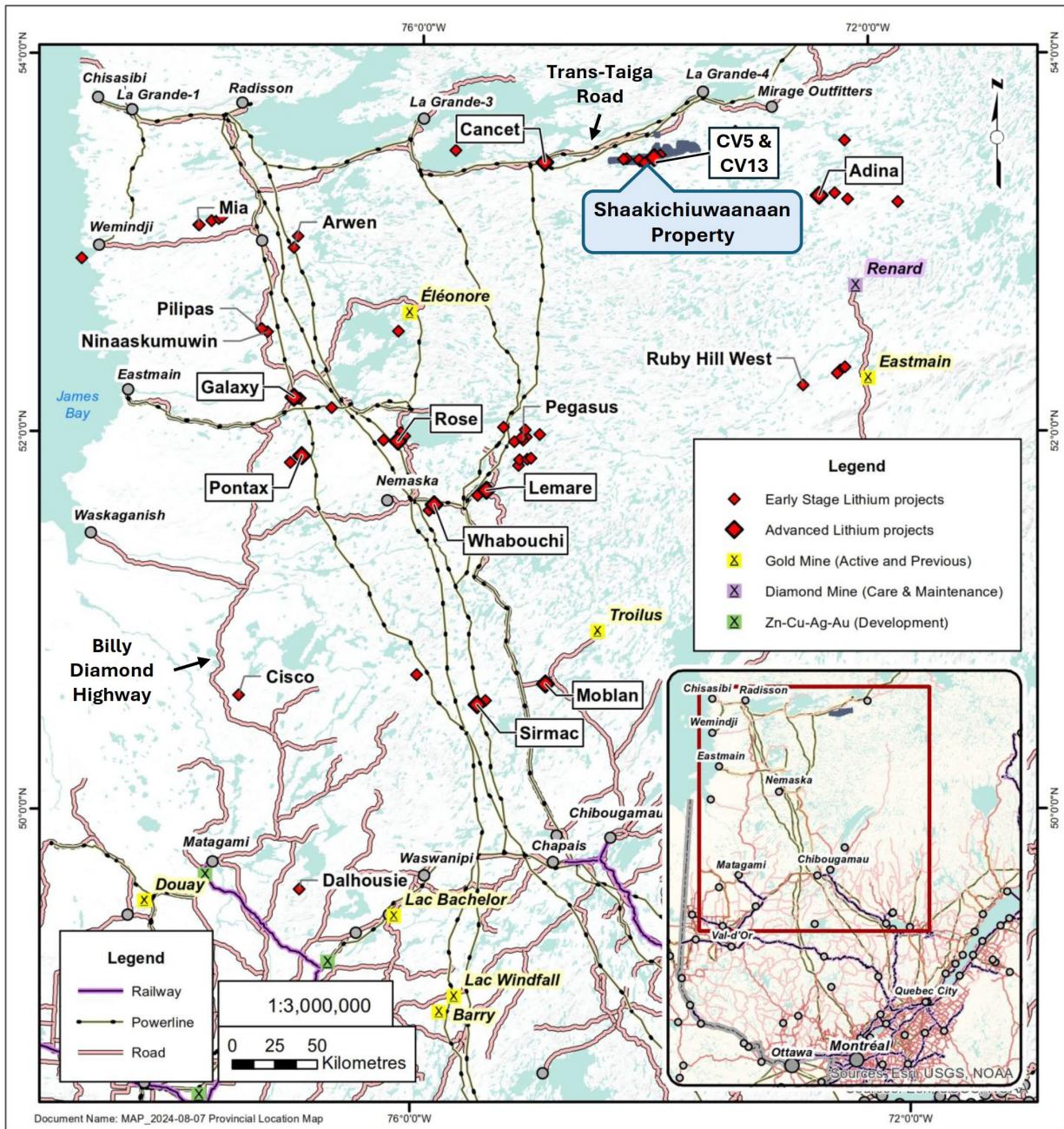


Figure 12: Shaakichiuwaanaan Project Location

There are two primary claim groups that are relevant to the Project – one straddling KM-270 of the Trans-Taiga Road, and the second with its northern border located directly south of KM-270, approximately 5.8 km from the Trans-Taiga Road and powerline infrastructure corridor (Figure 12). The LG-4 hydroelectric dam complex is located approximately 30 km north-northeast of the Property. The Project is located central to the Property, approximately 13 km south of KM-270 on the Trans-Taiga Road, 14 km south of the powerline, and 50 km southwest of the LG-4 dam complex.

The Project is located in Eeyou Istchee / James Bay on the traditional territory of the Cree Nation of Chisasibi (trapline CH39), on Category III Land as defined under the James Bay and Northern Québec Agreement (“JBNQA”). The Eeyou Istchee James Bay Regional Government (“EIJBRG”) is the designated municipality for the region including the Property.

The Trans-Taiga is an all-season gravel road that trends east-west through the region and connects approximately 210 km to the west of the Project to the Billy Diamond Highway (Rte. 109) at KM541, which extends north to Radisson and south to Matagami, where it connects to Québec's regional road and railroad network. The Project may be accessed by helicopter, float plane, snowmobile, and winter road. The winter road, extending south from KM-270 of the Trans-Taiga Road, has recently been upgraded to provide all-season road access to the Project.

The Property is located in a sub-arctic climate region. Over the course of the year, the temperature typically varies from -27°C to 20°C , with rare extremes of -35°C and 26°C . Snow covers the ground from mid-October to late May, limiting field work in the winter period to drilling and geophysics. The Property topography consists of forested gently rolling hills, drainages, and muskeg swamps between approximately 260 m and 350 m elevation, typical of the James Bay Region.

The CV5 Deposit is located partially under a lake named 001 ("Lake 001"). Water management is important, and the PEA considers an underground mining portion to access higher grade earlier in the mining sequence, minimize the impact on the lake, reduce the fish habit impact and still recovering the most part of the mineral resource. A water dam and diversion ditch are required.

PROJECT DESCRIPTION

The PEA is centered around open pit and underground mining of CV5, followed by DMS-only processing on site to produce a 5.5% Li_2O spodumene concentrate that is then transported by road and rail to Bécancour, Québec. There are no slurry tailings produced from the process plant and therefore the study does not include the requirement for a tailings dam. The PEA assumes product will be converted to Lithium chemicals in Bécancour by the customer(s). Multiples lithium bearing pegmatites have been defined at CV5 to date. Within the PEA, most of the mineable resources is mined from a single pegmatite that has up to 140 m in thickness with the balance mined from other adjacent pegmatites.

MINERAL RESOURCE

The PEA is underpinned by the Shaakichiuwaanaan Mineral Resource Estimate (MRE or Mineral Resource), specifically the CV5 Spodumene Pegmatite component. The Shaakichiuwaanaan Mineral Resource (see news release dated August 5, 2024) includes both the CV5 and CV13 spodumene pegmatites for a total of 80.1 Mt at 1.44% Li_2O Indicated and 62.5 Mt at 1.31% Li_2O Inferred, for 4.88 Mt contained lithium carbonate equivalent ("LCE"). Presented by resource location/name, this MRE includes Mineral Resources of 78.6 Mt at 1.43% Li_2O Indicated and 43.3 Mt at 1.25% Li_2O Inferred at CV5, and 1.5 Mt at 1.62% Li_2O Indicated and 19.1 Mt at 1.46% Li_2O Inferred at CV13. The PEA, as announced herein, considers only the Mineral Resources from the CV5 Spodumene Pegmatite.

The Shaakichiuwaanaan Mineral Resource cut-off grade (which in turn is different to the assessed PEA cut-off grade) is variable depending on the mining method and pegmatite (0.4% Li_2O open pit, 0.6% Li_2O underground CV5, and 0.8% Li_2O underground CV13). The Effective Date of the Shaakichiuwaanaan Mineral Resource is June 27, 2024. Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability.

The CV5 Pegmatite component of the Shaakichiuwaanaan Mineral Resource is supported by 344 holes (129,673 m) and 11 outcrop channels (63 m). The block model for the CV5 Pegmatite Mineral Resource is presented below in Figure 13 and Figure 14.

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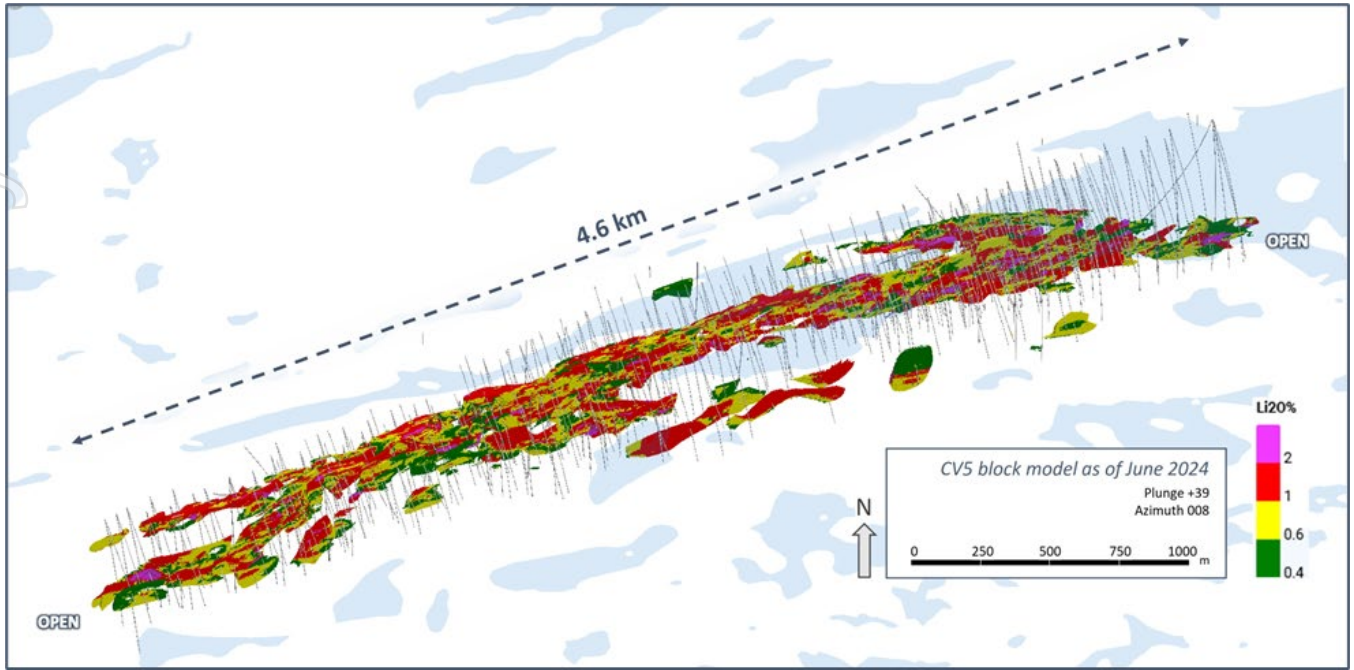


Figure 13: Oblique view of the CV5 Spodumene Pegmatite Block Model (classified material unconstrained) (not to scale)

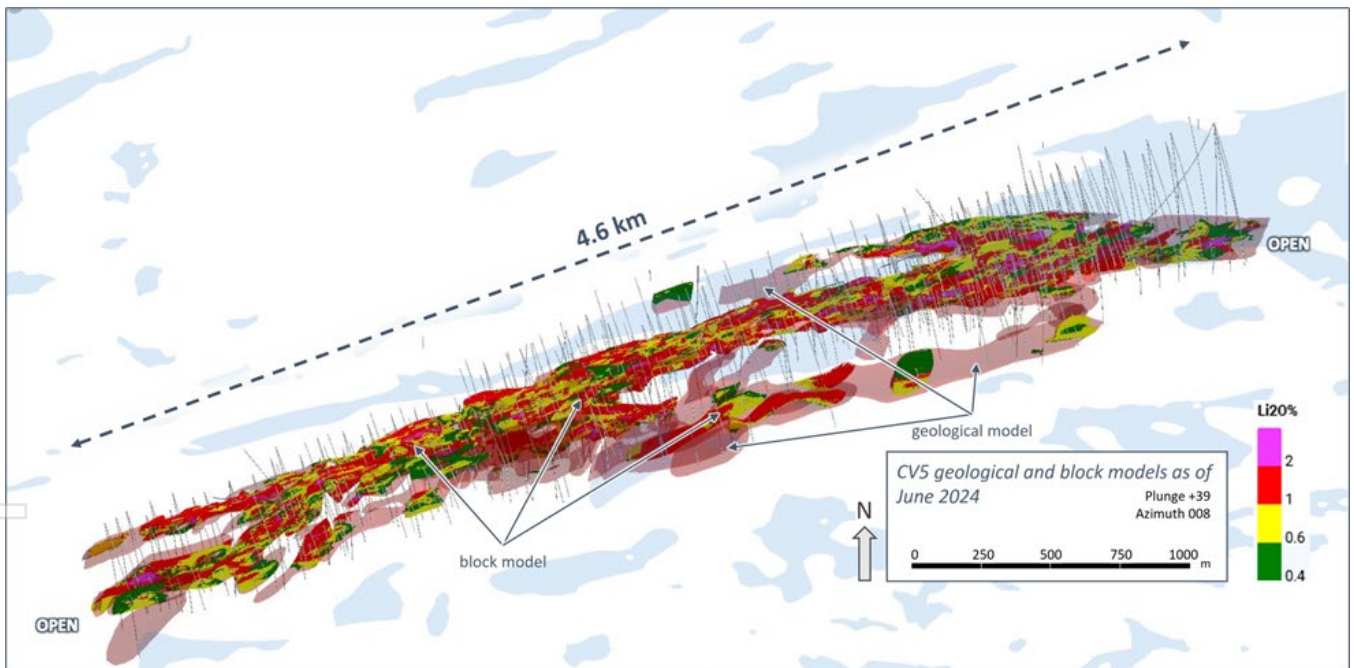


Figure 14: Oblique view of the CV5 Spodumene Pegmatite Block Model (classified material unconstrained) Overlaid with Geological Model (semi-transparent light red) (not to scale)

GEOLOGY

The Property overlies a large portion of the Lac Guyer Greenstone Belt, considered part of the larger La Grande River Greenstone Belt, and is dominated by volcanic rocks metamorphosed to amphibolite facies. Rocks of the Guyer Group (amphibolite, iron formation, intermediate to mafic volcanics, peridotite, pyroxenite, komatiite, as well as felsic volcanics) predominantly underly the Property (Figure 15). The amphibolite rocks that trend east-west (generally steeply south dipping) through this

region are bordered to the north by the Magin Formation (conglomerate and wacke) and to the south by an assemblage of tonalite, granodiorite, and diorite, in addition to metasediments of the Marbot Group (conglomerate, wacke) in the areas proximal to the CV5 Spodumene Pegmatite. Several regional-scale Proterozoic gabbroic dykes also cut through portions of the Property (Lac Spirt Dykes, Senneterre Dykes). The lithium pegmatites on the Property are hosted predominantly within amphibolite's, metasediments, and to a lesser extent ultramafic rocks.

To date, the LCT pegmatites at the Property have been observed to occur within a corridor of approximately 1 km in width that extends in a general east-west direction across the Property for at least 25 km – the 'CV Lithium Trend' – with significant areas of prospective trend that remain to be assessed (Figure 16). To date, eight distinct lithium pegmatite clusters have been discovered along the CV Lithium Trend at the Property – CV4, CV5, CV8, CV9, CV10, CV12, CV13, and CV14 (Figure 15). The core area of the trend includes the CV5 and CV13 spodumene pegmatites with approximate strike lengths of 4.6 km and 2.3 km, respectively, as defined by drilling to date and which remain open.

To date, at the CV5 Spodumene Pegmatite, multiple individual spodumene pegmatite dykes have been geologically modelled (Figure 17 and Figure 18). However, a vast majority of the CV5 Mineral Resource is hosted within a single, large, principal spodumene pegmatite dyke (Figure 19), which is flanked on both sides by multiple, subordinate, sub-parallel trending dykes. The CV5 Spodumene Pegmatite, including the principal dyke, is modelled to extend continuously over a lateral distance of at least 4.6 km and remains open along strike at both ends and to depth along a large portion of its length. The width of the currently known mineralized corridor at CV5 is approximately ~500 m, with spodumene pegmatite intersected at depths of more than 450 m in some locations (vertical depth from surface). The pegmatite dykes at CV5 trend west-southwest (approximately 250°/070° RHR), and therefore dip northerly, which is different than the host amphibolites, metasediments, and ultramafics which dip moderately in a southerly direction.

The principal spodumene pegmatite dyke at CV5 ranges from <10 m to more than 125 m in true width, and may pinch and swell aggressively along strike, as well as up and down dip. It is primarily the thickest at near-surface to moderate depths (<225 m), forming a relatively bulbous, elongated shape, which may flair to surface and to depth variably along its length. As drilling has focused over the principal dyke, the immediate CV5 corridor has not been adequately drill tested and it is interpreted that additional subordinate pegmatite lenses are situated proximal, especially in the southcentral areas of the deposit. The pegmatites that define CV5 are relatively undeformed and very competent, although likely have some meaningful structural control.

The CV5 Spodumene Pegmatite display internal fractionation along strike and up/down dip, which is evidenced by variation in mineral abundance including spodumene and tantalite. This is highlighted by the high-grade Nova Zone, situated at the base of the principal pegmatite body, and traced over a significant distance with multiple drill hole intercepts (core length) ranging from 2 m to 25 m at >5% Li₂O, within a significantly wider mineralized zone of >2% Li₂O.

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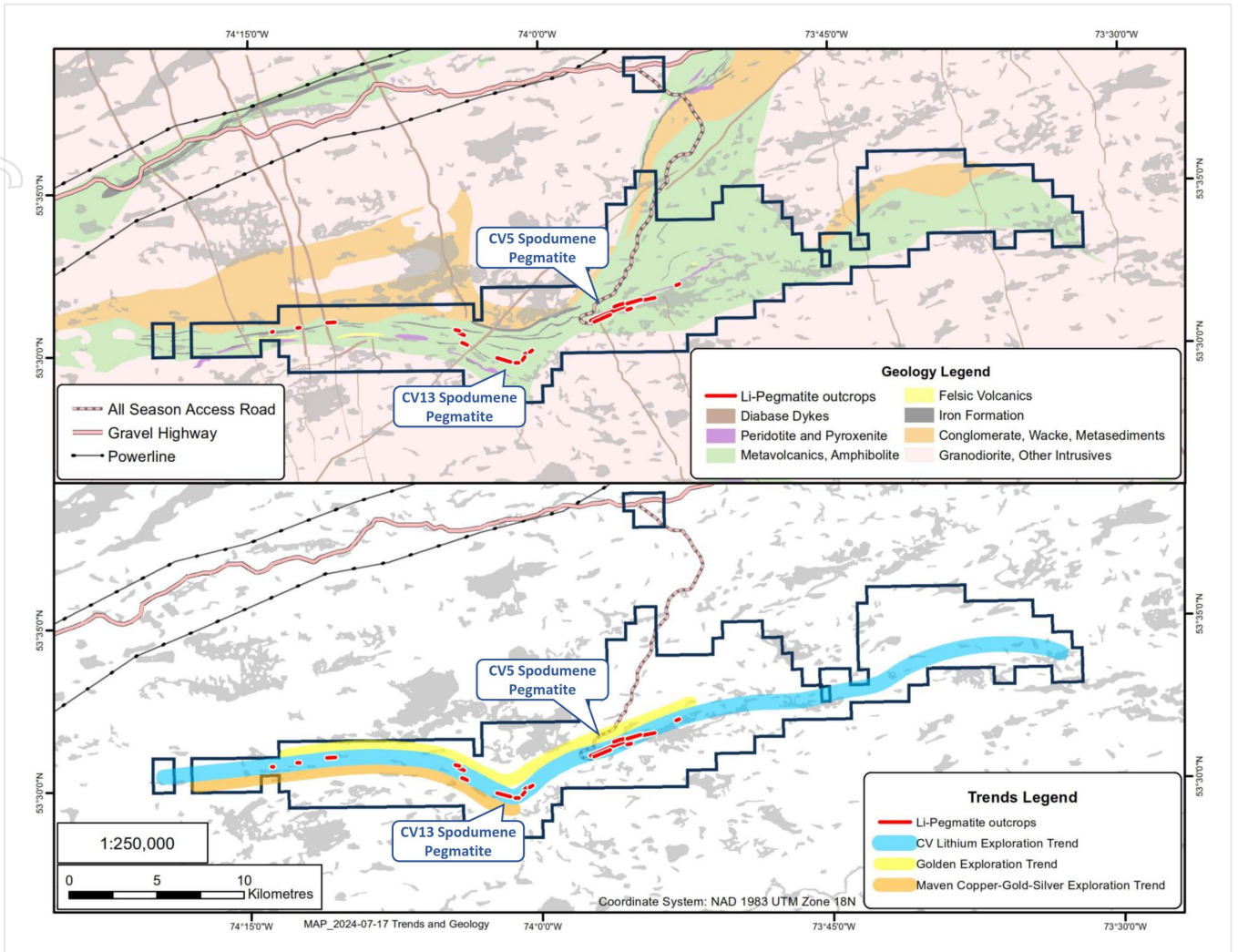


Figure 15: Property Geology and Mineral Exploration Trends

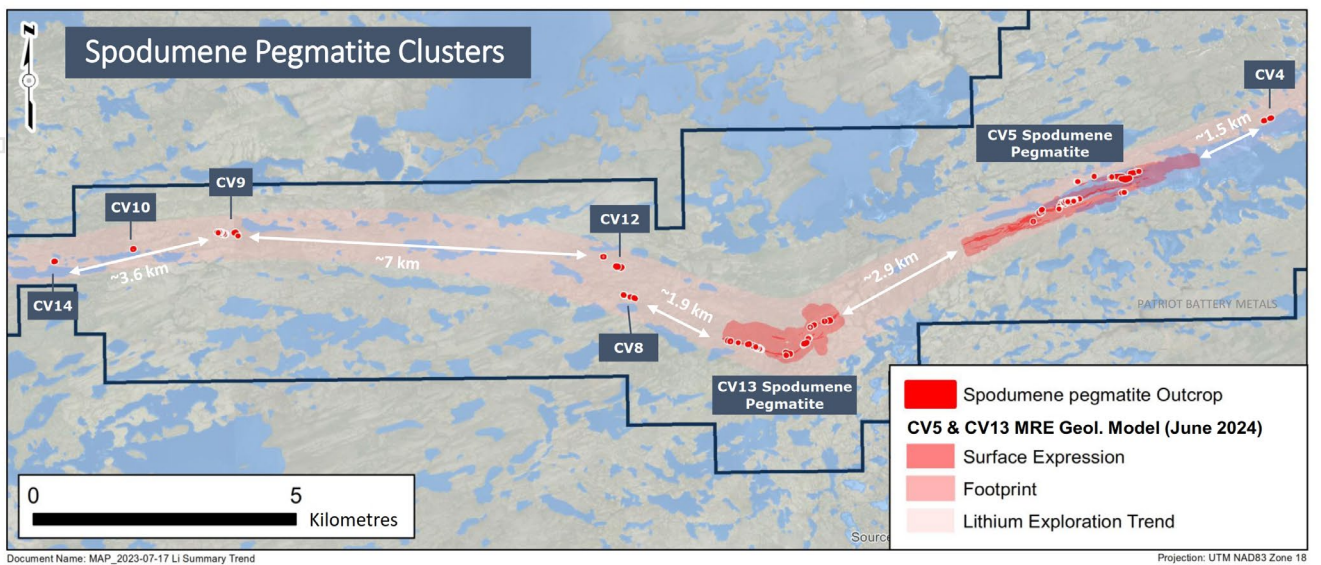


Figure 16: Spodumene Pegmatite Clusters at the Property Discovered to Date

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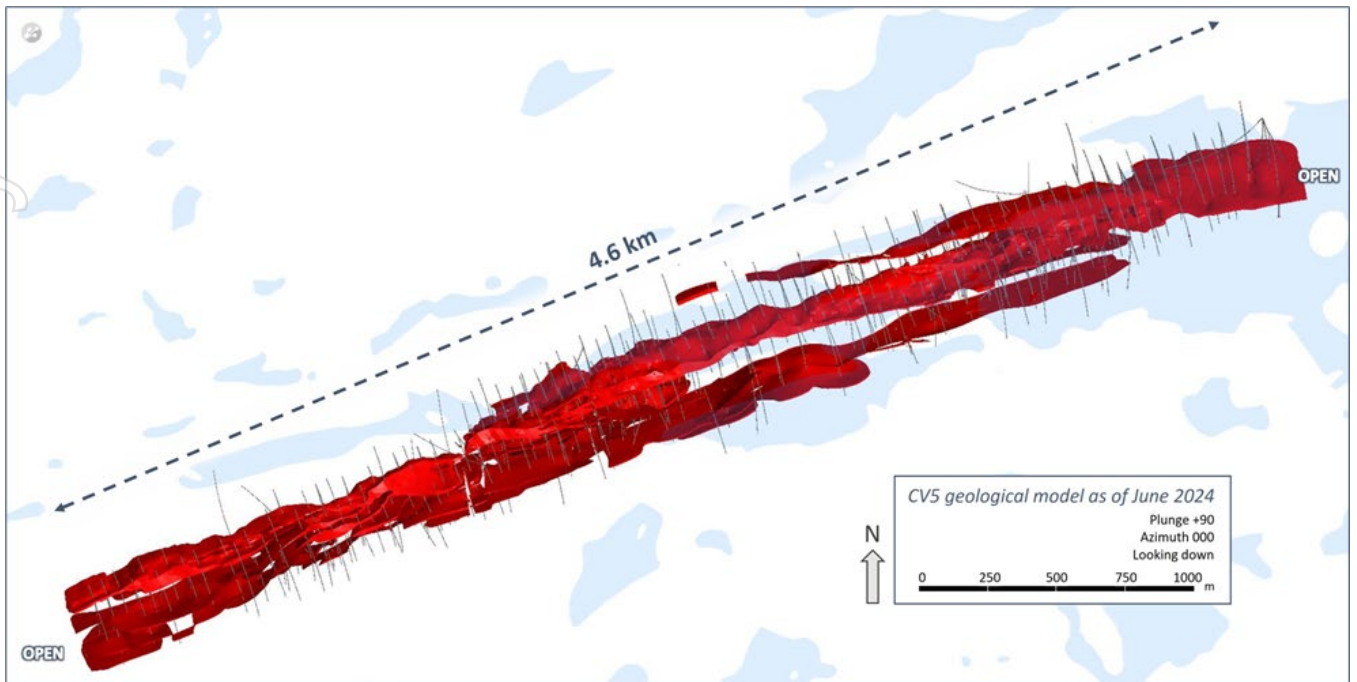


Figure 17: Plan View of CV5 Spodumene Pegmatite Geological Model – All Lenses

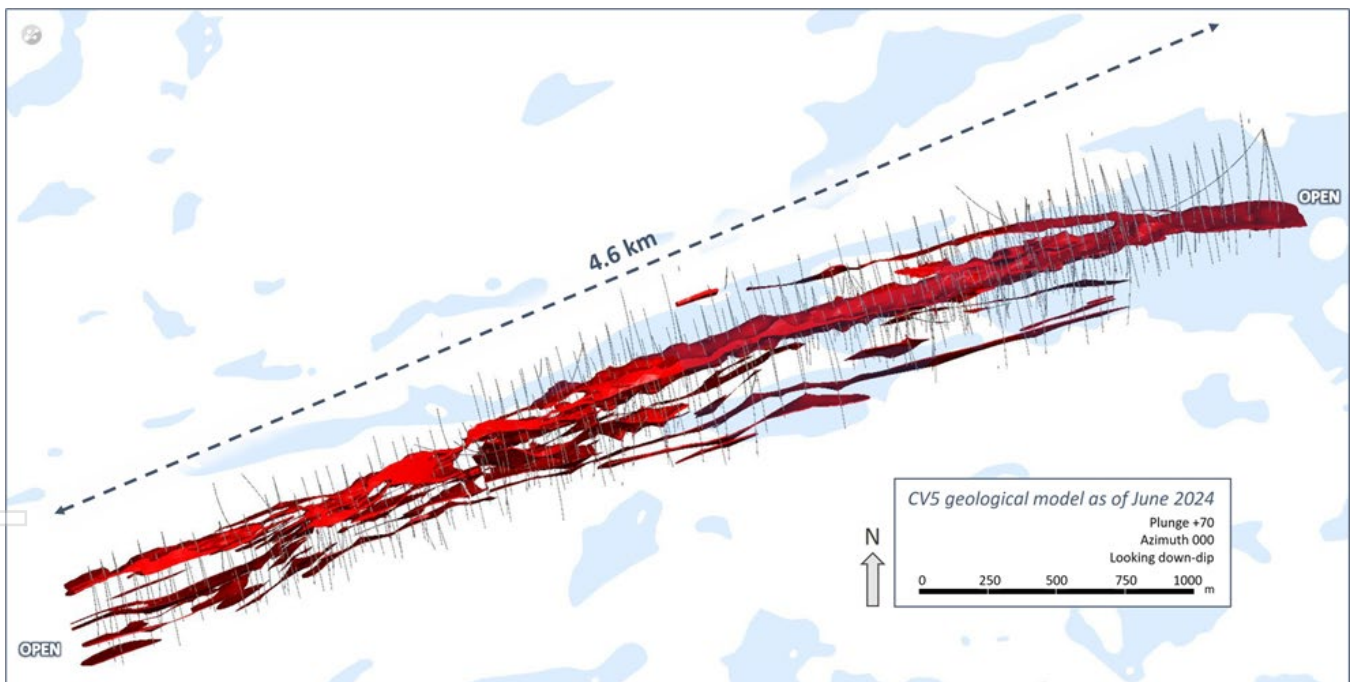
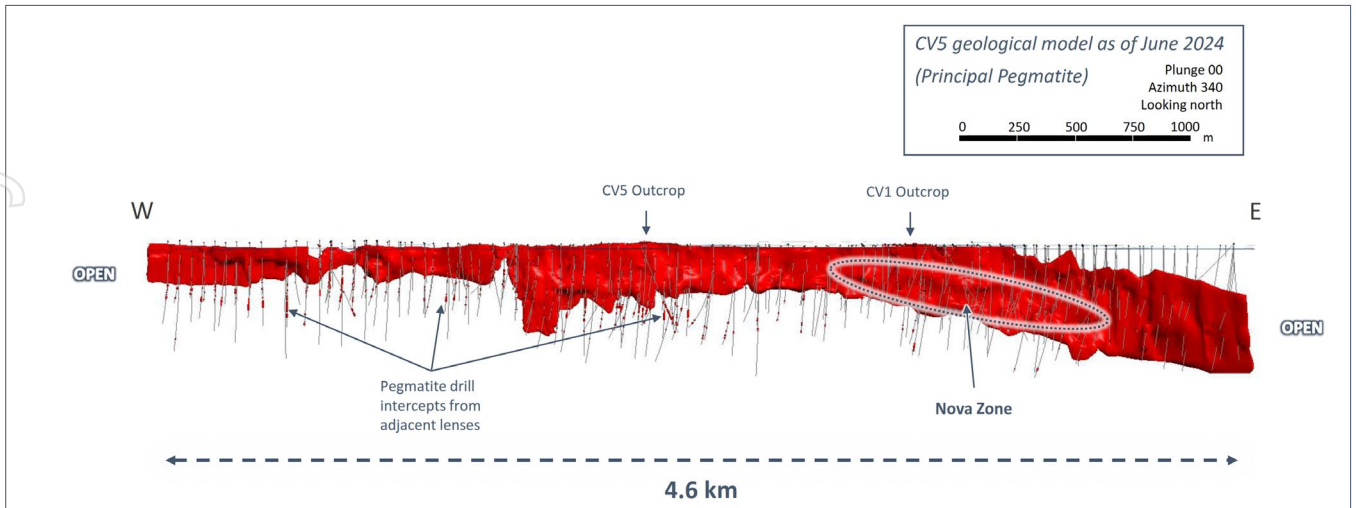


Figure 18: Inclined View of CV5 Spodumene Pegmatite Geological Model Looking Down Dip (70°) – All Lenses (not to scale)

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**Figure 19: Side View of CV5 Geological Model Looking North (340°)
– Principal Pegmatite Only**

MINING

The mining strategy adopted in the PEA is to open pit mine the south-west end of CV5 Open Pit Pegmatite, representing approximately 56% of the LOM production target (50.5 Mt), with the remaining 44% of the production target (39.8 Mt) mined via underground mining. The resource used in the PEA mine schedule for the combined open pit and underground is 75% Indicated and 25% Inferred category resources. For a breakdown of Inferred and Indicated Resources mined each year over LOM, refer to Figure 35.

The Project area contains numerous bodies of water near planned infrastructure. The mine design and site layout have been designed at PEA level with this in mind. This is particularly the case with Lake 001, which is impacted by open pit mining to a greater or lesser extent due to the size of the open pit chosen. As part of the PEA optimization efforts, an open pit only mining strategy has been assessed versus a 'hybrid' mining strategy involving both open pit and underground methods. A quantitative and qualitative comparison between the two strategies based on economic, operational, environmental and social impacts was completed. Although both scenarios returned positive economic outcomes, the assessment concluded that the open pit and underground scenario should be adopted for the PEA preferred project option going forward to design.

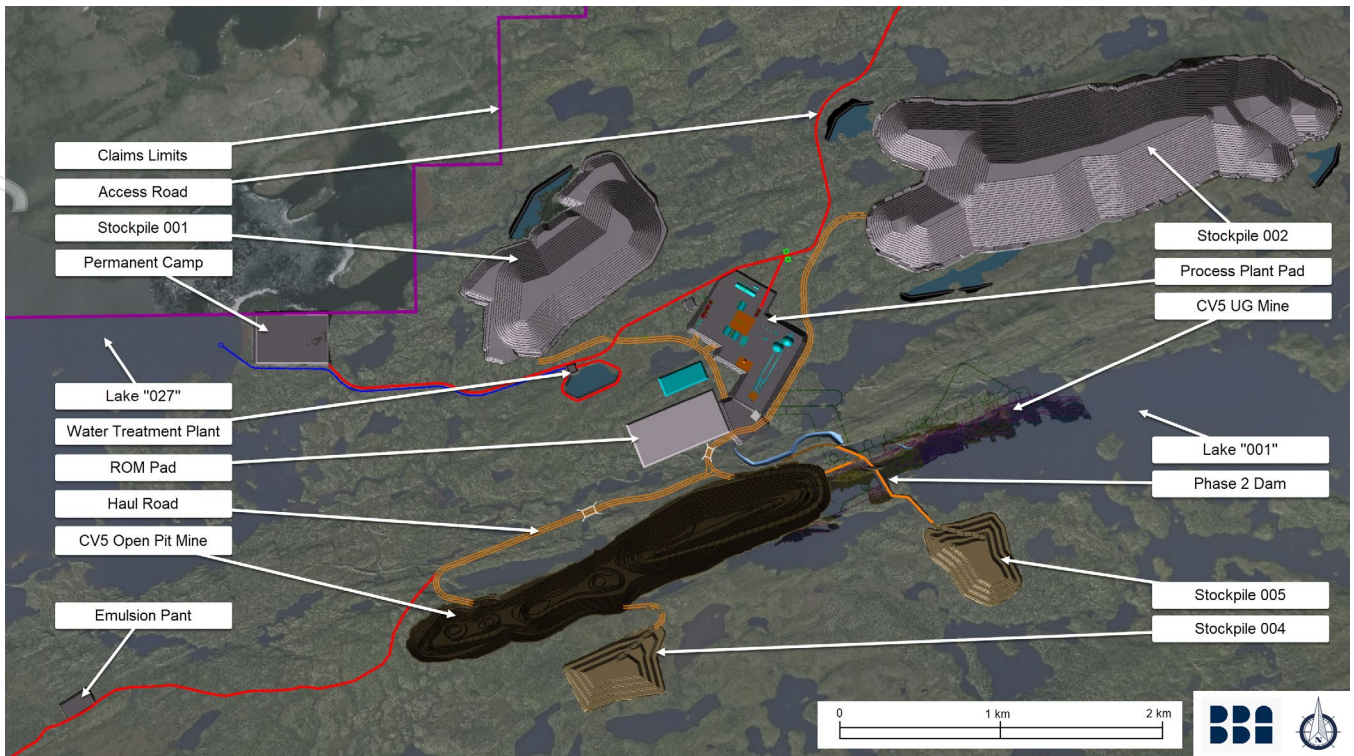


Figure 20: General Layout - Mine Site

The subsequent design phases of the Project will aim, among other things, to minimize infrastructure encroachment into the water environment to reduce fish habitat impacts as much as possible while sustainably mining this resource.

Open Pit

Open Pit Optimization

BBA Engineering ("BBA") completed the open pit optimization, design and mine schedule for the open pit mining component of the study. The geological block model used is that of the updated Mineral Resource Estimate for CV5, announced to the market August 5, 2024.

A slope optimizer software has been used on the geological block model to create a diluted mining model for the open pit that accounts for mining recovery and dilution for the open pit mine. Using this method, it was estimated that the overall dilution for the open pit was approximately 16% (7% internal pegmatite dilution and 9% host rock dilution), and a mining recovery of 97%.

The pit optimization process included Indicated and Inferred Mineral Resources. Mining costs, process rejects material handling costs, and General and Administration ("G&A") costs were based on BBA's early work on the Project and other experience with remote mining operations in Québec. Processing costs and other processing parameters including metallurgical recovery were provided by Primero. The costs for the concentrate transportation were estimated by an independent consultant for the road transportation component and BBA engaged with the railway operator for the rail haulage component estimation. Note, at a later stage of the study, the road transport component of the total transport cost was updated with a budget estimate provided directly from a recognized haulage contractor in Québec.

Geotechnical parameters are based on BBA's investigation, including rock mass characterization and preliminary geotechnical assessment. The economic parameters of the study are presented in Table 6.

Table 6: Open Pit Optimization Parameters

Parameter	Unit	Value
Geotechnical Parameters		
Pit slope	deg.	45-47
Operating costs		
Mining cost – Rock	\$/t mined	7.46
Mining cost – Overburden	\$/t mined	5.00
Processing cost	\$/t milled	14.17
Tailings management cost	\$/t milled	1.59
G&A cost	\$/t milled	20.41
Total based cost	\$/t milled	36.17
Transport cost – Road & Rail	\$/t conc	287.70
Recovery Parameters		
Mill recovery	%	$(75*(1-EXP(-1.995*(Li_2O \text{ grade}\%)))$ 100
Concentrate grade	%	5.50
Production rate	Mtpa (concentrate)	0.8
Economic Parameters		
Exchange rate	US\$/CA\$	0.76
Concentrate price	US\$/t	1,375
Concentrate price	\$/t	1,809
Royalty	%	2
Discount rate	%	8

The optimization resulted in a range of pit shells for a range of prices, including the base price of US\$1,375 per tonne SC5.5 (representing revenue factor (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 gives the Project more robust economic outcomes.

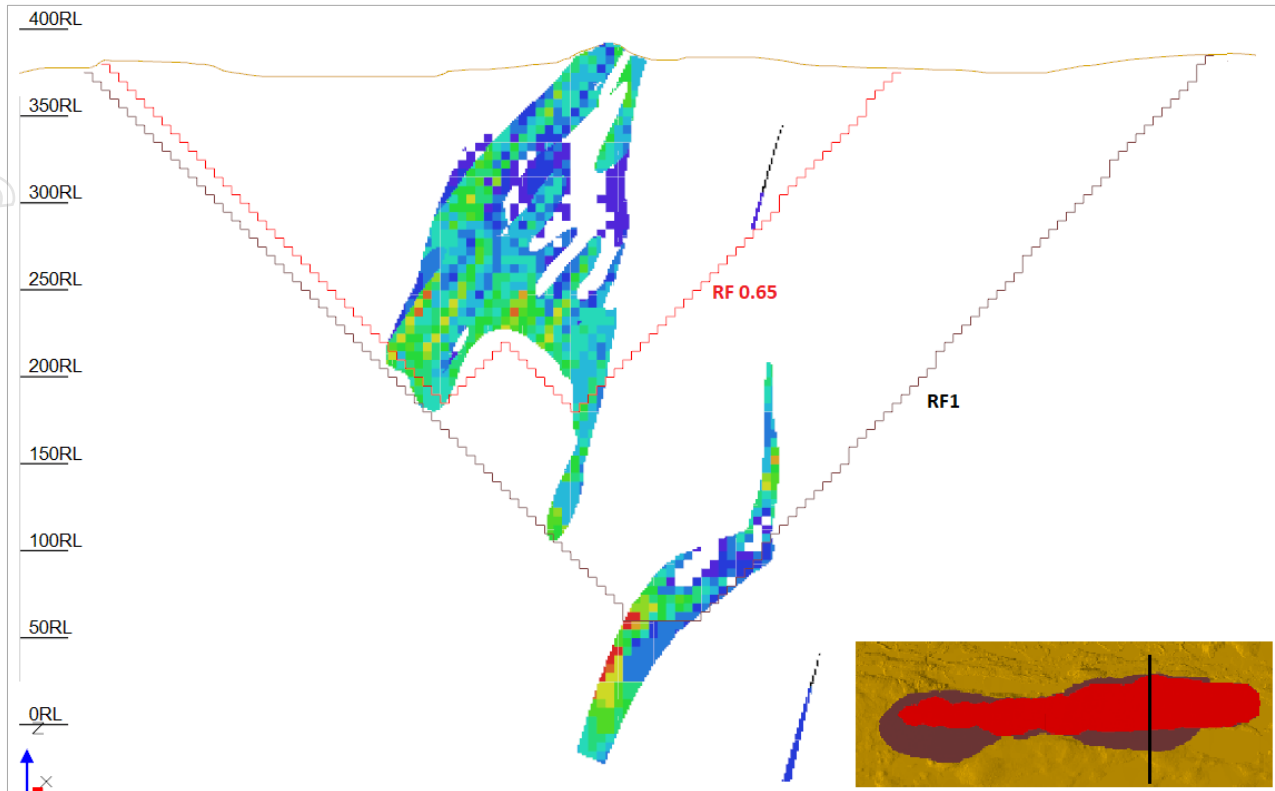


Figure 21: Pit Shell Isometric View Cross-section - East Side, Revenue Factor (RF) 0.65 vs RF1

The selected pit shell for RF 0.65 contains 52.3 Mt at an average grade of 1.13% Li_2O (after accounting for dilution and mineralized material loss) with a strip ratio of 3.1.

Open Pit Design

The pit will 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. Mineable resource will be transported in 100 t class trucks, while 200 t class trucks will be used to transport waste rock material.

Rock mass characterization and laboratory testing data was obtained from geotechnical diamond drilling performed in April 2024. Based on the preliminary geotechnical assessment, a highwall inter-ramp slope of 45° to 47° is recommended for the final pit walls. The recommended bench heights are 10 m with bench face angle of 70° to 75° . Table 7 shows the parameters used for pit design.

Table 7: Pit Design Parameters

Design Parameters	Unit	Value
Wall Parameters		
Bench height	m	10
Berm width	m	6.5
Bench face angle	°	70-75
Inter ramp angle	°	45-47
Maximum vertical without ramp or geotechnical berm	m	180
Geotechnical berm width	m	18
Ramp Parameters		
Ramp width – single lane	m	20
Ramp width – double lane	m	28
Minimum mining width	m	40
Maximum vertical with single lane	m	50

Figure 22 shows a plan view of the final stage pit design completed according to the parameters listed above and with the guidance of shells generated from the optimization process. The pit is divided into four stages based on operational and economic considerations.

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 dam wall 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 dam wall. This dam wall and diversion channel will be constructed in the pre-production year.

The final pit has a footprint of approximately 2.8 km by 425 m and mines to a depth of approximately 200 vertical metres into fresh rock. The final pit contains 50.5 Mt of mineralized material at an average grade of 1.11% Li₂O. This represents 56% of the total mineralized material mined by the open pit and the underground. The balance of 44% of mineralized material sourced from the underground (39.8 Mt at an average grade of 1.54% Li₂O).

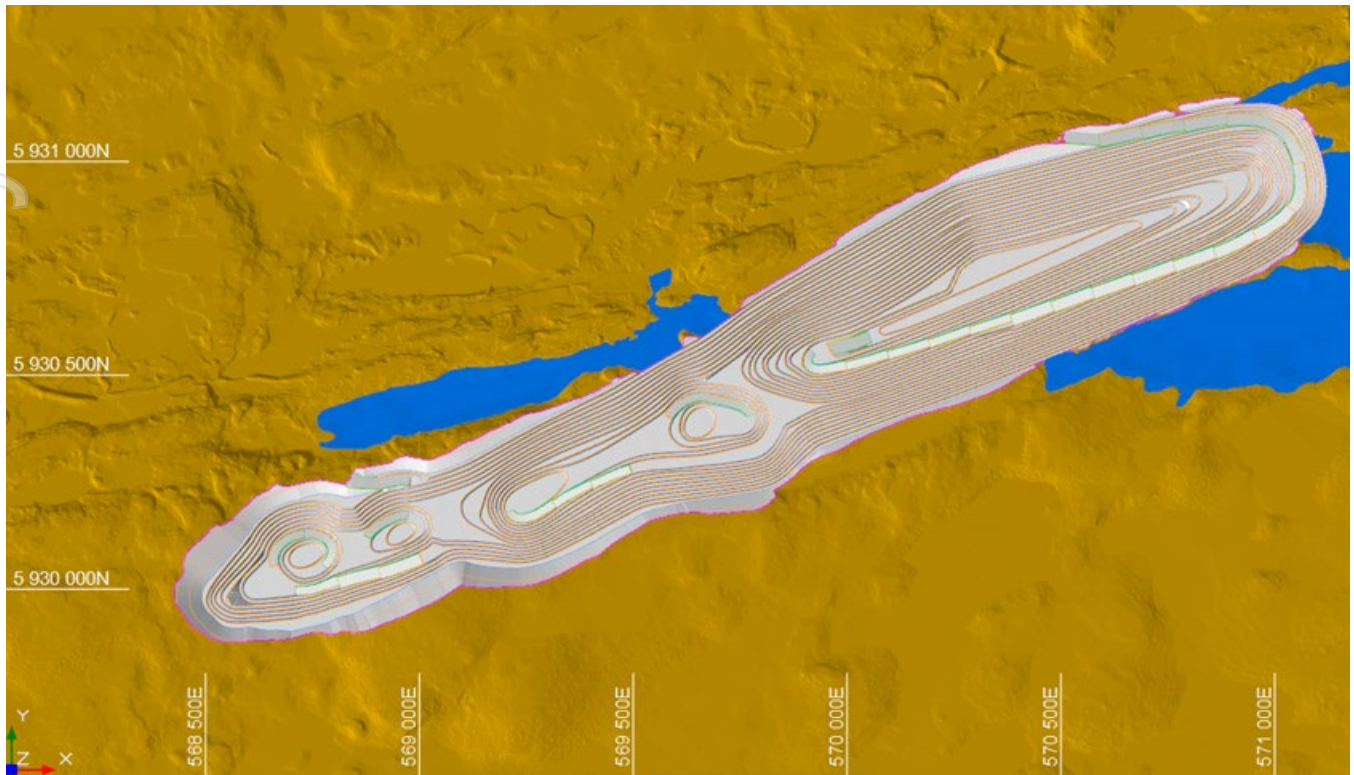


Figure 22: CV5 Final Pit Design

Table 8 summarizes the pit's physical shape within each stage design. Note that the Mineral Resource reported for the respective stage design is post allowances for mining dilution and mining losses.

Table 8: Open Pit Mine Physicals

OP Designs	Mineralized Material Tonnes (Mt)	Waste Tonnes (Mt)	OVB Tonnes (Mt)	Avg Li ₂ O Grade (%)	Total Material (Mt)	Strip Ratio (t/t)
Phase 1	2.7	11.2	7.1	1.15%	21.1	6.69
Phase 2	8.9	19.8	0.3	1.05%	29.0	2.25
Phase 3	8.4	27.7	2.3	1.08%	38.4	3.58
Phase 4	30.5	113.8	6.4	1.14%	150.9	3.94
Total	50.5	172.5	16.0	1.11%	239.3	3.74

Note: All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

The Stage 1 pit is mined over Years -1 to 2, the Stage 2 pit mined over Years 1 to 8, the Stage 3 pit mined over Years 1 to 9, and the Stage 4 pit mined over Years 5 to 18. The strip ratio in Stage 1 is high relative to the other stages; however, the grade of the mineralized material within Stage 1 is materially higher than the other stages. The net effect is that the margin per tonne within Stage 1 is still higher than the other stages, making this stage the focus of early mining for best Project economics.

Open Pit Mine Schedule

The open pit mine schedule has been completed in parallel with the underground mining schedule such that both mining schedules, whilst honouring their respective production parameters, work in unison to achieve the overall desired final spodumene concentrate target(s) for the Project. In relation to the open pit mining schedule, the following inputs were used to complete the schedule:

- Production ramp up is scheduled to meet the following processing plant throughputs:
 - 74% of Phase I processing plant capacity in Year 1 (1.85 Mt);
 - 99% of Phase I processing plant capacity in Year 2 (2.475 Mt);
 - 100% of Phase I and 74% of Phase 2 in Year 3 (4.35 Mt);
 - 100% of Phase I and 99% of Phase 2 in Year 4 (4.975 Mt);
 - 100% for Year 5 onward (5.0 Mt).
- Target concentrate production for the site of 800 kt SC5.5 per year at full production (Year 5+);
- Maximum plant feed, sourced from the open pit and the underground, of 5 Mt per year;
- Mining production ramps up over 4 years;
- Maximum yearly vertical advance rate of 80 metres.

The resulting mining schedule for the open pit is displayed on Figure 23 and Figure 24. The results of the combined OP and UG schedule can be seen within the section 'Combined Mining Production Schedule'. The open pit is mined over 19 years reaching its maximum production rate of 16 Mtpa after 4 years. The production significantly decreases during the 13th year when the strip ratio drops significantly due to the stripping in Phase 4 being mostly completed.

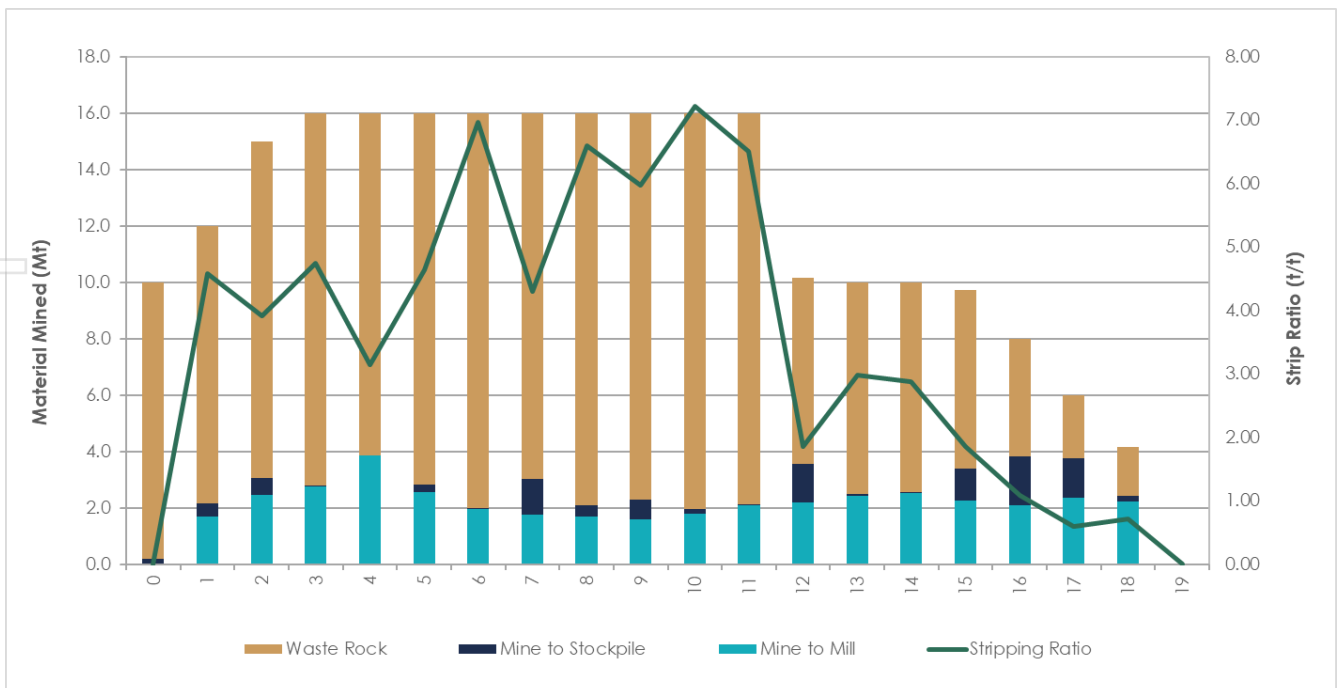


Figure 23: CV5 Pit – Material Mined

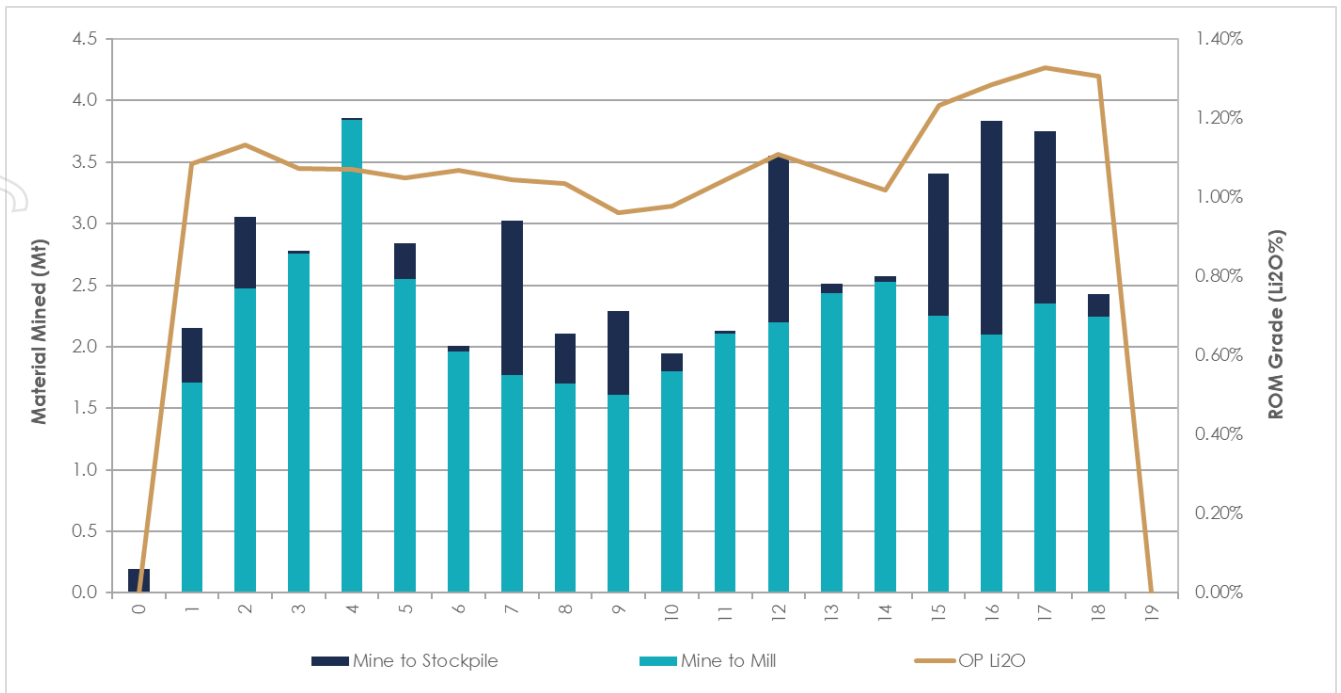


Figure 24: CV5 Pit – Mineralized Material Mined

Underground

The underground mining method selected for the CV5 Pegmatite is the traditional long-hole stoping method for 96% of the material and long-hole longitudinal retreat method for the remaining 4% of material. The dip, thickness and continuity of the spodumene pegmatite dykes is suitable to use this mining method. For the purpose of the PEA, it has been assumed that the underground mine design will be developed and completed by a specialized underground mining contractor.

Stope Optimization

A stope optimizer software was used to produce the optimal stope shapes. The economic and technical parameters considered are derived from preliminary scoping study investigation, benchmark information and a mining contractor quotation. A preliminary underground mining cost estimate of \$62.95/t plant feed has been used in calculating the cut-off grade. The other economic parameters used are consistent with the economic parameters of the open pit optimization. The underground cut-off grade used is 0.7% Li₂O.

As the underground mine is located under Lake 001, a crown pillar of 100 m has been assumed in the PEA. Additional geotechnical information and modelling will be required for the next phase of feasibility study, which may allow for this crown pillar thickness to be reduced. Stope dimension have been set to a maximum of 20 m x 15 m x 30 m (width, length, and height). Paste backfill will be used to fill primary stopes and ensure stability when mining secondary stopes.

The stope optimization process resulted in 10.3% dilution, which is caused by material below the cutoff grade being included in the stopes shapes. Additional external operational dilution was applied as part of the mine scheduling process to account for over-break when blasting. External dilution of 3% has been assumed for all stopes and 5% dilution from the paste backfill is added for the secondary stopes. Mining recovery has been set to 90%. The minimum thickness assumed for a stope is 3 m and the minimum pillar between two spodumene dykes is 6 m.

Based on the stope optimizations the total mineral resources mined by the underground, after dilution and recovered tonnes, is 39.8 Mt @ 1.54% Li₂O.

Underground Design and Mine Schedule

The underground mine is located northeast and along strike of the open pit, under Lake 001. A pillar of 75 m is maintained between the open pit and the underground design and will be recovered once the open pit mining is complete and it is safe to mine the stope near the pit wall. In the thickest part of the lithium spodumene dyke being mined, there could be up to seven stopes in length (or 140 m). The underground mine would be composed of nine pyramids to always ensure productivity. Figure 26 shows the nine distinct pyramids. The first pyramid is targeting the Nova Zone area, which contains the highest grade of the CV5 Pegmatite. Figure 27 to Figure 29 show example of tonnes and Li₂O grades within some stopes in the Nova Zone. The Nova Zone is located near surface, between 200 m and 500 m below the surface. The zone contains extremely high-grade stopes that may enable Patriot to be very competitive in the world's hard rock mining marketplace, as grades this high are rare. This zone is preferentially targeted in the underground mining sequence for much improved Project financial benefit. Accessing the Nova Zone offers a unique opportunity to mine stopes in excess of 2.0% grade – a relative competitive advantage to many other projects. This high-grade is characterized by large crystal structure which makes the material easily recovered by DMS techniques at relatively large crush size. By developing the open pit mine and the underground Nova Zone concurrently, a blended high feed grade can be realized. It is these characteristics, unique to the Nova Zone and to the CV5 Deposit that result in a competitive advantage for improved project benefit.

The mining sequence that follows the mining of the first pyramid is set according to ensuring the required grade and tonnage to blend with the mineral resource from the open pit. The pyramids are mined from the bottom to the top to ensure geotechnical stability and redistribute ground stress. Levels are designed at 30 m intervals. The underground mine is comprised of 14 levels and over 1,965 longhole stopes. The deepest level is approximately 500 m below surface.

Two portals will be constructed near the ROM pad that will provide access to two declines. One decline is designed as a service ramp for transporting gear and personnel throughout the mine and hauling waste materials to the surface. The second decline is for the sole purpose of mineralized material haulage. The intent is to have a trolley-assisted haulage ramp where automated electric trucks will carry mineralized material to the surface. This will improve the fleet's productivity, reduce ventilation demand, and improve safety for the underground workers. The haulage ramp will be connected to three 'ore passes' where all the mineralized material will be dumped. A third portal will be located in the bottom of the pit to connect with the south satellite zone once the pit is depleted. Chutes at the bottom of the ore passes will load 65-tonne mining trucks. Five ventilation raises will be necessary throughout the LOM to move fresh air into and out of the mine (Figure 25). Three ventilation raises are located on the main body while two additional raises are required for the south satellite zone. Figure 25 shows an overview of the underground mine design.

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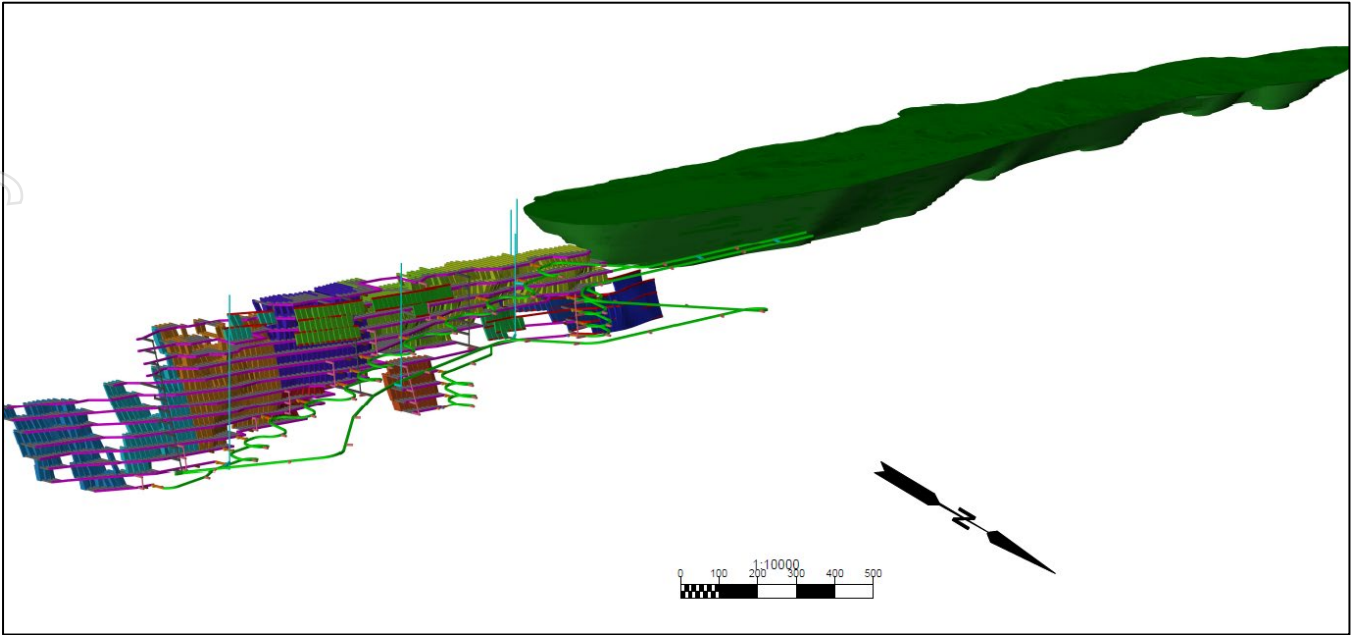


Figure 25: Isometric View of Open Pit and Underground Mine Design

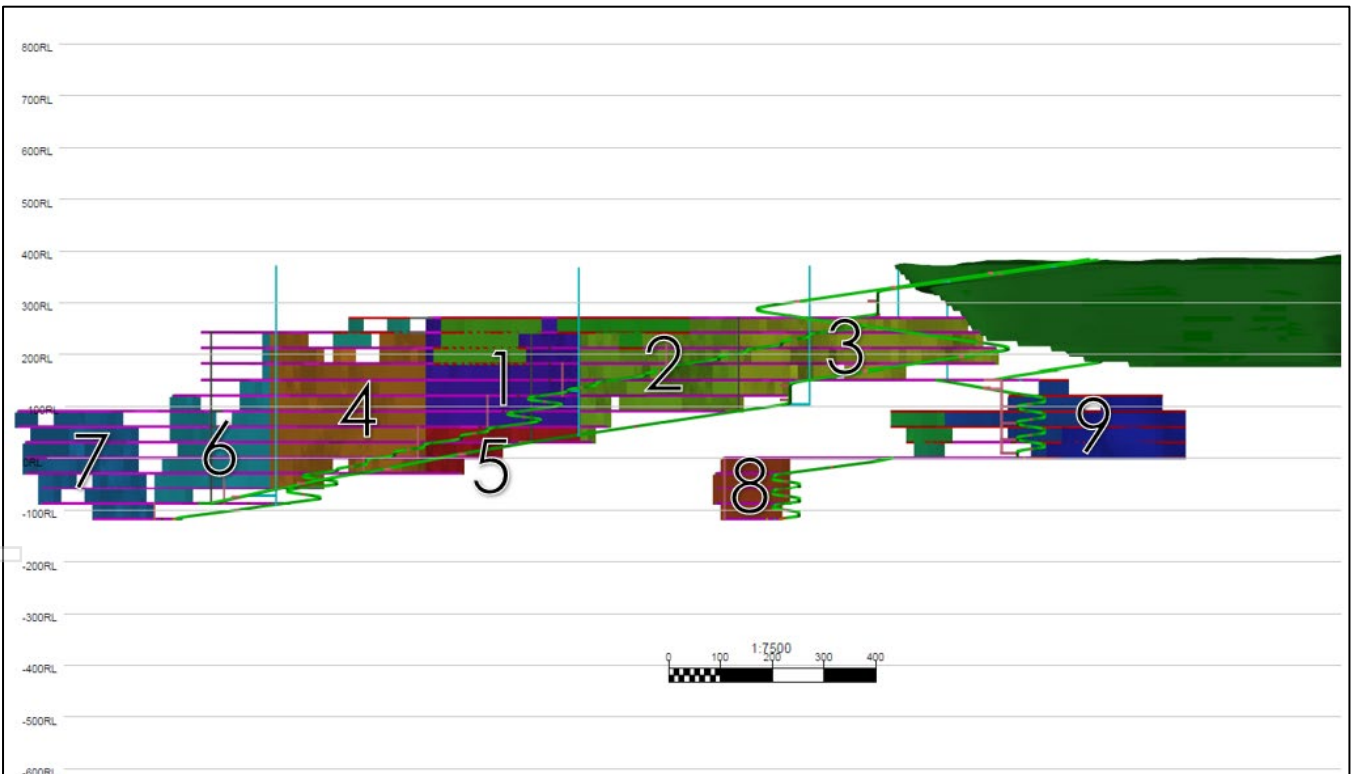


Figure 26: Underground "Pyramids" - Looking South

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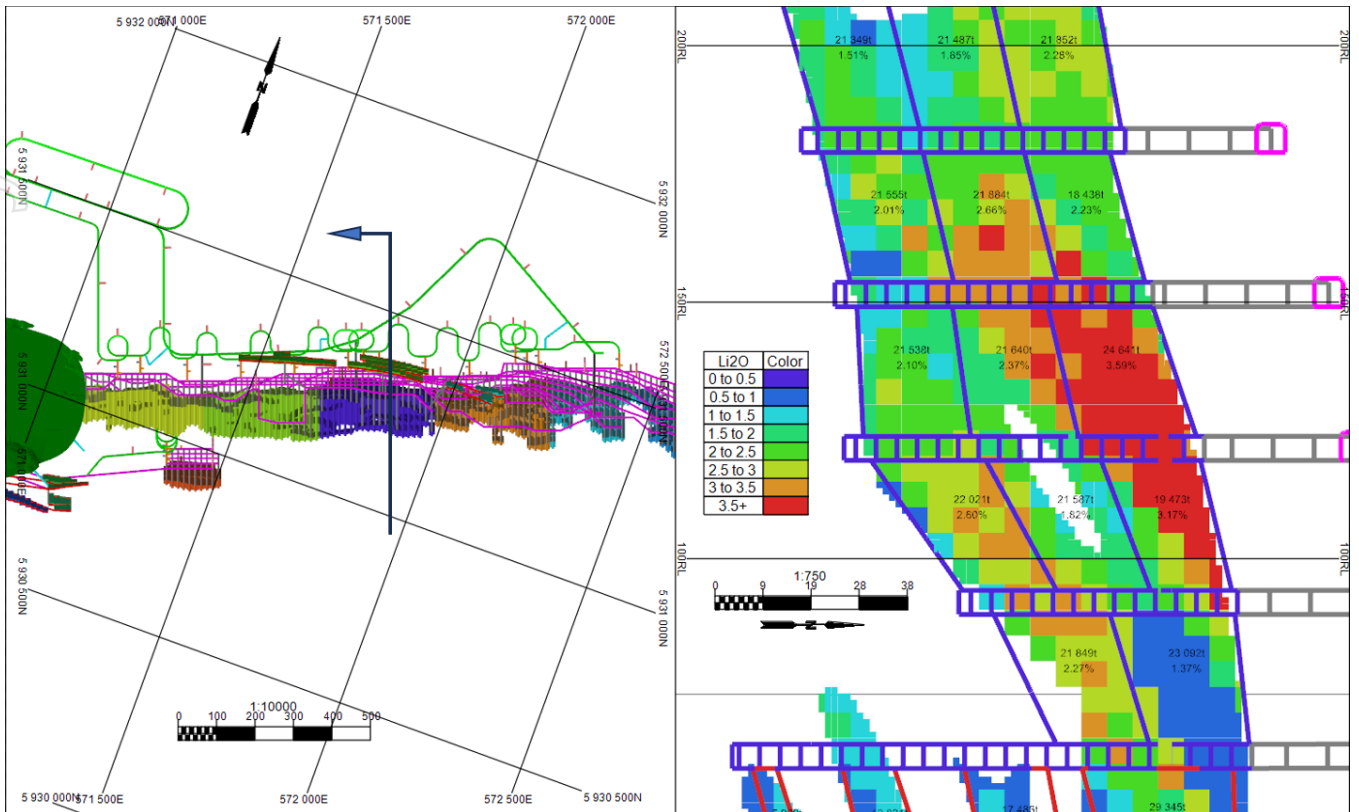


Figure 27: Example of Nova Zone Stopes Tonnes and Li₂O% Grade

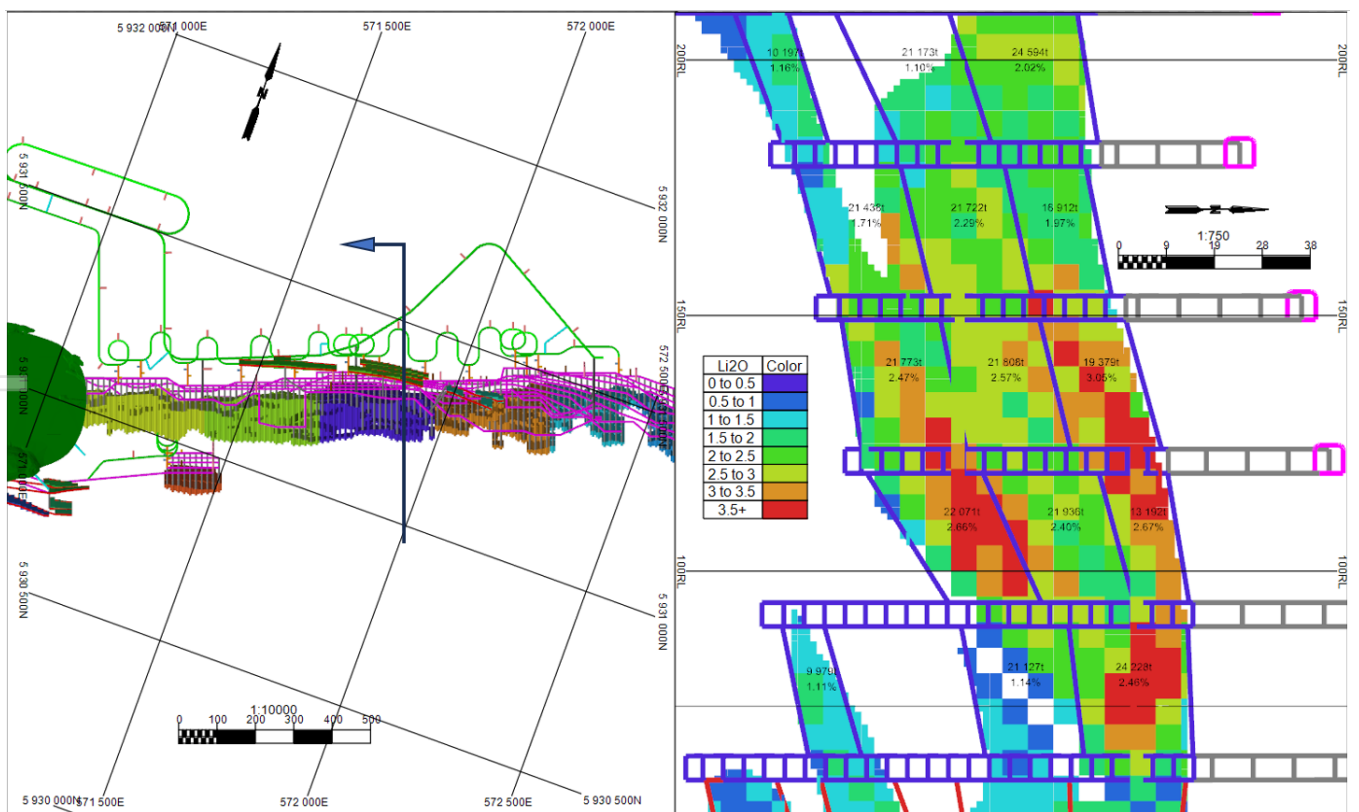


Figure 28: Example of Nova Zone Stopes Tonnes and Li₂O% Grade

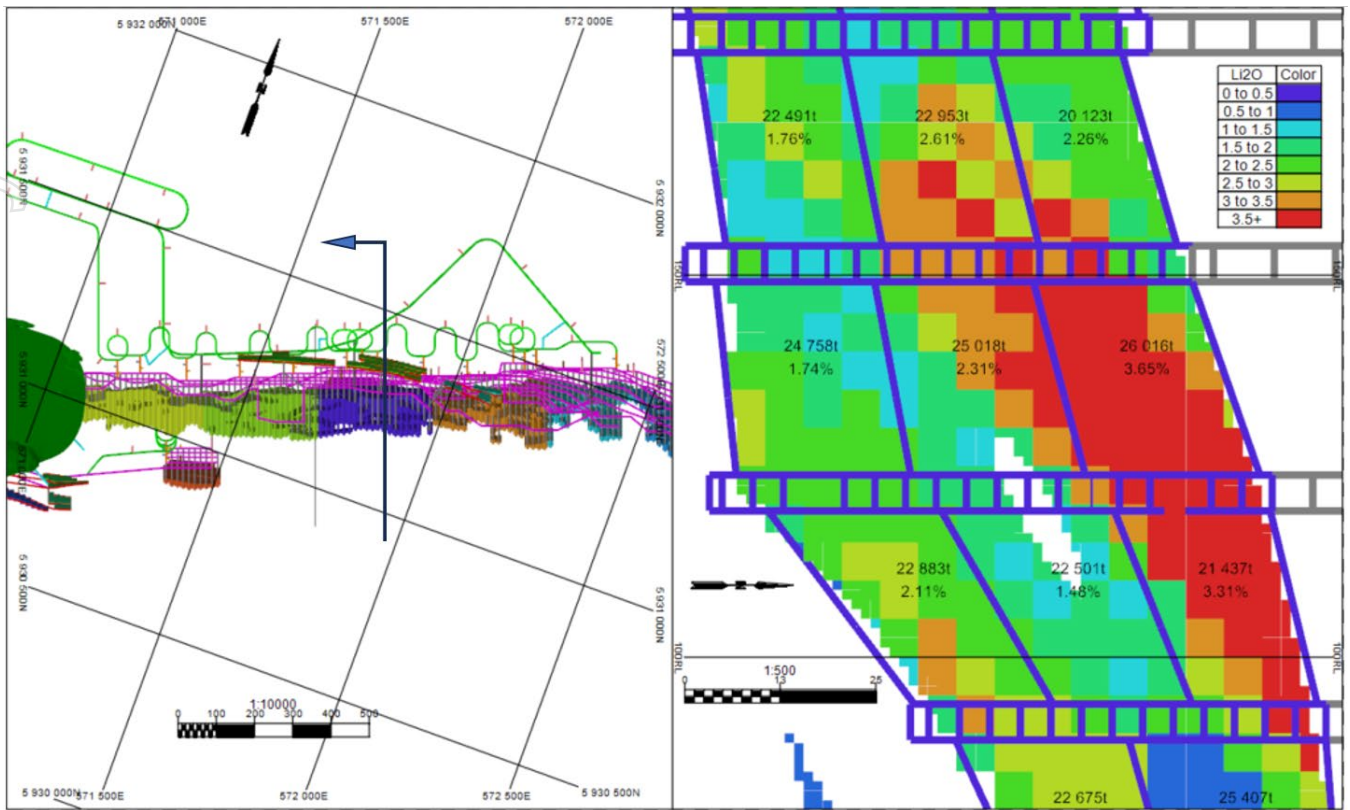


Figure 29: Example of Nova Zone Stopes Tonnes and Li₂O% Grade

All underground infrastructure required by law and operational needs were added to the underground mine design to reflect accurate development requirements and costing.

Since the stopes will need to be backfilled, a paste backfill plant is located on the surface near the processing plant. The plant will take a specific size fraction of the non-concentrate middlings and bypass (-0.65 mm) streams emanating from the process plant to produce the paste backfill, to send back underground as fill.

The underground mine's initial development will take approximately 16 months before the first stope is available for production. Production will then ramp-up over a period of 4 years to reach a maximum production rate of approximately 5,000 tonnes per day or approximately 2 Mtpa. The underground mine will produce mineralized material for an estimated 22 years, starting production at Year 3 and ending at Year 24. Full production will start at Year 5 until Year 19. Production will decrease significantly in the last 3 years, as the last stopes will be mined by longhole longitudinal retreat mining method, which is a less productive method. Also, as the pit's ramp system is used to haul material from the south satellite zone, the last stopes near the pit's wall will have to be mined last once the south zone is completed. Figure 30 and Figure 31 show an overview of the underground mining schedule.

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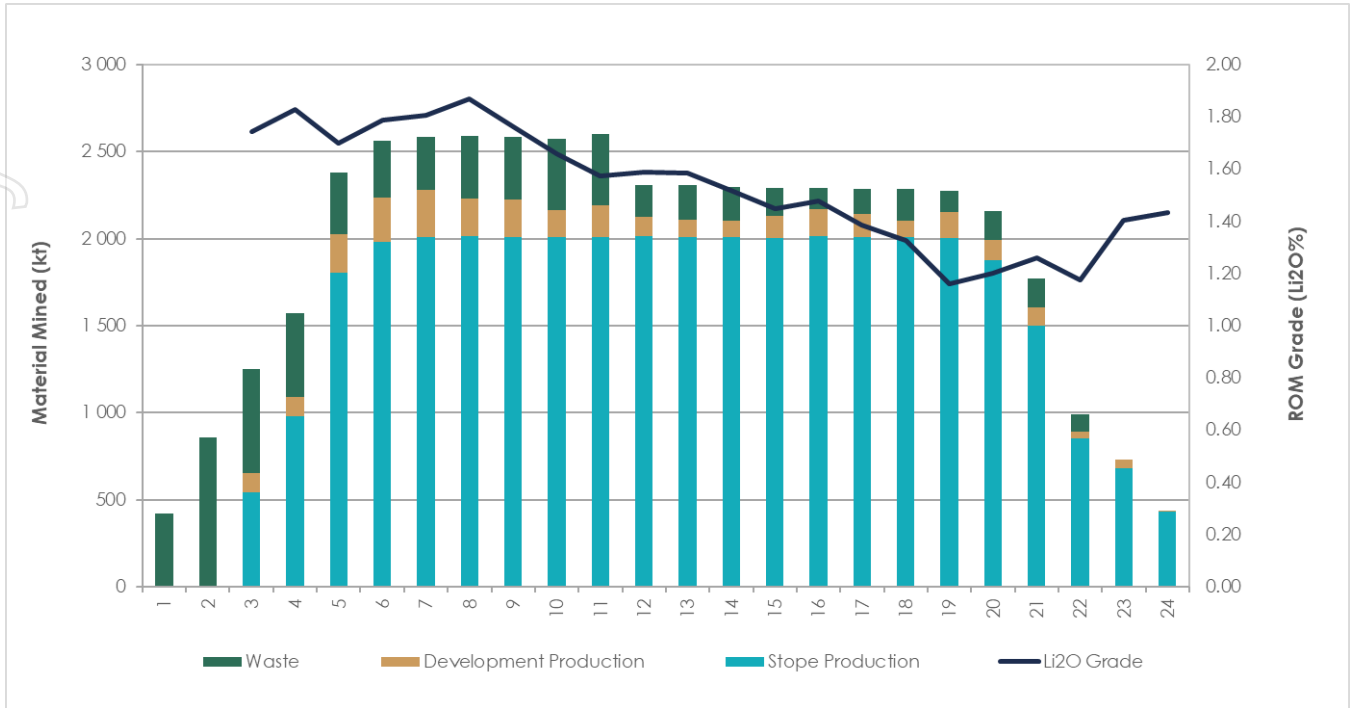


Figure 30: CV5 UG - Material Mined

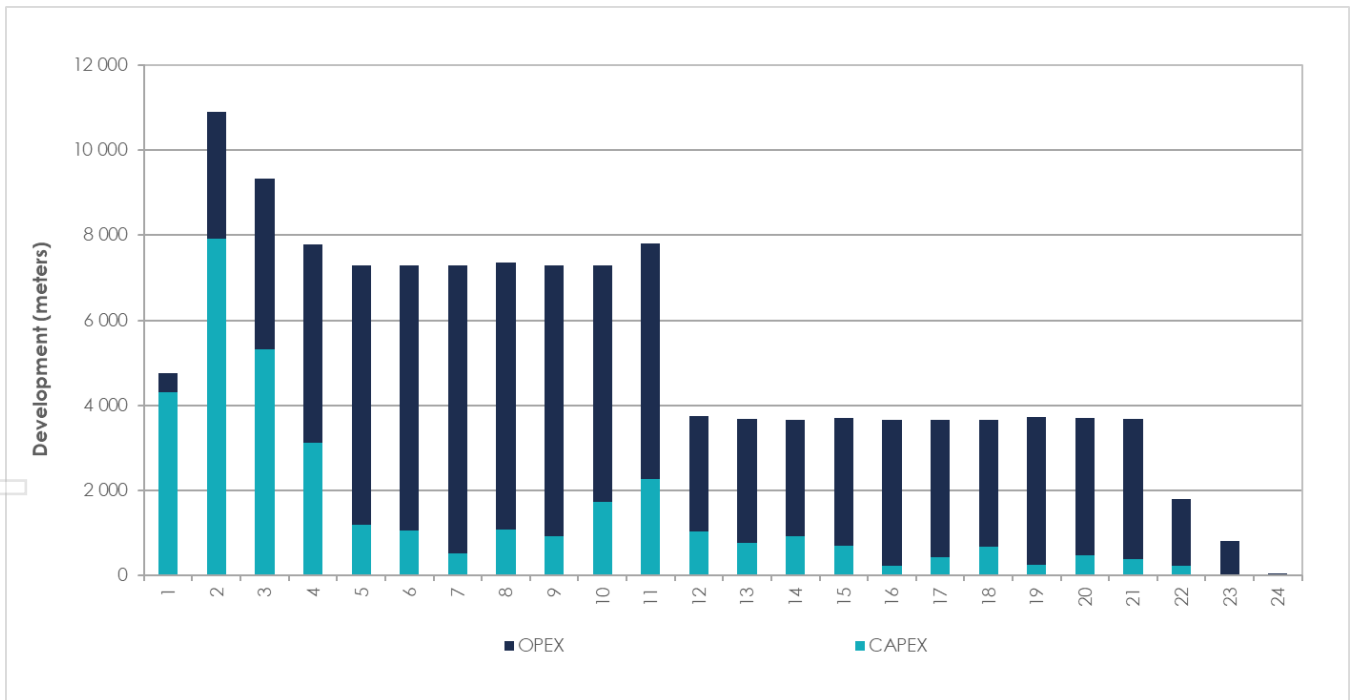


Figure 31: UG Mine Development Schedule

Combined Mining Production Schedule

The hybrid scenario has the benefit of accessing high-grade from the underground while having access to plenty of resource from the surface at a low strip ratio. The two mines provide a more balance feed grade that could be modify at any time if market condition changes.

The synergy of the two mines allows the site to produce a steady stream of concentrate at full production starting on Year 4 and lasting 15 years as seen on Year 18. Concentrate output starts dropping on Year 20 as the pit's mineralized material is exhausted and the underground mine production decreases. Figure 32 and Figure 33 show the schedule for mineralized material mined and mill feed. Figure 32 shows the combine mineralized material mining schedule.

When the average grade of the mill feed going above 1.26% Li_2O , the mill's throughput needs to be reduced to keep the concentrate production at 800,000 tonnes of concentrate. Mill throughput needs to be reduced between Years 5 and 9 when the high-grade from the Nova Zone is being mined and between Years 15 and 18 when higher grade from the bottom of the pit is being mined as seen in Figure 33.

Figure 34 shows the concentrate production schedule. The mill feed and concentrate production slowly increase from Years 0 to 3 as the site's processing plant is being expanded. The small dip in concentrate production in Years 10 and 11 is due to the underground mine average grade decreasing as the Nova Zone is exhausted. The open pit is also in a period of heavy waste stripping which decreases mineralized material mining. Figure 35 shows the yearly mineralized material mined by resource classification for the combined open-pit and underground mines. At least 70% of the material mined is classified as indicated for the whole length of the full production period (Years 3 to 17).

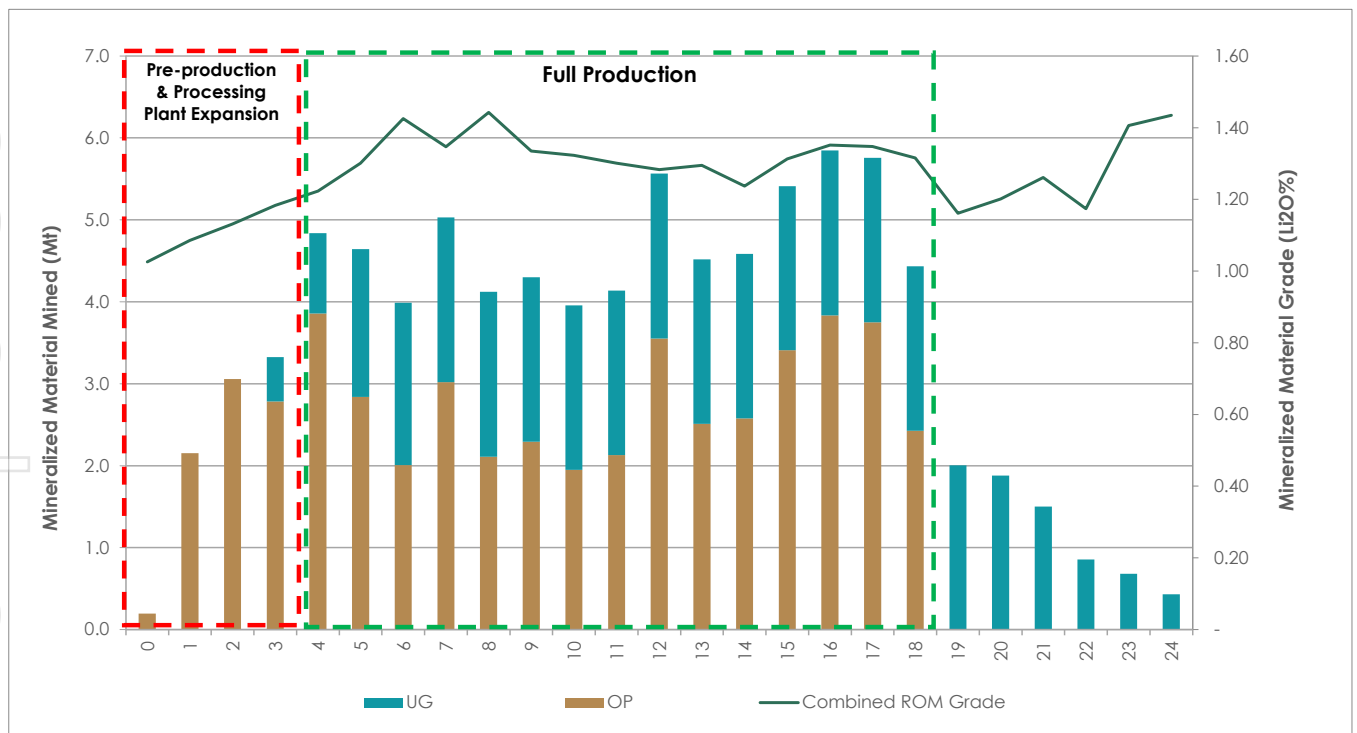


Figure 32: Mineralized Material Mining

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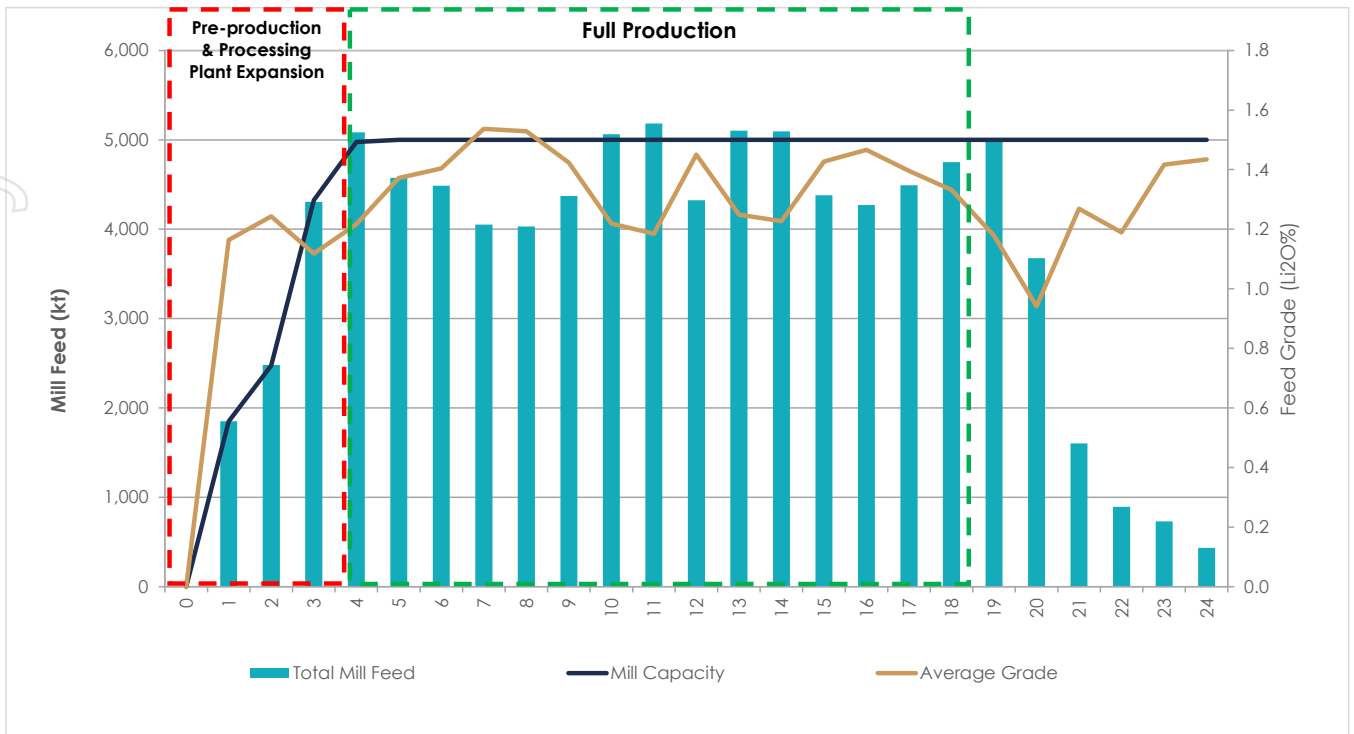


Figure 33: Processing Plant Feed & Grade

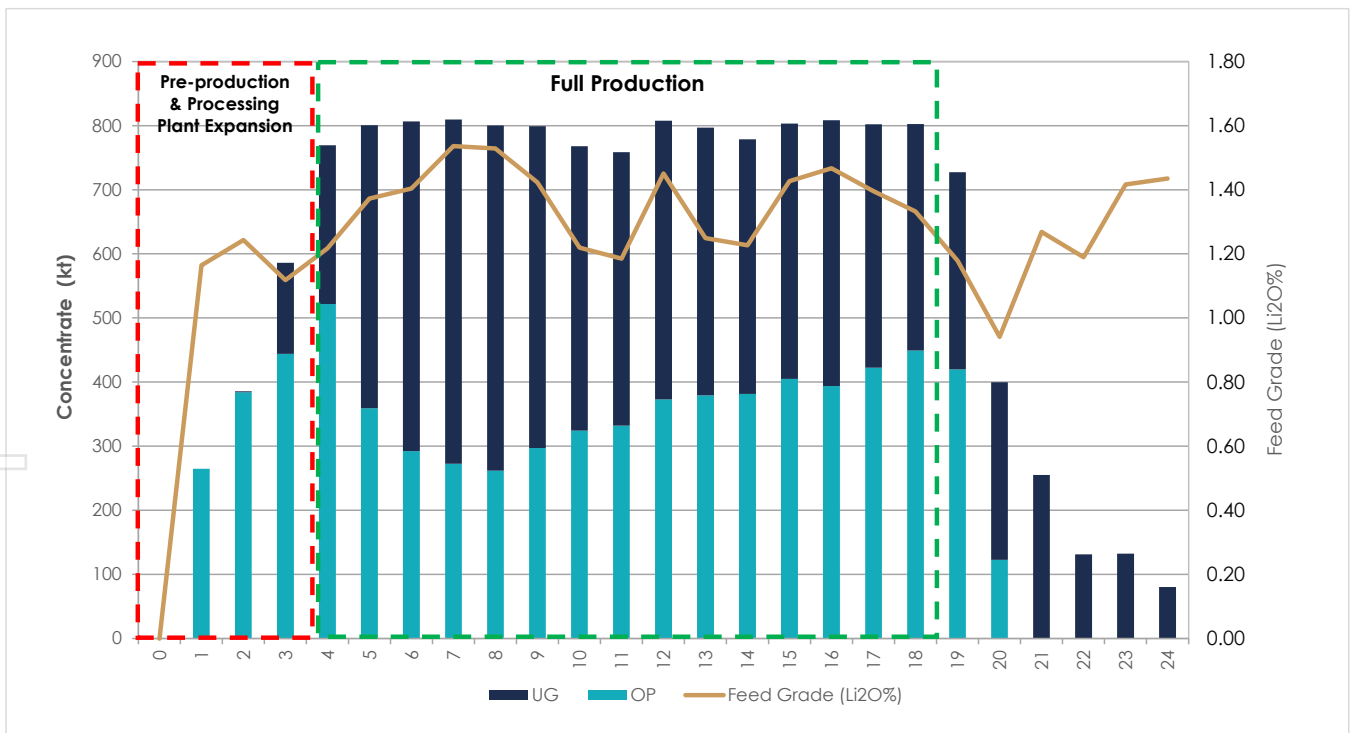


Figure 34: Concentrate Production (SC 5.5%)

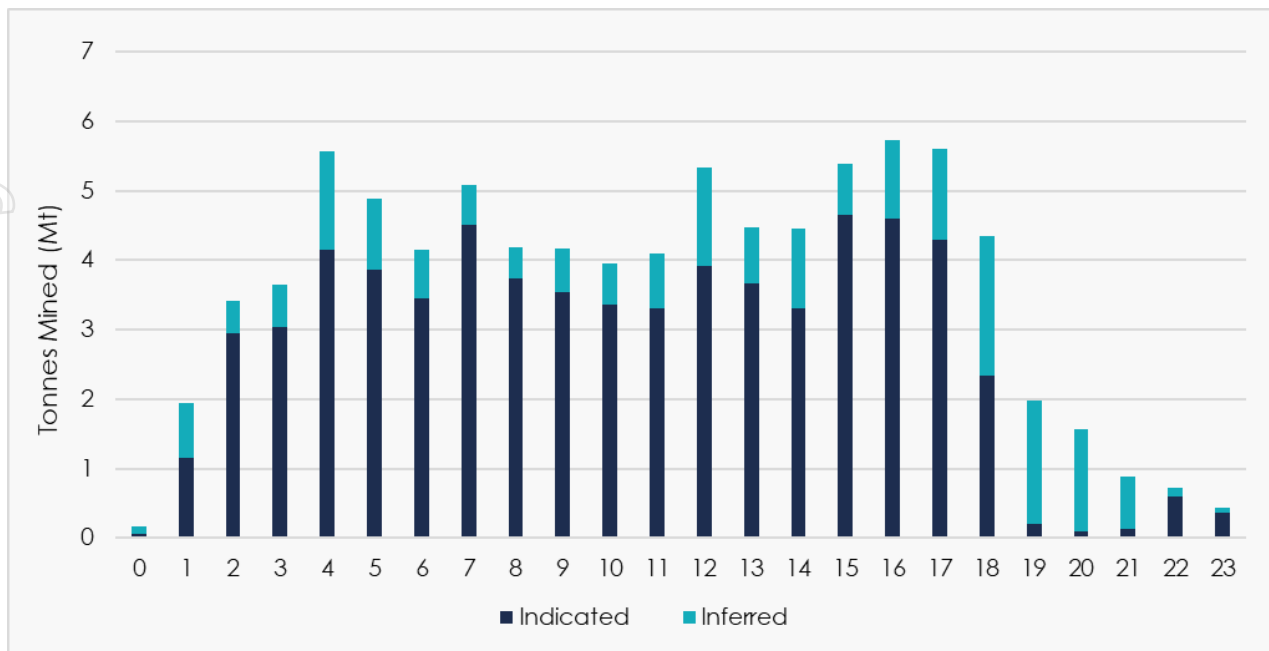


Figure 35: Yearly Mineralized Material Mined (OP/UG Combined) By Classification

METALLURGICAL TEST WORK & PROCESSING AND RECOVERY

Metallurgical Test Work

The Company engaged Primero and SGS Canada in 2023 to assist with a metallurgical test work program for the CV5 Deposit. Test work was completed at the SGS Lakefield Ontario facility. The scope of the program included both mineralogical characterization and metallurgical test work. Both SGS and Primero are independent of the Company and are industry recognized in lithium pegmatite processing. The objectives of the metallurgical test work program being to confirm the dominant lithium bearing mineral species for CV5 and evaluate the beneficiation performance of the deposit using a conventional spodumene DMS flowsheet. Target concentrate specifications were set at >5.5% Li₂O and <1.2% Fe₂O₃.

Mineralogical characterization consisted of TIMA-X (Quantitative SEM), Electron Probe Micro-Analysis (“EPMA”), Laser Ablation by Inductively Coupled Plasma Mass Spectrometry (LA by ICP-MS), X-ray diffraction (“XRD”) analysis, and chemical assays. Metallurgical test work included Heavy Liquid Separation (“HLS”) and DMS pilot scale test work. Preliminary flotation test work was completed on the DMS bypass fraction and DMS “middlings” (i.e. second stage DMS floats).

Test work completed to date indicates that the CV5 Pegmatite can be processed by DMS-only given the favourable metallurgical test work results. Test work revealed that a top size of 9.5 mm reporting to a gravity separation process provided relatively consistent results in terms of concentrate Li₂O grade and Li₂O recovery.

Testing of CV5 was done both in terms of variability across region, throughout the width of the dykes (i.e. at contact with host rock, in the centre of formation) as well as testing of the host rock separately (to properly gauge impacts of host rock dilution on metallurgical performance). The broad range of spatial locations with a range of gangue mineral assemblages, lithium and iron head provides thorough testing of the material. There is a strong indication that the positive HLS recoveries can be expected from other coarse spodumene samples taken from CV5.

Gravity test work included 24 pegmatite composites were generated from drill core from the CV5 Pegmatite, representing a combined comprising of 631 kg of quarter-core NQ and 707 kg half-core NQ (see Figure 37 for metallurgical results). Additionally, five composites were made of different host rock types identified around the CV5 material, corresponding to 345 kg half-core NQ.

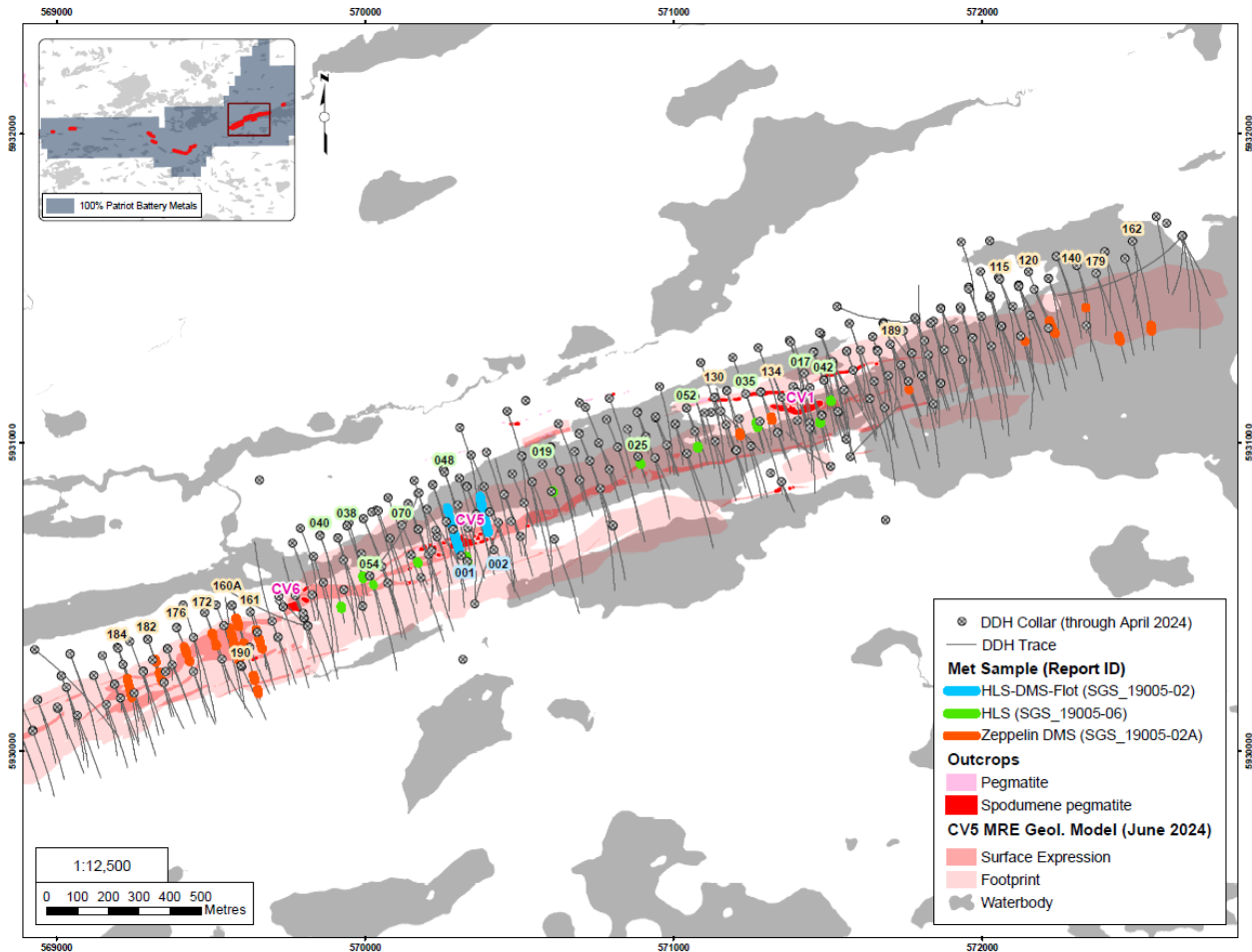


Figure 36: Metallurgical Drill Core Map for CV5

Although not considered in the CV5 region, five pegmatite composites were generated from drill core from the CV13 Pegmatite, representing a combined comprising of 42.7 kg of quarter-core NQ. Results were both promising and consistent with CV5 results, with global lithium recoveries of 75% to 80%. These preliminary results offer future exploration potential.

Summary of the test work and findings:

- Test work supports a DMS-only process flowsheet to produce a spodumene concentrate grade of >5.5% Li₂O and <1.2% Fe₂O₃. Test work Li₂O recoveries of 70% to 85% were achieved for HLS test work (for feed grade in the range 1.0% to 1.5% Li₂O respectfully).
- Test work completed on CV5 includes three DMS tests and 24 Heavy Liquid Separation (“HLS”) and magnetic separation tests. The HLS and magnetic separation tests were conducted using 24 composites from across the CV5 Deposit.
- Coarse spodumene was found to be the dominant lithium mineral species across all samples with minor quantities of lepidolite (values range between 0% to 4.3% with an average of 0.98%) and moderate quantities of mica (values range between 0% to 17.1% with an average of 6.50%) observed.

- Three pilot DMS tests (cyclone diameter of 250 mm) were completed. Table 9 summarises the global Li_2O feed grades (before fines screening), global lithium recoveries and the Li_2O and Fe_2O_3 grades of the concentrates achieved. These results strongly support adopting a DMS-only process flowsheet.

Table 9: Pilot DMS Results

DMS Feed Li_2O Grade (%)	Global DMS Lithium Recovery (%)	Concentrate Li_2O Grade (%)	Concentrate Fe_2O_3 Grade (%)
1.01	77.4	5.64	0.55
1.07	79.0	5.77	0.62
1.16	69.4	6.21	0.60

- Fe_2O_3 grades in HLS concentrates were in the range 0.52% – 1.79% and after magnetic separation was applied to 15 of the 24 composites, all concentrates were <1.2% Fe_2O_3 .
- The 24 CV5 HLS variability test results were adjusted to more appropriately represent recoveries expected in an operating DMS plant. After fitting a trend to this data, it indicates:
 - Recoveries of 70% – 75% Li_2O expected at feed grades above 1.4% Li_2O ;
 - Recoveries of 60% – 70% Li_2O expected at feed grades of 0.9% – 1.4% Li_2O ;
 - Recoveries of 50% – 60% Li_2O are possible at feed grades of 0.7% – 0.9% Li_2O .
- Flotation was performed on sample composed of DMS middlings (second stage DMS floats) combined with the DMS bypass fraction (i.e. -0.85 mm). The global Li_2O recovery was improved from 79.0% (the DMS only recovery) to 89.1% (DMS followed by flotation). Flotation spodumene concentrate returned a grade of 5.49% Li_2O and 0.40% Fe_2O_3 . Flotation shows promise to potentially be added to a DMS only plant at some stage in the future once operational.
- Some samples assayed contained elevated grades of Ta_2O_5 (with values as high as 300 ppm). There is further work warranted to assesses if tantalum can be recovered from any of the non-product streams of the DMS plant.

The test work results for both HLS (from CV5 and CV13) and DMS (from CV5) are shown in Figure 37. The concentrate grades achieved are all greater than 5.5% Li_2O and lower than 1.2% Fe_2O_3 . All tests were performed on samples that had a 9.5-mm top size. Three pilot scale DMS tests were conducted in 2023 and 2024, which resulted in lithium recoveries of 77.4%, 79%, and 69.4% and concentrate Li_2O grades of 5.64%, 5.77%, and 6.21% respectively, for feed Li_2O grades of 1.01%, 1.07%, and 1.16% respectively. The diameter of the cyclone was 250 mm. The concentrate generated from one of the DMS tests is shown in Figure 37.

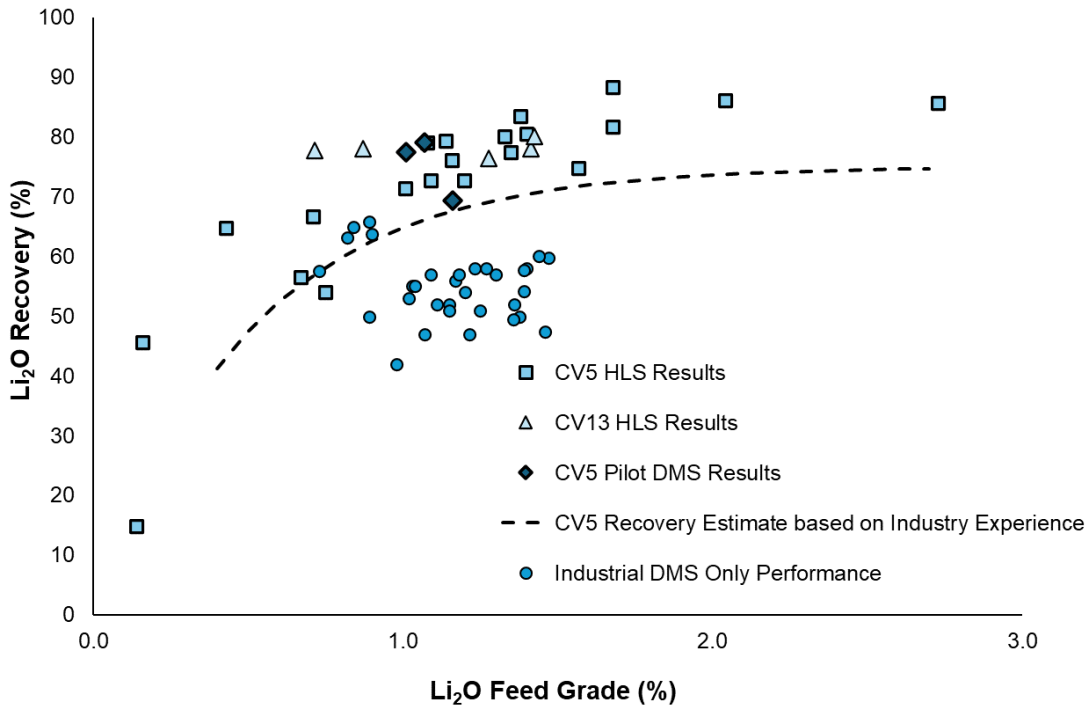


Figure 37: Metallurgical Test Work Recovery Results & Industry Based Recovery Estimates for 3 x Size Range DMS Process Plant

The lithium recovery expected from a three-size range, DMS concentrator treating material 9.5 mm to 0.65 mm is shown in Figure 38. The recovery is deemed to be a relationship to the concentrators Li₂O feed grade. Expected concentrator recoveries are lower than test work results based on scale-up factors that are driven by the effects of both larger diameter cyclones and the crowding effect seen in the DMS sinks. This variation between laboratory test work results and those achieved in operating plants has, to date, been observed within the industry with respect to operating spodumene DMS concentrators. For reference, lithium recoveries achieved by other DMS-only concentrators are shown for reference ('Industrial DMS Only Performance' in Figure 37). The project's higher expected recovery is due both the quality of the material (large spodumene grains with a narrow grain size distribution) and the three size range DMS plant (which lessens the impact of particle size effect in the DMS process).



Figure 38: Final Concentrate Product Generated from the CV5 Pegmatite via DMS

Recommendations for the next steps in the test work program are:

- Fines bypass processing can increase the recovery of the project (i.e. via flotation). Due to the high recovery of the DMS-only process, further assessment of the recovery improvement and its associated costs (i.e. Capex and Opex) would need to be assessed to ascertain the feasibility of this processing step. If determined to be attractive, the process step would be added after start-up of the DMS-only flowsheet as to not hinder the typically fast start-ups associated with DMS-only operations. Further flotation test work is planned within the next phase of study.
- Further work directed at the recovery of tantalite will be completed as part of the next phase of study work.
- Due to the width and orientation of the CV5 Pegmatite lenses, the expected dilution of the plant feed is expected to be relatively low. However, there may be opportunities to maximize the extraction of spodumene concentrate from the deposit if parts of the deposit with higher dilution are directed to an ore sorting processing solution. Ore sorting test work is planned for the next phase of test work.

Processing and Recovery

The process flowsheet adopted for the PEA, based on the metallurgical testwork, assumes a three-size range, DMS - only flowsheet. This flowsheet was chosen due to its relative simplicity, its attractive ramp up from commissioning, and high lithium recoveries that were achieved in the testwork.

The process plant is designed to process 5 Mtpa of run of mine (“ROM”) feed with an average life of grade of 1.31% Li₂O (resulting in a corresponding Li₂O recovery of 69.5%) to produce an average of 827,530 tpa of spodumene concentrate with a grade of 5.50 wt.% Li₂O.

The design adopted for the PEA is comprised of two parallel plants of 2.5 Mtpa. The design is based on the Company’s execution strategy, which is to install a process plant feed capacity of 5 Mtpa through staged production increases. Note that the 2.5 Mtpa design adopted has already been used successfully on a global scale within the industry.

The process flowsheet, illustrated by the simplified flowsheet in Figure 39, includes firstly a crushing plant, followed by a DMS processing plant, and finally dewatering prior to the various output streams reporting to their respective handling areas. The crushing plant involves three stages of crushing with the last stage of crushing being a closed circuit with a 9.5 mm screen. The crushed -9.5 mm product reports to a crushed feed stockpile. Material is reclaimed from the crushed feed stockpile via feeders under the stockpile and then screened into four streams of 9.5 mm to 4 mm, 4 mm to 1.5 mm, 1.5 mm to 0.65 mm, and -0.65 mm.

The 9.5 mm to 4 mm, the 4 mm to 1.5 mm and the 1.5 mm to 0.65 mm streams report to the coarse DMS, fine DMS and the ultrafine DMS processing circuits respectively. For the coarse DMS circuit, the first stage of DMS generates a lower density fraction that reports directly to tailings handling. The higher density fraction of this first stage reports to the second stage of DMS, which produces a higher density concentrate fraction that is directed to the magnetic plant (refer below), and a lower density lithium bearing ‘middlings’ fraction. The coarse DMS ‘middling’ fraction is directed to a re-crush circuit where the material is crushed to -3.3 mm followed by screening at 0.65 mm. The 3.3 mm to 0.65 mm is then processed via a dedicated DMS circuit, producing concentrate that reports to the magnetic plant, and a tailings stream. The -0.65 fraction reports to tailings dewatering.

The fine and ultrafine DMS circuits both have a single stage of DMS processing. The higher density fraction is a lithium rich stream that is directed to a magnetic plant (refer below) while the lower density material is directed to tailings handling.

The 'bypass' fraction, being the -0.65 mm from the DMS preparation section of the plant (immediately preceding the crushed feed stockpile) and the re-crush circuit screen undersize, is collected and directed to a thickener to be dewatered. The thickener underflow reports directly to a belt filter.

The magnetic separation circuit removes the minerals with iron contaminants by using high intensity magnetic fields to ensure that the final concentrate specification does not exceed the final iron impurity target value (i.e. $\text{Fe}_2\text{O}_3 < 1.2 \text{ wt.}\%$). The +2.9 SG material from all three DMS circuits (i.e. coarse, fine and ultrafine) are conveyed to the magnetic separation circuit. The coarse concentrate is fed to a screen with a 6.3 mm cut size. The screen oversize (+9.5 mm to 6.3 mm), being too coarse in size to effectively be processed with wet belt magnetic separators, is directed to the final concentrate. The screen undersize is fed to the coarse wet belt magnetic separator. The DMS concentrates from the fine and ultrafine circuits each report to dedicated wet belt magnetic separators. The magnetic fractions from the three units are dewatered via a screen. The dewatered screen oversize is conveyed to the tailings handling piles. The non-magnetic fractions, considered final concentrates, are also dewatered with screens and then conveyed to a concentrate stockpile. Final concentrate is handled with a front-end loader for the purpose of loading road trains for transport off site.

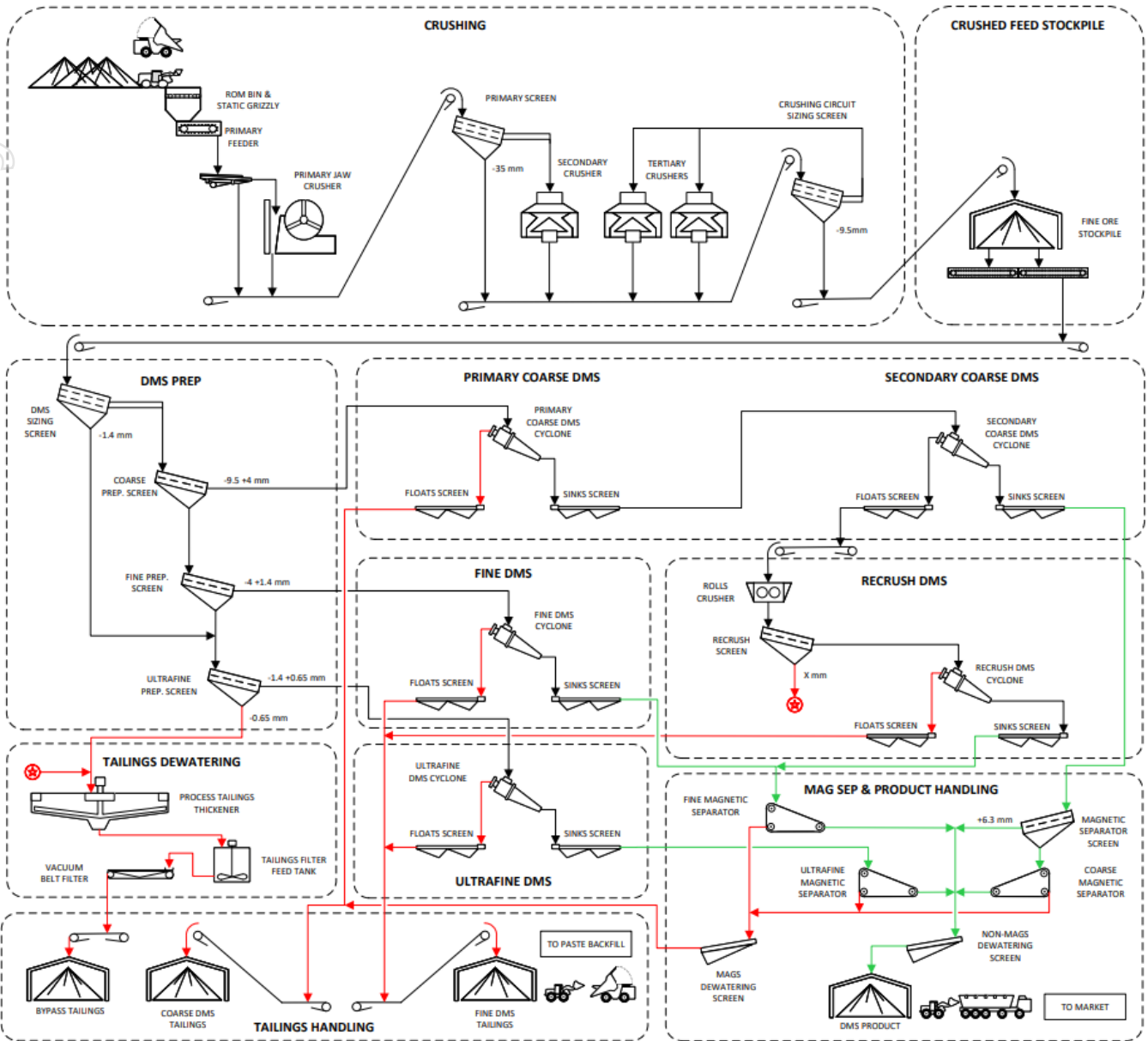


Figure 39: Simplified Process Plant Flowsheet

SITE INFRASTRUCTURE

General main site infrastructure is shown in Figure 40, while Figure 41 provides a view of the possible power line route vs. the existing Exploration Camp and potential new mine site.

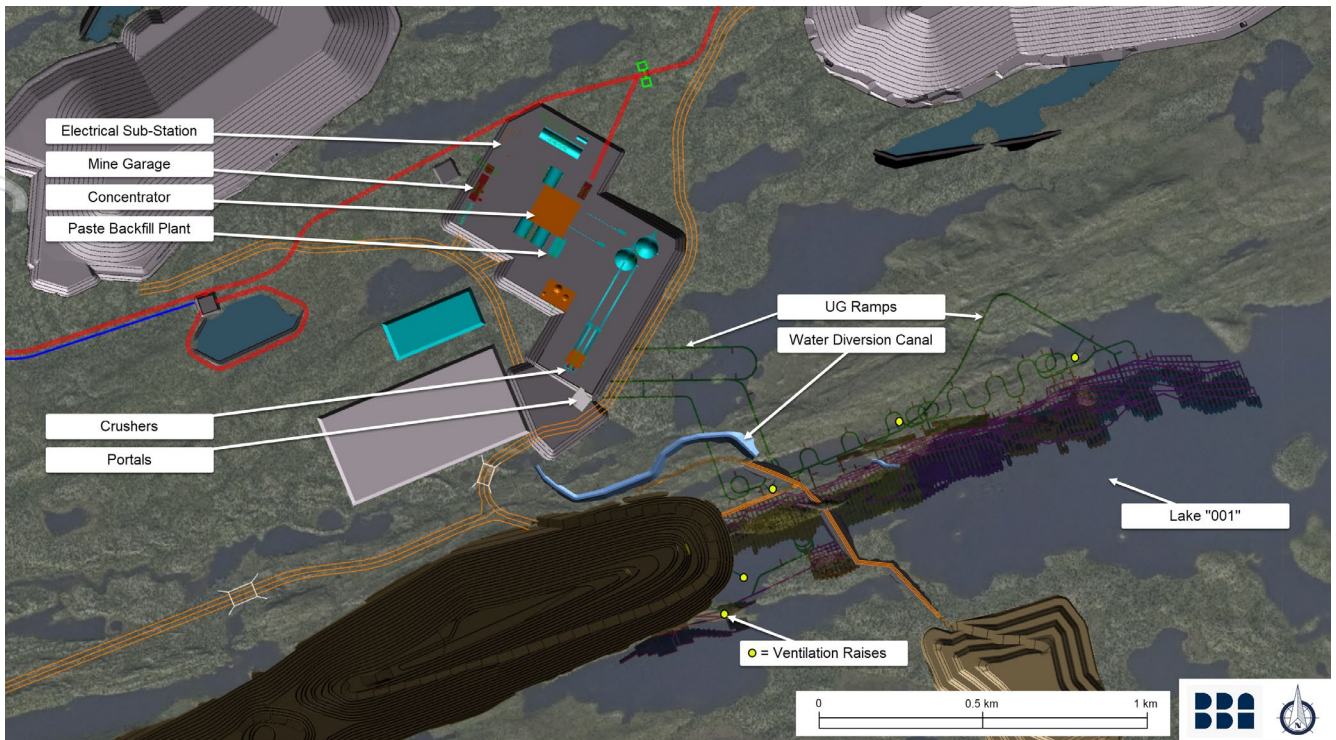


Figure 40: Main Site Infrastructure

The main site infrastructure includes the following:

- Open pit mine;
- Underground mine;
- Processing plant (crusher buildings, crushed ROM domes, concentrator, loadout);
- Paste backfill plant;
- Mining fleet, light vehicles, and highway trucks garages;
- Administrative offices, dry rooms, warehouses, and auxiliary buildings for the concentrator and the mine areas;
- Waste rock and rejects management facilities with their associated ditching and pond systems for water management;
- Fresh/raw water wells and water treatment plants;
- Electrical substation and overhead electrical powerlines;
- Emulsion plant and explosive storage magazines buildings;
- Fuel storage pad and refuelling stations;
- ROM pads;
- Water retention dikes on Lake 001;
- Water diversion canal for Lake 001;
- Permanent workers camp for construction and operational needs;
- Matagami Transshipment Centre (“MTC”).

Hydro-Québec renewable electrical energy was the energy of choice for the Project. No windmill or solar panels were considered.

The main site electrical substation will be located at approximately 55 km south of the Hydro-Québec's 315 KV Tilly substation. To interconnect these two substations, a 69 kV transmission line on wooden poles will be built, along existing roads where possible. This new powerline is shown on Figure 41.

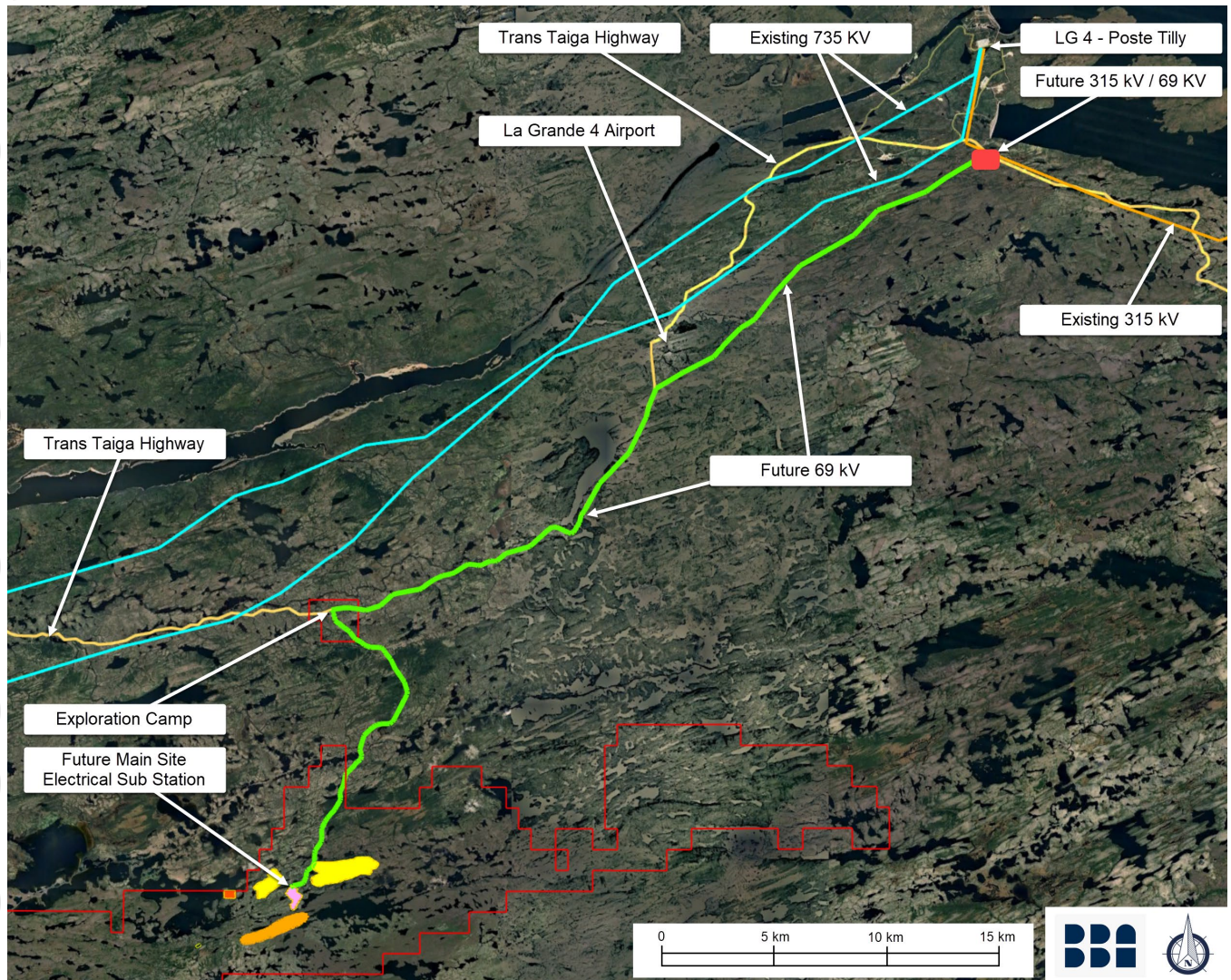


Figure 41: Main Site 69 kV Power Line

A preliminary estimate evaluated the main site electrical power consumption to be 25.7 MW. The new electrical substation will have a firm capacity of 30 MVA and more. Electrical distribution at the main site will be done by 13.8 kV overhead distribution lines.

Final access to power will be subject to both further engineering assessment and application and approvals to access the Hydro-Québec system.

PRODUCT TRANSPORTATION

The PEA logistics assessment included engagement with a specialist logistics consultant and contractors with specific experience in the James Bay region.

Highway trucks with trailers will transport spodumene concentrate between the mine loadout area and the Matagami Transshipment Centre. The MTC, located approximately 834 km southwest of the mine loadout area, will receive the concentrate. Trucks will pull two side dumper trailers, with a total payload capacity of 75 tonnes (2 x 37.5 tonnes).

Upon arrival at the MTC, trucks will unload the spodumene concentrate on a concrete floor beneath a new prefabricated dome. Front end loaders will manage the stockpile while loading railcars. The stockpile capacity is approximately 5 to 6 days of production (around 11,500 t).

Trains equipped with railcars having a capacity of approximately 95 tonnes will transport the spodumene concentrate from the MTC to Bécancour, QC. To accommodate the covered railcars, a new spur line will be constructed. These railcars will be delivered and picked up by the Canadian National Railway Company ("CN").

Finally, in Bécancour, QC, the spodumene concentrate railcars will be emptied using a straddle excavator. Further storing and processing activities for the spodumene concentrate are not the responsibility of PMET for this study.

ENVIRONMENTAL STUDIES AND PERMITTING

The Project is subject to the provincial environmental and social impact assessment ("ESIA") and review process of the JBNQA, and the federal (Canadian) impact assessment process. Additional detailed permits and authorizations will also be required to build and operate the proposed mine. Concerning the provincial process, a Preliminary Information Statement was submitted to the Québec Ministry of Environment ("MELCCFP") in November 2023 to officially begin the process. On April 5, 2024, the MELCCFP confirmed that the Project was subject to the ESIA process and issued a directive that outlined the Project specific guidelines for the completion of the ESIA. On the federal side, the Supreme Court of Canada stated in October 2023 that the Impact Assessment Act is unconstitutional in some regards for examination of various types of projects, including mining projects. Minor amendments to the Act were put into law in June 2024, focussing the federal review process and providing for efficiencies in the review timelines. Discussions with the Impact Assessment Agency of Canada ("IAAC") are ongoing and the IAAC website is being monitored to identify any new procedures, policy and guidance documents that are published to reflect these changes.

Environmental baseline studies began in 2022 and have continued throughout 2024. Field studies have focused on fisheries, vegetation and wetlands, hydrology, endangered species, large mammals, and birds. Additional studies are planned to further characterize the social environment, identify potential archaeological sites and establish a baseline for noise and air quality. All field studies are undertaken with the direct participation of First Nations field technicians, and findings are shared with the community.

The Property is on public lands, on the territory of the Eeyou Istchee James Bay Regional Government. All drilling activities and all the planned infrastructure for the proposed mine are located on the traditional lands of the Cree Nation of Chisasibi (trapline CH39). The Company has visited the Cree community and hosted Project information sessions beginning in 2022 and intensifying throughout 2023 and 2024. The main objective of these sessions has been to gather preliminary concerns, recommendations, and interests from stakeholders. Ongoing community sessions will include sharing of environmental baseline data, exchange of land use information and opportunities for input to mitigation measures and habitat compensation projects contemplated as part of the Project design.

LITHIUM MARKET & COMMODITY PRICE ASSUMPTIONS

Lithium Market Overview

The lithium spodumene market remains dynamic and complex, characterized by price volatility due to fluctuating demand, evolving supply dynamics, and shifts in contract pricing mechanisms. Recent market indicators and technical reports support a benchmark price of US\$1,375/tonne for spodumene concentrate (SC5.5% FOB Bécancour basis) in Q3 2024.

Supply:

- Lithium raw material production is increasing as new projects come online and established producers expand, resulting in ample supply (Fastmarkets 2024).
- While there is sufficient chemical capacity supporting China's domestic consumption and export markets, refining capacity limitations in Western markets could impact the availability of battery-grade lithium products compliant with Western industry standards, like the US Inflation Reduction Act and European Battery Passport process.
- There is growing concern about the geopolitical risk posed by the concentration of the lithium-ion battery supply chain in China.

Demand:

- Lithium demand remains strong, primarily driven by the EV sector, though growth has moderated since early 2023. Global EV sales growth reached 20% in H1 2024, with EV market share touching 17.8% in 2023, on track for 20% of all car sales in 2024 (combining BEV and PHEV passenger cars). Energy storage systems and consumer electronics continue to significantly contribute to overall demand. In fact, Energy Storage Systems (“ESS”) will require more GWh installed capacity in 2025 than EV batteries did in 2020. (Fastmarkets, 2024; Rho Motion, 2024; Bloomberg NEF, 2024).

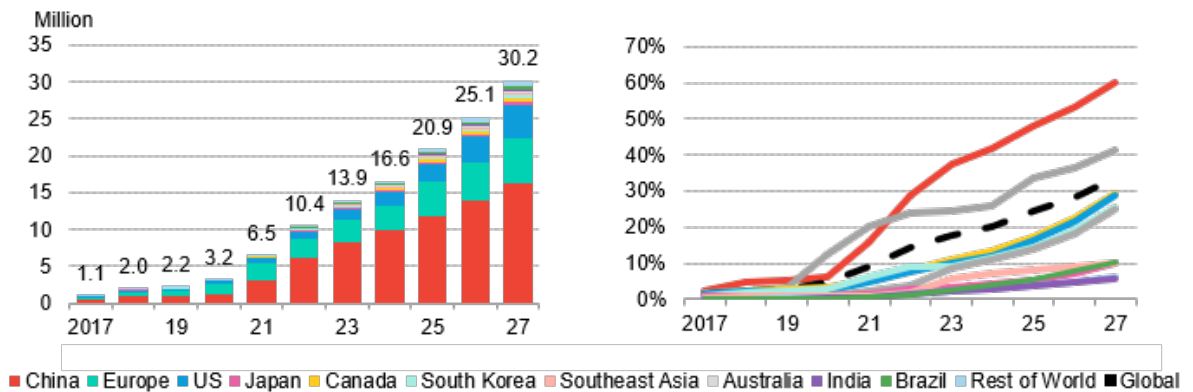


Figure 42: Projected BEV and PHEV Passenger Car Demand
(Source: Fastmarkets, 2024; Rho Motion, 2024; Bloomberg NEF, 2024)

Pricing Dynamics:

- The market is shifting from long-term contracts towards spot and short-term agreements, contributing to increased price volatility. Recent auction prices have fluctuated considerably, reflecting a changing market landscape with some sources suggesting a potential price floor is forming (S&P Global 2024).

Lithium Spodumene Concentrate Price Assumptions

Spot Prices:

- Fastmarkets' assessment for spodumene concentrate (SC6%) CIF China was \$800–\$950/t on January 17, 2024, a significant decrease from the peak in early 2023 due to softening downstream chemical prices and ample lithium raw material supply (Fastmarkets, 2024).

Contract Prices:

- Benchmark Mineral Intelligence's latest assessment on July 10, 2024, indicated that the global weighted average price for lithium carbonate (min 99%) was \$12,210.62/t. Spodumene prices are anticipated to stabilize in the \$1,100–\$1,200/t range in Q3 (Benchmark Mineral Intelligence, 2024).

Recent Technical Reports & Press Releases

- Several mining companies have published technical reports and press releases using a range of long-term spodumene price assumptions.

Benchmark Price Analysis

Based on recent technical reports, banking commodities analyst reports and company disclosures spodumene prices cluster around \$1,300–\$1,500 per tonne for 5.5% spodumene concentrate. This suggests a benchmark price within this range is a fair representation of current market conditions. However, prices can vary significantly based on concentrate percentage and other factors.

Conclusion

The lithium spodumene market is characterized by dynamic pricing influenced by a variety of factors. While price volatility is expected to persist, a benchmark price in the range of \$1,300–\$1,500 per tonne for 5.5% spodumene concentrate is justified based on recent market data. It is recommended to use a long-term price outlook of US\$1,375/tonne (SC5.5% FOB Bécancour basis).

NPV SENSITIVITY AND ANNUAL CASH FLOWS

The pre-tax base case financial model results in an internal rate of return of 38% and an NPV of \$4.7 billion with a discount rate of 8%. The simple pre-tax payback period is 3.6 years. On an after-tax basis, the base case financial model results in an internal rate of return 34% and an NPV of \$2.9 billion with a discount rate of 8%. The simple after-tax payback period is 3.6 years.

Table 10 shows the financial analysis summary.

Table 10: Financial Analysis Summary

Description		CA\$ M	US\$ M
Pre-Tax	Discount Rate		
	0%	13,299	10,107
	5%	6,818	5,182
	8%	4,699	3,571
	10%	3,698	2,811
	15%	2,073	1,575
	Pre-Tax IRR	38%	
	Payback Period	3.6 years	
After-Tax	Discount Rate		
	0%	8,308	6,314
	5%	4,270	3,245
	8%	2,937	2,232
	10%	2,305	1,752
	15%	1,269	964
	After-Tax IRR	34%	
	Payback Period	3.6 years	

The Project is most sensitive to grade, spodumene concentrate price and the exchange rate. Therefore, improving the geological model for definition and accuracy is recommended. The spodumene concentrate price and the exchange rate are based on market risks (supply and demand) and political risks, respectively.



APPENDIX 2 – SUPPORTING DATA

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	Mobian	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	Shaakichiwaanan	Development	PEA	\$1,500	24		Patriot Battery Metals Press Release dated August 21, 2024

Figure 43: Sources - Global Positioning of Hard Rock Lithium Assets



NON-IFRS AND OTHER FINANCIAL MEASURES

This press release 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 news release 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.

ABOUT PATRIOT BATTERY METALS INC.

Patriot Battery Metals Inc. is a hard-rock lithium exploration company focused on advancing its district-scale 100%-owned Shaakichiuwaanaan Property (formerly known as Corvette) located in the Eeyou Istchee James Bay region of Québec, Canada, which is accessible year-round by all-season road and is proximal to regional powerline infrastructure. The Shaakichiuwaanaan Mineral Resource¹, which includes the CV5 & CV13 spodumene pegmatites, totals 80.1 Mt at 1.44% Li₂O Indicated, and 62.5 Mt at 1.31% Li₂O Inferred, and ranks as the largest lithium pegmatite resource in the Americas, and the 8th largest lithium pegmatite resource in the world. Additionally, the Shaakichiuwaanaan Property hosts multiple other spodumene pegmatite clusters that remain to be drill tested, as well as significant areas of prospective trend that remain to be assessed.

For further information, please contact us at info@patriotbatterymetals.com or by calling +1 (604) 279-8709, or visit www.patriotbatterymetals.com. Please also refer to the Company's continuous disclosure filings, available under its profile at www.sedarplus.ca and www.asx.com.au, for available exploration data.

This news release has been approved by the Board of Directors.

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¹ Shaakichiuwaanaan (CV5 & CV13) Mineral Resource Estimate (80.1 Mt at 1.44% Li₂O and 163 ppm Ta₂O₅ Indicated, and 62.5 Mt at 1.31% Li₂O and 147 ppm Ta₂O₅ ppm Inferred) is reported at a cut-off grade of 0.40% Li₂O (open pit), 0.60% Li₂O (underground CV5), and 0.80% Li₂O (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.

DISCLAIMER FOR FORWARD-LOOKING INFORMATION

This news release 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 financial performance and condition.

All statements, other than statements of historical fact included in this news release, 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 release 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 news release, 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; 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 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; 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 news release, 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, 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.

COMPETENT PERSON STATEMENT (ASX LISTING RULE 5.22)

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.