



ANNUAL INFORMATION FORM

FOR THE FINANCIAL YEAR ENDED
MARCH 31, 2023

July 28, 2023

This Annual Information Form (“AIF”), for Frontier Lithium Inc. (the “Company”), is prepared with an effective date of March 31, 2023, unless otherwise indicated. Other continuous disclosure documents, including the Company’s press releases and quarterly and annual reports are available under the Company’s profile through its filings with the securities regulatory authorities in Canada at www.sedar.com (“SEDAR”).

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1 EXPLANATORY NOTES

1.1 Glossary Of Technical Information

The estimated mineral reserves and mineral resources discussed herein have been calculated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) – Definitions Adopted by CIM Council on December 11, 2005 (the “CIM Standards”) which were adopted by the Canadian Securities Administrators’ National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (“NI 43-101”). The following definitions are reproduced from the CIM Standards:

The term “mineral reserves” means the economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes allowances for dilution and losses that may occur when the material is mined. A “proven mineral reserve” is the economically mineable part of a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified. A “probable mineral reserve” is the economically mineable part of an indicated mineral resource, and in some circumstances a measured mineral resource, demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

The term “mineral resources” means a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. A “measured mineral resource” is that part of a mineral resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity. An “indicated mineral resource” is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and test information gathered through appropriate techniques from location such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed. An “inferred mineral resource” is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

1.2 Forward Looking Statement

This Annual Information Form (“AIF”) contains certain “forward-looking information” within the meaning of applicable Canadian securities legislation and “forward-looking statements” within the meaning of applicable United States securities legislation, together “forward-looking information”. Forward-looking information in this AIF includes, but is not limited to: statements with respect to future events; statements regarding the pre-feasibility study and its projections; statements regarding operations; planned exploration and development programs and expenditures; commercial agreements; timelines and milestones with respect to the Company’s properties; anticipated expenditures and programs; the impact of COVID-19 on the Company; the estimation of mineral resources; magnitude or quality of mineral deposits; anticipated advancement of mineral properties and programs; future exploration prospects; proposed exploration plans and expected results of exploration; the Company’s ability to obtain licenses, permits and regulatory approvals required to implement expected future exploration plans; changes in commodity prices and exchange rates; future growth potential of the Company; future development plans; and currency and interest rate fluctuations. Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, identified by words or phrases such as “expects”, “is expected”, “anticipates”, “believes”, “plans”, “projects”, “estimates”, “assumes”, “intends”, “strategy”, “goals”, “objectives”, “potential”, “possible” or variations thereof or stating that certain actions, events, conditions or results “may”, “could”, “would”, “should”, “might” or “will” be taken, occur or be achieved, or the negative of any of these terms and similar expressions) and that are not statements of fact, may be forward-looking statements. Forward-looking information is subject to certain risks, uncertainties and assumptions. Although we believe that the expectations reflected in the forward-looking information are reasonable, there can be no assurance that such expectations will prove to be correct. We cannot guarantee future results, performance or achievements. Consequently, there is no representation that the actual results achieved will be the same, in whole or in part, as those set out in the forward-looking information.

Forward-looking statements are necessarily based upon a number of factors and assumptions that, if untrue, could cause actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by such statements. Forward-looking statements are based upon a number of estimates and assumptions that, while considered reasonable by the Company at this time, are inherently subject to significant business, economic and competitive uncertainties and contingencies that may cause the Company’s actual financial results, performance, or achievements to be materially different from those expressed or implied herein. Some of the risks and other factors that could cause results to differ materially from those expressed in the forward-looking statements include, but are not limited to: the general expectations with respect to the development of the Company’s properties; general economic conditions in Canada, the United States and globally; industry conditions, including the state of the electric vehicle market; governmental regulation of the mining industry, including environmental regulation; geological, technical and drilling problems; unanticipated operating events; competition for and/or inability to retain drilling rigs and other services; the availability of capital on acceptable terms; the need to obtain required approvals from regulatory authorities; stock market volatility; volatility in market prices for commodities; liabilities inherent in the mining industry; changes in tax laws and incentive programs relating to the mining industry; the future price of lithium; anticipated costs and the Company’s ability to fund its programs; the Company’s ability to carry on exploration and development activities; the timing and results of drilling programs; the discovery of additional mineral resources on the Company’s mineral properties; the timely receipt of required approvals and permits, including those approvals and permits required for successful project permitting, construction and operation of projects; the costs of operating and exploration expenditures; the Company’s ability to operate in a safe, efficient and effective manner; the potential impact of natural disasters; the Company’s ability to obtain financing as and when required and on reasonable terms; the assumptions and projections from the pre-feasibility study; the impacts and ongoing developments of the COVID-19 global pandemic and the other factors

described herein under “Mineral Projects Risk Factors”, as well as in our public filings available at www.sedar.com. Readers are cautioned that this list of risk factors should not be construed as exhaustive.

The forward-looking information contained in this AIF is expressly qualified by this cautionary statement. We undertake no duty to update any of the forward-looking information to conform such information to actual results or to changes in our expectations, except as otherwise required by applicable securities legislation. Readers are cautioned not to place undue reliance on forward-looking information.

1.3 Cautionary Note Regarding Presentation of Mineral Reserve and Resource Estimates

The technical information contained in this AIF was prepared in accordance with Canadian standards for reporting of Mineral Resource and Mineral Reserve estimates, which differ from United States standards. In particular, and without limiting the generality of the foregoing, the terms “mineral reserve”, “proven mineral reserve”, “probable mineral reserve”, “mineral resource”, “measured mineral resource”, “indicated mineral resource” and “inferred mineral resource” are defined in accordance with the standards of the Canadian Institute of Mining, Metallurgy and Petroleum. While the terms “mineral resource”, “measured mineral resource”, “indicated mineral resource” and “inferred mineral resource” are recognized and required by NI 43-101, and now recognized under the SEC Modernization Rules, SEC Industry Guide 7 does not recognize them. Readers are cautioned that, except for that portion of mineral resources classified as mineral reserves, mineral resources do not have demonstrated economic viability. Inferred mineral resources have a high degree of uncertainty as to their existence and as to whether they can be economically or legally mined. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Therefore, you are cautioned not to assume that all or any part of an inferred mineral resource exists, that it can be economically or legally mined, or that it will ever be upgraded to a higher category. Likewise, you are cautioned not to assume that all or any part of measured mineral resources or indicated mineral resources will ever be upgraded into mineral reserves.

1.4 Certain Other Information

Certain information in this AIF is obtained from third party sources, including public sources, and there can be no assurance as to the accuracy or completeness of such information. Although believed to be reliable, management of the Company has not independently verified any of the data from third party sources unless otherwise stated.

1.5 Presentation Of Financial Information and Use of Non-GAAP Financial Measures and Ratios

The Company presents its financial statements in Canadian dollars. All dollar figures in this AIF are in Canadian dollars, unless otherwise indicated. All of the financial data contained in this AIF have been prepared in accordance with International Financial Reporting Standards (“IFRS”), also referred to as Generally Accepted Accounting Principles (“GAAP”), as issued by the International Accounting Standards Board (“IASB”).

This document refers to a non-GAAP financial measure “working capital” which is not a measure recognized under IFRS in Canada and does not have a standardized meaning prescribed by IFRS or by Generally Accepted Accounting Principles (“GAAP”) in the United States.

This non-GAAP financial measure does not have standardized meanings under IFRS, may differ from those used by other issuers, and may not be comparable to similar financial measure reported by other issuers. This financial measure has been derived from the Company’s financial statements and applied on a consistent basis as appropriate. The Company discloses this financial measure because it believes they assist readers in understanding the result of the Company’s operations and financial position and provide further information about the Company’s financial results to investors.

This measure should not be considered in isolation or used in substitute for other measures of performance prepared in accordance with IFRS.



In this AIF, “working capital” means the difference between current assets and current liabilities.

2 BACKGROUND AND CORPORATE STRUCTURE

2.1 Name, Address, And Incorporation

Frontier Lithium Inc. (the “Corporation”, “Company” or “Frontier”) is a Canadian junior mining company actively focused on the acquisition, exploration and development of mineral resource properties in North America. The Company is domiciled in Canada and incorporated under the Alberta Business Corporations Act. On April 21, 1995, the Company amended its Articles to change its name from 646215 Alberta Inc. to Houston Lake Mining Inc. and removed its private company restrictions. On May 19, 2016, the Company amended its Articles to change its name from Houston Lake Mining Inc. to Frontier Lithium Inc. The Company’s head office address is 2736 Belisle Drive, Greater Sudbury, Ontario P3N 1B3 and its registered office address is #1250, 639 – 5th Avenue S.W. Calgary, Alberta, T2P 0M9. The Company does not have any material subsidiaries.

The Company’s common shares are listed on the following securities exchanges:

Jurisdiction	Exchange	Symbol
Canada	TSX Venture Exchange (TSX.V)	FL
United States	Over-the-Counter (OTCQX)	LITOF
Germany	Borse Frankfurt	HL2

All material assets of the Company are located in the province of Ontario. The Company’s main assets include, but are not limited to, a mining lease, mining claims, exploration camp infrastructure and related equipment, vehicles, computer software and hardware.

3 GENERAL DEVELOPMENT OF THE BUSINESS

3.1 Our History Or Overview

The Company is a Canadian-based resource company focused on advancing its 100% owned PAK Lithium Project (the “PAK Lithium Project” or “Project”) located 175 km north of Red Lake, Ontario. The Company is currently in the exploration phase and is conducting various work programs for Pre-Feasibility Study to become a fully-integrated lithium mineral concentrate and refined salts/chemicals producer.

3.2 Three Year History

3.2.1 Recent Developments (Subsequent events to the Financial Year End March 31, 2023)

On April 18, 2023, the Company announced the resignation of Mr. Tony Zheng, who has served as the Company’s Chief Financial Officer, due to personal reasons. Frontier has appointed Mr. John Didone, a long-time member of its Board of Directors, as the Acting Chief Financial Officer. Mr. Zheng will provide advisory services for a period of time to support Mr. Didone and ensure a smooth transition.

On May 9, 2023 the Company announced filing of a NI 43-101 - Technical Report on the Spark Lithium resources and provided initial results on the 2023 exploration program including to date drilling progress as detailed at the Bolt pegmatite (“Bolt”) as well as detailed mapping of the Spark pegmatite showing drillhole traces. The Company’s plans are to continue drilling Bolt from the west and then move the drill rig back to the PAK area and continue drilling there with widely spaced single hole fences with collars from the east.

On May 31, 2023, the Company released a Pre-Feasibility Study (“PFS”) for a proposed mine-to-lithium chemical/hydromet plant facility (“Integrated Project”) in the Great Lakes Region of North America. The PFS assumes a hydromet plant that would convert spodumene concentrate feedstock sourced from a vertically

integrated spodumene open-pit mining and milling facility at the Company's PAK Lithium Project, located north of Red Lake, Ontario. The PFS demonstrates pre-tax NPV of US \$2.59 billion discounted at 8%. The PFS confirms that, based on the Company's understanding, the 100% owned Integrated Project could be one of the continent's largest and lowest-cost producer of lithium carbonate and lithium hydroxide able to supply the rapidly growing electric vehicle industry in North America. On June 27, 2023, the Company announced the appointment of Mr. Gregory Da Re as Vice President of Corporate Development effective June 28, 2023. Mr. Da Re brings a deep understanding of electric vehicle battery supply chains and brings two decades of experience as an accomplished investment executive.

On July 14, 2023, the Company filed a NI 43-101 – Technical Report titled "Pre-Feasibility Study for the PAK Project " (the "PFS Technical Report"). This Technical Report outlines the preliminary feasibility assessment of the 100% owned PAK Project, located north of Red Lake in Ontario, and a proposed hydrometallurgical plant that would convert spodumene concentrate feedstock into lithium chemicals. The Technical Report confirms, based on the Company's understanding, the vertically Integrated Project could be North America's largest and lowest-cost producer of lithium carbonate and lithium hydroxide, supplying the rapidly growing electric vehicle industry on the continent.

3.2.2 Financial Year Ended March 31, 2023

On April 19, 2022, the Corporation announced the appointment of Tony Zheng as Chief Financial Officer of the Company. Mr. Zheng is a Chartered Professional Accountant with over 11 years of experience in finance, risk management, corporate strategy, mergers, and acquisitions, with international precious and base metals companies. In April 2023, the Company announced the resignation of Mr. Tony Zheng, who has served as CFO, due to personal reasons. Frontier has appointed Mr. John Didone, a long-time member of its Board of Directors, as the Acting Chief Financial Officer.

On May 2, 2022, the Company announced its planned exploration program for the fiscal year ended March 31, 2023 and targets for the PAK Lithium project which include infill and step out drilling on the Spark deposit, as well as detailed and regional mapping and prospecting in areas both proximal to known spodumene-bearing pegmatite deposits and in under-explored areas within its approximately 27,000 hectare claim block. The Company plans to continue evaluating the Spark pegmatite with a 15,000 metre drill program which began in May 2022 utilizing two diamond drills. It is anticipated that all resource categories of the deposit will be substantially increased. Concurrently, during the drill program, the regional and detailed geological mapping and prospecting will be carried out.

On June 7, 2022, the Company announced the results from the drilling completed during the Phase XI drill program on the Spark pegmatite. Phase XI was completed in March 2022 with a total of 1,342.5 metres in five holes completed. The primary objective for the Phase XI drill program was to focus on low-ground drilling (best drilled in the winter months) to define the western limit of the Spark deposit. Instead, the completed drilling confirmed that the deposit remains open to the west and a new zone to the NW was discovered which will need further investigation in the future. Two of five geomechanically holes were completed with three delineation holes; two of which were collared in muskeg areas.

On July 25, 2022, the Company announced the results for four of the drill holes completed during the Phase XII drill program on the Spark pegmatite. Subsequently on August 17, 2022, the Company announced the results of four additional drill holes completed during the Phase XII drill program on the Spark pegmatite. The detailed results have been released by the Company and are available on SEDAR (www.sedar.com). The Company has completed 8,000 metres of drilling in 24 holes and has reported analysis from 8 drill holes as of August 17, 2022. The initial drill holes were designed to convert Inferred material to Indicated for the planned open pit. The drilling was focused on the Inferred resource within the central portion of the Spark deposit at depth. Four of the holes (DDH's PL-57, 58, 63 and 64) reported on July 25, 2022 and two holes (DDH's PL-059-22 and PL-060-22) reported on August 17,

2022 were terminated in pegmatite, one hole (DDH's PL-061-22) was ended in mafic volcanics due to preliminary feasibility study ("PFS") time constraints requiring quick upgrading of some of the existing Inferred resource and will be extended later in the program. With this objective in mind, most May and June drill holes are steeply dipping (> 65) and designed to test the inferred area to a vertical depth of around 300 to 320 metres. These holes will be included in the upgraded Measured-Indicated Resource for Spark that will become part of the PFS targeted for completion by the end of calendar 2022.

On August 17, 2022, the Company announced the results for four additional drill holes completed during the Phase XII drill program on the Spark pegmatite which began in May 2022, including Phase XII delineation and infill drilling with two drill rigs, whereby, the Company had completed 8,000 metres of drilling in 24 holes at that time. Analysis from 4 holes was reported as: DDH PL-059-22 intersected 145 metres of pegmatite over a 316 metres interval from surface with an average grade of 1.5% Li₂O along with some minor mafic volcanic sheets. DDH PL-060-22 intersected 357.5 metres of spodumene-bearing pegmatite averaging 1.63% Li₂O throughout the entire hole representing a horizontal distance of 110m. DDH PL-061-22 was collared in pegmatite intersecting 280.7 metres averaging 1.42% Li₂O. DDH PL-068-22 intersected spodumene pegmatite zones typically 20 to 50 metre thick with grades ranging from 1.42% to 2% Li₂O.

On September 20, 2022 the Company announced the results of five additional drill holes completed during the Phase XII drill program on the Spark pegmatite which began in May 2022. Phase XII delineation and infill drilling with two drill rigs is currently being conducted, whereby, the Company has completed 11,150 metres of drilling in 34 holes as of September 11, 2022. Analysis from 5 of the holes was reported as follows: DDH PL-062-22 intersected a total of 180.8 metres of pegmatite averaging 1.55% Li₂O with thin sheets of mafic rafts within the pegmatite as expected, the hole was collared north of the Spark Pegmatite in mafic volcanic, and was drilled to convert inferred material at depth and to provide a northern contact of the Spark Pegmatite. This hole was terminated in pegmatite due to time constraints and was to be extended later in the program. DDH PL-066-22 intersected 338.0 metres of continuous pegmatite averaging 1.79% Li₂O and it was collared in pegmatite on the southern end of the Spark orebody, the hole was drilled to convert inferred material at depth. DDH PL-070-22, PL-071-22 and PL-073-22 were collared proximal to each other and fanned out to test both the northern upper and southern lower contacts with the mafic host rock. As expected, they intersected diminishing proportions of pegmatite from west to east with an increase in mafic rafts towards the east.

On October 11, 2022 the Company announced the results for 4 additional drill holes completed during the Phase XII drill program on the Spark pegmatite which began in May 2022. The Company completed 11,150 metres of drilling in 34 holes as of September 11, 2022. Analysis from 4 of the holes was reported as follows: DDH PL-065-22 intersected a total of 171.5m of pegmatite averaging 1.57% Li₂O and thin sheets of mafic rafts within the pegmatite as expected. Collared north of the Spark Pegmatite in mafic volcanic 30 metres west of PL-062-22, hole was drilled to convert inferred material at depth and to provide a northern contact of the Spark Pegmatite. DDH PL-067-22 intersected 326.6 metres of pegmatite averaging 1.92% Li₂O. Collared in pegmatite on the southern end of the Spark orebody and 40 metres east of PL-066-22, the hole was drilled to convert inferred material at depth. DDH PL-069-22 intersected 275.3 metres of pegmatite averaging 1.74% Li₂O. Collared in Mafic Volcanic on the southern end of the Spark orebody, hole was drilled to convert inferred material at depth. DDH PL-072-22 intersected 124.1 metres of pegmatite averaging 1.55% Li₂O. Collared in Mafic Volcanic on the southern end of the Spark orebody, 30 metres east of PL-069-22, the hole was drilled to convert inferred material at depth.

On October 19, 2022 the Company entered into an agreement with a syndicate of underwriters co-led by RBC Capital Markets & Goldman Sachs & Co., LLC (the "Underwriters") pursuant to which the Underwriters agreed to purchase, on a "bought deal" basis, 9,100,000 units of the Company (the "Units") at a price of \$2.20 per Unit (the "Offering Price"), representing total gross proceeds of approximately \$20 million for the Company(the "Offering").

On November 10, 2022 the Company announced that it has closed its previously announced Offering. Pursuant to the Offering, the Company issued 10,465,000 units (the "Units") of the Company, including 1,365,000 Units issued in connection with the exercise in full of the over-allotment option granted to the Underwriters in connection with the Offering, at a price of \$2.20 per Unit (the "Offering Price"), representing total gross proceeds of \$23,023,000. The Underwriters received a cash commission equal to 5.5% of the gross proceeds of the Offering. Each Unit consisted of one common share of the Company (a "Common Share") and one-half of one common share purchase warrant of the Company (each whole common share purchase warrant, a "Warrant"). Each Warrant will entitle the holder thereof to purchase one common share of the Company at a price of \$2.75 for a period of 36 months following the closing of the Offering.

On November 16, 2022 the Company announced the results for 4 additional drill holes and 1 channel completed during the Phase XII drill program on the Spark pegmatite which began in May, 2022 with two diamond drill rigs and finished in October of 2022 with 14,641 metres in 45 holes. The initial objective for the Phase XII drill program was focused on converting the inferred resource within the Spark deposit to the indicated category in preparation for a pre-feasibility study on the PAK Lithium Project. The latter half of the program included geotechnical drilling for ground control and pit design purposes as well as step out drilling to define the eastern and western extents of the ore body. The Company reported intersection of 338 metres of pegmatite averaging 1.64% Li₂O, including a 68 metre zone of 2% Li₂O.

On December 14, 2022 the Company announced the results for 7 more drill holes completed during Phase XII drill program on the Spark pegmatite which began in May, 2022 with two diamond drill rigs and finished in October of 2022 with 14,641 metres in 45 holes. The main objective of the program was focused on converting inferred material to the indicated category for the planned open pit. The Spark pegmatite is one of the two delineated premium spodumene-bearing lithium deposits on the PAK Lithium Project. The Company reported intersection of 126.8 metres of pegmatite averaging 1.31% Li₂O, including a 11 metres zone of 1.79% Li₂O and 459 parts per million of Ta₂O₅.

The Company also announced that it has adopted a new 10% rolling stock option plan (the "New Stock Option Plan"). The New Stock Option Plan was approved by the board of directors of the Company, and the shareholders of the Company at the annual general meeting of shareholders on October 3, 2022, and has been approved by the TSX Venture Exchange ("TSXV"). The New Stock Option Plan replaces the Company's previous 10% fixed stock option plan. The Company also announced the grant of an aggregate of 4,900,000 stock options under the New Stock Option Plan (the "Options") to certain directors, officers, consultants and employees of the Company for retention purposes, and in recognition of these individuals continuing efforts in assisting the Company's with its growth. These Options are exercisable at a price of \$ \$2.10 per common share and will have a term of 5 years from the date of issuance. 50% of these Options vest on the grant date, and the remaining 50% vest on the date that is the first anniversary date of the grant date.

On January 10, 2023 the Company announced the results for 7 more drill holes completed during Phase XII drill program on the Spark pegmatite which began in May, 2022 with two diamond drill rigs and finished in October of 2022. The main objective of the program was focused on converting inferred material to the indicated category for the planned open pit. The Spark pegmatite is one of the two delineated premium spodumene-bearing lithium deposits on the PAK Lithium Project. The Company reported intersection of 154.3 metres of pegmatite averaging 1.69% Li₂O, including a 26 metres zone of 2.15% Li₂O.

On January 31, 2023 the Company announced results from the 2022 mapping campaign at the PAK Lithium Project. The mapping program delivered several key results, including discovery of a new pegmatite zone approximately 1 kilometre WNW of the Spark deposit; significant expansion of the Pennock Pegmatite showing; and generation of prospective targets to be followed up in future regional mapping and prospecting programs.

The Company also announced at this time that it granted 150,000 stock options under the New Stock Option Plan. These options were issued to certain directors, officers, or employees of the Company. These options are exercisable at a price of \$2.30 per common share and will have a term of 5 years from the date of issuance. 50% of these options vest on the grant date, and the remaining 50% vest on the date that is the first anniversary date of the grant date.

On February 8, 2023, the company announced the results for the remaining 7 drill holes completed during Phase XII drill program on the Spark pegmatite which began in May, 2022 with two diamond drill rigs and finished in October of 2022. The main objective of the program was focused on converting inferred material to the indicated category for the planned open pit. The Spark pegmatite is one of the two delineated premium spodumene-bearing lithium deposits on the PAK Lithium. The company reported intersections of 398.25 metres of pegmatite averaging 1.88% of Li₂O, including a 23.4 metres zone of 3.12% Li₂O.

The Company at this time also announced that it has granted 500,000 stock options under the New Stock Option Plan. These options have been issued to certain directors, officers, or employees of the Company. These options are exercisable at a price of \$ \$2.73 per common share and will have a term of 5 years from the date of issuance. 50% of these options vest on the grant date, and the remaining 50% vest on the date that is the first anniversary date of the grant date.

On February 15, 2023, the Company announced the appointment of Mr. Graeme Goodall, to the position of Vice President of Operations. Mr. Goodall is a Professional Engineer with a designation in Metallurgical Engineering. He holds a Ph.D. in Materials Engineering from McGill University. Mr. Goodall joins Frontier with over twenty years of experience focused on metallurgy, pyrometallurgy and extractive operations for multi-national mining and metals producers.

On February 28, 2023, the company announced an expansion of the Spark deposit with 18.8 Mt in indicated and 29.7 Mt in inferred resource categories. The Company reported an updated mineral resource estimate ("MRE") for the Spark deposit, the second delineated premium spodumene-bearing lithium deposit at the PAK Lithium Project. The resource estimation has been prepared by BBA E&C Inc. and includes a summary of the MRE.

On March 15, 2023 the company provided an update for current and future exploration plans for the PAK Lithium Project in northwestern Ontario. The Phase XIII drill Program has been designed to contribute towards the Company's exploration target of 100 metric tonnes of open pit resource on the PAK Lithium Project and to perform limited geotechnical and environmental drilling to support feasibility study of the Project. A maiden drill program was estimated to soon commence testing the 600 meter long Bolt pegmatite showing located between the PAK and Spark deposits. Further exploration drilling was planned to define the western extension of the Spark deposit, particularly the "high grade" zone intersected to the northwest including the one-kilometre area between the Spark deposit and the new pegmatite discovered through two grab samples averaging 3.1% Li₂O in 2022.

3.2.3 Financial Year Ended March 31, 2022

On April 21, 2021, the Company announced the closing of a non-brokered Flow-Through private placement offering of 1,822,708 units of the Company priced at \$1.30 per Unit, for total gross proceeds of \$2,369,520. Each unit consisted of one (1) common share of the Company and one-half (1/2) share purchase warrant. Each full warrant entitled the holder thereof to purchase one additional common share of the Company at an exercise price of \$1.50 for a 24-month period from the closing. All warrants issued at this financing were subject to an accelerated expiry of warrants at the sole discretion by the Company within set terms. In connection with the \$2,369,520 offering, the Company issued finder's fees of \$121,201 and 93,232 finder warrants. The private placement was oversubscribed from the initial offering amount.

On April 21, 2021, the Company also announced a Preliminary Economic Assessment ("PEA") of its vertically integrated operations to produce lithium hydroxide chemicals from the PAK Lithium Project (available on its website

and on SEDAR). Concurrently with the aforementioned, the Company announced the closing of its previously announced acquisition of the 2.5% Net Smelter Royalty that was outstanding on the Company's Pakeagama Lake Pegmatite Project for consideration of \$4,000,000 in cash and 1,000,000 common shares of the Company at a price of \$1.00 per share.

On April 28, 2021, the Company announced the appointment of Greg Mills, former Head of RBC's Global Equities, to its Board of Directors. Mr. Mills has 36 years of experience in capital markets and currently is the Chairman of the Board of Sundial Growers Inc., a director of Aequitas Innovations and the capital markets advisory to Portag3 Ventures.

On May 26, 2021, the Company announced that the Government of Ontario had agreed to contribute \$363,000 towards assisting the Company with piloting a proprietary process that seeks to overcome certain financial, technical and environmental risks identified with conventional lithium chemical processing utilized commercially outside of North America.

On July 20, 2021, the Company announced the appointment of Marc Boissonneault, former Head of Global Nickel Assets for Glencore, to its Board of Directors. Mr. Boissonneault retired in 2020 after an impressive 31-year career. He oversaw Glencore's six underground mines, two open-pit mine complexes, two concentrators, an HPAL processing plant, two smelters, and two hydrometallurgical refineries.

On September 1, 2021, the Company announced the hiring of David Ewing as Vice President of Sustainability and External Affairs. Mr. Ewing brings over 20 years of experience in environmental matters and has built effective working relationships with regulatory authorities, Indigenous people and local communities throughout his career. He successfully developed and implemented sustainability programs and led the Indigenous partnerships and regulatory affairs portfolios for Evolgen by Brookfield Renewable, a subsidiary of Brookfield.

On October 19, 2021, the Company announced that it had successfully produced battery-quality lithium hydroxide monohydrate through a reputable third-party firm using its crystallization process technology from a purified lithium hydroxide solution produced by the Company. The lithium salts were produced from "ore-to-hydroxide" sulphate conversion route by a mini-pilot plant using core samples taken from the PAK Lithium Project's PAK deposit. This project demonstrated that the Company could produce concentrate and lithium hydroxide from the PAK Lithium Project.

On December 15, 2021, the Company announced the closing of its previously announced Bought Deal Flow-Through private placement offering for a total of 6,453,000 flow through shares of the Company priced at \$1.86 per flow through share, for total gross proceeds of \$12,002,580. The shares were offered on a bought deal basis co-led by Canaccord Genuity Corp. and BMO Capital Markets (collectively, the "Underwriters"). In connection with the \$12,002,580 offering, the Company paid the Underwriters a cash finder's fees of approximately 6% of the aggregate gross proceeds raised and finder warrants equal to 6% of the number of shares sold. The private placement was oversubscribed from the initial offering amount.

On January 11, 2022, the Company reported favourable PFS level metallurgical results from the Company's 100% owned PAK Lithium Project, confirming the suitability and robustness of the flowsheet design. Locked cycle flotation produced a lithium concentrate with grade of 6.15% lithium oxide ("Li₂O") with a corresponding Li recovery of 78.1%. The test involved six cycles and was very stable indicating good metallurgy. The sample included approximate zonation variability of the resource with dilution at the average Spark resource grade of 1.58% Li₂O and final iron oxide levels of 0.44% Fe₂O₃. These results confirmed the suitability of the material to meet some of the most rigorous specifications of the lithium market.

On February 7, 2022, the Company announced the appointment of Tess Lofsky to its Board of Directors. Ms. Lofsky is a business focused; legal executive with considerable experience in corporate and securities law and corporate governance developed over 15 plus years in various industries including mining and construction. Ms.

Lofsky is currently Senior Legal Counsel and Corporate Secretary for Bird Construction (TSX: BDT), and previously served as Legal Counsel & Corporate Secretary for the Greater Toronto Airports Authority, and Vice President, General Counsel & Corporate Secretary of North American Palladium Ltd.

On March 1, 2022, the Company reported an updated mineral resource estimate for the Spark deposit, the second delineated premium spodumene-bearing lithium deposit on the PAK Lithium Project. Highlights of the mineral resource estimate include: Spark pegmatite includes 14.41 million tonnes averaging 1.40% Li₂O in the indicated category and also includes 18.12 million tonnes averaging 1.37% Li₂O in the inferred category.

On March 30, 2022, the Company announced the successful completion of an advanced phase of lithium concentrate piloting. A representative sample of 7.8 tonnes was assembled which included a head grade of 1.57% Li₂O and 0.80% Fe₂O₃. The processing involved flotation with conventional preparatory steps of desliming, magnetic separation and gravity concentration. In total, 930 kg of concentrate was produced with an average grade of 6.07% Li₂O with 0.78% Fe₂O₃ and an overall lithium recovery of 76%. A 0.5 tonne portion of the concentrate was sent to the Company's technology development partner for hydrometallurgical conversion process piloting whereby results will be used for the bases of final lithium chemical process selection and basis of the ensuing PFS.

3.2.4 Financial Year Ended March 31, 2021

On August 5, 2020, the Company announced the closing of its previously announced non-brokered private placement offering for a total of 10,077,000 units of the Company priced at \$0.20 per unit, for total gross proceeds of \$2,015,400. Each unit consisted of one (1) common share of the Company and one-half (½) share purchase warrant, for total of 5,038,500 warrants priced at \$0.27 for a period of 24 months following the closing date of the issuance. The private placement was oversubscribed from the initial offering amount.

On September 9, 2020, the Company announced the commencement of a PEA of its vertically integrated operations to produce lithium hydroxide chemicals from the PAK Lithium Project. The Company engaged WSP Canada Inc. (TSX: WSP) to work closely with the Company, in leading the PEA.

On September 23, 2020, the Company announced the appointment of Mr. Stephen J.J. Letwin to its Board of Directors. Mr. Letwin is a director of Hess Midstream (2018) and of Margaux Resources and is also the President and CEO of Mancal Corporation. Mr. Letwin was President and CEO of IAMGOLD Corporation for ten years and was also a member of their board of directors.

On October 21, 2020, the Company announced the production of lithium hydroxide monohydrate ("LiOH.H₂O") from bench-scale test work completed in partnership with XPS Expert Process Solutions ("XPS"), a Glencore Corporation and AG Hydrometallurgy Services.

On November 17, 2020, the Company announced the discovery of Bolt, a new spodumene-bearing pegmatite zone between the PAK and Spark deposits.

On November 18, 2020, the Company announced the closing of its previously announced non-brokered Flow-Through private placement offering for a total of 3,025,710 units of the Company priced at \$0.35 per unit, for total gross proceeds of \$1,058,998. In connection with the \$1,058,998.55 offering, the Company issued finder's fees of \$48,391 and 138,261 finder warrants.

On February 5, 2021, the Company announced that its common shares began trading on the OTCQB Venture Market (the "OTCQB"). The Company trades on the OTCQB under the symbol "LITOF".

On February 22, 2021, the Company announced the hiring of Dr. Naizhen Cao as Vice President of Technology. Dr. Cao is an industry veteran, having worked both in China and Canada as a senior technical leader with expertise in lithium and battery materials. During his career, he held several key positions within the lithium industry.

On March 17, 2021, the Company announced the appointment of Bart Meekis, former chief of Sandy Lake First Nation, to its Board of Directors. Mr. Meekis is a member of the Oji-Cree First Nation of northwestern Ontario and resides in Sandy Lake, Ontario.

On March 19, 2021, the operator of financial markets for the U.S. and global securities announced that the Company had qualified to trade in the OTCQX Best Market. The Company upgraded to the OTCQX from the OTCQB Venture Market.

On March 31, 2021, the Company announced the closing of its previously announced non-brokered private placement offering for a total of 7,636,371 units of the Company priced at \$1.00 per unit, for total gross proceeds of \$7,636,371. The private placement was oversubscribed from the initial offering amount.

3.3 Trends And Outlook

The Company intends to focus its business activity in the near term on advancing and developing the PAK Lithium Project.

The market for lithium derivatives softened from 2018 highs to 2020 due to temporary oversupply which caused difficulties for many junior mining companies to raise capital. More recently, lithium companies have benefited from robust global EV sales in 2021, 2022 and 2023 year to date, as well as more aggressive OEM EV target announcements in recent months. As a result of the electric vehicle market continuing to surprise to the upside, lithium related stocks are seeing an increased ability to raise necessary capital to advance projects.

The Company believes it has adequate working capital to advance its work on the PAK Lithium Project throughout the current fiscal year but is actively seeking additional working capital by equity financing and also exploring several strategic options to advance its development with the goal of minimizing dilution for shareholders, such as offtake equity loan arrangements and minority project equity interest partnership.

As of March 31, 2023, the Company had a cash position of \$27.37 million and total working capital of \$17.6 million. The Company's liquidity and capital resources summarized as follows in [Table 1](#):

Table 1: Statements of Financial Position

Items	Year Ended	
	March 31, 2023 (in \$ 000's)	March 31, 2022 (in \$ 000's)
Cash and cash equivalents	27,371	17,683
Working capital	27,236	17,559
Total assets	35,197	24,628
Total liabilities	1,957	1,310
Shareholder's Equity	33,240	23,318

The Company's continuation as a going concern is dependent upon successful results from its exploration and development activities, and its ability to generate funds through equity raises sufficient to meet current and future obligations. Management intends to finance operating costs over the next twelve months with current cash on hand, proceeds from the exercise of stock options or warrants, and further equity financings if required.

4 BUSINESS OF THE CORPORATION

4.1 General

The Company is a pure-play lithium mineral exploration and development Company focused on its 100% owned PAK Lithium Project in northwestern Ontario's Red Lake Mining district, Canada. The Company's primary objective is to become a strategic supplier of technical grade spodumene concentrates for premium glass and glass-ceramics producers and battery-grade lithium hydroxide and other chemicals to the growing electric vehicle and energy storage markets in North America. The PAK lithium property (herein after referred to as, the "PAK Lithium Project" or "PAK Project" or "Project") is part of the Company's land position on 'Electric Avenue' – an emerging highly prospective lithium-mineral district. Electric Avenue is a major structural corridor in northwestern Ontario that divides two geological domains for hundreds of kilometers and hosts multiple rare metal occurrences containing high levels of lithium in the mineral called spodumene.

The Company's leadership team's successful mining ventures include a multi-decade track record in funding, partnering, constructing, and operating mining and refining companies in North America. The Company published a Pre-Feasibility Study ("PFS") on July 14, 2023. The pre-tax base case financial model results in an internal rate of return ("IRR") of 28.6% and a Net Present Value ("NPV") of USD \$3,365 million with a discount rate of 8%. The simple pre-tax payback period of this is 4.9 years. On an after-tax basis, the base case financial model results in an internal rate of return of 24.1% and an NPV of USD \$2,261 million with a discount rate of 8%. The simple after-tax payback period is 4.9 years. The project models a fully-integrated lithium operation utilizing spodumene concentrate generated from the PAK Lithium Project to achieve downstream conversion for production of battery-quality lithium chemicals and concentrate for the glass and glass-ceramics market. Please refer to the NI 43-101 - Technical report by BBA Engineering Ltd. ("BBA") issued on July 14, 2023, and filed under the Company's profile on SEDAR. The Company has completed in-fill drilling on the Spark deposit and work necessary to support the PFS assessing a fully-integrated lithium operation. The Company's proposed lithium operation includes the production of technical grade lithium concentrates required by premium glass-makers and chemical grade lithium concentrates required as feedstock for the planned production of both lithium carbonate and lithium hydroxide at a downstream lithium conversion plant.

Given the nature of the resource business, the limited extent of the Company's assets, and the present stage of exploration and development, the business and operations of the Company are subject to numerous risks, many of which are beyond the Company's control. The Company considers the risks set out in Section 7.1.1 below to be some of the most significant to potential investors in the Company, but not all of the risks are associated with an investment in securities of the Company. If any of the risks materialize into actual events or circumstances or other possible additional risks and uncertainties of which the Company is currently unaware or which it considers to be material in relation to the Company's business actually occur, the Company's assets, liabilities, financial condition, results of operations (including future results of operations), business and business prospects, are likely to be materially and adversely affected. In such circumstances, the price of the Company's securities could decline, and investors may lose all or part of their investment. See Section 7.1.1 "*Mineral Projects Risk Factors.*"

4.2 Our Current Business

What is Lithium?

Lithium is the third element and is the lightest of all metals on the periodic table that is one of the most rapidly growing metals being used in modern industry. Its usages range from pharmacy with lithium-based bipolar disorder

treatment drugs to aeronautics with light aluminum/lithium alloys.¹ Lithium's most important usage currently occurs in energy storage systems through lithium-based batteries. The dynamics of the lithium market in North America and around the world are changing as there is a need for considerable quantities of lithium.

Lithium has unique properties, including:

- Highest specific heat capacity and thermal conductivity (heat transfer applications)
- The lightest metal with the best electrochemical potential (high energy and power density)
- Low viscosity once molten (lower than water)

What Lithium is used for?

Because of its unique properties, lithium is required in specific applications. Glass and ceramics were the main usage of lithium until 2005.² Since this date, the use of lithium-based batteries have taken over due to their major role in the electronic and energy storage markets, both in North America and globally. Lithium-based batteries are the most important storage systems currently available on the market.³ Lithium-based batteries are commonly used in consumer electronics, including laptops and cell phones, as well as in electric vehicles. The consumer electronics segment is projected to grow rapidly due to the increasing sales of electronic devices.⁴ Single-use, non-rechargeable lithium-based batteries are also used in remote controllers, handheld games, cameras, and smoke detectors. Characteristics such as low weight, large energy storage, and small size are driving the demand for batteries; thus, positively influencing the growth of the segment. Subsequently, electric vehicles constitute 14 percent of global automotive sales in 2022, up from nine percent in 2021 and five percent in 2020. The majority of lithium demand is from the utilization of Lithium-based batteries for use in electric vehicles and consumer electronics. Lithium is used to manufacture cathodes, anodes and electrolytes alike.

Regarding ceramics, lithium is used in both of its mineral or refined chemical forms to provide economic and environmental benefits by reducing melting temperatures. Lithium greases are used for their excellent temperature properties (they are stable at a high temperature and do not solidify at a low temperature). Lithium bromide solutions play an important role in air treatment, and lithium hydroxide is used as CO₂ scrubbers in space shuttles and submarines.⁵

In summary, lithium is vital in many applications and is considered a critical metal due to its high economic importance.

Some various uses of lithium are shown in [Figure 1](#).⁶

¹ C. Dessemond, F. Lajouie-Leroux, G. Sourcy, N. Laroche, J. Magnan - *Spodumene: The Lithium Market, Resources and Processes*, Minerals Review, May 29, 2019, p. 1. [Dessemond].

² *Op. cit.*, Dessemond p. 2.

³ M. Bini, D. Capsoni, S. Ferrari, E. Quartarone, — *Rechargeable lithium batteries: Key scientific and technological challenges*, *Rechargeable Lithium Batteries*, Woodhead Publishing, 2015, p. 1–17.

⁴ *Lithium Market Size, Share & Trends Analysis Report By Product (Carbonate, Hydroxide), By Application (Automotive, Consumer Goods, Grid Storage), By Region (APAC, EU, North America), And Segment Forecasts, 2022 – 2030*, Grand View Research Market Analysis Report [Grand View Research Market Analysis Report].

⁵ *Op. cit.*, Dessemond p. 3.

⁶ *Op. cit.*, Egbue p. 4.

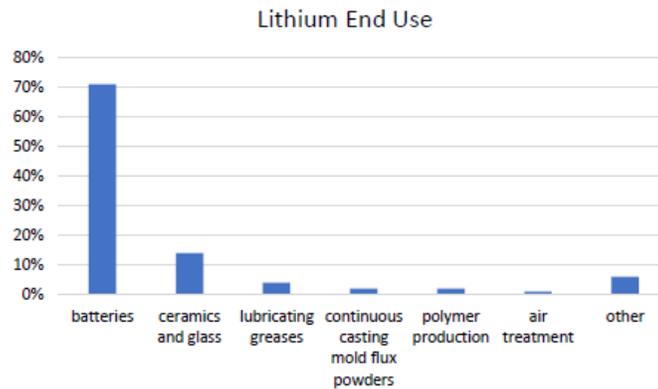


Figure 1: Lithium End Use

Where is Lithium found?

Most extractable lithium resources are found in minerals and brines.⁷ Lithium is found in more than 145 different pegmatite minerals, but it is extracted only from spodumene, petalite, lepidolite and eucryptite. Among these, spodumene is the most abundant lithium ore.⁸ Pegmatites are coarse-grained igneous rocks formed by the crystallization of magma at depth in the crust.⁹ Brines constitute the largest and cheapest sources of lithium worldwide while pegmatites comprise approximately 30% of lithium identified reserves. Brines are located mainly in the salars of South America, particularly in Chile and Argentina. The geographic distribution of lithium resources is shown in [Figure 2](#).

Located in Canada, “Electric Avenue” is a major structural corridor in northwestern Ontario, where the Company’s PAK Project is located. Electric Avenue divides two geological domains for hundreds of kilometers and hosts multiple rare metal occurrences, including spodumene deposits, which contain high levels of lithium. The PAK deposit, located at the southeastern end of Electric Avenue, hosts at the surface one of the highest quality spodumene lithium hard rock deposit in North America. Additionally, the PAK deposit makes up some of the highest-grade resources with the lowest iron impurity levels (i.e., iron levels less than 0.15% Fe₂O₃ in the lattice of the spodumene crystals).

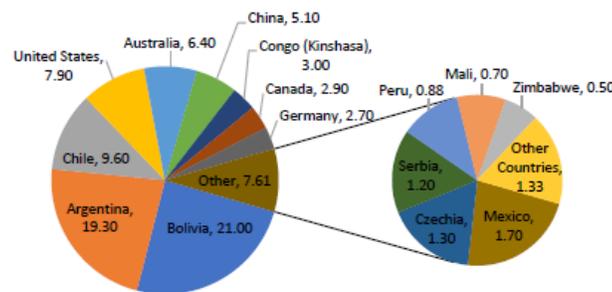


Figure 2: Lithium Resources (in million tons)

⁷ *Op. cit.*, Egbue p. 8.

⁸ L. Peiro, G. Mendez, R. Ayres - *Lithium: Sources, Production, Uses, and Recovery Outlook*, JOM, July 11, 2013, p. 988 [Peiro].

⁹ *Ibid.*, Peiro, p. 989.

4.3 Description of Products

Lithium is extracted from brine and spodumene as lithium carbonate, lithium hydroxide or lithium chloride which is directly used or further processed.¹⁰ Spodumene concentrates are currently one of the most important raw materials used to produce battery grade lithium chemicals. The spodumene purity will directly affect the final price received. The monetary value of low iron spodumene is greater than the more common, higher iron spodumene. Furthermore, a low iron spodumene is also well suited to potentially produce a high-yielding chemical-grade lithium concentrates which is used to produce battery quality lithium chemicals. The production of lithium from spodumene requires an intense heating, cooling, and filtration process, requiring a downstream conversion plant.¹¹ Significant capital is required to design and construct a lithium conversion plant and additional financing will be required by the Company to do so, see Section 7.1.1 “*Mineral Projects Risk Factors.*”

4.4 Principal Markets – Market Size and Growth

This AIF includes market and industry data that has been obtained from third party sources, including industry publications. The Company believes that its industry data is accurate and that its estimates and assumptions are reasonable, but there is no assurance as to the accuracy or completeness of this data. Third party sources generally state that the information contained therein has been obtained from sources believed to be reliable, but there is no assurance as to the accuracy or completeness of included information. Although the data is believed to be reliable the Company has not independently verified any of the data from third party sources referred to in this prospectus or ascertained the underlying economic assumptions relied upon by such sources.

4.4.1 World Supply & Demand

The markets for lithium-based products are affected by worldwide economic cycles and the volatility in supply and pricing that is commonly associated with commodity-based products. In the case of lithium-based products, demand is driven largely by the rate of adoption of lithium-based batteries, particularly those used in electric vehicles. Meanwhile, supply is driven by the capacity of producing lithium-based production operations and the ability of those operations to produce battery grade products. At present, the market for lithium-based products is experiencing supply constraints. The demand for lithium chemicals such as lithium carbonate and lithium hydroxide has been growing rapidly, driven predominantly by rechargeable battery technology now in high demand for electric vehicles and other energy storage applications. The North America electric vehicle market size is expected to reach US\$ 147.60 billion by 2028 and is anticipated to expand at a compound annual growth rate (CAGR) of 37.2% from 2021 to 2028. This increased and expected demand has not been accompanied by matching supply increases, as the timeline for new production to become available is, in most cases, measured over several years and is not responsive to short-term demand increases.

Current projections indicate continued growth in lithium demand from the battery sector for the foreseeable future. Demand is likely to exceed supply for at least the next three years until a number of new supply sources are established. Additionally, industry analysts expect significant battery shortages post 2025. The EU estimates that to meet its climate neutrality goal, it will need up to 18 times more lithium in 2030. The forecasts rise to 60 times more lithium by 2050. [Figure 3](#) displays supply deficits starting in 2026 and demand calibrating to available supply for the balance of the decade.

¹⁰*Ibid.*, Peiro, p. 989.

¹¹*Ibid.*, Peiro, p. 989.

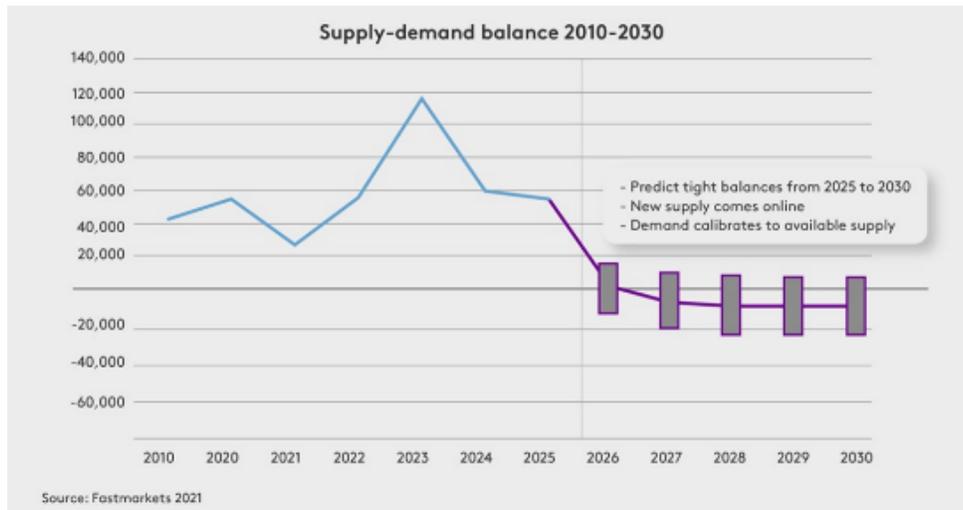


Figure 3: Lithium Market Balance

4.4.2 Lithium Pricing

Lithium carbonate and lithium hydroxide are two of the raw materials used in the development of lithium-based batteries. In 2016, lithium carbonate prices were reported to range from US\$10,000/tonne to US\$16,000/tonne while lithium hydroxide prices were reported to range from US\$14,000/tonne to US\$20,000/tonne. Prices peaked in 2022 at a US\$84,000/tonne and US\$74,000/tonne for lithium hydroxide and lithium carbonate respectively. The high prices established in 2022 have since started to experience a notable decent, as demonstrated in [Figure 4](#). During the last quarter of the fiscal year ended March 31, 2023, lithium carbonate prices were approximately US\$60,500/tonne in global markets while lithium hydroxide prices were approximately US\$73,500/tonne.

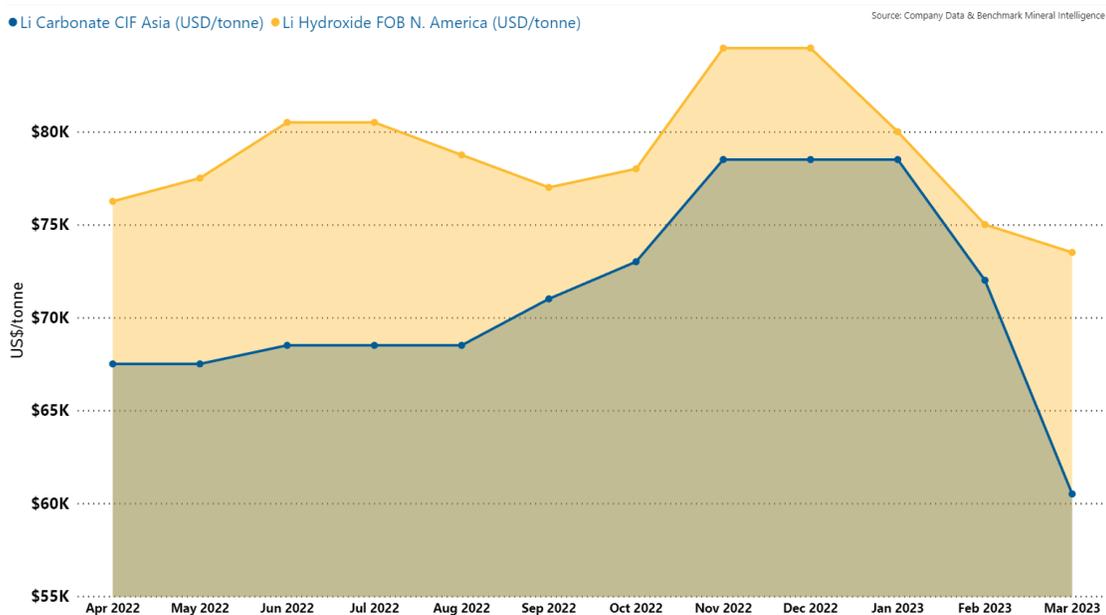


Figure 4: Lithium Carbonate and Hydroxide Spot Prices (April 2022 to March 2023)

4.4.3 Market Size and Growth

Based on the above, the global lithium market was valued at US\$6.83 billion in 2021 and is expected to expand at a CAGR of 12.0% from 2022 to 2030.¹² Based on the current market size and expected growth of the lithium market, the Company expects to be able to sell all of the lithium it is able to produce, however there is no assurance that the Company will discover and produce lithium and, assuming it is successful, there is no assurance as to the price the Company will receive for its products.

4.4.4 Competitors

The Company's objective is to become a strategic domestic supplier of spodumene concentrates for industrial users such as premium glass makers, as well as battery grade lithium hydroxide and other chemicals for the growing electric vehicle and energy storage markets in North America.

Currently, the global lithium market is consolidated with production concentrated in the hands of a few key manufacturers.¹³ Albemarle, SQM, Livent Corp., Orocobre Ltd., Ganfeng Lithium Co., Ltd., and Tianqi Lithium are amongst the key lithium producers in the world. The manufacturers are mainly located in the Americas, Asia, and Australia. The market players compete against product quality, reliability, in terms of supply and customer service, and diversity in the product portfolio. It has been suggested that the lithium industry supply deficit could be exaggerated as projects located in more corrupt and less resource friendly countries have their environmental feasibility questioned. Countries like Canada, USA, and Australia can potentially benefit thanks to their established and transparent mining governance.

4.5 Key Partners

The Company has no key partners at this time.

4.6 Intangible Properties

Our intellectual property is primarily in the form of trademarks and domain names. We also hold rights to several website addresses related to our business including websites that are actively used in our day-to-day business such as <https://www.frontierlithium.com>.

4.7 Changes to Contracts

The Company does not expect any changes to any of the material contracts it has for the current fiscal year.

4.8 Mining Licences and Permits

The Company's flagship asset is the 100% owned PAK Lithium Property located 175 km north of Red Lake, Ontario, in the Red Lake Mining District. This property covers an area of 27,121 hectares comprising of three Mining Leases and 1,258 contiguous plus a group of three Mining Claims. The Company acquired the Mining Claims to the PAK Lithium Property on or before January 9, 2019, and the associated Mining Leases on February 22, 2017, April 14, 2022 and August 2, 2022. The Mining Leases are valid for 21 years.¹⁴ The Company continues to apply for and maintain required permits and this is an ongoing business.

¹²*Op. cit.*, Grand View Research Market Analysis Report

¹³*Op. cit.*, Grand View Research Market Analysis Report

¹⁴ON Mining Act s. 81(3)

4.9 Governmental Regulations

The Company is an Ontario-based business, located in a mature mining jurisdiction with a rigorous regulatory landscape. As such, the Company is subject to a variety of governmental regulations, including for exploration and development; environmental protection; tenure; production; taxes; labour standards and occupational health and safety. See Section 8 “Mineral Projects Risk Factors” for the risk factors associated with these regulations.

Legislation governing mining in Ontario includes, but is not limited to, the *Mining Act*, the *Environmental Assessment Act*, the *Environmental Protection Act*, the *Ontario Water Resources Act*, the *Public Lands Act* and the *Occupational Health and Safety Act*, as well as a number of federal acts, including the *Fisheries Act*. In total, there are twelve provincial and federal ministries involved in regulating mining and exploration activities.

With respect to permitting, the Company will undergo what is commonly referred to as the “one-window approach” – which is a coordinated regulatory approach led by the Ontario provincial government bringing together the Ministry of Mines, Ministry of Environment Conservation and Parks, Ministry of Northern Development, and other implicated Ministries. Outreach to implicated federal government departments for long-lead permits, such as those required under the federal *Fisheries Act*, would also be done at this time. To advance the mine and mill, it is anticipated that the Company will require four class environmental assessments. The mine and mill are not subject to the federal *Impact Assessment Act*, as determined by the ‘Projects List’ (*Physical Activities Regulations* under the *Impact Assessment Act*).

In preparation for entering the environmental assessment process, the Company is advancing work on its environmental baseline studies. These include surface water quality and hydrology, groundwater, the aquatic environment (i.e. fish and fish tissue analysis), the terrestrial environment (i.e. species at risk), and air quality. It will begin work on a closure plan for the mine in advance of its development.

The Company conducts its mineral exploration and development activities in compliance with applicable regulations, including environmental protection regulations. It has agreements in place with proximal First Nation groups and has advanced benefits programs, including recruitment, training and scholarship programs. The Company regularly communicates with proximal First Nation groups on its exploration activities, including consulting with them on permits. While the Company regularly communicates and consults with proximal First Nation groups, the Company recognizes that federal and provincial governments have the legal ‘duty to consult’ with these groups of people, and to minimize the impacts of activities on public health and safety and the environment. This is consistent with the recognition and affirmation of existing Aboriginal and treaty rights in Section 35 of the Constitution Act, 1982.

4.10 Competitive Conditions

The mineral exploration and mining industry is intensely competitive and there is no assurance that, even if commercial quantities of a mineral resource are discovered, a profitable market would exist for the sale of same. The Company will compete with Companies and other business entities which are better financed, have greater technical expertise/facilities and have better access to capital than the Companies; there is no assurance that the Company will be able to successfully compete against such other Companies and entities for capital or for properties. Furthermore, there is competition for experienced management and directors in the junior mineral exploration and development sector. There can be no assurance that the Companies will be successful in attracting and retaining qualified personnel as competition for persons with these skill sets increase.

4.11 Specialized Skills and Knowledge

All aspects of the Company’s business require specialized skills and knowledge. Such skills and knowledge include the areas of geology, drilling, logistical planning and implementation of exploration programs and regulatory, finance, legal and accounting expertise. The Company relies upon its management, employees and various

consultants for such expertise and competition for such people qualified personnel has become more intense in recent years, particularly in Canada where there has been an expansion of lithium project exploration and development.

4.12 Mineral Price Cycles and Economic Cycles

The mining business is subject to mineral price cycles. The marketability of minerals and mineral concentrates is also affected by worldwide economic cycles. Lithium markets are affected by demands for lithium batteries and global economic conditions. Fluctuations in supply and demand in various regions throughout the world are common. As noted in "Competitive Conditions" above, the Company is unable to give any predictions of future commodities prices with any certainty.

4.13 Economic Dependence

The Company's business is, and will be in the future, dependent on the exploration, development and commercial operation of its lithium resource properties.

The Company is not at this time a commercial producer. It is not currently dependent on any sole contract to sell products or services. There is no single supplier or small group of suppliers on which the Company relies to meet the Company's requirements for goods, services or raw materials.

However, the Company cannot predict if it would, if it began production from the PAK Lithium Project in the future, be dependent on one major purchaser of any products from the Project. The market for lithium, while more concentrated than for some widely traded commodities like oil, still has many purchasers and end consumers of lithium products and concentrates.

4.14 Bankruptcy And Similar Procedures

There are no bankruptcies, receivership or similar proceedings against the Company nor is the Company aware of any such pending or threatened proceedings. The Company has not commenced any bankruptcy, receivership or similar proceedings during the Company's history.

4.15 Reorganizations

There has been no formal reorganization of the Company since inception. For share capital changes and name changes implemented by the Company see "Corporate Structure of the Corporation – Name, Address and Incorporation".

4.16 Employees

As of March 31, 2023, the Company had 19 full-time and 14 part-time consultants and contractors. A significant portion of the Company's work is done by services providers such as providers of accounting, legal audit, and some geological services. These persons are not included in the numbers disclosed above.

4.17 Environmental Protection

The Company's operations are subject to various government laws and regulations at the federal and provincial levels concerning environmental protection to which the Company complies. To enable project advancement, including mine planning and permitting, rigorous baseline data must be collected and assessed to ensure both terrestrial and aquatic ecosystems are protected. Collection of environmental baseline data for the PAK Lithium Project began in 2014 and is ongoing. See Section 4.9 "Government Regulations."

4.18 Social Or Environmental Policies

The Company aims to provide social and environmental benefits from its PAK Lithium Project, while minimizing any negative impacts. As part of mining and commercial production planning, the Company is expected to assess and address potential impacts to the natural and social environments, including to Aboriginal communities proximal to the project. The Company has ongoing communication with these and other aboriginal communities. Aboriginal and treaty rights of Indigenous communities are protected under Section 35 of *The Constitution Act* (Canada). The federal and provincial governments share the duty to consult Indigenous communities regarding developments such as this Project as part of the environmental/impact assessment and approvals process.

The Ontario Ministry of Mines will provide guidance to the Company regarding the consultation that is required for the Project and the aspects of the consultation process that will be delegated to the Company. The Company is then required to prepare an Indigenous Consultation Work Plan in accordance with the requirements of the *Mining Act*, while endeavouring to meet the consultation requirements of the other involved government agencies.

Guided by our Indigenous Principles (a public document) the Company understands the importance of building and maintaining close relationships with Indigenous communities, particularly those communities proximal to the PAK Lithium Project. Over the past decade, the Company has communicated and consulted with the communities of North Spirit Lake First Nation, Deer Lake First Nation, and Sandy Lake First Nation since it started exploration activities in the area. It committed to consultation with Keewaywin First Nation in 2019 and has been actively engaged with them since. The Company has also begun communication with other area First Nations with interest in the Project. The Company has signed exploration agreements in place with the four proximal First Nation communities. The agreements are designed to recognize and respect the Aboriginal and Treaty rights and support the interests of the local communities, including through financial contributions; actions that go beyond legal compliance. The Company and all four signatory communities desire to maintain open and friendly, cooperative, ongoing communications with positive working relationships.

These agreements also state that the parties agree that it is their common objective to assist community members to benefit from business opportunities associated with exploration activities undertaken by the Company. If the ensuing PFS is positive, the parties have also committed to make best efforts to develop a collaboration/impact and benefits (IBA) agreement to support future mine production. The Company continues to conduct mineral exploration with the support of these communities.

Reflecting its commitment, the Company regularly provides updates on the Project to the proximal First Nations communities and provides opportunities for tours and environmental monitoring of the site. It employs community members at the Project camp, provided on-site training when it is required, support area businesses with First Nations ownership or partnership structures and provides annual scholarships to each of the four proximal communities.

5 MINERAL PROPERTIES

Information in this section has an effective date of July 14, 2023, pursuant to the PFS Technical Report which was filed this date and can be found on the Company's SEDAR profile at (www.sedar.com).

5.1 PAK Lithium Project

The Company's mineral property is composed of three Mining Leases and 1,261 Mining Claims totalling 27,121 hectares. The Property is located 175 km north of Red Lake, Ontario in the Red Lake Mining Division, centred around 52°36'N latitude and 93°23'W longitude near Pakeagama Lake. Four lithium bearing pegmatite zones have been discovered to date, including Pak, Spark, Bolt, and Pennock. See sections 5.7 through 5.7.4 below for more

detailed descriptions of each pegmatite zone. Sufficient work has been completed by the Company on the PAK and the Spark pegmatite zones to prepare a resource estimate for each as well as an NI 43-101 compliant PFS.

The Company retained BBA to prepare a PFS in accordance with National Instrument 43-101 for Frontier's PAK Lithium Project Fully Integrated Pre-Feasibility Study, herein referred to as the "Project", located in northwestern Ontario. The PFS encompasses both the PAK and Spark Deposits in a fully integrated operational scenario from mining to chemical production.

The Results of the PFS are presented in the PFS Technical Report and filed on the Company's profile on SEDAR (www.sedar.com).

This report was prepared by a team of independent consultants and qualified persons including Todd McCracken, P.Geo., of BBA, Bahareh Asi, P.Eng., of BBA, Joanne Robinson, P.Eng., of BBA, David Willock, P.Eng., of BBA, Shane Ghouralal, P.Eng., MBA, of BBA, Darlene Nelson, P.Eng., of WSP, Andrew Holloway, P.Eng., of Halyard Inc., Ian Ward, P.Eng., of Ian Ward Consulting Services, and Ron deGagne, P.Geo., of Environmental Applications Group.

The issue date of the PFS Technical Report is July 14, 2023 and the effective date is May 31, 2023.

The following descriptions in this Section 5 are excerpts and summaries of results from the PFS Technical Report for the Project. This is not a complete summary of the PFS Technical Report. For the complete PFS Technical Report and a detailed description of the resource estimates and PFS, the reader is directed to the original report filed on SEDAR in accordance with NI 43-101, which includes detailed information regarding the Project, such as:

- Property Location and Description
- History
- Geological Setting and Mineralization
- Deposit Type, Exploration and Drilling
- Sample Preparation, Analyses and Data Verification
- Mineral Processing and Metallurgical Testing
- Mineral Resource Estimate
- Mining Methods
- Recovery Methods
- Project Infrastructure
- Market Studies and Contracts
- Environmental Studies, Permitting and Social or Community Impact
- Capital and Operating Costs
- Economic Analysis
- Interpretations and Conclusions and Recommendations

The following summary is subject to all assumptions, qualifications and procedures set out in the PFS and is qualified in its entirety with reference to the full text of the PFS Technical Report. Readers should read this summary in conjunction with the complete PFS Technical Report.

5.2 Property Location and Ownership

The PAK Lithium Project is located 175 km north of Red Lake, Ontario in the Red Lake Mining District and is situated on Crown Land. The Project covers an area of 27,062 hectares comprised of three Mining Leases and 1,261 Mining Claims of which 1,258 are contiguous with the Mining Leases. The center of the Project is located in the National Topographic System map sheet reference 53C/11 at approximately 52°36'N latitude and 93°23'W longitude near Pakeagama Lake (Figure 5). The Mining Leases and Mining Claims are 100% owned by the Company.

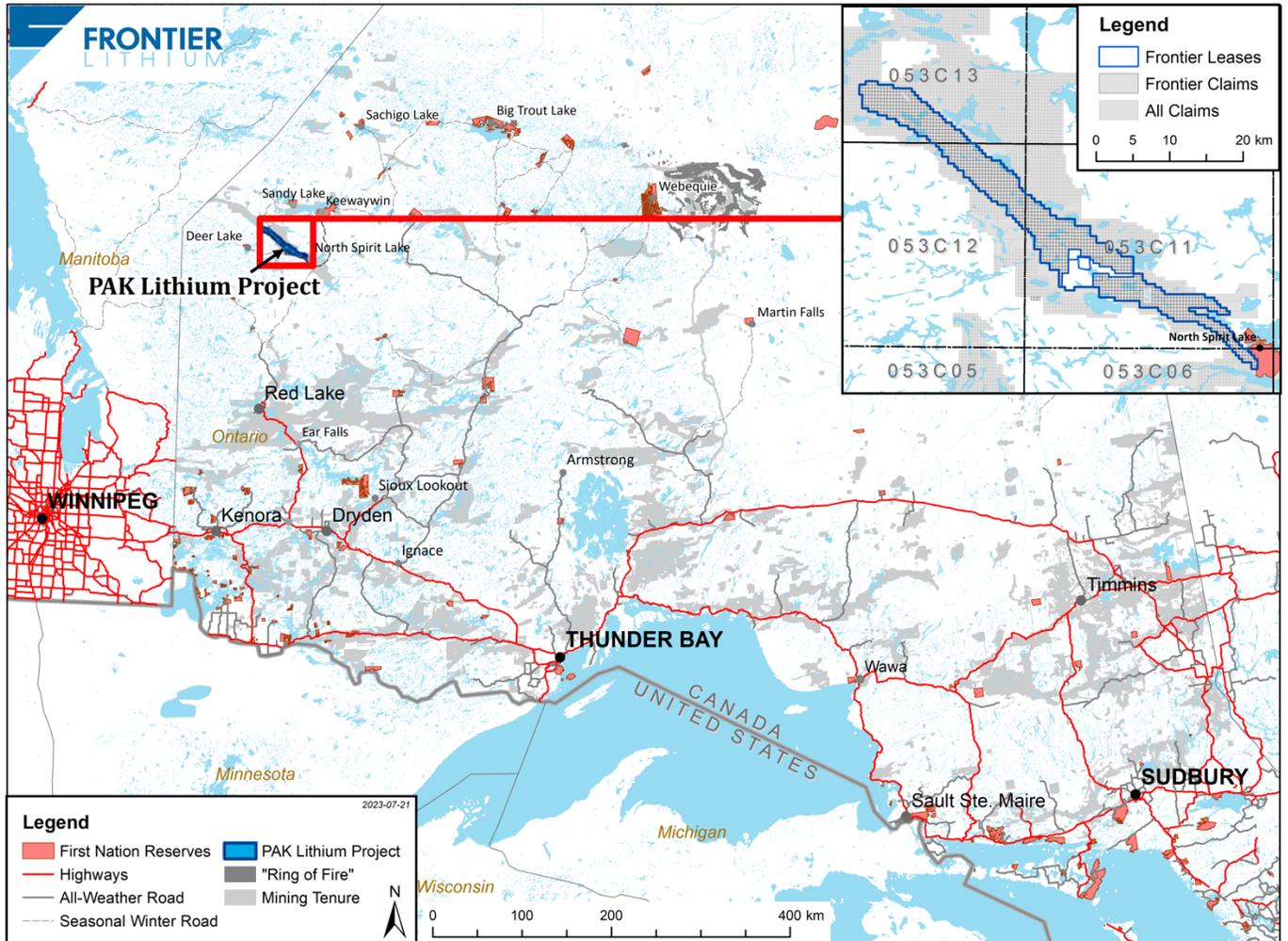


Figure 5: Property Location Map

5.3 Infrastructure and Access

As noted above, the PAK Lithium Project is located 175 km north of Red Lake, Ontario in the Red Lake Mining District and is situated on Crown Land. Access to the Property is available year-round by chartered ski or float equipped aircraft from Red Lake. The project is located in a relatively isolated area of north-western Ontario where infrastructure consists of a winter road, which services the First Nation communities of Deer Lake (45 kilometres west of the Project), Sandy Lake (55km north), and North Spirit Lake (25km east). The winter road runs over the

mining claims on the west side of the project with vehicular access to the property during winter months of February and March. Currently, access to the property occurs from approximately May 15 (after break-up) to October 15 (5 months) via float plane, and from February 1 to March 15 (1.5 months) via the winter road.

The Watay Power Project is being built to connect 24 First Nation Communities to Ontario's electrical grid, and traverses over the Company's PAK Lithium Project land tenure, with its consent. Funded through both the federal and provincial governments, the Watay Power Project will bring low-cost electricity to the region, will enhance the viability of the Company's PAK Lithium Project and will improve social-economic conditions for northern residents. Phase 1 of the Watay Power Project has been completed and Phase 2 is currently under construction, with completion expected in 2023.

To enable construction of the Watay Power Project a series of 'long-life' bridges are being installed along the winter road between the communities of Deer Lake and North Spirit Lake. A government sponsored engineering study led by some of the Company's partnered Communities is under way for "Berens River Bridge and Roads" project to improve and extend the winter road season and address the Berens River crossing as a first step towards all-season road access to the district.

The Company has also initiated a scoping study to assess the construction of an all-season road following the corridor used by the Watay Power Project. An all-season road in the region could enable year-round access to the region's Indigenous communities and the Company's PAK Lithium Project. Assuming a favourable scoping study, discussions will be held with the communities on how best to advance the all-season road from Red Lake to the PAK Lithium Project and participating communities.

5.4 Historical Work

A.P. Low of the Geological Survey of Canada (GSC) completed the first geological reconnaissance mapping of the region in 1886. Additional geological surveys were carried out by G. V. Douglas (1925) and M. E. Hurst (1928) of the Ontario Department of Mines. In the past, most of the exploration activity in the region has been centred on the Favourable and Setting Net Lakes area located 25 to 40 km to the northwest of the Property.

While prospecting, K.C. Murray identified gold in the Favourable Lake area in 1927. The gold property was developed as the Berens River Mine and produced 4,451 kg gold, 160,926 kg silver, 2,770 t lead, and 815,147 kg zinc from 508,665 tons of ore between 1939 and 1948.¹⁵ Subsequent exploration by Golsil Mines Limited, Zahavy Mines Limited, Getty Mines Limited, and Noramco Mines Ltd. was carried out until the early 1990's.

Geological mapping of portions of the region was carried out by Ayres.¹⁶ He noted spodumene in a pegmatite dyke and holmquistite within granitic rocks near Setting Net Lake (25 km WNW of Pakeagama Lake). A grab sample from the pegmatite dyke contained 0.52% Li.¹⁷

An airborne reconnaissance gamma-ray spectrometer survey was flown over the Pakeagama Lake area in 1977 as part of a regional coverage program by the Ontario Geological Survey ("OGS") and the GSC in 1979. The survey was flown at a 120 m terrain clearance with 5 km line spacing and a 2.2 km station interval. No significant radiometric anomalies were detected in the immediate vicinity of Pakeagama Lake.

5.4.1 Work by the Ontario Geological Survey

Geological mapping of the region was completed by D. Stone of the OGS in 1990.¹⁸ Tourmaline-rich samples from the vicinity of Pakeagama Lake returned anomalous levels of lithium, cesium, tantalum, and beryllium during this

¹⁵ Stone, D., (1998). *Precambrian geology of the Berens River area, northwest Ontario, Ont. Geol. Surv.*, OFR 5963, p. 116 [Stone, 1998].

¹⁶ Ayres, L.D., (1970). *Setting Net Lake area, District of Kenora (Patricia Portion)*: Ontario Dept. Mines (revised), Scale 1:15,840, p. 538; Ayres, L.D., (1972). *Northwind Lake area, District of Kenora (Patricia Portion)*: Ontario Dept. Mines, Scale 1:15,840, p. 756.

¹⁷ Ayres, L.D., (1972). *Setting Net and Northwind Lakes areas, District of Kenora (Patricia Portion)*: Ontario Dept. Mines, MP. 53, p. 6-13.

work. Five rare metal mineral occurrences were detected over a 35 km trend along the Bear Head Lake Fault Zone; however, the Pakeagama Lake pegmatite occurrence became the main focus of detailed work.

In 1998 and 1999, Dr. F. Breaks and Dr. A. Tindle of the OGS, studied the Pakeagama pegmatite. Approximately 2,186 analyses had been conducted to establish that the Pakeagama rare metals pegmatite is potentially a world-class pegmatite suggesting the presence of Tanco-style mineralization. The Tanco Pegmatite at Bernic Lake in Manitoba is a world-class locked cycle testing (“LCT”) pegmatite that was mined for tantalum, lithium and cesium. At the time, the Pakeagama pegmatite was thought to vary in width from 30 to 125 m, with a strike length of at least 260 m (open in both directions) that may extend another 300 m to an aplite dyke showing on the shores of Pakeagama Lake.

The detailed documentation of a variety of tantalum-rich minerals coupled with the presence of pollucite (main cesium ore mineral) renders the Pakeagama Lake pegmatite and adjoining area one of the best exploration targets for tantalum and cesium in Northwestern Ontario.”¹⁹

In 2007, an airborne electro-magnetic survey was flown by Fugro at 200 metre line spacing and 120 metre terrain clearance for the Ontario Geological Survey’s. The northwest limit of the survey included the PAK and Spark deposits. The iron formations in the metasediments and sulphides in the metavolcanic units were well defined by the survey.

In 2018, a combined helicopter-borne electromagnetic and aeromagnetic survey was flown from the Spark area to the Manitoba border by Geotech Limited for the Ministry of Energy, Northern Development and Mines and the Ontario Geological Survey’s. Line spacing was 200 metres with an instrument terrain clearance of 50 metres. The survey successfully identified geological units and structural lineaments associated with the various greenstone belts within the survey area.

5.4.2 Exploration Work by the Corporation and its Predecessor Company Houston Lake Mining

There has been little exploration by publicly traded or private companies prior to work completed by the Company and Houston Lake Mining, the Company’s predecessor company. [Table 2](#) summarizes the work that has been completed on the property by the Company and its predecessor company Houston Lake Mining.

Table 2: Property Summary

Year	Company / Organization ⁽¹⁾	Activity	Highlights
1999	Houston Lake Mining Inc.	Geological mapping and sampling	Confirmed work completed by the OGS.
2001	Houston Lake Mining Inc.	Ground geophysics	26-km magnetic and VLF survey; the survey was unsuccessful in delineating the pegmatite zone, however, defined the contacts between metasedimentary and granitic rock that contains the pegmatites in overburden covered areas.
2001	Emerald Fields Resources Corp.	Geological mapping and sampling	Mapped and sampled the area immediately to the northwest of the pegmatite. No anomalies noted.
2001	Houston Lake Mining Inc.	Geological sampling (channel sampling)	Identified and confirmed high-grade lithium in the "Core Zone" of 4.5% Li ₂ O over 13.9 m.

¹⁸ *Op Cit.*, Stone, 1998, p. 116; Stone, D., Fogal, R., and Fitzsimons, S., (1993). *Precambrian geology, Whiteloon Lake*, Ont. Geol. Surv. Map P.3224, Scale 1:50,000 [Stone, 1993].

¹⁹ Breaks, F.W., Tindle, A.G., and Smith, S.R., (1999). *Raremetal mineralization associated with the Berens River - Sachigo Subprovincial boundary, northwestern Ontario: Discovery of a new zone of complex-type, petalite subtype pegmatite and implications for future exploration*: Ontario Geol. Surv., MP 169, p. 168-182 [Breaks et al].

Year	Company / Organization ⁽¹⁾	Activity	Highlights
2008	Houston Lake Mining Inc.	Line cutting - soil sampling	Re-established the grid for mapping the pegmatite and surrounding area. An Enzyme Leach survey was completed showing an apparent continuity of the anomalous zones away from the pegmatite to the southeast and east. This is most apparent with Cs, V, Ta, Li, Ga, and Nb.
2010	Houston Lake Mining Inc.	Acquisition of claims by option agreement	Three claims secured the land holdings immediately to the south and east of the pegmatite covering most of Pakeagama Lake.
2011	Houston Lake Mining Inc.	MMI soil sample survey	The regional survey was somewhat successful in delineating elevated cesium, lithium, and rubidium MMI concentrations both to the northwest and southeast directions coincident with the assumed orientation of the Pakeagama Lake pegmatite.
2012	Houston Lake Mining Inc.	Channel sampling; staking	Historical and 2 new channels were sampled across portions of the pegmatite verifying historical grades by using certified standards. Increased land tenure to the southeast along the pluton.
2013	Houston Lake Mining Inc.	Phase I diamond drilling; staking	Completed the first diamond drilling on the Property totaling 955 m in 6 holes. Intersected 154 m wide pegmatite zone grading 1.22% Li ₂ O, 111 ppm Ta ₂ O ₅ , and 0.41% Rb ₂ O and a high-grade Lithium zone of 18 m grading 4.22% Li ₂ O. Continued staking along the pluton.
2013	Houston Lake Mining Inc.	Spodumene study	Completed an electron microprobe study confirming low-inherent iron content of the spodumene at the Pakeagama Lake Pegmatite.
2014	Houston Lake Mining Inc.	Phase II diamond drilling; staking	Completed 1,489 m in 9 holes which confirmed continuity of the high-grade UIZ and extended the strike length and depth extent of the mineralized pegmatite zones. Continued staking to the southeast.
2014	Houston Lake Mining Inc.	Channel sampling; staking	Completed the twinning of outstanding historical channels and cut two new channels confirming the grades and width of the UIZ at surface. Staked to the northwest.
2015	Houston Lake Mining Inc.	Phase III diamond drilling	Completed 1,641 m in 8 holes which confirmed continuity of the grades and extended the strike length and depth extent of the mineralized pegmatite zones.
2015	Houston Lake Mining Inc.	Bulk sample of UIZ	In late February and early March, a drill-blast program of 67 holes was completed with an approximately 300-tonne sample extracted and hauled to Red Lake for crushing and transported to SGS in Lakefield, ON for final processing as a direct shipping ore product (DSO) for an industrial test in Europe.
2015	Houston Lake Mining Inc.	Initiated baseline sampling, staking	Established water sampling and monitoring stations within the PAK project area to be sampled three times annually (spring freshet, late summer, and winter). Also initiated flora and fauna study including species lists. Staked two additional claims along the access trail to the winter road.
2015	Houston Lake Mining Inc.	Phase IV diamond drilling	Completed 608 m in 2 holes which tested the eastern extension of the pegmatite. As predicted, the pegmatite body is continuous and plunging to the east at roughly 45 degrees.
2015	Houston Lake Mining Inc.	Channel sampling	Stripped overburden and extended surface exposures of the high-grade UIZ to the WNW and completed 70 m of new channel cuts in 8 separate channels.
2016	Frontier Lithium Inc.	Name change	Company changes name from Houston Lake Mining to Frontier Lithium Inc.
2016	Frontier Lithium Inc.	Exploration agreement	Company signs Exploration Agreement with Deer Lake First Nation and Sandy Lake First Nation.
2016	Frontier Lithium Inc.	Preliminary Prefeasibility Study	Company initiated a preliminary prefeasibility study on the Project.
2017	Frontier Lithium Inc.	Exploration agreement	Company signs Exploration Agreement with North Spirit Lake First Nation.
2017	Frontier Lithium Inc.	Tree core & Soil Study	Completed a study of available trees in and around the deposit area and also on two lines to the northwest to test an area of prospective geology away from the deposit
2017	Frontier Lithium Inc.	Geological Mapping	Began a process of systematic mapping within the Company's claim area away from the deposit. Completed a petrographic study on selected hand samples collected
2017	Frontier Lithium Inc.	Metallurgical test	Metallurgical test produces a spodumene concentrate with a grade of 7.13% Li ₂ O.
2017	Frontier Lithium Inc.	Phase V diamond drilling	Completed 1,032 m in 4 holes to delineate the eastern plunge of the pegmatite.

Year	Company / Organization ⁽¹⁾	Activity	Highlights
2017	Frontier Lithium Inc.	Hydrogeology / geotechnical	Completed 316 m in 28 holes and 576 m in 5 holes for hydrogeology and geotechnical support, respectively for the PFS.
2018	Frontier Lithium Inc.	Baseline Environmental Surveys	Finished with baseline surveys including areas designated in the PFS. This included aquatic studies plus flora and fauna.
2018	Frontier Lithium Inc.	Preliminary Prefeasibility Study	Publish results of the preliminary prefeasibility study.
2018	Frontier Lithium Inc.	Geological Mapping	Continued with the geological mapping and discovered the new Spark pegmatite 2.3 km northwest of the PAK deposit.
2018	Frontier Lithium Inc.	Hydrogeology	Completed 194 m in 20 holes for hydrogeology as a result of recommendation from the 2018 PFS.
2018	Frontier Lithium Inc.	Phase VI Diamond Drilling	Completed a 9-drillhole program totaling 1,221 m focused on delineating the deposit beneath the eastern extension and the near-surface UIZ
2018	Frontier Lithium Inc.	Channel Sampling	Completed 8 channels on the exposed surface of the Spark Pegmatite
2019	Frontier Lithium Inc.	Phase VII Diamond Drilling	In February, completed drilling to test the Spark pegmatite with 5 holes totalling 1,340 m.
2019	Frontier Lithium Inc.	Phase VIII Diamond Drilling	In August, completed an additional 4 holes totaling 1,159 m on the Spark pegmatite
2019	Frontier Lithium Inc.	Channel Sampling	Completed 4 additional channels on the exposed surface of the Spark Pegmatite
2019	Frontier Lithium Inc.	Exploration agreement	Company signs Exploration Agreement with Keewaywin First Nation.
2019	Frontier Lithium Inc.	Channel Sampling	Completed 1 channel on the exposed surface of Pennock Pegmatite
2020	Frontier Lithium Inc.	Prefeasibility study	Included the Spark Resource mineral estimate with the Prefeasibility study report
2020	Frontier Lithium Inc.	Channel Sampling	Completed 2 channels on the exposed surface of Bolt Pegmatite
2021	Frontier Lithium Inc.	Phase IX Diamond Drilling	In February and March, completed 4 in-fill and 2 geotechnical drill holes on the Spark pegmatite totalling 1,631 m.
2021	Frontier Lithium Inc.	Pre Economic Assessment	Report includes fully integrated operation from mining through to the production of lithium compounds
2021	Frontier Lithium Inc.	LiDAR Survey	LiDAR was flown over the entire PAK Lithium Project area of 27 km ² producing a digital elevation model with accuracies of >15 cm vertical and <30 cm horizontal.
2021	Frontier Lithium Inc.	Phase X Diamond Drilling	Completed 5 drill holes totally 1,638 m on the Spark pegmatite
2021	Frontier Lithium Inc.	Channel Sampling	Completed a third channel on the Bolt Pegmatite and two more channels on the western parts of Spark.
2021-2022	Frontier Lithium Inc.	AMT Geophysical Survey	Initiated AMT survey over the PAK, Bolt and Spark pegmatites and completed 200m grid in March 2022
2022	Frontier Lithium Inc.	Phase XI Diamond Drilling	Completed 3 delineation and 2 geomechanical holes totally 1,343 m on the Spark pegmatite
2022	SLR Consulting Limited	Environmental Baseline Study	Initiated an environmental audit and began a systematic program of surface and groundwater sampling, aquatic and terrestrial studies.
2022	Frontier Lithium Inc.	Phase XII Diamond Drilling	Completed 45 holes including two geo-mechanical holes for a total of 14,641 m on the Spark Pegmatite to ensure sufficient size and grade to proceed with a PFS.
2022	Frontier Lithium Inc.	Channel Sampling	Completed a channel on the Spark Pegmatite in an area where there was a gap in drilling due to topography - drill accessibility.
2022	Frontier Lithium Inc.	Reconnaissance Mapping and Prospecting	Completed regional scale mapping over the entire PAK Lithium Project. Two mapping crews utilized the same helicopter used to support the Phase XII drill program.
2022	Axiom	UAV Mag Survey	Completed a UAV Mag survey over 15 km ² covering the PAK, Spark, and Bolt pegmatites.
2023	Frontier Lithium Inc.	Phase XIII Diamond Drilling	Initiated drilling on the Bolt pegmatite, hydrogeological-geomechanical drilling at PAK as required for DFS and delineation drilling on the western extension of Spark. Also includes some condemnation drilling for proposed mill and waste piles. Drilling is ongoing and as of April 28, 2023 completed 4,662.3 metres in 22 holes.
2023	Frontier Lithium Inc.	Reconnaissance	Completed follow-up on priority targets identified during the 2022 reconnaissance work

Year	Company / Organization ⁽¹⁾	Activity	Highlights
		Mapping and Prospecting	and filled in gaps. Included channel sampling of prospective pegmatite dykes and bodies.

Notes:

(1) Houston Lake Mining Inc. changed its name to Frontier Lithium Inc. in July 2016.

5.5 Geological Setting

The PAK Lithium Project area is situated along the boundary between the Berens River and Sachigo Subprovinces²⁰ of the Archean Superior Province of the Canadian Shield (Figure 6). These subprovinces comprise a series of relatively isolated volcano-sedimentary (Greenstone) belts surrounded by extensive granitic and gneissic suites of rock. The subprovinces are separated by the Bear Head Lake Fault Zone (Figure 7).

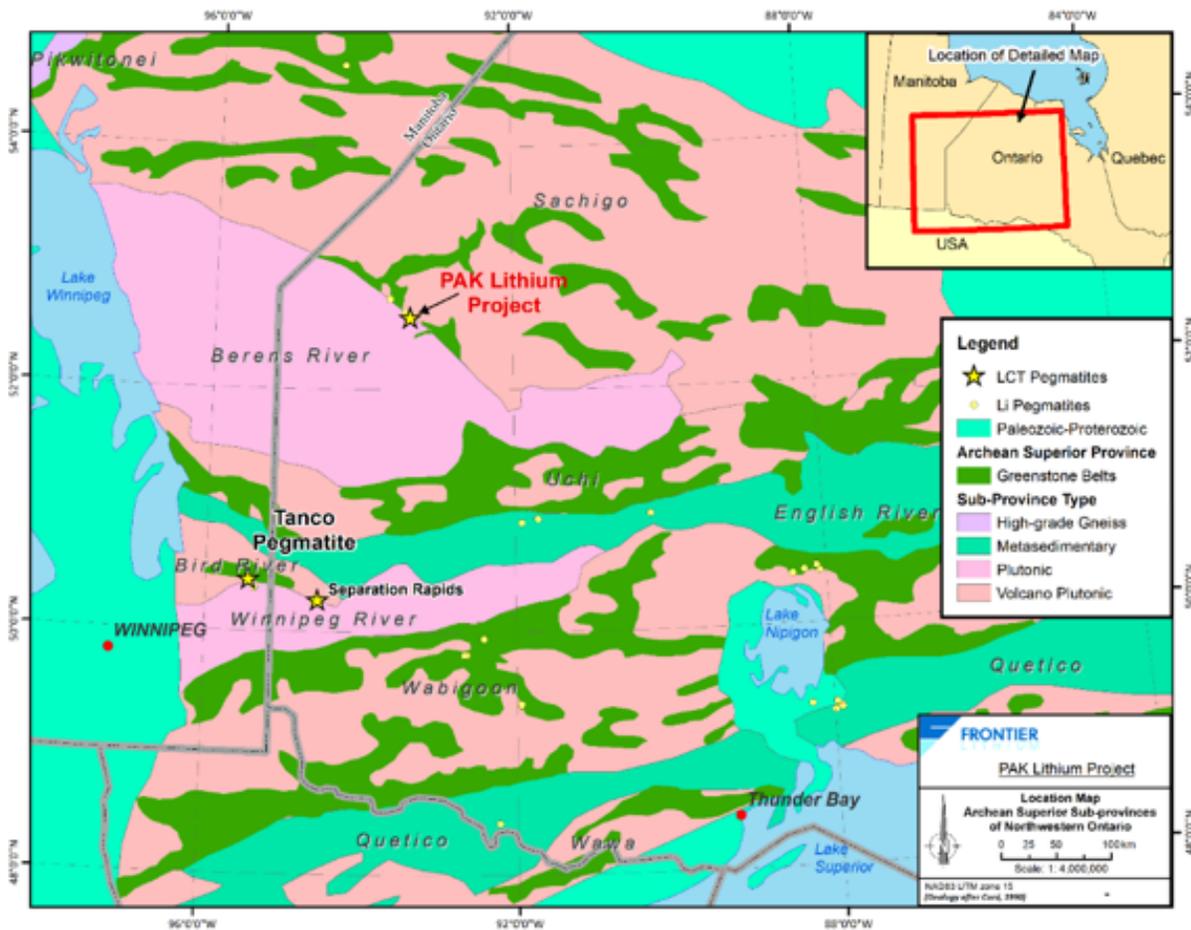


Figure 6: Archean Subprovinces

²⁰ Card, K.D. and Ciesielski, A., (1986), DNAG #1. *Subdivisions of the Superior Province of the Canadian Shield*: Geoscience Canada, v. 13, p. 5-13.

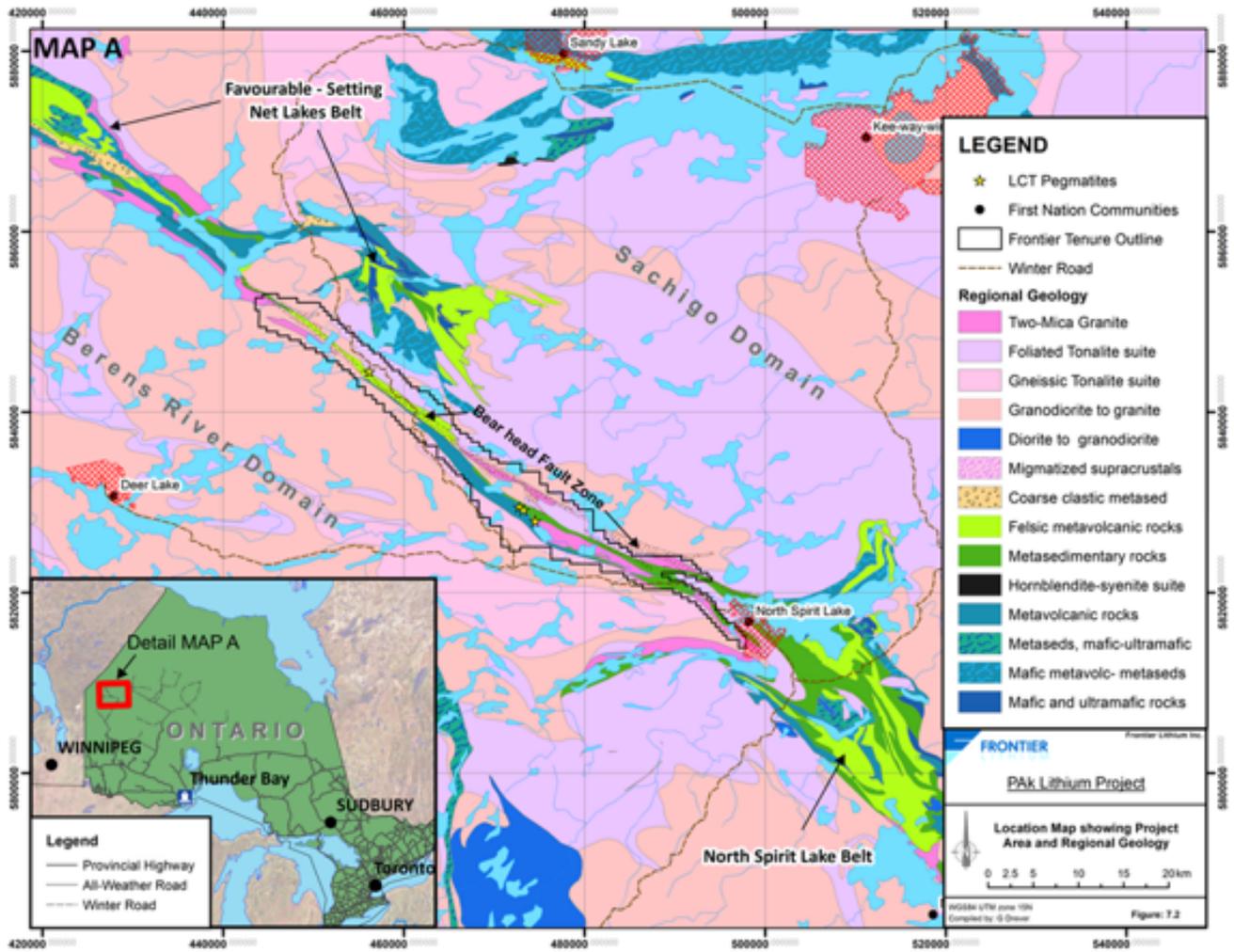


Figure 7: Regional Geology

Two of the greenstone belts that are located along the Bear Head Lake Fault Zone are the Favourable Setting Net Lakes and the North Spirit Lake greenstone belts located to the northwest and southeast of the Property, respectively. The belts are connected through the Pakeagama Lake area by the Bear Head Lake Fault system. The main assemblages of volcanic and sedimentary rocks that are identified in each belt are, in part, correlated between the two belts.²¹ The assemblages of the Favourable Lake and North Spirit Lake Greenstone belts have been metamorphosed under greenschist facies conditions, however an increase to amphibolite facies occurs in proximity to the Bear Head Lake Fault Zone. Amphibolite facies is the predominant metamorphic grade in the PAK Lithium Project area outside of the Greenstone belts.

The Bear Head Lake Fault is the dominant structural feature in the region and has been traced for over 140 km from northwest-southeast. The fault is composed of a several hundred metres thick zone of mylonite. The presence of cataclastites, tension gashes infilled by vuggy quartz-epidote-adularia, and potassic alteration indicate that brittle

²¹ *Op. cit.*, Stone 1993.

deformation has been superimposed on the mylonites. A dextral transcurrent dislocation of the Bear Head Lake Fault has been interpreted from microstructures.²² The regional gneissosity trends northwest-southeast and generally is steeply dipping inward towards the core of the volcano-sedimentary assemblage in the vicinity of Pakeagama Lake. The Bear Head Lake Fault Zone appears to be the locus for a peraluminous suite of granitic plutons. Nine major plutons consisting of two mica granites (fertile granites) are documented over the 140 km strike length of the fault. Fertile granites are interpreted to be the parental rocks that give rise to rare metal pegmatites.

5.6 Project Geology

The area is underlain by the northwestern extension of the North Spirit Lake Greenstone belt. The Greenstone rocks are approximately 2 km wide in the vicinity of the pegmatites (Figure 8).

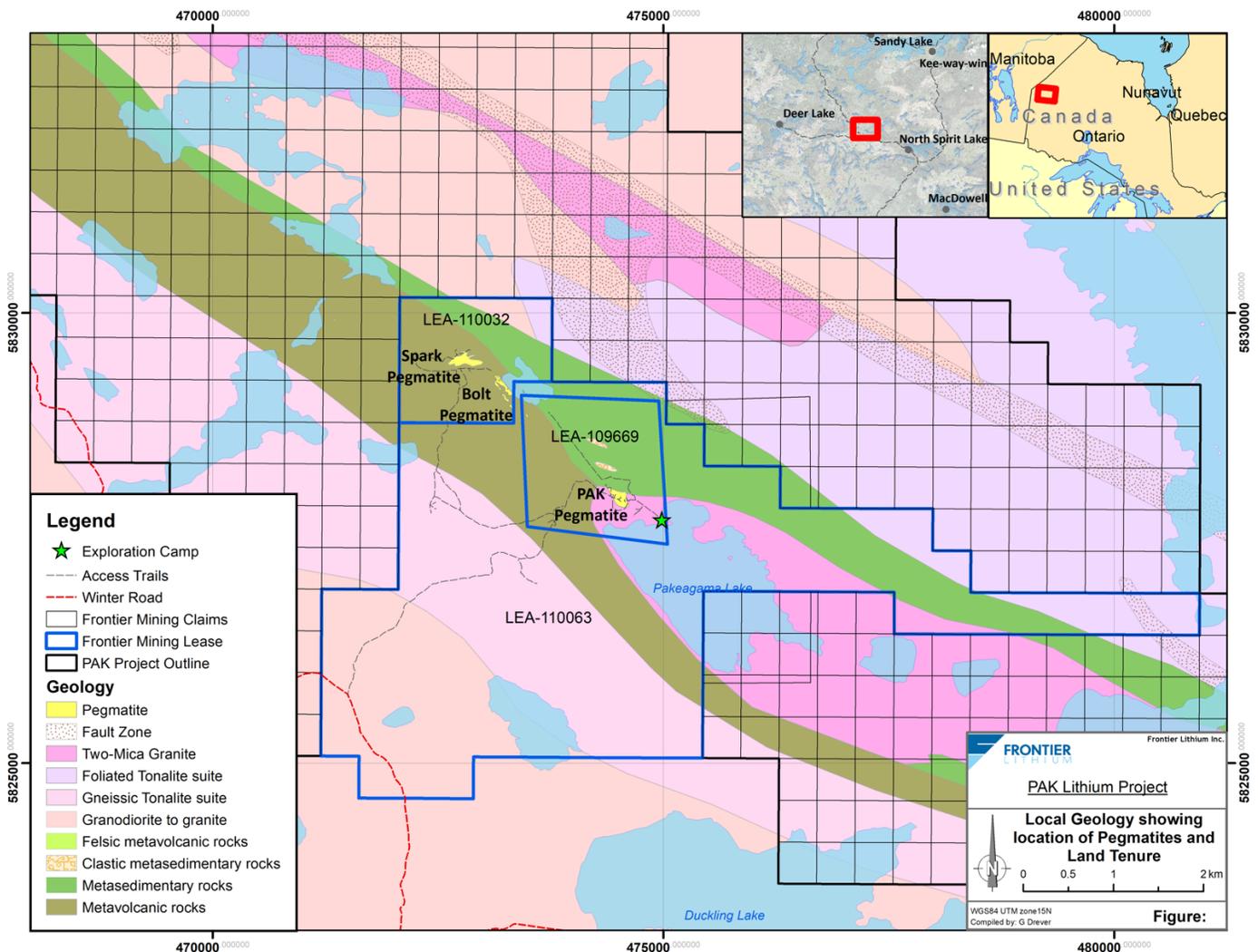


Figure 8: Location of PAK, Spark and Bolt Pegmatites

²² Germundson, R. K. (2008): *Report on the Exploration Program Carried Out on Claim KRL 1232441 at Pakeagama Lake in the Red Lake Mining Division, Ontario*. Ontario Assessment Report.

The Greenstone belt is bounded to the north by biotitic tonalities and granites of the Whiteloon Lake Batholith (Sachigo Subprovince) and to the south by gneissic granodiorites and granites of the Bear Head Lake Batholith (Berens River Subprovince of the Superior Province).

There are three main lithological domains. To the northeast, rocks with metasedimentary origins are composed of pelitic sediments, iron formation, and conglomerate. The southwest region is comprised dominantly of mafic metavolcanic and related metasedimentary rocks. The elongate, 2.5 by 15 km, Pakeagama Lake peraluminous granite and mica pluton trending northwest-southeast was emplaced along the unconformable contact between metasedimentary and metavolcanic-metasedimentary rocks.

The Pakeagama Lake granitic pegmatite (PAK pegmatite) is a highly evolved, zoned, complex-type, petalite-subtype LCT pegmatite with highly anomalous values of lithium, cesium, tantalum, and rubidium.²³ The pegmatite body outcrops near the northwestern margins of the Pakeagama Lake pluton ([Figure 8](#)). A second pegmatite, the Spark Pegmatite occurs 2.3 km to the northwest close to the contact between the metavolcanics – metasedimentary sequences. Preliminary results suggest lithological similarities to the PAK pegmatite. A third pegmatite, Pennock Pegmatite, is located approximately 25 km northwest of Spark. A fourth pegmatite, the Bolt Pegmatite, is located between PAK and Spark. These four pegmatites comprise the PAK Lithium Project.

5.7 Mineralization

5.7.1 PAK Pegmatite

On surface, a metasedimentary sequence with banded iron formation forms an apparent northern boundary to the pegmatite. Muscovite and tourmaline-bearing pegmatites and aplites occur up to 1 km from the main pegmatite mass. The PAK pegmatite is described as the second largest complex-type petalite subtype pegmatite in Ontario.²⁴

The relatively fresh-appearing pegmatite has irregular, steeply dipping contacts with the weakly foliated garnet-muscovite-biotite granite host rock. A 130° strike is inferred from the coincidence of the exposed 260 m strike length, the weak foliation in the host granite, and the general trend of the Bear Head Lake Fault. The pegmatite is open along strike in both directions.

The exposed outcrop area was mapped initially by Dr. F. Breaks in 1999, and at least five separate zoned phases were identified.²⁵ More recently P. Vanstone, former chief geologist at the Tanco Mine in Manitoba, was contracted by the Company and consolidated the pegmatite zones using commonly accepted pegmatite nomenclature and Tanco zone mineralogical criteria. The three main pegmatite zones identified in this work are (from southwest to northwest and perpendicular to the strike of the pegmatite) the Central Intermediate Zone (CIZ – tantalum, rubidium, and cesium enriched), Upper Intermediate Zone (UIZ - lithium and rubidium enriched), and the Lower Intermediate Zone (LIZ – lithium and rubidium enriched). A lower and upper wall zone has also been described but not included as a separate mapped unit ([Figure 9](#)).

To date, six mineralogical zones have been identified in the exposed pegmatite. These zones include a Border Zone, Upper and Lower Wall Zones, and Upper, Central and Lower Intermediate Zones (UIZ, CIZ and LIZ). The zonation and some of the zone alterations display a number of similarities with the Tanco pegmatite as described by Černý.²⁶

²³ *Op. cit.*, Breaks et al.

²⁴ *Ibid.*, Breaks et al.

²⁵ *Ibid.*, Breaks et al.

²⁶ Černý, P., Ercit, T.S., and Vanstone, P.T., (1996): *Petrology and Mineralization of the Tanco rare-element pegmatite, southeastern Manitoba*, Geol. Assoc. Can.- Min. Assoc. Can., Joint Ann. Mtg., Field Trip Guidebook A3, p. 63.

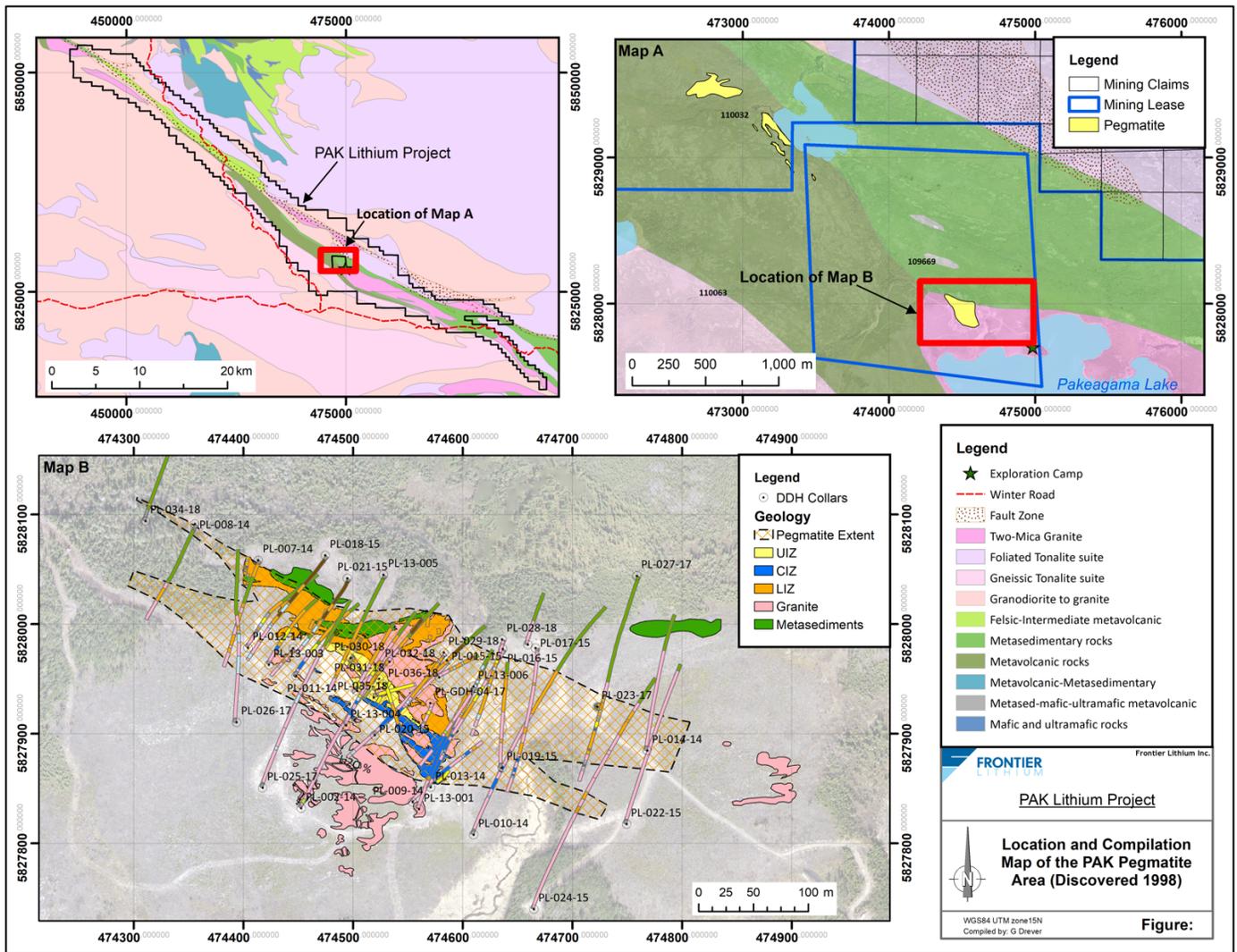


Figure 9: Detailed Geology of the PAK pegmatite

5.7.2 Spark Pegmatite

The Spark pegmatite was discovered on September 17, 2018, by the Company during routine geological mapping of the area. The Spark pegmatite is less complex than the PAK pegmatite. It appears to be emplaced oblique to the dominant trend and near the contact of the host metavolcanics-metasedimentary sequences. [Figure 10](#) is a compilation map showing the surface exposure of the pegmatite along with drillhole traces. Spodumene-bearing aplite is ubiquitous throughout the Spark pegmatite, with narrow intervals consisting of coarse-grained feldspar-muscovite. A later phase of coarser grained feldspar-quartz-spodumene-muscovite overprints the aplite.

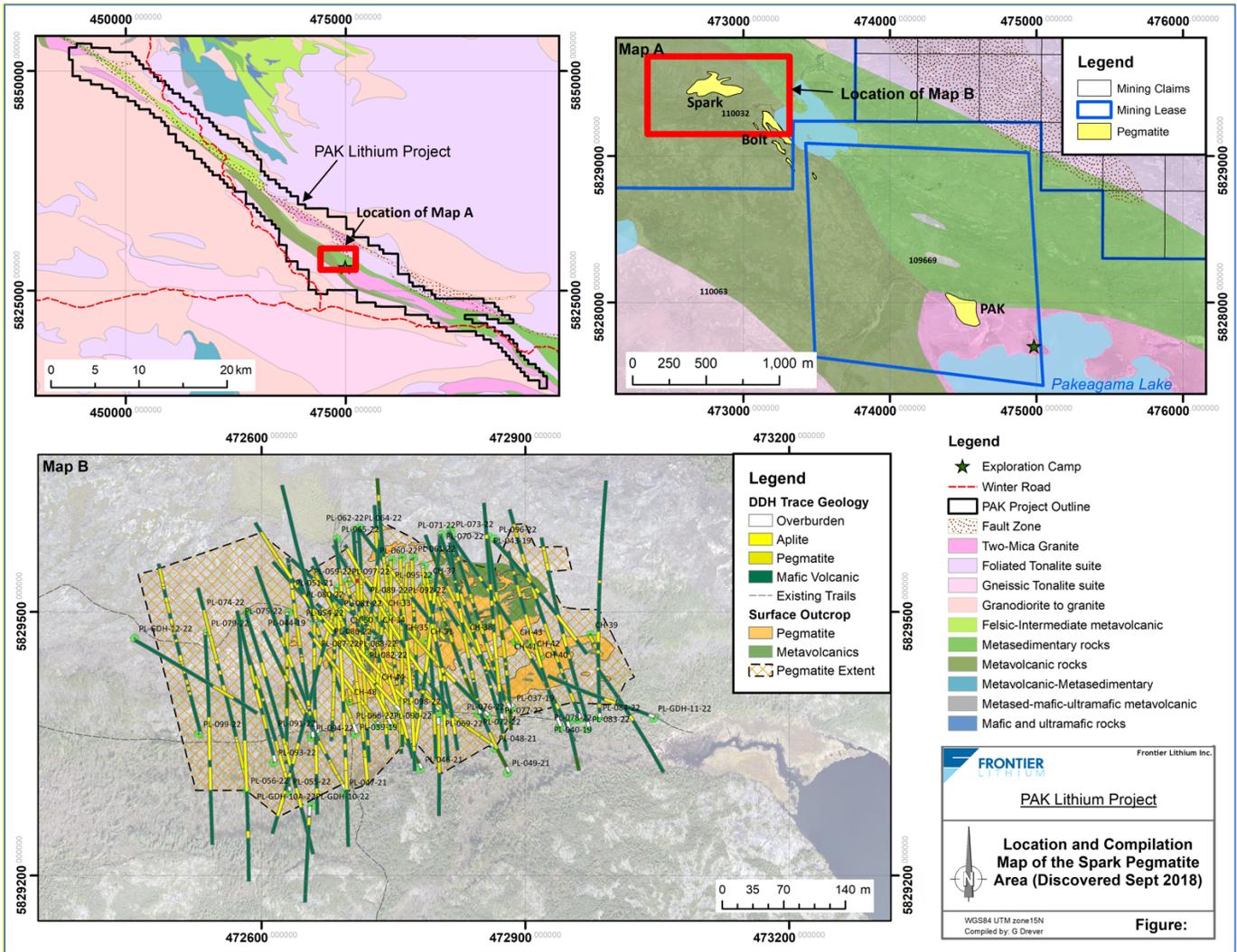


Figure 10: Detailed Geology of the Spark pegmatite

5.7.3 Pennock Pegmatite

Immediately after the discovery of the Spark pegmatite, the historic Pennock showing was investigated by the Corporation in 2018. A 1.5 km-long pegmatite dike was located, which is intermittently exposed and contains white to light grey spodumene and lepidotite. The dyke is oriented east-west, cross-cutting the main trend of the Bearhead Lake fault and culminates near a 16m wide exposed “blow-out” at the western end. During the drilling program on Spark in July 2019, the support helicopter was used to transport a two-person crew to cut a channel across the main blow-out area of the Pennock pegmatite. [Figure 11](#) is a compilation of the Pennock pegmatite area showing the Li_2O concentrations along the sampled channel.

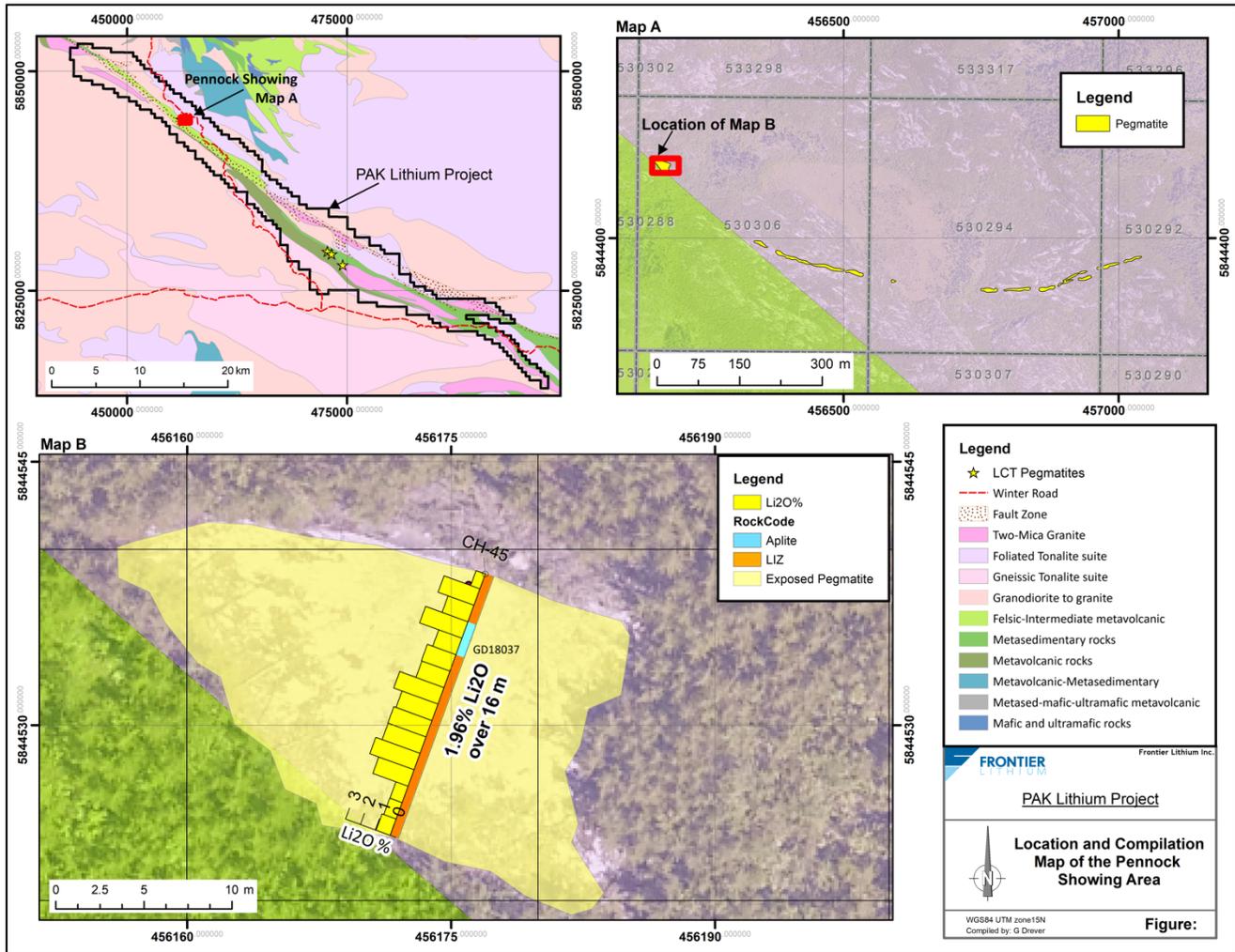


Figure 11: Compilation of the Pennock pegmatite

5.7.4 Bolt Pegmatite

In September 2020, several zones of pegmatite were discovered by the Company ranging between a few metres to over 50 metres wide and traced for at least 600 metres along the western side of a small waterbody. The pegmatite encountered is generally concordant with the mafic meta-volcanic host rock and oriented sub-vertical. The surface of the pegmatite is typically dark grey, lichen-covered and oxidized making it considerably less conspicuous than the lighter-colored Spark and PAK pegmatites.

An easily accessible area towards to southern margin of the main exposure was channeled with two off-set channels oriented perpendicular to the main trend of the pegmatite as well as a third channel 130m farther to the northwest. A mixed zone of pegmatitic aplite and metavolcanics similar to Spark with a contact zone occurring near and parallels the shoreline. During March and April 2023, eleven holes were drilled into the Bolt pegmatite from the west. [Figure 12](#) is a compilation of the Bolt pegmatite showing surface exposures of the pegmatite with channel and drill holes traces overlain.

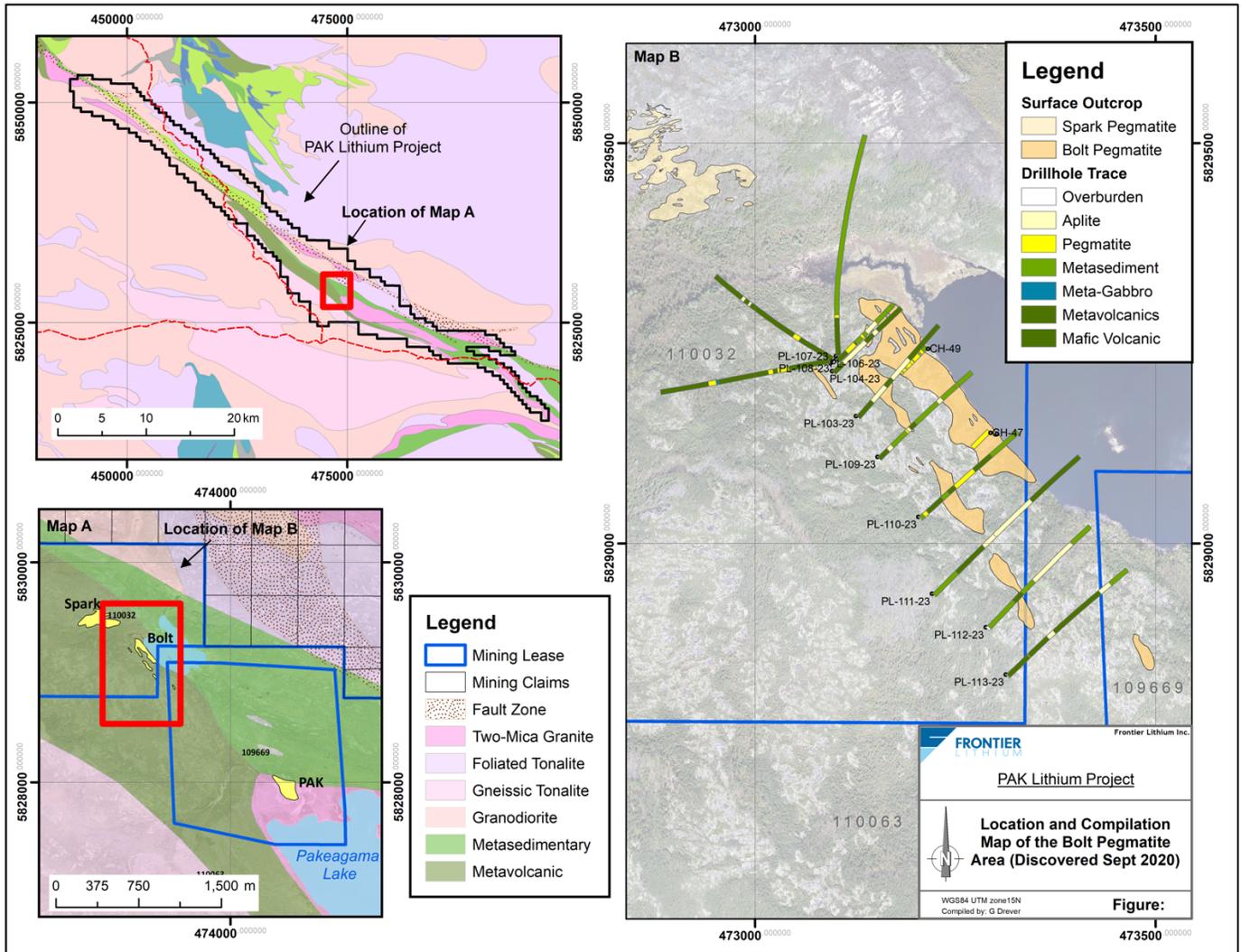


Figure 12: Compilation of the Bolt pegmatite area

5.8 Resource Estimate

The Company issued results of the PFS Technical Report on May 31, 2023 and filed the PFS Technical Report under the Company's profile on SEDAR (www.sedar.com) on July 14, 2023. The Mineral Resource contained within the PAK Lithium Project is separated between the PAK and Spark deposits.

The resource of the PAK deposit is contained in three zones: Upper Intermediate Zone ("UIZ"), Central Intermediate Zone ("CIZ"), and Lower Intermediate Zone ("LIZ"). The UIZ and CIZ zones were modelled as distinct solids, with the LIZ being modelled to surround the UIZ and CIZ encompassing the bulk pegmatite and ensuring no voids existed between the solids. Note that the lithium contained in the CIZ is not considered a resource as it is not present as spodumene, but there is potential to classify it as a Ta/Cs/Rb resource with additional work.

At a cut-off grade of 0.6% Li₂O, PAK contains an "open-pitiable" resource of 5,964,000 tonnes at a grade of 1.81% Li₂O in the Measured and Indicated categories for a total lithium resource of 108,036 tonnes. There is an additional Inferred Resource of 680,500 tonnes at a grade of 1.75% Li₂O containing 11,893 tonnes of Li₂O. See Table 3 for a summary of mineral resources included in the PFS Technical Report.

Table 3: PAK open pit Mineral Resource Summary (May 2023)

Cut-off	Resource Category	Commodity	Geologic Zone	Tonnes (t)	Li ₂ O (%)	Ta ₂ O ₅ (ppm)	Cs ₂ O (%)	Rb ₂ O (%)	Contained Li ₂ O (t)
0.6% Li ₂ O	Measured	Lithium	Upper Intermediate Zone (UIZ)	325,200	3.43	59	0.03	0.14	11,154
		Lithium	Lower Intermediate Zone (LIZ)	1,019,400	1.73	105	0.04	0.29	17,636
		Lithium	Total Lithium Zone	1,344,600	2.14	94	0.04	0.25	28,790
		Lithium / Tantalum / Rubidium	Bulk Pegmatite	1,344,600	2.14	94	0.04	0.25	28,790
0.6% Li ₂ O	Indicated	Lithium	Upper Intermediate Zone (UIZ)	255,400	2.91	75	0.04	0.21	7,432
		Lithium	Lower Intermediate Zone (LIZ)	3,819,900	1.88	99	0.04	0.30	71,814
		Lithium	Total Lithium Zone	4,075,300	1.94	97	0.04	0.29	79,246
		Tantalum / Rubidium	Central Intermediate Zone (CIZ)	544,100	1.11	113	0.08	0.63	n/a
		Lithium / Tantalum / Rubidium	Bulk Pegmatite	4,619,400	1.72	99	0.04	0.33	79,246
0.6% Li ₂ O	Measured + Indicated	Lithium	Upper Intermediate Zone (UIZ)	580,600	3.20	65	0.03	0.17	18,587
		Lithium	Lower Intermediate Zone (LIZ)	4,839,300	1.85	100	0.04	0.30	89,450
		Lithium	Total Lithium Zone	5,419,900	1.99	96	0.04	0.29	108,036
		Tantalum / Rubidium	Central Intermediate Zone (CIZ)	544,100	1.11	113	0.08	0.63	n/a
		Lithium / Tantalum / Rubidium	Bulk Pegmatite	5,964,000	1.81	98	0.04	0.32	108,036
0.6% Li ₂ O	Inferred	Lithium	Upper Intermediate Zone (UIZ)	74,200	2.77	96	0.04	0.25	2,055
		Lithium	Lower Intermediate Zone (LIZ)	528,900	1.86	79	0.02	0.23	9,838
		Lithium	Total Lithium Zone	603,100	1.97	81	0.02	0.23	11,893
		Tantalum / Rubidium	Central Intermediate Zone (CIZ)	77,400	1.21	153	0.08	0.51	n/a
		Lithium / Tantalum / Rubidium	Bulk Pegmatite	680,500	1.75	89	0.03	0.26	11,893

An underground resource estimate was also calculated for the PAK Deposit using a cut-off grade of 0.8% Li₂O. At the 0.8% Li₂O cut-off grade the underground resources are estimated to be 1,265,530 tonnes averaging 2.14% Li₂O Indicated plus 2,077,750 averaging 2.37% Li₂O Inferred. See Table 4 for a summary of mineral resources included in the PFS Technical Report.

Table 4: PAK Underground Mineral Resource Summary (May 2023)

Cut-off	Resource Category	Commodity	Geologic Zone	Tonnes (t)	Li ₂ O (%)	Ta ₂ O ₅ (ppm)	Cs ₂ O (%)	Rb ₂ O (%)	Contained Li ₂ O (t)
0.8% Li ₂ O	Measured	Lithium	Upper Intermediate Zone (UIZ)	0	-	-	-	-	0
		Lithium	Lower Intermediate Zone (LIZ)	0	-	-	-	-	0
		Lithium	Total Lithium Zone	0	-	-	-	-	0
		Lithium / Tantalum / Rubidium	Bulk Pegmatite	0	-	-	-	-	0
0.8% Li ₂ O	Indicated	Lithium	Upper Intermediate Zone (UIZ)	0	-	-	-	-	0
		Lithium	Lower Intermediate Zone (LIZ)	1,261,700	2.15	91	0.04	0.29	27,127
		Lithium	Total Lithium Zone	1,261,700	2.15	91	0.04	0.29	27,127
		Tantalum / Rubidium	Central Intermediate Zone (CIZ)	3,830	1.16	143	0.06	0.34	n/a
		Lithium / Tantalum / Rubidium	Bulk Pegmatite	1,265,530	2.14	91	0.04	0.29	27,127
0.8% Li ₂ O	Measured + Indicated	Lithium	Upper Intermediate Zone (UIZ)	0	-	-	-	-	0
		Lithium	Lower Intermediate Zone (LIZ)	1,261,700	2.15	91	0.04	0.30	27,127
		Lithium	Total Lithium Zone	1,261,700	2.15	91	0.04	0.30	27,127
		Tantalum / Rubidium	Central Intermediate Zone (CIZ)	3,830	1.16	143	0.06	0.34	n/a
		Lithium / Tantalum / Rubidium	Bulk Pegmatite	1,265,530	2.14	91	0.04	0.30	27,127
0.8% Li ₂ O	Inferred	Lithium	Upper Intermediate Zone (UIZ)	27,450	4.35	31	0.02	0.10	1,194
		Lithium	Lower Intermediate Zone (LIZ)	2,043,400	2.35	73	0.02	0.25	48,020
		Lithium	Total Lithium Zone	2,070,850	2.38	72	0.02	0.25	49,214
		Tantalum / Rubidium	Central Intermediate Zone (CIZ)	6,900	2.03	146	0.12	0.24	n/a
		Lithium / Tantalum / Rubidium	Bulk Pegmatite	2,077,750	2.37	73	0.02	0.25	49,214

Although the Spark deposit contains two styles of mineralization, Aplite and LIZ (similar to the PAK LIZ), they are not distinct and were therefore modelled as a single zone representing the bulk pegmatite.

On February 28, 2023, the Company reported an updated mineral resource estimate for the Spark deposit prepared by BBA. Much of the Inferred Resource from previous resource estimates has now been upgraded to the higher confidence level of Indicated Resource.

The updated resource for Spark deposit are an Indicated Resource of 18,828,000 tonnes at 1.52% Li₂O containing 286,186 tonnes of contained Li₂O and an additional Inferred Resource of 29,746,000 tonnes at 1.34% Li₂O containing 398,596 tonnes of contained Li₂O. Please see table 5 below for details. The Spark lithium deposit remains open along strike and down dip.

Table 5: Spark open pit Mineral Resource summary

Cut-Off	Resource Classification	Tonnes (t)	Li ₂ O (%)	Ta ₂ O ₅ (ppm)	Cs ₂ O (%)	Rb ₂ O (%)	Contained Li ₂ O (t)
0.65% Li ₂ O	Indicated	18,828,000	1.52	112	0.020	0.26	286,186
	Inferred	29,746,000	1.34	116	0.030	0.26	398,596

Mineral Resource Estimate Notes

1. Mineral Resources were prepared in accordance with NI 43-101 and the CIM definition Standards (2014). Mineral resources that are not mineral reserves do not have demonstrated economic viability. This estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
2. Open pit Mineral Resources are reported at a cut-off grade of 0.65% Li₂O that is based on a 6.0% spodumene concentrate prices of US\$1,500/tonne and an exchange rate of 1.29.
3. Appropriate mining costs, processing costs, metal recoveries, and inter ramp pit slope angles were used by BBA to generate the pit shell.
4. Rounding may result in apparent summation differences between tonnes, grade, and contained metal content.
5. Tonnage and grade measurements are in metric units.
6. A bulk density factor of 2.74 was applied to the pegmatite and 2.70 was applied to the aplite based on 1,466 measurements.

5.9 Exploration

5.9.1 Diamond Drilling and Channeling

Diamond drilling on the PAK Lithium project began with Phase I in February 2013 on the PAK pegmatite. Phase I through Phase VI were completed between 2013 and 2018 at the PAK pegmatite and Phase VII to XII were completed between 2019 and 2022 on the Spark pegmatite. Phase XIII drilling includes all drilling completed in 2023 which is ongoing and includes delineation drilling at Bolt, Geomechanical-hydrogeological drilling at PAK and some condemnation drilling for the proposed mill and waste piles sites. All Phases of drilling including Phase XIII up to April 28, 2023 was described in detail in the PFS Technical Report.

Channeling of exposed pegmatite has been ongoing since 2012 with channeling completed on the PAK, Spark, Pennock and Bolt pegmatites and is described in detail in the PFS Technical Report.

5.9.2 Geological Mapping and Prospecting

Regional-scale mapping was initiated in 2017 and ramped up during the 2022 summer drill program utilizing the helicopter on contract to support the drill program. During the 2022 program, the entire project area was covered with traverses at roughly 500 metre spacing. Up to 30 priority targets (lithium prospects) were identified with at least three being spodumene-bearing pegmatite dykes.

Plans for the 2023 summer program are to complete detailed follow-up including channeling on priority targets.

5.9.3 Geophysical Surveys

A ground-based PULSAR AMT (Audio Magneto-Telluric) survey was completed in March 2022 which encompassed the PAK and Spark pegmatites. Results indicate a strong magnetotelluric response along the granite-mafic contacts in the PAK Deposit area and virtually no significant response at Bolt. The Spark Deposit is clearly imaged and appears to extend to greater depths and further to the west than the surface exposures.

In September 2022, an unmanned aerial vehicle (“UAV”) magnetic survey was flown over roughly the same area as the PULSAR survey including the new pegmatite discovery to the west-northwest of Spark. A total of 347 line-km of survey were flown at 50 metre line spacing. Results clearly depicts the folding evident in the metavolcanic units wrapping around the north end of Pakeagama Lake converging with the metasedimentary rocks to the east. Also of interest are the magnetic low regions corresponding to the Spark Deposit and the area of coarse conglomerates immediately northeast of PAK

5.10 Mineral Processing and Metallurgical Testwork

5.11 Mineral Processing

The most recent phase of beneficiation testing was completed at SGS Canada to support the PFS flowsheets and includes samples from Spark deposit and samples from the PAK deposit.

The test work involved a bulk sample from the Spark deposit along with a series of variability samples. Testing of the Spark bulk sample involved a pilot plant that produced sufficient material for conducting downstream test work of the hydrometallurgical process required to produce lithium chemicals. As there was a considerable amount of past testing completed with samples from the PAK deposit, only a single bulk sample was provided for the program that involved DMS processing and locked cycle testing.

The throughput and mass balance calculations used as the basis of design for the technical grade concentrator were based on the average production of 40,000 tonnes per annum of technical grade concentrate (7.2% Li_2O). In the criteria it is assumed that all solid masses, typically tonnes, are dry and metric unless stated otherwise. At the average head grade of 1.79% Li_2O , this level of production requires processing 207,360 tonnes per annum with an average daily production of 568 tonnes per annum (26 tonnes per hour) assuming 92% availability. Preconcentration of the ore using dense media separation (“DMS”) rejects up to 40% of the run of mine, thereby reducing the comminution and flotation throughput to 15 tonnes per hour on a design basis.

The throughput and mass balance calculations used as the basis of design for the chemical grade concentrator were based on the average production of 160,000 tonnes per annum of chemical grade concentrate (6.0% Li_2O). At the average head grade of 1.50% Li_2O , this level of production requires processing 766,505 tonnes per annum of feed and an average daily production of 2,100 tonnes per day (95 tonnes per hour) assuming 92% availability. The metallurgical test work indicated that the Spark ore is not suitable for preconcentration using DMS. A schematic of the concentrators is given in Figure 13.

The metallurgical test work results confirmed the suitability of the new conceptual flowsheets. The process design provides design parameters for the production and storage of spodumene concentrate in the Concentrator facilities on site.

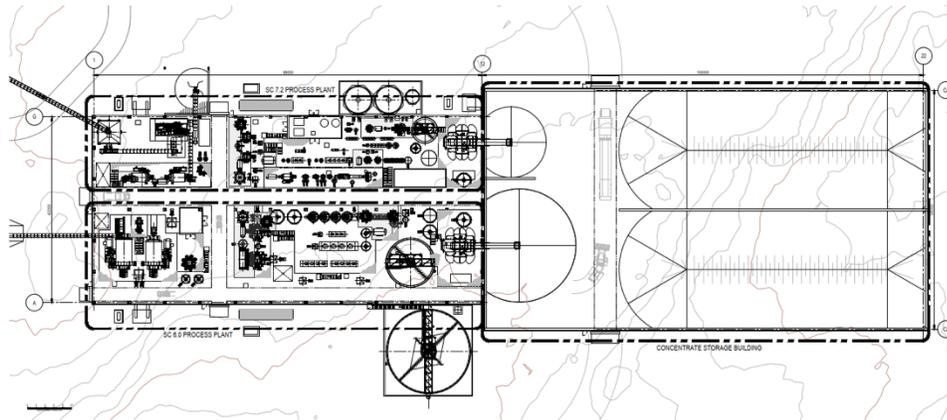


Figure 13: Schematic of the concentrator facility to produce Technical and Chemical grade concentrate.

5.11.1 Chemical Conversion

The chemical grade concentrate from the Project will be transported by truck and further processed at a Lithium Chemicals Conversion Plant (chemicals plant) located in or near a Great Lakes port city in Northern Ontario.

The Company has completed the full plant design based on American Association of Cost Engineers Class 4 limits for the commercial chemicals plant. The plant is designed to produce 20,000 tonnes per annum of lithium carbonate equivalent ("LCE"), which will require a concentrate processing rate of 160,000 tonnes per annum. The process will produce both lithium hydroxide and lithium carbonate at a 60/40 ratio.

The chemical grade concentrate as delivered contains Spodumene as chemically inert alpha-spodumene, which requires conversion to beta-spodumene in order to be leached and converted to the required products.

Conversion of the received concentrate, by calcining, is performed using a natural gas fired, refractory-lined rotary kiln, equipped with dust control systems and designed to calcine the feed at a temperature of or close to 1,100°C. The product from the kiln is cooled by a water-cooled rotary cooler.

The cooled product containing almost all spodumene as beta-spodumene is ground in a conventional dry grinding ball mill to reduce any lumps created during calcination or any oversized particles.

The ground product then is fed together with addition of acid to an indirect heated kiln with a target temperature of around 250°C and several hours of residence time in order to maximize the conversion of the beta-spodumene to lithium sulphate which can be leached in the next stage.

The converted roaster product is leached to extract soluble lithium in a series of tanks under controlled temperature, pH and residence time in order to obtain maximum leaching performance. Raising of the pH by controlled limestone addition ensures that the levels of aluminium and iron in solution are kept at a minimum. Further neutralization is conducted using sodium hydroxide and soda ash solutions in order to reduce the levels of calcium and magnesium in solution.

Following precipitation of calcium and magnesium, ion exchange is used to remove further amounts of impurity divalent metals, such as calcium and magnesium.

The purified solution is upgraded to optimize the lithium concentration using evaporation for each stream feeding either the hydroxide or carbonate product circuit, and with a target concentration of 30 g/L lithium content. Each lithium hydroxide and lithium carbonate circuit has a dedicated evaporator.

The upgraded solution is reacted with sodium carbonate solution to precipitate lithium carbonate which produces an intermediate product below battery grade. Sodium is removed from the barren solution as sodium sulphate prior to the solution being recirculated.

The product is dewatered, repulped with fresh water and further purified using carbon dioxide addition to produce soluble lithium bicarbonate and filtration for removal of impurities. The final stage is by heating the solution to precipitate the lithium carbonate to the optimum battery grade product. Recycle streams in these circuits are retreated to ensure maximum recovery. The final product is filtered, dried and packaged for transport to markets.

For the production of lithium hydroxide, the solution after ion exchange and evaporation feeds a circuit where sodium hydroxide solution is added and two stages of cooling are used to produce and remove from the solution sodium sulphate in the crystalline form of Glauber's salt (mirabilite, $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$). The Glauber's salt is purified to marketable grade upon repulping and crystallization using an evaporative crystallizer. The Glauber's salt is transformed into anhydrous sodium sulphate upon drying and is then packaged for sale.

After the removal of the mirabilite, the resulting solution is evaporated in two stages to produce crystalline lithium hydroxide monohydrate solids of battery grade. The final product is recovered from the solution by filtration and is then dried and packaged for shipment. A schematic of the conversion facility is shown in Figure 14.

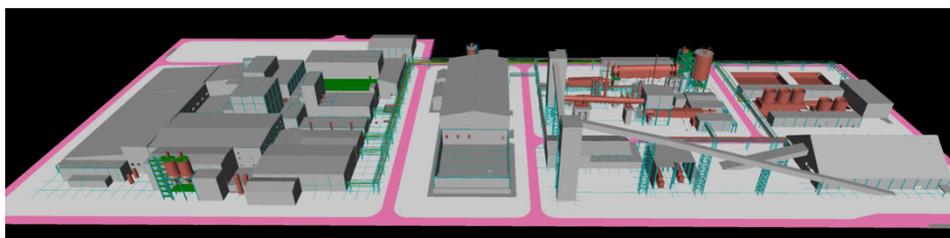


Figure 14: Schematic of the chemical conversion facility

6 Mining Method

Open pit mining was considered a viable option for the study given that the mineralization is on or near surface. Open pit mining will include conventional drilling and blasting with a combination of a backhoe type excavator and front-end loader type excavator loading broken rock into haul trucks, which will haul the material from the bench to the crusher, ROM (run of mine) stockpile or waste stockpiling areas depending on the material type. Ancillary equipment includes dozers, graders, and various maintenance, support, service and utility vehicles.

The open pit production period is approximately 24 years. The operation scenario for the PFS involves starting mining at PAK with the technical grade line at the concentrator plant in Year 1. In year 3 mining starts at Spark with chemical grade line at the concentrator plant. The average mining rate of ore and waste over the LOM (life of mine) is approximately 4.6 million tonne per annum, with a peak of approximately 8.2 million tonnes per annum. The feed specific to each mill line is 210,000 tonnes per annum from PAK to the technical grade line and 830,000 tonnes per annum from Spark to the chemical grade line.

The mine plan considers a ramp-up of 30% in Q1, 60% in Q2, 100% in Q3 and Q4 for the technical grade line in Year 1 and chemical grade line in Year 3. The Li_2O grade range from PAK / technical grade line varies from 1.5% to 2.0%. In the PFS modelling all ore material from PAK has been designated as technical grade feed while all ore material from Spark has been designated as chemical grade feed. The overall stripping ratio is 3.7,

Detailed descriptions of the mining methods, pit designs, processing volumes, equipment and mine plan are available in chapter 16 of the PFS Technical Report.

6.1 Proposed Processing Methods

The fully integrated proposed mineral processing flowsheet involves two stages of processing. The first is beneficiation of the spodumene mineral in the concentrator facility located at the mine site. The Project carries production facilities for two concentrate grades, a 7.2% Li₂O technical grade and a 6% Li₂O chemical grade. The second stage of processing takes place at a chemical conversion facility where the 6% concentrate is processed into lithium carbonate and lithium hydroxide monohydrate for the battery industry. Complete details of the supporting test work for both steps are published in the PFS Technical Report.

6.2 Economics

The economic/financial assessment of the PAK Project was carried out using a discounted cash flow approach on a pre-tax basis, with a technical grade (“TG”) spodumene concentrate, chemical grade (“CG”) spodumene concentrate, lithium hydroxide and lithium carbonate prices. The product sales prices and the cost estimates are in Canadian dollars (CAD or \$) unless otherwise stated. An exchange rate of \$0.77 USD per \$1.00 CAD was assumed to convert USD market price projections. No provision was made for the effects of inflation. Current Canadian tax regulations were applied to assess the corporate tax liabilities by a third party.

The pre-tax base case financial model results in an internal rate of return (“IRR”) of 28.6% and a Net Present Value (“NPV”) of \$3,365 million with a discount rate of 8%. The simple pre-tax payback period of the Project is 4.9 years. On an after-tax basis, the base case financial model results in an internal rate of return of 24.1% and an NPV of \$2,261 million with a discount rate of 8%. The simple after-tax payback period is 4.9 years. These are summarized in Table 6: Financial analysis Summary

Table 6: Financial analysis Summary

Description		CAD M	USD M
Pre-Tax	Discount Rate		
	8%	3,365	2,588
	Pre-Tax IRR	28.6%	
	Payback Period (years)	4.9	
After-Tax	Discount Rate		
	8%	2,261	1,739
	After-Tax IRR	24.1%	
	Payback Period (years)	4.9	
	Cumulative Effective Tax Rate	31.7%	

The full economic analysis and sensitivity tables are included in the PFS Technical Report, selected highlights are disclosed below:

- Life of Project Cash Flow (unlevered) of US\$8.07 billion over 24-year total project life;
- Total initial capital expenditure estimate of US\$468 million for the technical grade concentrator and expansion capital of US\$576 million for the chemical grade concentrator and chemical plant with a contingency of 20% included.

- Sustaining Capital of US\$90 million;
- Annual Average EBITDA of US\$251.3 million;
- All-in cash costs of US\$7,433 per tonne of LCE; and
- After-Tax Pay Back of Capital Expenditures is 4.9 years after the start of commercial operations.

The Project shows positive economics. The Project is most sensitive to the USD:CAD exchange rate, battery grade lithium hydroxide prices, lithium carbonate prices and the capital costs based on the NPV and IRR sensitivities.

7 STUDY CONCLUSIONS AND RECOMMENDATIONS

The results and assumptions of the PFS demonstrate that the PAK Lithium Project has the potential to be technically and economically viable as a producer of premium technical grade concentrate, battery grade lithium hydroxide and battery grade lithium carbonate.

Two separate exploration programs are proposed for the Project – Phase 1 and Phase 2 programs. The successful exploration and completion of Phase 1 will have an impact on how the Phase 2 program will be conducted and carried out.

7.1 Phase1 Program

Phase 1 is designed to enhance the Project leading towards a Definitive Feasibility Study. A budget of \$8.75 million is estimated to complete the Phase 1 program at the Project. Table 7 summarizes the Phase 1 budget.

Table 7: Phase 1 budget Summary

Task	Estimated Cost (\$CAD) Phase 1
Geology & Exploration	1,000,000
Bulk Sampling	100,000
Geotech and Hydrogeology	300,000
Environmental, Permitting and Community Relations	3,500,000
Mineral Processing	350,000
Engineering	3,500,000
Total	8,750,000

7.1.1 Geology

Recommendations are to continue drilling the mineralized zone at Spark to increase confidence in the mineral resource. Characterize the mineral zonation at Spark to determine mineralogical and geochemical similarities and potential contrasts with the PAK Deposit. Further evaluate the potential mineralogical and geochemical zonation that may be present within the Spark Pegmatite and update the mineral resource models.

7.1.2 Exploration Drilling

Recommendations are to test the western extension of the Spark Pegmatite with particular emphasis on the southwestern extension as well as the northwestern zone intersected at depth where the spodumene crystal morphology, including colour, suggests low impurity. The northwestern zone also has higher lithium grades and pockets rich in cesium and tantalum.

Another recommendation is additional drilling at Bolt to determine continuity, depth extent and potential association with Spark and/or PAK.

7.1.3 Mining

Recommendation to define optimum size and area required to complete a test mining scenario to evaluate the economics for mining in an area without an all-season road.

7.1.4 Metallurgy and Processing

Below are recommendations related to the metallurgy and processing of the Project:

- Future metallurgical test work should be scheduled to firm up the overall performance envelope definition for the mineral processing flowsheets at PAK and Spark, which is not expected to change significantly in future studies. A program of variability sampling and bench-scale testing for both deposits is recommended for Phase 1, as this helps to mitigate risk related to feasibility study metallurgical performance predictions. Recommended work includes a program of LCT on composite PAK/Spark samples to verify and optimize concentrator process flowsheet.
- A comprehensive program of sampling, metallurgical test work and products characterization. It is recommended that individual samples selected to highlight compositional variation be tested, in addition to production composites (Y1, Y2, Y3-5, etc.) that accurately reflect latest mine production plans. Lab scale variability testing would confirm the performance of all flowsheet unit operations, including DMS (via HLS tests), grinding, gravity concentration, magnetic separation, flotation and dewatering.
- Additional Spark SC6.0 concentrate will be required for the chemicals plant design detail.

7.1.5 Hydrogeology and Geomechanical Drilling

During February and March 2023, both hydrogeological and geomechanical drilling work was completed at the PAK Deposit. To meet the requirements of the upcoming feasibility study, further hydrogeological and geomechanical drilling will be required at the Spark Deposit along with analysis of the 2023 drill campaigns.

7.1.6 Dike Design Considerations

It is important to note that this preliminary assessment was performed to confirm the technical feasibility and probable conformity of the chosen concept. The following works are recommended in further stages of the Project:

- Geotechnical investigation along the perimeter dikes, particularly at the critical sections of the South Dike and West Dike.
- Geotechnical characterization of dike foundation and construction materials, particularly the soft clay present under the planned location of the dike.
- Stability analysis for the South Dike and reclaim pond dike.
- Additional stability analysis for the West Dike (towards the south portion).
- Additional analysis for the East Dike subject to blasting loads due to its proximity to the open pit.
- Liquefaction potential analysis.

7.1.7 Environmental, Permitting and Community Relations

Below are recommendations related to environmental, permitting and community relations of the Project:

- Complete a project description for the Project for permitting purposes.

- Continue the environmental baseline study program, including expanding the program to encompass the full extent of the Spark pegmatite area, completing stage 2 archeology study and the traditional land and resource use study.
- Continue to engage and consult with local Indigenous communities.
- Develop a detailed mine closure plan with associated costs.

7.1.8 Economic analysis

Below are economic analysis recommendations related to the Project:

- Obtain offtake agreements or contracts for the technical grade concentrate selling prices.
- Validate transport costs with direct quotes.
- Ensure contracts have free on board shipping as shown in the cash flow model.
- Apply carbon taxes and credits, and decarbonization plans for the next project phase.

7.2 Phase 2 Program

Phase 2 is designed to collect the data required to commence a feasibility study including engineering.

The budget for Phase 2 is estimated to be approximately \$11.6 million. Table 8 summarizes the Phase 2 budget.

Table 8: Phase 2 Budget Summary

Task	Estimated Cost (\$CAD) Phase 2
Mining	50,000
Geotechnical and Hydrogeology	350,000
Environmental, Permitting and Community Relations	500,000
Processing	1,250,000
Engineering and Feasibility Study	9,400,000
Total	\$11,550,000

7.2.1 Mining

Recommendations regarding Phase 2 mining procedures may include:

- Enlarge pit design to get as close as geotechnically possible to Pakeagama Lake.
- Complete detailed surface geological mapping to refine stratigraphy, structural setting and characterize mineralization.

7.2.2 Metallurgy and Processing

Recommendations regarding Phase 2 metallurgy and processing may include:

- A pilot plant campaign is recommended for PAK to allow extended continuous flowsheet operation and generation of product for technical grade characterization and marketing. Ideally, the bulk sample for piloting would include representative dilution levels and would be preconcentrated (Sorting plus DMS) prior to the remaining mineral processing operations.
- An additional Spark pilot run is also required to provide feedstock for a chemicals plant optimization program.

- Complete proof of concept development work to produce lithium hydroxide for thorough evaluation of chemical grade concentrate alternatives.

7.2.3 Geotechnical and Hydrogeology

Recommendations regarding Phase 2 geotechnical and hydrogeology may include:

- Address the gaps in the geotechnical coverage caused by the expansion of the proposed open pit shell with the interpretation and new geotechnical drilling. This includes the eastern and western extents of the pit walls as well as the pit bottom.
- Develop a water management plan for collecting surface water/overburden/shallow top of the bedrock runoff and seepage in sumps on the pit floor.
- Conduct drilling at the Spark area for water data collection and calculation of water in pit flows.
- Update the geologic model with the emphasis on identifying potential major structures.
- Review the tailing management facility design and undertake further study on the tailings storage area's capacity.
- Conduct geotechnical studies for the proposed Spark open pit to determine geotechnical pit design parameters, the waste rock and stripped surface organics pile designs, overall dump height slope angle, maximum bench lifts and safe face slope angles.

7.2.4 Civil

Recommendations regarding Phase 2 civil matters may include:

- Conduct a complete geotechnical study in each planned infrastructure area and for each segment of road to properly identify depth of bedrock and quality of overburden material, in order to obtain site specific geotechnical recommendations for accurate design of site preparation and infrastructure.

7.2.5 Feasibility Study

Recommendations regarding Phase 2 feasibility study may include:

- Update the Project engineering to a feasibility level design, using the Project PFS as a base.
- Complete a Definitive Feasibility Study.

8 MINERAL PROJECTS RISK FACTORS

The Company is exposed to risks of varying degrees of significance which could affect its ability to achieve its strategic objectives. The main objective of the Company's risk management processes is to ensure that the risks are properly identified and mitigated, and that the capital base is adequate in relation to those risks. Risks include metal price fluctuations and the low success rate for the discovery of new deposits. Industry competition and lack of funding may also limit opportunities. Future political, regulatory and environmental changes could affect any aspect of the Company's business including property title, taxation, aboriginal issues and environmental protection.

8.1 Conditions of The Industry In General

The exploration and development of mineral resources, including construction, start-up and operation of a mine and the construction, start-up and operation of a mill (concentrator plant), involves significant risks. Although the discovery of a deposit can prove to be extremely lucrative, few properties where exploration and development work are carried out become producing mines thereafter. Significant expenditures are necessary to establish ore reserves, to work out the representative metallurgical processes and to build the mining plant on a particular site. It

is impossible to provide assurance to the effect that the current state of the project contemplated by the Company will generate a profit. The mineral industry is intensely competitive in all its phases. The Company competes with many other mineral exploration companies who have greater financial resources and technical capacity.

8.2 Forward Looking Statements May Prove Inaccurate

Readers are cautioned not to place undue reliance on forward-looking information included herein or in the continuous disclosure of the Company. By its nature, forward-looking information involves numerous assumptions, known and unknown risks and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking information or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate. See "Forward-Looking Statements" section for details.

Risk Factors Related to the Corporation

8.3 Exploration, Development and Operating Risks

The Company is in the process of exploration and development of its properties and has not yet generated any revenues from production. The recovery of expenditures on mineral properties and the related exploration and evaluation expenditures are dependent on the existence of economically recoverable mineralization, the ability of the Company to obtain financing necessary to complete the exploration and development of its projects, and upon future profitable production, or alternatively, on the sufficiency of proceeds from disposition. Resource exploration is highly speculative in nature, includes risks and frequently is non-productive. The Company's proposed lithium operation includes the production of technical grade lithium concentrates required by premium glass and glass-ceramics producers and chemical grade lithium concentrates required as feedstock for the planned productions of both lithium carbonate and lithium hydroxide at a downstream lithium conversion plant. These final products sold to the battery market must meet stringent chemical requirements with tight controls over impurities. There is no assurance that the Company's efforts will be successful and will result in commercial production or profitability.

8.4 Feasibility and other studies Are Estimates Only and are Subject to Uncertainty

Feasibility studies are used to determine the economic viability of an ore deposit, as are pre-feasibility studies and preliminary economic assessments. Feasibility studies are the most detailed studies and reflect a higher level of confidence in the estimated production rates, and capital and operating costs. Generally estimated levels of confidence are plus or minus 15% for feasibility studies, plus or minus 30% for pre-feasibility studies. These levels are estimates and generalizations only and are not to be taken as assurances and reflect the levels of confidence that may exist at the time the study is completed. Subsequent changes to lithium prices, foreign exchange rates (if applicable), reclamation requirements, operating and capital costs may differ materially from these estimates.

8.5 Uncertainty of Mineral Resources

The mineral resource estimate for the PAK deposit is based on 34 boreholes, 67 rotary blastholes, and 31 channels. Three mineral domains were modelled in three dimensions using Surpac software. Mineral estimating was completed by ordinary kriging. Using a cut-off of 0.6% Li₂O, the pit constrained Measured and Indicated Mineral Resource totalled 5.4 Mt at 1.99% Li₂O with an additional pit constrained Inferred Mineral Resource of 0.6 Mt at 1.97% Li₂O. Below the pit shell there is a Measured and Indicated Mineral Resource totalling 1.3 Mt at 2.15% Li₂O with an additional Inferred Mineral Resource of 2.1 Mt at 2.38% Li₂O using a cut-off of 0.8% Li₂O.

The mineral resource estimate for the Spark Deposit is based on 71 boreholes and 15 channels. Three mineral domains were modelled in three dimensions using Datamine software. Mineral estimating was completed by

ordinary kriging. Using a cut-off of 0.65% Li₂O, the pit constrained Indicated Mineral Resource totals 18.8 Mt at 1.52% Li₂O with an additional pit constrained Inferred Mineral Resource of 29.7 Mt at 1.34% Li₂O.

The Company's ability to put these properties into production will be dependent upon the results of further drilling and evaluation. There is no certainty that expenditures made in the exploration of the Company's mineral properties will result in identification of commercially recoverable quantities of ore or that mineral reserves will be mined or processed profitably. Such assurance will require completion of final comprehensive feasibility studies and, possibly, further associated exploration and other work that concludes a potential mine at each of these projects is likely to be economic.

8.6 Going Concern and Insolvency Risk

The Company's financial statements have been prepared on a going concern basis, which assumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business as they come due into the foreseeable future.

The Company is an early-stage mine developer currently focused on exploration with no cash flow. It is subject to elevated risks common in such enterprises, including under-capitalization, cash shortages and limitations with respect to personnel, and financial and other resources. Given this, there is no assurance that the Company will be successful in achieving a return on shareholders' investments.

The Company has no assurance that additional funding will be available to it for further exploration and development of its PAK Lithium Project when it is required. Although the Company has historically relied on equity placements to fund its operations and repay its liabilities. Management is actively pursuing financing and alternative funding options and is minimizing discretionary expenditures where prudent. While the Company has been successful in the past, there can be no assurance that it will be able to raise sufficient funds in the future. These conditions and events indicate that a material uncertainty exists that may cast significant doubt about the Company's ability to continue as a going concern.

The Company believes that there is sufficient cash and other short-term assets readily convertible into cash in order to meet its liabilities when they come due. The Company's cash is held in business accounts with a Canadian bank. Management believes that liquidity risk is moderate. The Company manages liquidity risk through the management of its capital structure and continuously monitors actual and projected cash flows.

8.7 Mineral Titles

The Company is satisfied that evidence of title to the PAK Lithium Property is adequate and acceptable by prevailing industry standards with respect to the current stage of exploration on the PAK Lithium Property. The Company may face challenges to the title the PAK Lithium Property or subsequent properties it may acquire, which may prove to be costly to defend or could impair the advancement of the Company's business plan.

8.8 Operating Risks

The Company's operations are subject to all of the hazards and risks normally incidental to the exploration for, and the development and operation of, mineral properties. The Company has implemented comprehensive health and safety measures designed to comply with government regulations and protect the health and safety of the Company's workforce in all areas of its business. Nonetheless, mineral exploration, development and exploitation involves a high degree of risk, which even a combination of experience, knowledge and careful evaluation may not be able to overcome. Unusual or unexpected formations, formation pressures, fires, power outages, shutdowns due to equipment breakdown or failure, aging of equipment or facilities, unexpected maintenance and replacement expenditures, human error, labour disruptions or disputes, inclement weather, higher than forecast precipitation, flooding, shortages of water, explosions, releases of hazardous materials, deleterious elements materializing in

mined resources, tailings impoundment failures, cave-ins, slope and embankment failures, landslides, earthquakes, industrial accidents and explosions, protests and other security issues, and the inability to obtain adequate machinery, equipment or labour due to shortages, strikes or public health issues such as pandemics, are some of the risks involved in mineral exploration and exploitation activities, which may, if as either a significant occurrence or a sustained occurrence over a significant period of time, result in a material adverse effect. The Company expects to rely on third-party owned infrastructure in order to successfully develop and operate its projects, such as power, utility and transportation infrastructure. Any failure of this infrastructure without adequate replacement or alternatives may have a material impact on the Company.

8.9 Infrastructure Risks

The PAK Lithium Project is located 175 km north of Red Lake, Ontario, on Crown land, in a relatively isolated region, with basic infrastructure. Access to the PAK Lithium Project occurs from approximately May 15 (after break-up) to October 15 (5 months) via float plane, and from February 1 to March 15 (1.5 months) via the winter roads. A future source of power, the Watay Power Project, which traverses over the Company's PAK Lithium Project, is expected to be completed and could provide power to the PAK Lithium Project via Ontario's electrical power grid, but there is no assurance of this completion or of the Company utilizing this power source. The Company has also initiated a scoping study to assess the construction of all-season roads which would follow the corridor used by the Watay Power Project. However, currently consistent and reliable access via airplane or winter roads to the PAK Lithium Project is not assured or guaranteed nor is the completion of the Watay Power Project. Delays in the completion or the non-development of these said infrastructure projects could have a material adverse effect on the Company's business, financial position and results of operations.

8.10 Permits, Licences And Authorizations

The activities of the Company require obtaining in a timely manner and maintaining permits and licenses from various governmental authorities. The Company considers that it holds all the permits and licenses required for the activities it currently explores on, in accordance with the relevant laws and by-laws. Changes brought to the laws and regulations could affect these permits and licenses. Nothing guarantees that the Company can obtain all the permits and all the necessary licenses in order to continue its exploration activities, to build mines or mining plants and to begin mining operations on its property.

8.11 Loss of Interest in Properties

The Company's ability to maintain an interest in the properties optioned or owned by the Company will be dependent on its ability to complete all required works and to make all necessary payments to hold these interests. Failure to make necessary payments and/or obtain additional financing may result in the Company being unable to complete the required work required to keep the property interests in good standing and could result in the delay or postponement of further exploration and or the partial or total loss of the Company's interest in the PAK Lithium Property.

8.12 Aboriginal Title Land Claims

Aboriginal rights may be claimed on Crown properties or other types of tenure with respect to which mining rights have been conferred. The Supreme Court of Canada's 2014 decision in *Tsilhqot'in Nation v. British Columbia* marked the first time in Canadian history that a court has declared Aboriginal title to lands outside of reserve land. The Company's property interests may now or in the future be the subject of Aboriginal land claims. The legal nature of Aboriginal title claims is a matter of considerable complexity. The impact of any such claim on the ownership interest in properties cannot be predicted with any degree of certainty and no assurance can be given that a broad recognition of Aboriginal rights in the area in which the Company's property interests are located, by

way of a negotiated settlement or judicial pronouncement, would not have an adverse effect on the Company's activities. Even in the absence of such recognition, the Company may at some point be required to negotiate with and seek the approval of holders of Aboriginal interests in order to facilitate exploration and development work on its property interests, and there is no assurance that the Company will be able to establish a practical working relationship with any Aboriginal organization in the area which would allow it to ultimately develop its property interests.

8.13 Local Resident Concerns

The exploration and development of the Company's projects could be subject to resistance from local residents that could prevent or delay exploration and development of its properties.

8.14 Insurance Risks

Exploration, development, and production operations on resource properties involve numerous risks, including unexpected or unusual geological and/or operating conditions, fires, floods, earthquakes and other environmental occurrences, any of which could result in damage to, or destruction of, producing facilities, damage to life or property, environmental damage and possible legal liability. Although precautions to minimize risk will be taken, operations are subject to hazards that may result in environmental pollution and consequent liability that could have a material adverse impact on the business, operations and financial performance of the Company. It is not always possible to obtain insurance against all such risks and the Company may decide not to insure against certain risks as a result of high premiums or other reasons. Should such liabilities arise, they could have an adverse impact on the Company's results of operations and financial condition and could cause a decline in the value of the Company's shares.

8.15 Key Person Insurance

The Company does not maintain key person insurance on any of its directors or officers, and as result the Company would bear the full loss and expense of hiring and replacing any director or officer in the event the loss of any such persons by their resignation, retirement, incapacity, or death, as well as any loss of business opportunity or other costs suffered by the Company from such loss of any director or officer.

8.16 Litigation Risks

The Company and/or its directors may be subject to a variety of civil or other legal proceedings, with or without merit and relating to a variety of causes including environmental, financial, operational and other causes of action. At this time, the Company is not aware of any material litigation matters that have not been publicly disclosed.

8.17 Dependence on Management

The success of the Company is dependent on the contributions of the individuals that make up its management team. The loss of services from an individual could have an unfavorable, short-term impact on the Company. Management maintains a strong equity position in the Company incentivizing their continued contributions, therefore this risk is considered to be low.

8.18 Risks of Relying on Consultants

The Company has relied on, and may continue to rely on, consultants and others for mineral exploration and exploitation expertise. The Company believes that those consultants are competent and that they have carried out their work in accordance with internationally recognized industry standards. However, if the work conducted by

those consultants is ultimately found to be incorrect or inadequate in any material respect, the Company may experience delays or increased costs in developing its properties.

8.19 Conflicts of Interest

Some of the directors and officers of the Company are engaged as directors or officers of other companies involved in the exploration and development of mineral resources. Such engagement could result in conflicts of interest. Any decision taken by these directors and officers and involving the Company will be in conformity with their duties and obligations to compromise in an equitable way and in good faith with the Company and these other companies. Moreover, these directors and officers will declare their interests and will abstain to vote on any question which could give rise to a conflict of interest.

8.20 Cyber Security Risks

As the Company continues to increase its dependence on information technologies to conduct its operations, the risks associated with cyber security also increase. The Company relies on management information systems and computer control systems. Business and supply chain disruptions, plant and utility outages and information technology system and network disruptions due to cyber-attacks could seriously harm its operations and materially adversely affect its operation results. Cyber security risks include attacks on information technology and infrastructure by hackers, damage or loss of information due to viruses, the unintended disclosure of confidential information, the issue or loss of control over computer control systems, and breaches due to employee error. The Company has implemented security procedures and measures in order to protect its systems and information from being vulnerable to cyber-attacks. The Company believes these measures and procedures are appropriate. To date, it has not experienced any material impact from cyber security events. However, it may not have the resources or technical sophistication to anticipate, prevent, or recover from rapidly evolving types of cyber-attacks. Compromises to its information and control systems could have severe financial and other business implications.

8.21 Tax Risks

The Company is subject to various taxes including, but not limited to the following Canadian taxes: income tax; goods and services tax; sales tax; land transfer tax; payroll tax. The Company's tax filings will be subject to audit by various taxation authorities. While the Company intends to base its tax filings and compliance on the advice of its tax advisors, there can be no assurance that its tax filing positions will never be challenged by a relevant taxation authority resulting in a greater than anticipated tax liability.

Risk Factors Related to the Market

8.22 Price of Lithium Salts/Chemicals and Spodumene Concentrates

Fluctuations in the price of lithium salts/chemicals and spodumene concentrates and their substitutes could have material impacts on the financial results of the Company, the ability of the Company to finance its activities and the price of its common shares. Lithium prices are affected by numerous factors beyond the Company's control, including producer hedging activities, the relative exchange rate with other major currencies, global and regional demand, and political and economic conditions. Worldwide lithium production levels also affect the pricing of this commodity, and prices are occasionally subject to rapid short-term changes due to speculative activities. Other market factors that pose commodity price risks to the Company include interest rate increases, inflation or deflation. Despite having the rare technical grade spodumene from the PAK deposit, price fluctuations may have material impacts on the financial results of the Company. The Company does not actively manage its exposure to price risk

associated with these commodities and will not do so until it achieves production, if it does at any point in the future.

Lithium is considered an industrial mineral and the sales prices for the different lithium compounds are not public. Lithium is not a traded commodity like base and precious metals. Sales agreements are negotiated on an individual and private basis with each different end-user. In addition, there are a limited number of producers of lithium compounds and it is possible that these existing producers will try to prevent new-comers from entering the chain of supply by increasing their production capacity and lowering sales prices. Factors such as foreign currency fluctuation, supply and demand, industrial disruption and actual lithium market sale prices could have an adverse impact on operating costs and stock market prices and on the Company's ability to fund its activities. To the extent that markets for different lithium compounds do not develop in the manner contemplated by the Company, then the long-term growth of lithium products will be adversely affected, which would inhibit the potential for development of the Company's properties, their potential commercial viability and would otherwise have a negative effect on the business and financial condition of the Company.

8.23 Competition

The mining industry is intensely competitive in all its phases. The Company competes for the acquisition of mineral properties, claims, leases and other mineral interests as well as for the recruitment and retention of qualified employees with many companies possessing greater financial resources and technical facilities than the Company. The competition in the mineral exploration and development business could have an adverse effect on the Company's ability to hire or maintain experienced and expert personnel or acquire suitable properties or prospects for mineral exploration in the future.

8.24 Market, Interest and Currency Risk

Market risk is the risk that changes in market prices, such as interest rates, foreign exchange rates and equity prices will affect the Company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return. The Company is headquartered and has its mineral resources within Canada, thereby eliminating the majority of its sovereign and foreign exchange risk. Management therefore believes at the current state of exploration and development its risk management policy is adequate.

8.25 Credit Risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in a financial loss. Credit risk arises from cash and cash equivalents with banks and financial institutions as well as credit exposures to outstanding receivables. The Company currently has no exposure to credit, and therefore no credit risk.

8.26 Governmental Regulation

The activities of the Company are subject to various federal, provincial and municipal laws, which relate to the exploration and development, taxes, standards of work, diseases and the occupational safety, the safety in mines and transformation plants, toxic substances, the protection of the environment and others. The development is subject to legislative measures and laws with the federal, provincial and municipal levels relating to the protection of the environment. Such laws impose high standards on the mining and chemicals industry. Companies are expected to control the waste water and materials and to force the participants to account for such controls to the lawful authorities, to reduce or eliminate the impact that are generated by certain production activities; extraction and of treatment and which are later on deposited on the ground or are rejected into the air or the water, to

complete work of restoration of the mining properties, to control dangerous waste and materials and to reduce the risk of industrial accidents. Failure to comply with the above-mentioned legislative measures can involve important fines and other penalties.

8.27 Environmental and Safety Regulations and Risks

Environmental laws and regulations may affect the operations of the Company. These laws and regulations set various standards regulating certain aspects of health and environmental quality. They provide for penalties and other liabilities for the violation of such standards and establish, in certain circumstances, obligations to rehabilitate current and former facilities and locations where operations are or were conducted. The permission to operate can be withdrawn temporarily where there is evidence of serious breaches of health and safety standards, or even permanently in the case of extreme breaches. Significant liabilities could be imposed on the Company for damages, clean-up costs or penalties in the event of certain discharges into the environment, environmental damage caused by previous owners of acquired properties or noncompliance with environmental laws or regulations. In all major developments, the Company generally relies on recognized designers and development contractors from which the Company will, in the first instance, seek indemnities. The Company intends to minimize risks by ensuring compliance with environmental, health and safety laws and regulations and operating to applicable environmental standards. There is a risk that environmental laws and regulations may become more onerous, making the Company's operations more expensive.

8.28 Climate Change

The Company acknowledges climate change and that the increased regulation of greenhouse gas emissions may adversely affect the Company's operations as related legislation is becoming more stringent. The effects of climate change or extreme weather events may cause prolonged disruption to the delivery of essential commodities which could negatively affect production efficiency.

The Company makes efforts to mitigate climate risks by ensuring that extreme weather conditions are included in its emergency response plans. However, there is no assurance that the response will be effective, and that the physical risks of climate change will not have an adverse effect on the Company's operations and profitability.

8.29 Public Health and Related Risk

Public health crises, such as epidemics and pandemics, acts of terrorism, war or other conflicts and other events outside of the Company's control, may adversely impact the activities of the Company as well as operating results. In addition to the direct impact that such events could have on the Company's facilities and workforce, these types of events could negatively impact capital expenditures and overall economic activity in impacted regions or, depending on the severity of the event, globally, which could impact the demand for and prices of commodities. A prolonged continuance of a public health crisis could also have a material adverse effect on overall economic growth and impact the stability of the financial markets and availability of credit. Any of these developments could have a material adverse effect on the Company's business, financial position, liquidity and results of operations.

8.30 Conflict in Ukraine and International Response

The recent outbreak of hostilities in Ukraine, and the accompanying international response including economic sanctions, has been extremely disruptive to the world economy, with increased volatility in commodity markets, including higher oil and gasoline prices, international trade and financial markets, all of which have a trickle-down effect on supply chains, equipment and construction. There is substantial uncertainty about the extent to which this conflict will continue to impact economic and financial affairs, as the numerous issues arising from the conflict are in flux and there is the potential for escalation of the conflict both within Europe and globally. There is a risk of substantial market and financial turmoil arising from the conflict which could have a material adverse effect on the

economics of the Company's projects, and the Company's ability to operate its business and advance project development.

Risk Factors Related to the Securities of the Corporation

8.31 Price Volatility of Publicly Traded Securities

In recent years, the securities markets in Canada have experienced a high level of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies.

There can be no assurance that continual fluctuations in price will not occur. It may be anticipated that any quoted market for the Common Shares will be subject to market trends generally, notwithstanding any potential success of the Company in creating revenues, cash flows or earnings. The value of Common Shares will be affected by such volatility.

8.32 Resale of Common Shares

The continued operation of the Company will be dependent upon its ability to generate operating revenues and to obtain additional financing. There can be no assurance that any such revenues can be generated or that other financing can be obtained. If the Company is unable to generate such revenues or obtain such additional financing, any investment in the Company may be lost. In such event, the probability of resale of the Common Shares would be diminished.

8.33 Dilution

Additional financing needed to continue funding the development and operation of the Company may require the issuance of additional securities of the Company. The issuance of additional securities and the exercise of common share purchase warrants, options and other convertible securities will result in dilution of the equity interests of any persons who are or may become holders of Common Shares.

8.34 Dividends

The Company has no current plans to pay any cash dividends for the foreseeable future. Any decision to declare and pay dividends in the future will be made at the discretion of the Board of Directors and will depend on, among other things, the Company's financial results, cash requirements, contractual restrictions and other factors that the Board of Directors may deem relevant. In addition, the Company's ability to pay dividends may be limited by covenants of any existing and future outstanding indebtedness that the Company or its subsidiaries incur. As a result, investors may not receive any return on an investment in the Company's securities unless they sell the securities for a price greater than that which they paid for them.

9 DIVIDENDS AND DISTRIBUTIONS

The Company has no fixed dividend policy and the Company has not declared any dividends on its Common Shares since its incorporation. The Company anticipates that all available funds will be used to undertake exploration and development programs on its mineral properties as well as for the acquisition of additional mineral properties. The payment of dividends in the future will depend, among other things, upon the Company's earnings, capital requirements and operating and financial condition. Generally, dividends can only be paid if a Company has retained earnings. Other than requiring Board approval and similar corporate law requirements, there are no restrictions in the Company's Articles preventing the Company from paying dividends. There can be no assurance that the Company will generate sufficient earnings to allow it to pay dividends. Also see *Section 7.1.1 "Mineral Projects Risk Factors"*.

10 DESCRIPTION OF CAPITAL STRUCTURE

10.1 Capital Structure

The Company is authorized to issue an unlimited number of First Preferred shares, Second Preferred shares, and Common Shares. The First Preferred shares are not entitled to vote at meetings of shareholders but are entitled to preference as to the payment of dividends and distribution of the remaining property of the Company on dissolution over Second Preferred shares and Common Shares. The Second Preferred shares are not entitled to vote at meetings of shareholders but are entitled to preference as to the payment of dividends and distribution of the remaining property of the Company on dissolution over Common Shares. The Company has only issued Common Shares as of date of this AIF and these Common Shares carry the right to vote at shareholder meetings, and to the payment of dividends and distribution of the remaining property of the Company on dissolution subsequent to the rights of preferred shares.

Below is a summary of the Common Shares and other securities of the Company issued and outstanding as at March 31, 2023.

Table 16: Capital Structure

	As at March 31, 2023
Common Shares	226,932,041
Stock options	20,090,718
Warrants	6,127,822

10.2 Stock Options

The Company has issued incentive options to certain directors, employees, officers, and consultants of the Company. As of March 31, 2023, the issued incentive options outstanding are shown below in [Table 17](#).

Table 17: Options Issued

Options Issue Date	Number of Options Outstanding	Exercise Price (\$)	Expiry Date
Dec. 11, 2019	650,000	0.30	Dec. 11, 2024
Sept. 23, 2020	2,790,000	0.25	Sept. 23, 2025
Feb. 23, 2021	5,180,001	1.05	Feb. 23, 2026
May 1, 2021	243,110	0.90	May 1, 2026
May 5, 2021	1,000,000	0.90	May 5, 2026
Jul. 20, 2021	1,250,000	0.82	Jul. 20, 2026
Sept. 1, 2021	1,520,000	0.90	Sept. 1, 2026
Oct. 19, 2021	157,607	0.92	Oct. 19, 2026
Feb. 7, 2022	1,000,000	2.71	Feb. 7, 2027
April 19, 2022	750,000	3.16	April 19, 2027
Dec 14, 2022	4,900,000	2.10	Dec 14, 2027
Jan 31, 2023	150,000	2.30	Jan 31, 2028

Feb 8, 2023	500,000	2.73	Feb 8, 2028
Total:	20,090,718		

10.3 Warrants

As of March 31, 2023, the following issued warrants were outstanding as shown below in [Table 18](#).

Table 18: Issued Warrants

Warrants Issue Date	Number of Warrants Outstanding	Exercise Price (\$)	Expiry Date
April 13, 2021	701,731	1.50	April 13, 2023
December 15, 2021	193,590	1.52	December 15, 2023
November 10, 2022	5,232,500	2.75	November 10, 2025
Total:	6,127,822		

Notes:

(1) 605,000 of these warrants were exercised and 96,731 were expired with expiry month of April 2023.

10.4 Common Shares and Financing Sources

The Company issued 10,465,000 common shares and generated approximately \$21.3 million in cash and cash equivalents, net of share issuance costs, during the year ended March 31, 2023. The Company has 226,932,041 common shares issued and outstanding as at March 31, 2023.

10.5 Options

During the year ended March 31, 2023, 6,300,000 (2022 - 5,995,000) stock options were issued to directors, employees, and consultants of the Company. Using the Black-Scholes option pricing model with certain assumptions made: the average fair value of each option granted is approximately \$2.28 (2022 - \$1.18). Stock-based compensation of \$6.6 million (2022 - \$4.5 million) was recognized in the year (stock option compensation) and credited to Contributed Surplus.

The weighted average of the remaining contractual life of options outstanding as at March 31, 2023 was 3.68 years.

10.6 Warrants Issued To Shareholders

As at March 31, 2023, the Company had 6,127,822 outstanding share purchase warrants with a weighted average price of \$2.57 as a result of financings within the past two calendar years.

11 MARKET FOR SECURITIES

11.1 Market For Securities

The Company's Common Shares are listed on the following exchanges:

Jurisdiction	Exchange	Symbol
Canada	TSX Venture Exchange (TSX-V)	FL
United States	Over-the-Counter (OTCQX)	LITOF
Germany	Borse Frankfurt	HL2

The following table sets forth the daily closing price ranges and aggregate monthly trading volume of the Company's Common Shares on the TSX Venture Exchange for the most recently completed financial year:

Table 19: Trading Statistics

Month	High \$	Low \$	Volume
March 2023	2.85	1.95	7,147,284
February 2023	3.04	2.52	11,422,021
January 2023	2.65	1.98	6,709,448
December 2022	2.23	1.98	4,943,985
November 2022	2.35	1.88	5,990,410
October 2022	2.34	1.97	4,124,030
September 2022	2.69	2.05	3,747,898
August 2022	2.72	1.89	4,879,900
July 2022	2.3	1.30	6,701,900
June 2022	3.31	2.07	9,673,300
May 2022	3.89	3.18	6,760,900
April 2022	3.74	3.02	10,900,000

11.2 Prior Sales

The following table summarises the grant of securities outstanding but not listed on a marketplace, convertible or exercisable, as applicable, into Common Shares of the Company during the most recently completed financial year.

Table 20: Prior Sales

Issue Date	Number of Securities	Security	Exercise Price (\$)	Expiry Date
May 1, 2021 ⁽¹⁾	25,000	Stock options	0.90	May 1, 2026
May 5, 2021 ⁽¹⁾	1,000,000	Stock options	0.90	May 5, 2026
July 20, 2021 ⁽¹⁾	1,250,000	Stock options	0.82	July 20, 2026
September 1, 2021 ⁽¹⁾	1,520,000	Stock options	0.90	September 1, 2026
October 19, 2021 ⁽¹⁾	157,607	Stock options	0.92	October 19, 2026
February 7, 2022 ⁽¹⁾	1,000,000	Stock options	2.71	February 7, 2027
April 19, 2022 ⁽¹⁾	750,000	Stock options	3.16	April 19, 2027
December 14, 2022 ⁽¹⁾	4,900,000	Stock options	2.10	December 14, 2027
January 31, 2023 ⁽¹⁾	150,000	Stock options	2.30	January 31, 2028
February 8, 2023 ⁽¹⁾	500,000	Stock options	2.73	February 8, 2023
April 13, 2021 ⁽²⁾	701,731	Warrants	1.50	April 13, 2023
December 15, 2021 ⁽³⁾	193,590	Warrants	1.52	December 15, 2023
November 10, 2022 ⁽⁴⁾	5,232,500	Warrants	2.75	November 10, 2025
Total	17,380,428			

Notes:

- (1) The Company granted, these Options to directors, officers and certain consultants of the Company, subject to the terms and conditions of the Stock Option Plan.
- (2) Warrants were issued in connection with this private placement of 1,822,708 units, the Company issued 1,004,586 Common Share purchase warrants exercisable at \$1.50 per share for a period of 24 months from the date of issuance.
- (3) Warrants were issued in connection with this private placement of 6,453,000 units, the Company issued 387,180 Common Share purchase warrants exercisable at \$1.52 per share for a period of 24 months from the date of issuance.
- (4) Warrants were issued in connection with the prospectus offering of 10,465,000 units, the Company issued 5,232,500 Common Share purchase warrants exercisable at \$2.75 per share for a period of 36 months from the date of issuance.

12 DIRECTORS AND OFFICERS

The name, province or state of residence, position with and principal occupation within the five preceding years for each of the directors and executive officers of the Company, as at the date of this AIF, are set out in the following table:

Table 21: Directors & Officers details

Name, Current Position with the Corporation, Province or State and Country of Residence and Date First Appointed as Director or Officers	Principal Occupation During Past Five Years	Common Shares Beneficially Owned or Controlled (directly or indirectly) and percentage of Issued and Outstanding Common Shares
Reginald F. Walker <i>Chairman and a Director</i> Val Caron, ON April 1995	Owner of Consbec Inc. (drilling and blasting contractor) since 1975.	28,428,907 (12.5%)
John R. Didone ⁽¹⁾ <i>Director and Acting Chief Financial Officer</i> Sudbury, ON November 9, 2017	Professional Accountant based out of Sudbury, ON Canada, was partner until 2018 at SRWC LLP.	1,068,500 (0.5%)
Marian (Mike) Koziol ⁽¹⁾ <i>Director</i> Sudbury, ON January 27, 2011	Mr. Koziol retired as President and Director of Alto Ventures Ltd. (now Big Ridge Gold Corp) in 2020. He is a geologist with over 40 years of experience exploring for gold and base metals in the Canadian Shield.	920,000 (0.4%)
Tess Lofsky <i>Director</i> Toronto, ON February 7, 2022	Senior Legal Counsel and Corporate Secretary at Bird Construction. Prior to that, she served as Legal Counsel & Corporate Secretary for the Greater Toronto Airports Authority and Vice President, General Counsel & Corporate Secretary of North American Palladium Ltd.	4,000 (0.0%)
Stephen Letwin ⁽¹⁾ <i>Director</i> Calgary, AB September 23, 2020	Mr. Letwin is the current President and Chief Executive Officer of Mancal Corporation. Prior to that, Mr. Letwin was President and Chief Executive Officer of IAMGOLD Corporation for nine years.	75,000 (0.0%)
Bartholemew Meekis <i>Director</i> Red Lake, ON March 17, 2021	Mr. Meekis previously served 16 years on the Sandy Lake First Nation council, including 4 years as Deputy Chief and 6 years as Chief.	Nil

<p>Greg Mills <i>Director</i> Toronto, ON April 28, 2021</p>	<p>Mr. Mills served 20 years at RBC Dominion Securities Inc. as Managing director of RBC Capital Markets' Global Equities division and on RBC Capital Markets' Operating and Global Risk committees and previously was a director of RBC USA Holdco Corporation.</p>	<p>175,000 (0.1%)</p>
<p>Marc Boissonneault <i>Director</i> Sudbury, ON July 20, 2021</p>	<p>Mr. Boissonneault is a global mining and metals industry executive. Most recently, Mr. Boissonneault was Head of Global Nickel Assets for Glencore with a 31-year career.</p>	<p>250,000 (0.1%)</p>
<p>Trevor R Walker <i>President & CEO</i> Greater Sudbury, ON February 21, 2017</p>	<p>Trevor R. Walker is the President and CEO of the Company. Mr. Walker joined the Company in 2010, and since then has played a key strategic role in focusing and developing the Company's PAK Lithium Project in Northwestern Ontario.</p>	<p>2,430,141 (1.1%)</p>
<p>Naizhen Cao <i>VP of Technology</i> Greater Sudbury, ON February 22, 2021</p>	<p>Naizhen Cao is the Vice President of Technology of the Company. Dr. Cao held several key positions within the lithium industry including: Chief Scientist at Tianqi Lithium, a global lithium producer and most recently, Dr. Cao was Chief Technology Officer for a subsidiary of Contemporary Amperex Technology Co., Limited ("CATL").</p>	<p>Nil</p>
<p>David Ewing <i>VP of Sustainability and External Affairs</i> Ottawa, ON September 01, 2021</p>	<p>David Ewing is the Vice President of Sustainability and External Affairs of the Company. Most recently, Mr. Ewing was a Director of Sustainability, Indigenous Partnerships & Government Affairs with Brookfield Renewable. Prior to that, Mr. Ewing was a Manager of Environment & Government Relations with Teck Resources Limited.</p>	<p>359,431 (0.2%)</p>
<p>Garth Drever <i>VP of Exploration</i> Greater Sudbury, ON January 2013</p>	<p>Mr. Drever is the Vice President of Exploration of the Company. Mr. Drever is a geologist with over 45 years of mineral exploration experience primarily with Cameco Corporation. Mr. Drever's past experience as an exploration geologist has included positions as Senior Geologist, District Geologist for Cameco Corporation. More recently he worked as exploration manager for Uravan Minerals, and as VP of Raven Minerals Corp., a private uranium exploration company.</p>	<p>3,988,664 (1.8%)</p>
<p>Graeme Goodall <i>VP of Operations</i> Greater Sudbury, ON February 15, 2023</p>	<p>Dr. Goodall has 20+ years of experience focused on metallurgy, pyrometallurgy and extractive operations for multi-national mining and metals producers.</p>	<p>2,940 (0.0%)</p>
<p>Gregory Da Re <i>VP of Corporate Development</i> Toronto, ON June 28, 2023</p>	<p>Dr. Da Re is an experienced investment executive 20+ years of track record on growing and transforming organizations, recently led for Ontario's efforts to build an EV battery supply chain within the province.</p>	<p>Nil</p>

Notes:

(1) Members of the Audit Committee

Directors and Officers

Reginald F. Walker, Chairman of the Board

Greater Sudbury, Ontario

Mr. Walker has been the operator/owner of Consbec Inc. since 1975. Consbec is the largest surface drilling and blasting contractor in North America and the only private Canadian Corporation who manufactures and transports bulk explosives. Mr. Walker has extensive experience in open pit mining, quarry and construction. Mr. Walker's open pit experience involves pit design, government regulatory requirements, high tonnage production, dilution, wall and drainage control. Mr. Walker is a member of the International Society of Explosive Engineers and the Canadian Institute of Mining and Metallurgy.

Marc Boissonneault, Director

Greater Sudbury, Ontario

An accomplished mining industry professional with extensive experience in leading major mining and metallurgical operations and capital projects in a global context, most recently he was Head of Global Nickel Assets for Glencore Canada Corporation with an impressive 31-year career. Marc has a proven track record of consistently delivering strong operating and capital project results while maintaining the highest standards of ESG performance. He holds a Bachelor of Engineering from McMaster University and MBA from Queen's University.

Stephen Letwin, Director

Calgary, Alberta

Mr. Steve Letwin brings over 30 years of experience from the resource sector. Mr. Letwin is the current President and Chief Executive Officer of Mancal Corporation. Prior to that, Mr. Letwin was President and Chief Executive Officer of IAMGOLD Corporation for nine years. He also served as Executive Vice President, Gas Transportation & International with Enbridge Inc. Before joining Enbridge, he served as President and Chief Operating Officer of TransCanada Energy.

John R. Didone, CPA, CA, CMA, HBCOMM, Chairman of the Audit Committee, Director and Acting Chief Financial Officer

Greater Sudbury, Ontario

Mr. Didone was a Partner at SRWC LLP, Chartered Professional Accountants based out of Sudbury, Canada until 2018. He was with the firm since 1980 and over this time had gained considerable insight of business affairs, in particular his demonstrated experience offering professional advice on the expansion of national companies. Mr. Didone is in touch with the Company's strategic goals, our staged growth strategy and he has experience working with mining and construction sectors. He graduated from Laurentian University's Commerce program earning an H.B. Commerce and maintains designations and/or certifications as a CPA, CA, and CMA.

Marian (Mike) Koziol B.Sc., P. Geo, P.Eng., Director

Greater Sudbury, Ontario

Mr. Koziol served as the President and Director of Alto Ventures Ltd. (now Big Ridge Gold Corp.) prior to his retirement in 2020. and resides in Sudbury, Ontario. Alto Ventures Ltd. (Alto) was a Canadian gold exploration corporation with projects in Ontario, Quebec, and Manitoba. Mr. Koziol is a geologist with over 40 years of experience exploring for gold and base metals in the Canadian Shield. He played key roles in a number of gold

and base metals discoveries during his career with Saskatchewan Mining Development Corporation and Cameco Gold Inc., including the McIlvenna Bay Copper-Zinc deposit, Saskatchewan, and the Comtois and Destiny gold deposits in Quebec. During his tenure as District Geologist from 1996 to 2002, Mr. Koziol was responsible for all exploration activities carried out by Cameco Gold Inc. in Eastern Canada, where he evaluated, acquired, and managed a number of gold exploration projects in Manitoba, Ontario and Quebec. Mr. Koziol joined Alto Ventures in 2004 and while at Alto he has acquired a number of high potential gold projects in Ontario Quebec and Manitoba. Mr. Koziol graduated with a BSc degree in Geological Sciences from McGill University in 1978 and holds a number of professional and technical memberships including the Association of Professional Geoscientists of Ontario (P.Ge.), and the Association of Professional Engineers of Ontario (P.Eng.).

Tess Lofsky, LL.B., Director

Toronto, Ontario

Ms. Lofsky is a business focused legal executive with considerable experience in corporate and securities law and corporate governance, developed over 15 plus years in various industries including mining and construction. Ms. Lofsky is currently Senior Legal Counsel and Corporate Secretary for Bird Construction (TSX:BDT), and previously served as Legal Counsel & Corporate Secretary for the Greater Toronto Airports Authority, and Vice President, General Counsel & Corporate Secretary of North American Palladium Ltd. At North American Palladium, Ms. Lofsky provided advice and counsel on a broad range of public company matters including corporate finance and M&A, as well as with respect to environmental, labour and employment, health and safety and indigenous law matters related to their portfolio of assets including mine operations and exploration properties in Ontario and Quebec. Ms. Lofsky received a Bachelor of Social Sciences degree from the University of Ottawa and a Bachelor of Law from Queens University.

Bartholemew Meekis, Director

Sandy Lake, Ontario

Mr. Meekis is a member of the Oji-Cree First Nation of northwestern Ontario and resides in Sandy Lake, Ontario. Mr. Meekis previously served 16 years on the Sandy Lake First Nation council, including 4 years as Deputy Chief and 6 years as Chief. On council and as Chief, Mr. Meekis worked on building partnerships to improve community infrastructure and housing, and essential power and road initiatives in the region.

Greg Mills, Director

Toronto, Ontario

Mr. Mills has 36 years of experience in capital markets, having served 20 years at RBC Dominion Securities Inc. as managing director of RBC Capital Markets' Global Equities division and on RBC Capital Markets' Operating and Global Risk committees and previously was a director of RBC USA Holdco Corporation. Mr. Mills holds a Bachelor of Science in Geology from the University of Windsor and currently is the Chairman of the Board of Sundial Growers Inc., Chairman, Filament Health Corp., Advisory board member of Elevate REIT, a director of Aequitas Innovations and the capital markets advisor to Portag3 Ventures.

Trevor R. Walker, MBA - President & Chief Executive Officer

Greater Sudbury, Ontario

Mr. Walker is the President and CEO of the Company. Mr. Walker joined the Company in 2010, and played a key strategic role in focusing the Company on rare metals and leading the development its PAK Lithium Project in Northwestern Ontario. Mr. Walker has extensive experience in open pit mining and quarrying various industrial minerals.

Naizhen Cao, Ph.D. – VP of Technology

Greater Sudbury, Ontario

Dr. Cao is an industry veteran having worked both in China and Canada as senior technical leader with expertise in lithium and battery materials. During his career, he held several key positions within the lithium industry including: Chief Scientist at Tianqi Lithium, a global lithium producer, where he managed the Technical Division and established the Key Lab of Lithium resources and lithium materials of the Sichuan Province of China. In addition, Dr. Cao launched and led key projects on lithium materials production. Most recently, Dr. Cao was Chief Technology Officer for a subsidiary of CATL, where he participated in all aspects of lithium mining and concentrate production. Dr. Cao published more than 50 scientific papers and filed more than 60 patents with particular proficiency in battery materials with specific focus on lithium chemicals and metal/alloys. Dr. Cao holds a Ph.D., from Tsinghua University, China, in Materials Science and engineering and held a Postdoctoral position at Laval University, Canada in Chemical Engineering.

David Ewing, MPA – VP of Sustainability and External Affairs

Ottawa, Ontario

Mr. Ewing brings over 20 years of experience in environmental matters and has built effective working relationships with regulatory authorities, Indigenous peoples and local communities throughout his career. While working within the mining and energy sectors, Mr. Ewing successfully developed and implemented a sustainability program and led the Indigenous partnerships and regulatory affairs portfolios for Evolgen by Brookfield Renewable, a subsidiary of Brookfield. Mr. Ewing earned a Bachelor of Environmental Studies from the University of Waterloo, and a Master of Public Administration from Queen's University.

Garth Drever, P.Eng., P.Geo – VP of Exploration

Greater Sudbury, Ontario

Mr. Drever is a geologist with over 45 years of mineral exploration experience primarily with Cameco Corporation. Mr. Drever specializes in innovative technologies for detecting ore bodies and has worked on many uranium deposits worldwide. Mr. Drever's past experience as an exploration geologist has included positions as Senior Geologist, District Geologist for Cameco Corporation. Mr. Drever began his career with the Geological Survey of Saskatchewan managing geochemical and geophysical programs exploring for uranium in Northern Saskatchewan. From 2001 to 2007, Mr. Drever played a key role in the development of Cameco's global exploration portfolio with experience in the USA, Australia, Africa, Asia, and Europe. More recently he worked as exploration manager for UraVan Minerals, and as VP of Raven Minerals Corp., a private uranium exploration company. Mr. Drever holds a B.Sc in geology from the University of Regina and is a member of the Association of Professional Engineers and Geoscientists of Saskatchewan, and the Association of Professional Geoscientists of Ontario.

Graeme Goodall, P.Eng., Ph.D. – VP of Operations

Greater Sudbury, Ontario

Graeme Goodall is a Professional Engineer with a designation in Metallurgical Engineering. He holds a doctorate degree, master's degree and bachelor's degree in Materials Engineering from McGill University in Montreal, Quebec. Mr. Goodall brings over twenty years of experience focused on metallurgy, pyrometallurgy and extractive operations for multi-national mining and metals producers, including Glencore, Vale, Rio Tinto and Noranda. His most recent position was Manager, Pyrometallurgy and Furnace Integrity at Glencore XPS in Sudbury and prior to that was Interim Technical Director and Superintendent, Furnace Integrity at Koniambo SAS in New Caledonia.

Greg Da Re, Ph.D. - VP of Corporate Development

Toronto, Ontario

Mr. Da Re is an accomplished executive leader with over two decades of experience in the investment sector and a deep understanding of electric vehicle battery supply chains. He has successfully driven economic growth and attracted strategic investments to the region. Most recently during his tenure at Invest in Canada, Mr. Da Re led Ontario's efforts to establish an EV supply chain, facilitating significant investments such as Canada's first EV battery gigafactory in Windsor and other key facilities. Previously, he served as the Senior Director of Business Ventures at RBC Ventures, the corporate venture arm of the Royal Bank of Canada. Mr. Da Re holds a Ph.D. in Civil & Environmental Engineering from MIT, a Master of Science in Civil & Environmental Engineering from UCLA, and a Bachelor of Applied Science in Civil Engineering from the University of Waterloo.

12.1 Shareholdings Of Directors and Officers

To the best of the Company's knowledge, as of the date of this AIF, the directors and officers of the Company, as a group, beneficially owned, directly or indirectly, or exercised control or direction over, 37,702,583 Common Shares representing approximately 16.6% of the issued and outstanding common shares of the Company.

12.2 Cease Trade Orders, Bankruptcies, Penalties or Sanctions

To the best of the Company's knowledge, except as described below, no director or executive officer of the Company is, as at the date of this AIF, or was, within ten (10) years before the date of this AIF, a director, chief executive officer or chief financial officer of any Corporation (including the Corporation), that (a) was subject to a cease trade or similar order or an order that denied the relevant corporation access to any exemption under the securities legislation, for a period of more than 30 consecutive days, or (b) was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

In 2013, Mr. Stephen Letwin was appointed as Chairman of the Board at ONEnergy Inc., a publicly listed company trading on the NEX Board of the TSX Venture Exchange. ONEnergy Inc. was subject to a Failure-to-File Cease Trade Order ("FFCTO") on May 6, 2019 from the Ontario Securities Commission. The FFCTO was revoked on August 18, 2021 following the filing of ONEnergy's financial statements and other regulatory filings.

To the best of the Company's knowledge, no director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company (a) is, as at the date of this AIF, or has been within the 10 years before the date of this AIF, a director or executive officer of any Corporation (including the Corporation) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, or (b) has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

To the best of the Company's knowledge, no director, or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to (a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (b) any other

penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

12.3 Committees Of The Board

As of the date of this AIF, the committees of the Board of Directors consist of an Audit Committee. The Company is in the process of establishing other committees, such as a Technical Committee, HR Committee and Corporate Governance Committee.

12.4 Composition Of The Audit Committee And Independence

As is required by TSXV Policies and National Instrument 52-110 – *Audit Committees* (“NI 52-110”), the charter of the audit committee of the Board of Directors of the Company (the “Audit Committee”) is attached hereto as Schedule A (the “Charter”). The Company’s Audit Committee consists of John Didone, Mike Koziol, and Steven Letwin. John Didone acts as Chair of the Audit Committee.

NI 52-110 provides that a member of an audit committee is “independent” if the member has no direct or indirect material relationship with the Company, which could, in the view of the Board of Directors, reasonably interfere with the exercise of the member’s independent judgment. Each member of the Audit Committee shall also be financially literate. For purposes hereof “financially literate” has the meaning set forth under NI 52-110 (as amended from time to time) and currently means the ability to read and understand a set of financial statements that present the breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company’s financial statements. The Board of Directors has determined that the three members, John Didone, Mike Koziol and Stephen Letwin are “independent” directors and that all members of the Audit Committee are “financially literate”.

John Didone

Mr. Didone was a Partner at SRWC LLP, Chartered Professional Accountants based out of Sudbury, Canada until 2018. Mr. Didone was with that firm since 1980 and over that time had gained considerable insight of business affairs. In particular, Mr. Didone has experience offering professional advice on the expansion of national companies. Mr. Didone graduated from Laurentian University’s Commerce program earning an HBCom and maintains designations and/or certifications as a CPA, CA, and CMA.

Mike Koziol

Mr. Koziol served as the President and Director of Alto Ventures Ltd. until July 2020 and resides in Sudbury, Ontario. Mr. Koziol is a geologist with over 35 years of experience exploring for gold and base metals in the Canadian Shield. Mr. Koziol played key roles in a number of gold and base metals discoveries during his career with Saskatchewan Mining Development Corporation and Cameco Gold Inc., including the McIlvenna Bay Copper-Zinc deposit, Saskatchewan, and the Comtois and Destiny gold deposits in Quebec. Mr. Koziol graduated with a BSc degree in Geological Sciences from McGill University in 1978 and holds a number of professional and technical memberships including the Association of Professional Geoscientists of Ontario (P. Geo.), and the Association of Professional Engineers of Ontario (P. Eng.). Mr. Koziol is also a member of the Prospectors and Developers Association of Canada.

Stephen Letwin

Mr. Letwin is a Director of Hess Midstream LP and Cassiar Gold (formly Margaux Resources) and also is the President and CEO of Mancal Corporation. Mr. Letwin was President and CEO of IAMGOLD Corporation for ten years and was also a member of their Board of Directors. Prior to joining IAMGOLD, Mr. Letwin was previously with Enbridge Inc. in Houston, Texas, as Executive Vice President, Gas Transportation & International. Before Enbridge, Mr. Letwin was President & CEO of TransCanada Energy and CFO of TransCanada Pipelines, Numac

(Westcoast Energy), and Encor Energy. Mr. Letwin holds an MBA from the University of Windsor, is a Certified General Accountant, a graduate of McMaster University (B.Sc., Honours), and a graduate of the Harvard Advanced Management Program.

12.5 Reliance on Certain Exemptions

The Company is relying upon the exemption set out in section 2.4 (*De Minimis Non-Audit Services*) and section 6.1 of NI 52-110 that provides that the Company, as a venture issuer, is not required to comply with Part 5 (*Reporting Obligations*) of NI 52-110.

12.6 Audit Fees

The following table ([Table 22](#)) sets forth the fees paid by the Company to Grant Thornton LLP (Grant Thornton LLP, the auditors of the Company for the previous three years:

Table 22: Audit Fees

	Year Ended March 31, 2023	Year Ended March 31, 2022	Year Ended March 31, 2021
Audit fees⁽¹⁾	\$99,500	\$62,700	\$43,860
All other fees	25,000	Nil	\$5,702
Total	\$124,500	\$62,700	\$49,562

Notes:

(1) The aggregate audit fees billed by the Company's auditor (or accrued). Includes taxes and CPAB fees. The aggregate fees billed (or accrued) for assurance and related services that are reasonably related to the performance of the audit or review of the Company's financial statements which are not included under the heading "Audit Fees", including for quarterly reviews. The aggregate fees billed (or accrued) for professional services provided by the auditor rendered for tax compliance, tax advice and tax planning.

12.7 Conflicts Of Interest

To the best of the Company's knowledge, except as otherwise noted in this AIF, there are no existing or potential conflicts of interest among the Company, its directors, officers, or other members of management of the Company except that certain of the directors, officers and other members of management serve as directors, officers and members of management of other public companies and therefore it is possible that a conflict may arise between their duties as a director, officer or member of management of such other companies and their duties as a director, officer or member of management of the Company. The directors and officers are aware of laws applying to directors and officers for corporate opportunity and requiring disclosure by directors of conflicts of interest. The Company will rely upon such laws in respect of any directors' or officers' conflicts of interest or in respect of any breaches of duty to any of its directors and officers. All such conflicts must be disclosed by such directors or officers in accordance with the *Alberta Business Companies Act* and, where appropriate, directors or officers with a conflict of interest abstain from voting on, or discussion of, certain transactions. The Company has adopted Corporate Governance Guidelines, which provide guidance and govern the management of potential conflicts, external communications and other matters.

13 PROMOTERS

No person has been within the two most recently completed financial years or during the current financial year, a promoter of the Company.

14 LEGAL PROCEEDINGS AND REGULATORY ACTIONS

The Company is not a party to, nor are any of the Company's properties subject to, any pending legal proceedings or regulatory actions the outcome of which would have a material adverse effect on the Company. Except as described below, the management of the Company is not aware of any material legal proceedings in which the Company may be a party which are contemplated by governmental authorities or otherwise.

15 INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Management of the Company is not aware of any material interest, direct or indirect, of any insider of the Company, or any associate or affiliate of any such person, in any transaction during the Company's three last completed financial years, or during the current financial year that has materially affected or is reasonably expected to materially affect the Company.

The Company's financial statements for the last three years and the management's discussion and analysis filed in connection therewith on SEDAR disclose related party transactions, such as the payment to directors and officers of management fees and / or salaries and the granting of stock options to same, in detail. Related party transactions have been excluded from this section as they do not materially affect, and are not reasonably likely to materially affect, the Company as described in Item 13 of 51-102F2.

16 TRANSFER AGENTS AND REGISTRARS

The Company's transfer agent and registrar is Odyssey Trust Company, with principal offices located at Stock Exchange Tower 1230 – 300 5th Avenue SW Calgary, Alberta, T2P 3C4.

17 MATERIAL CONTRACTS

Other than contracts entered into in the ordinary course of business, the Company has not entered into any material contracts within the most recently completed financial year or previous to the most recently completed financial year, that are still in effect.

18 INTERESTS OF EXPERTS

Unless stated otherwise herein, all scientific and technical data contained in this AIF has been reviewed, approved and verified by Garth Drever, P.GEO. who is the Company's in-house "Qualified Person" within NI 43-101 and is a member in good standing of the Professional Geoscientists Ontario. Mr. Drever is also the Company's Vice President, Exploration. Therefore, he is not considered to be independent under NI 43-101.

Grant Thornton LLP, Chartered Professional Accountants, who prepared the auditors' report accompanying the audited financial statements of the Company for the most recent year end, report that Grant Thornton LLP is independent of the Corporation within the meaning of the Rules of Professional Conduct of the Institute of Chartered Professional Accountants of Ontario. Disclosure with respect to the PAK Lithium Project in this AIF is based on the NI 43-101 PFS Technical Report by BBA Engineering Ltd. issued May 31st 2023, and filed on SEDAR on July 14th, 2023. This report was prepared by a team of independent consultants and qualified persons including Todd McCracken, P.Geo., of BBA, Bahareh Asi, P.Eng., of BBA, Joanne Robinson, P.Eng., of BBA, David Willock, P.Eng., of BBA, Shane Ghouralal, P.Eng., MBA, of BBA, Darlene Nelson, P.Eng., of WSP, Andrew Holloway, P.Eng., of Halyard Inc., Ian Ward, P.Eng., of Ian Ward Consulting Services, and Ron deGagne, P.Geo., of Environmental Applications Group. Each is a qualified person and independent as defined in NI 43-101.

To the best of the Company's knowledge, except for Mr. Drever, the registered or beneficial interest, direct or indirect, in any securities or other property of the Company or of one of the Company's associates or affiliates of each of the above experts represents less than one per cent of the Company's outstanding securities. None of the



above experts is or is expected to be elected, appointed or employed as a director, officer or employee of the Company's or of any associate or affiliate of the Company, except for Mr. Drever.

19 ADDITIONAL INFORMATION

Additional information including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and options to purchase common shares of the Company and securities authorized for issuance under equity compensation plans is contained in the management proxy circular for the Company's most recently held Annual General Meeting which is available on SEDAR at www.sedar.com.

Additional financial information is contained in the Company's comparative financial statements and management's discussion and analysis as at and for the period ended March 31, 2023, which are available on SEDAR at www.sedar.com. Additional information relating to the Company may be found on SEDAR at www.sedar.com.

20 SCHEDULE A - AUDIT COMMITTEE CHARTER

1. **Establishment of Audit Committee:** The directors of the Corporation (the “Directors”) hereby establish an audit committee (the “Audit Committee”).
2. **Membership:** The membership of the Audit Committee shall be as follows:
 - (a) The Audit Committee shall be composed of three members or such greater number as the Directors may from time to time determine.
 - (b) The majority of the members of the Audit Committee shall be independent Directors.
 - (c) Each member of the Audit Committee shall be financially literate. For purposes hereof “financially literate” has the meaning set forth under NI 52-110 (as amended from time to time) and currently means the ability to read and understand a set of financial statements that present the breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can be reasonably be expected to be raised by the Corporation’s financial statements.
 - (d) Members shall be appointed annually from among members of the Directors. A member of the Audit Committee shall ipso facto cease to be a member of the Audit Committee upon ceasing to be a Director of the Corporation.
3. **Oversight Responsibility:** The external auditor is ultimately accountable to the Directors and the Audit Committee, as representatives of the shareholders and such shareholders representatives have the ultimate authority and responsibility to select, evaluate, and where appropriate, replace the external auditors (or to nominate the external auditors to be proposed for shareholder approval in any management information circular and proxy statement). The external auditor shall report directly to the Audit Committee and shall have the responsibilities as set forth herein.
4. **Mandate:** The Audit Committee shall have responsibility for overseeing:
 - (a) the accounting and financial reporting processes of the Corporation; and
 - (b) audits of the financial statements of the Corporation.

In addition to any other duties assigned to the Audit Committee by the Directors, from time to time, the role of the Audit Committee shall include meeting with the external auditor and the senior financial management of the Corporation to review all financial statements of the Corporation which require approval by the Directors, including year-end audited financial statements. Specifically, the Audit Committee shall have authority and responsibility for:

 - (a) reviewing the Corporation’s financial statements, MD&A and earnings press releases before the information is publicly disclosed;
 - (b) overseeing the work of the external auditors engaged for purpose of preparing or issuing, an audit report or performing other audit, review or attest services for the Corporation, including the resolution of disagreements between management and the external auditors regarding financial reporting;
 - (c) reviewing annually and recommending to the Directors:
 - (i) the external auditors to be nominated for purposes of preparing or issuing an audit report or performing other audit, review or attest services for the Corporation; and
 - (ii) the compensation of the external auditors;
 - (d) discussing with the external auditor:
 - (i) the scope of the audit, in particular their view of the quality of the Corporation’s accounting principles as applied in the financials in terms of disclosure quality and evaluation methods, inclusive of the clarity of the Corporation’s financial disclosure and reporting, degree of conservatism or aggressiveness of the Corporation’s accounting principles and underlying estimates and other significant decisions made by management in preparing the financial disclosure and reviewed by the auditors;

- (ii) significant changes in the Corporation's accounting principles, practices or policies; and
 - (iii) new developments in accounting principles, reporting matters or industry practices which may materially affect the Corporation.
- (e) reviewing with the external auditor and the Corporation's senior financial management the results of the annual audit regarding:
 - (i) the financial statements;
 - (ii) MD&A and related financial disclosure contained in continuous disclosure documents;
 - (iii) significant changes, if any, to the initial audit plan;
 - (iv) accounting and reporting decisions relating to significant current year events and transactions;
 - (v) the management letter, if any, outlining the auditor's findings and recommendations, together with management's response, with respect to internal controls and accounting procedures; and
 - (vi) any other matters relating to the conduct of the audit, including such other matters which should be communicated to the Audit Committee under Canadian generally accepted auditing standards.
- (f) reviewing and discussing with the Corporation's senior financial management and, if requested by the Audit Committee, the external auditor:
 - (i) the interim financial statements;
 - (ii) the interim MD&A; and
 - (iii) any other material matters relating to the interim financial statements, including, inter alia, any significant adjustments, management judgments or estimates, new or amended accounting policies;
- (g) receipt from external auditor of a formal written statement delineating all relationships between the auditor and the Corporation and considering whether the advisory services performed by the external auditor during the course of the year have impacted their independence, and also ensuring that no relationship or services between) the external auditor and the Corporation is in existence which may affect the objectivity and independence of the auditor or recommending appropriate action to ensure the independence of the external auditor;
- (h) pre-approval of all non-audit services to be provided to the Corporation or its subsidiary entities by the external auditors or the external auditors of the Corporation's subsidiary entities, unless such pre-approval is otherwise appropriately delegated or if appropriate specific policies and procedures for the engagement of non-audit services have been adopted by the Audit Committee;
- (i) reviewing and discussing with the external auditors and senior financial management: the adequacy of procedures for review of disclosure of financial information extracted or derived from financial statements, other than the disclosure referred to in subparagraph (a) above;
- (j) establishing and reviewing of procedures for:
 - (i) receipt, retention and treatment of complaints received by the Corporation and its subsidiary entities regarding internal accounting controls, or auditing matters; confidential;
 - (ii) anonymous submission by employees of the Corporation and its subsidiary entities of concerns regarding questionable accounting or auditing matters; and
 - (iii) hiring policies regarding employees and former employees of present and former external auditors of the Corporation and its subsidiary entities;
- (k) reviewing with the external auditor, the adequacy of management's internal control over financial reporting relating to financial information and management information systems and inquiring of management and the external auditor about significant risks and exposures to the Corporation that may have a material adverse impact on the Corporation's financial statements, and inquiring of the external auditor as to the efforts of management to mitigate such risks and exposures; and

- (1) reviewing and/or considering that, with regard to the previous fiscal year,
 - (i) management has reviewed the Corporation's audited financial statements with the Audit Committee, including a discussion of the quality of the accounting principles as applied and significant judgments affecting the financial statements;
 - (ii) the external auditors and the Audit Committee have discussed the external auditors' judgments of the quality of the accounting principles applied and the type of judgments made with respect to the Corporation's financial statements;
 - (iii) the Audit Committee, on its own (without management or the external auditors present), has considered and discussed all the information disclosed to the Audit Committee from the Corporation's management and the external auditor; and
 - (iv) in reliance on review and discussions conducted with senior financial management and the external auditors, the Audit Committee believes that the Corporation's financial statements are fairly presented in conformity with the with International Financial Reporting Standards (IFRS) in all material respects and that the financial statements fairly reflect the financial condition of the Corporation.

5. Administrative Matters: The following general provisions shall have application to the Audit Committee:

- (a) A quorum of the Audit Committee shall be the attendance of a majority of the members thereof. No business may be transacted by the Audit Committee except at a meeting of its members at which a quorum of the Audit Committee is present or by a resolution in writing signed by all the members of the Audit Committee.
- (b) Any member of the Audit Committee may be removed or replaced at any time by resolution of the Directors of the Corporation. If and whenever a vacancy shall exist on the Audit Committee, the remaining members may exercise all its powers so long as a quorum remains. Subject to the foregoing, each member of the Audit Committee shall hold such office until the close of the annual meeting of shareholders next following the date of appointment as a member of the Audit Committee or until a successor is duly appointed.
- (c) The Audit Committee may invite such Directors, directors, officers and employees of the Corporation or affiliates thereof as it may see fit from time to time to attend at meetings of the Audit Committee and to assist thereat in the discussion of matters being considered by the Audit Committee. The independent auditor is to appear before the Audit Committee when requested to do so by the Audit Committee.
- (d) The time and place for the Audit Committee meetings, the calling and the procedure at such meetings shall be determined by the Audit Committee having regard to the Articles and By-Laws of the Corporation.
- (e) The Chair shall preside at all meetings of the Audit Committee and shall have a second and deciding vote in the event of a tie. In the absence of the Chair, the other members of the Audit Committee shall appoint a representative amongst them to act as Chair for that particular meeting.
- (f) Notice of meetings of the Audit Committee may be given to the independent auditor and shall be given in respect of meetings relating to the annual audited financial statements. The independent auditor has the right to appear before and to be heard at any meeting of the Audit Committee. Upon the request of the independent auditor, the Chair of the Audit Committee shall convene a meeting of the Audit Committee to consider any matters which the external auditor believes should be brought to the attention of the Directors or shareholders of the Corporation.
- (g) The Audit Committee shall report to the Directors of the Corporation on such matters and questions relating to the financial position of the Corporation or any affiliates of the Corporation as the Directors of the Corporation may from time to time refer to the Audit Committee.
- (h) The members of the Audit Committee shall, for the purpose of performing their duties, have the right to inspect all the books and records of the Corporation and its affiliates, and to discuss such books and records that are in any way related to the financial position of the Corporation with the Directors, directors, officers, employees and independent auditor of the Corporation and its affiliates.

- (i) Minutes of the Audit Committee meetings shall be recorded and maintained. The Chair of the Audit Committee will report to the Directors on the activities of the Audit Committee and/or the minutes of the Audit Committee meetings will be promptly circulated to the Directors or otherwise made available at the next meeting of Directors.
- (j) The Audit Committee shall, upon the approval of the Directors, adopt a formal written charter, which sets out the Audit Committee's responsibilities, the way they should be implemented and any other requirement such as membership and structure of the Audit Committee. The Audit Committee shall review and reassess the adequacy of the charter on an annual basis.
- (k) The Audit Committee shall ensure and/or consider that, with regard to the previous fiscal year,
 - (i) management has reviewed the Corporation's audited financial statements with the Audit Committee, including a discussion of the quality of the accounting principles as applied and significant judgments affecting the financial statements;
 - (ii) the external auditor and the Audit Committee have discussed the independent auditor's judgments of the quality of the accounting principles applied and the type of judgments made with respect to the Corporation's and/or the Corporation's financial statements;
 - (iii) the Audit Committee, on its own (without management or the independent auditors present), has considered and discussed all the information disclosed to the Audit Committee from the Corporation's management and the external auditor; and
 - (iv) in reliance on review and discussions conducted with management and outside auditors, the Audit Committee believes that the Corporation's financial statements are fairly presented in conformity with the with International Financial Reporting Standards (IFRS) in all material respects.
- (l) The Audit Committee shall have the authority to:
 - (i) engage independent counsel and other advisors or consultants as it determines necessary to carry out its duties;
 - (ii) set and pay the compensation for any advisors employed by the Audit Committee; and
 - (iii) communicate directly with the internal (if any) and external auditors and qualified reserves evaluators or auditors.

21 SCHEDULE B - GLOSSARY OF TERMS

The following technical terms may be used in this AIF, and may appear capitalized or in lower case, without any difference in meaning:

“Adularia” - A variety of K feldspar, a more ordered low-temperature variety of Orthoclase or partially disordered Microcline.

“AIF” - means this AIF;

“Alteration” - Any change in the mineral composition of a rock that is brought about by physical or chemical means.

“Amphibolite Facies” - One of the major divisions of the mineral-facies classification of metamorphic rocks, the rocks of which formed under conditions of moderate to high temperatures (500° C, or about 950° F, maximum) and pressures.

“Aplite” - A medium- to fine-grained rock (average grain size usually 1.0 mm or less) with a characteristic equigranular, sugary (saccharoidal) texture.

“Archean” - Oldest rocks of the Precambrian Era, older than about 2.5 billion years.

“Batholith” - A very large igneous intrusion extending deep in the earth's crust.

“Belt” - A specific elongate area defined by unique geologic characteristics.

“Beryllium” - Is a steel-gray metal that is quite brittle at room temperature, and its chemical properties somewhat resemble those of aluminum.

“Biotitic Tonalites” - Fine- to medium-grained, equigranular biotite tonalite usually occurring as rounded boulders. Tonalites are leucocratic (15 to 25% modal mafic minerals), light gray to buff on fresh surfaces, and locally contain mafic enclaves with reddish rims, the result of iron hydroxide staining.

“Board of Directors” or “Directors” - means the board of directors of the Corporation;

“Brittle Deformation” - Refers to the shape change of a material by breaking of its chemical bonds, which do not subsequently reform. In natural rocks, the result of brittle deformation is often manifested as fractures, especially faults and joints.

“Cataclastic” - Relating to rocks consisting of cemented fragments that originate from the mechanical breakdown of rock associated with plate tectonic processes.

“Cesium” - is a chemical element with the symbol Cs and atomic number 55. It is a soft, silvery-golden alkali metal with a melting point of 28.5 °C (83.3 °F), which makes it one of only five elemental metals that are liquid at or near room temperature.

“CIM” – mean the Canadian Institute of Mining, Metallurgy and Petroleum.

“CIM Standards” – means definitions used for estimated mineral reserves and mineral resources as approved by CIM Council on May 10, 2014 and adopted by the Canadian Securities Administrators’ National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (“NI 43-101”).

“Common Shares” - means the common shares of the Corporation;

“Corporation” or “Company”- means Frontier Lithium Inc. and, as the context requires, its subsidiary;

“Dextral Transcurrent Dislocation” - Describing direction and movement of earth's crust during a fault occurrence, dextral (Right-Handed slip) and transcurrent is a fracture in the rocks of Earth's crust in which the rock masses slip past one another parallel to the strike.

“Diabase” - A common basic igneous rock usually occurring in dykes or sills.

“Diamond Drilling/Drill Hole” - A method of obtaining a cylindrical core of rock by drilling with a diamond impregnated bit.

“Dip” - The angle at which a stratum is inclined from the horizontal.

“Dyke” - A tabular body of igneous rock cross cutting the host strata at a high angle.

“Exchange” - means the TSX Venture Exchange;

“Fault” - A fracture in a rock along which there has been relative movement between the two sides either vertically or horizontally.

“Fault Zone” - Is a cluster of parallel faults. However, the term is also used for the zone of crushed rock along a single fault. Prolonged motion along closely spaced faults can blur the distinction, as the rock between the faults is converted to fault-bound lenses of rock and then progressively crushed.

“Feldspar” - A group of common aluminosilicate minerals.

“Felsic” - Igneous rock composed principally of feldspars and quartz.

“Fold” - Bend in strata or any planar structure.

“Foliation” - Repetitive layering in metamorphic rocks.

“Formation” - A body of rock identified by lithological characteristics and stratigraphic position.

“Fracture” - A break in the rock, the opening of which allowing the entry of mineral-bearing solutions.

“Gamma-Ray Spectrometer Survey” – Radiometric surveys detect and map natural radioactive emanations, called gamma rays, from rocks and soils

“Geochemistry/Geochemical” - Study of variation of chemical elements in rocks or soil.

“Geology/Geological” – Study of the Earth’s history and life, mainly as recorded in rocks.

“Geophysics/Geophysical” - Study of the earth by quantitative physical methods, either by surveys conducted on the ground, in the air (by fixed wing aircraft or helicopter) or in a borehole or drillhole.

“Gneiss” - Is a high grade metamorphic rock, meaning that it has been subjected to higher temperatures and pressures than schist. It is formed by the metamorphosis of granite, or sedimentary rock. Gneiss displays distinct foliation, representing alternating layers composed of different minerals.

“Granite” - A coarse- or medium-grained intrusive igneous rock that is rich in quartz and feldspar; it is the most common plutonic rock of the Earth’s crust, forming by the cooling of magma (silicate melt) at depth.

“Granodiorite” - Is an intrusive rock, intermediate in composition between diorite and granite. Although often similar in appearance to diorite or granite, it has a higher quartz content than diorite, and a higher mafic mineral content than granite.

“Greenschist Facies” - One of the major divisions of the mineral facies classification of metamorphic rocks, the rocks of which formed under the lowest temperature and pressure conditions usually produced by regional metamorphism. Temperatures between 300 and 450 °C (570 and 840 °F) and pressures of 1 to 4 kilobars are typical.

“Greenstone” - A field term applied to any compact, dark-green, altered or metamorphosed basic igneous rock (e.g. spilite, basalt, gabbro, diabase) that owes its color to the presence of chlorite, actinolite, or epidote.

“Greenstone Belt” - Area underlain by metamorphosed volcanic and sedimentary rocks, usually in a continental shield.

“Hectare” - A square of 100 metres on each side.

“Igneous” - A classification of rocks formed from the solidification from a molten state.

“indicated mineral resource” - is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit.

“inferred mineral resource” - is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity.

“Intrusive/Intrusions” - An igneous rock that invades older rocks.

“Iron formation” (banded) - Chemically precipitated rock consisting of repeated thin layers of chert (silica) and iron oxides commonly magnetite and/or hematite.

“Joint venture” - business arrangement usually between companies that defines each parties vested interest in an asset.

“Lepidotite” - It is the most abundant lithium-bearing mineral and is a secondary source of this metal.

“Li₂O” – means lithium oxide, in this report refers to the marketable product produced from processing of the mineral spodumene.

“Lithium” - A chemical element of the alkali metal group that is the lightest metal known and that is used especially in alloys and glass, in mechanical lubricants, and in storage batteries.

“Lithological Domain” - Is a description of its physical characteristics visible at outcrop, in hand or core samples, or with low magnification microscopy. Physical characteristics include colour, texture, grain size, and composition.

“m” or “metre” means metre;

“Mafic” - An igneous rock composed chiefly of dark iron and manganese silicate minerals.

“Mapping” – The art and science of recording geological observations on a map.

“measured mineral resource” - is that part of a mineral resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit.

“Metamorphic Grade” - Refers to the range of metamorphic change a rock undergoes, progressing from low (little metamorphic change) grade to high (significant metamorphic change) grade. Low-grade metamorphism begins at temperatures and pressures just above sedimentary rock conditions.

“Metamorphosed” - A process whereby the composition of rock is modified by heat and pressure/A class of rock affected by metamorphism.

“Metasedimentary” - Is a type of metamorphic rock. Such a rock was first formed through the deposition and solidification of sediment. Then, the rock was buried underneath subsequent rock and was subjected to high pressures and temperatures, causing the rock to recrystallize.

“Mica Granites” - Is meant to describe a highly felsic, highly differentiated, leucocratic, peraluminous granitoid poor in calcium, magnesium, titanium, and iron, and that is moderately rich in potash and silica.

“Microstructures” - Describes the textural features of the rock, and can provide information on the conditions of formation, petrogenesis, and subsequent deformation, folding, or alteration events.

“mineral reserves” - means the economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

“mineral resources” - means a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction.

“Mineralization” - The concentration of metals and their chemical compounds in a body of rock.

“Muscovite” - Is the most common mineral of the mica family. It is an important rock-forming mineral present in igneous, metamorphic, and sedimentary rocks.

“Mylonite” - Is a metamorphic rock formed by ductile deformation during intense shearing encountered during folding and faulting, a process termed cataclastic or dynamic metamorphism.

“NI 43-101” - means National Instrument 43-101 - Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators;

“NI 52-110” - means National Instrument 52-110 - Audit Committees of the Canadian Securities Administrators;

“Ore” - Rock containing mineral(s) or metals that can be economically extracted to produce a profit.

“Outcrop” - An exposure of bedrock at the surface.

“PAK Lithium Project” or simply the “Property” in certain contexts has the meaning assigned to it in the Technical Report and refers to the Corporation’s PAK Lithium Project, Ontario.

“Pegmatite Dyke” - Is an igneous deposit that commonly contain large crystals and rather uncommon minerals

“PEA/Preliminary Economic Assessment” - is a study that includes an economic analysis of the potential viability of mineral resources taken at an early stage of the project prior to the completion of a preliminary feasibility study; also referred to as a scoping study.

“Peraluminous Suite” – Is a group of igneous rocks that have a molecular proportion of aluminium oxide higher than the combination of sodium oxide, potassium oxide and calcium oxide.

“Petalite” - Is a lithium aluminium phyllosilicate mineral $\text{LiAlSi}_4\text{O}_{10}$, crystallizing in the monoclinic system.

“Plunge” - The vertical angle an ore body makes between the horizontal plane and the direction along which it extends, longitudinally to depth.

“Pluton” - Is a body of intrusive igneous rock that is crystallized by the slow cooling of magma.

“Pollucite” - Is a zeolite mineral with iron, calcium, rubidium and potassium as common substituting elements. It is important as a significant ore of caesium and sometimes rubidium.

“Potassic Alteration” - Potassic (or K-silicate) alteration is characterized by the formation of new K-feldspar and/or biotite (green colored and Fe-rich), usually together with minor sericite, chlorite, and quartz.

“ppm” – Concentration in parts per million.

“probable mineral reserve” - is the economically mineable part of an indicated mineral resource, and in some circumstances a measured mineral resource, demonstrated by at least a preliminary feasibility study.

“Prospecting” – The art and science of searching for mineral deposits.

“proven mineral reserve” - is the economically mineable part of a measured mineral resource demonstrated by at least a preliminary feasibility study.

“Quartz” - Is a hard, crystalline mineral composed of silica (silicon dioxide).

“Radiometric Anomalies” - A deviation from the standard gamma-rays, which the radioactive isotopes of these elements emit during radioactive decay.

“Rare Metals” - Also called the rare-earth elements or (in context) rare-earth oxides, or the lanthanides (though yttrium and scandium are usually included as rare-earths) are a set of 17 nearly-indistinguishable lustrous silvery-white soft heavy metals.

“Rubidium” - Is the chemical element with the symbol Rb and atomic number 37. Rubidium is a very soft, silvery-white metal in the alkali metal group.

“Sandstone” – A sedimentary rock composed mainly of sand-sized quartz and/or feldspar.

“Schist” – Rocks of medium-grade metamorphism with well developed lamellar minerals.

“SEDAR” – The System for Electronic Document Analysis and Retrieval.

“Sediment” - Solid material that has settled down from a state of suspension in a liquid; may be transported and deposited by wind, water or ice, chemically precipitated from solution, or secreted by organisms, forms in layers in loose unconsolidated form.

“Sedimentary” - Pertaining to or containing sediment or formed by its deposition.

“Shear” - A planar zone of deformed rock caused by the movement of the rock.

“Sill” - A tabular body of igneous rock conforming to the strata it invades.

“Soil Sampling” - Systematic collection of soil samples from a series of different locations in order to study the distribution of its geochemical composition.

“Spodumene” - Is a pyroxene mineral consisting of lithium aluminium inosilicate, $\text{LiAl}(\text{SiO}_3)_2$, and is a source of lithium. It occurs as colorless to yellowish, purplish, or lilac kunzite (see below), yellowish-green or emerald-green hiddenite, prismatic crystals, often of great size.

“Strike” - Direction or trend of a geologic structure.

“Structure/Structural” - Pertaining to geological structure such as folds, faults, etc.

“Subprovince” - Is a spatial entity with common geologic attributes.

“Tantalum” - Is a chemical element with the symbol Ta and atomic number 73. Tantalum is a rare, hard, blue-gray, lustrous transition metal that is highly corrosion-resistant. It is part of the refractory metals group, which are widely used as minor components in alloys.

“Technical Report” - means the technical report titled “PAK Property” and issued on April 5, 2021.

“Tension Gashes” - Are small veins that open up when rocks get stretched. Often, they are arrayed en echelon with respect to other tension gashes, all oriented in the same direction.

“Tourmaline” - Is a crystalline boron silicate mineral compounded with elements such as aluminium, iron, magnesium, sodium, lithium, or potassium.

“Vein” - A thin sheet-like intrusion into a fissure or crack, commonly bearing quartz /a small vein or cluster of veins.

“Volcanic” - Descriptive of rocks originating from volcanic activity.

“Volcano-sedimentary” - A mix of rocks formed by volcanic and sedimentary processes.

“Vuggy” – Used to describe a texture containing vugs, which are cavities, voids or large pores in a rock that are commonly lined with mineral precipitates.