

## HIGH QUALITY, ALWAYS THE RIGHT CHOICE

Frontier Lithium offers a unique opportunity for investors seeking value in battery metals. Located in North America, Frontier’s lithium is contained in a rare low-iron spodumene resource which can produce two lithium products, a characteristic found in only a few commercially-viable deposits around the world. Two incentives to prompt the market to reprice this security are currently in the works; Demonstration concentrator plans for producing spodumene concentrate and initial bench-scale results from a lithium chemicals research and development partnership to produce lithium hydroxide. With a current lithium bear market investors are reminded of quality assets whereby Frontier boasts the highest grade and quality spodumene deposit in North America. With \$600 billion of recent investment committed to the global battery supply chain and sentiment that supply deficits will emerge in the next 24 months Frontier is positioned well to gain value and transition towards production therefore is considered to be a prime investment opportunity in North America.

## Company Highlights

Frontier Lithium is a TSX:V listed, pure play lithium company that contains the largest lithium resource in Ontario (1 million tonnes Lithium Carbonate Equivalent “LCE” with all resource categories). The company’s assets, which are 100% owned, are located in northwestern Ontario’s Electric Avenue, a new prospective high-quality lithium-metal region with strategic shipping access to North America’s Great Lakes transportation artery.

### PAK Deposit

PAK contains a resource of 9.3M tonnes of 2.04% Lithium oxide (Li<sub>2</sub>O). A 2018 PFS resulted in a post-tax NPV of \$300M and an internal rate of return of 38%. The deposit has the rare capacity to produce multiple lithium feedstock products for both industrial (premium glass makers) and battery markets.

## Market Facts

as of July 31, 2020 - \$CAD

Exchange — FL;TSX.V - HLKMF;OTC - HL2;Frankfurt  
 Market Capitalization — \$37,560,527  
 52-week Price Range — \$0.14 - \$0.35  
 Shares Issued — 170,729,672  
 FL Executive Options — (Avg. Price \$0.39) 12,700,000  
 Warrants (Avg. Price \$0.56) — 18,331,587  
 Fully Diluted — 189,061,259  
 Cash — \$2,134,133



### High Impurity Advantage

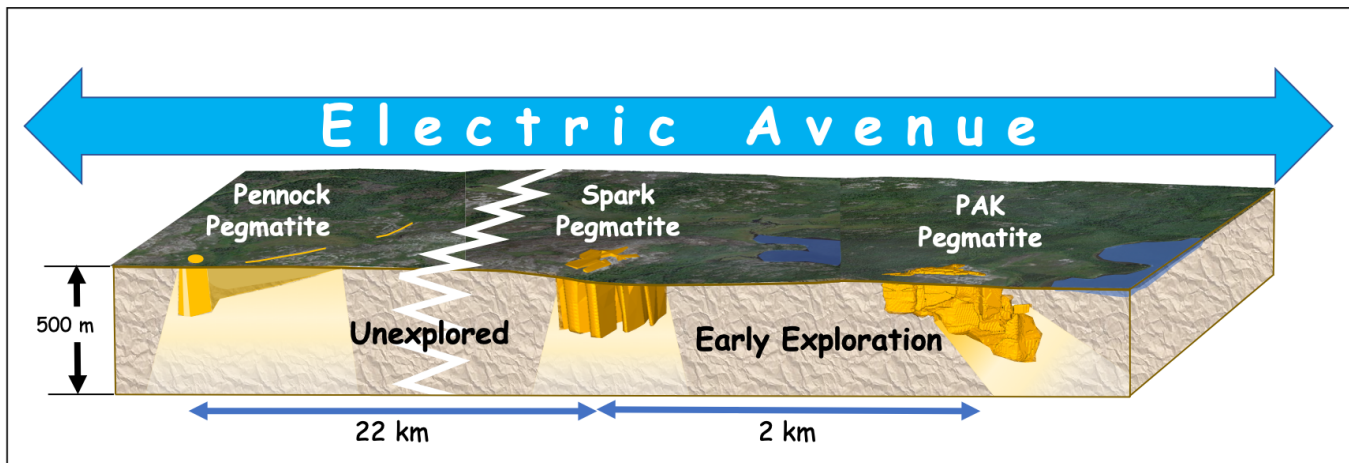
Due to its rare, low impurity levels, especially <0.1% iron oxide, Frontier’s mineral concentrate can compete with capital intensive lithium chemical products (technical grade carbonate). Its technical grade concentrate is a high-margin, low-capex intensive product similar to the premium output stream from the largest lithium producing Greenbushes mine in Australia.

### Growing Tonnage

Frontier Lithium expanded its PAK Lithium project with a Maiden Resource Estimate for the Spark Pegmatite which includes 3.25 million tonnes averaging 1.59% Li<sub>2</sub>O in the Indicated category and another 12.23 million tonnes averaging 1.36% Li<sub>2</sub>O in the Inferred category. The Spark lithium deposit remains open in all directions. The size of two resources would allow Frontier to achieve its objective of producing 20,000 tonnes LCE for an estimated 20 + years.

### Developments

The Phase I development plan is an ‘Advanced Exploration Program’ to construct a self-sustaining Demonstration Concentrator Plant in 2021-2022 to confirm the Project’s ability to provide suitable lithium products for users and its economic viability. The Corporation is in the product qualification, engineering, planning and permitting stages taking place.



## INVESTMENT THESIS

### INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING

#### Product of choice for glass producers

Glass producers pay a premium for their lithium units when in chemical form and are seeking a new supply of low impurity spodumene. Technical grade spodumene concentrates are inherently more valuable, which stems from the increased presence of alumina and silica in the mineral, both of which are key glassmaking materials. The low level of iron as an impurity is also critical for the consumers, who would otherwise need to use a converted lithium carbonate chemical and purchase additional fluxes at a higher cost.

#### A glass ceiling to break

There are only four major global lithium producers and only one dominant technical grade spodumene producer globally. This oligopolistic market offers a rare underserved niche market opportunity that Frontier can firstly exploit.

#### Direct Shipping Ore sample qualification in 2018

The suitability of the spodumene to meet the most rigorous specifications of the lithium market has been confirmed through processing 200 tonnes by a global producer who also participated in 50% of the costs. Technical grade spodumene concentrate specifications are the most stringent to meet, and is the second largest market for global lithium demand. In addition, Frontier's deposit exceeds standard chemical grade feedstock requirements for

further upgrading to produce compounds for the lithium-ion battery market. This quality increases optionality and greatly reduces potential technical risks and costs associated in possible downstream processing from the PAK project.

#### Battery Chemicals Partners

Frontier has identified specific technology and markets of interest for premium lithium compounds produced from the transformation of spodumene concentrate. The company has entered into a strategic partnership agreement with XPS Expert Process Solutions (XPS), a Glencore company, and

a private hydrometallurgical expert, to develop a process for refining spodumene concentrate into lithium hydroxide. A pilot scale is scheduled for 2020.

#### North American Ecosystem

Increasingly, the global trend is to secure resources 'locally,' especially those in close

proximity to big consumer markets. The joint American and Canadian Critical Minerals Act 2019 is progressing with the goal of protecting domestic mineral resources and the supply chains that refine the raw materials, such as lithium that form the core of the automotive and energy industries. Also, in recent news and a target market for Frontier is Apple's USD \$250m investment to further develop and grow Corning's Gorilla glass facility in USA.



Image source: Corning's website; "automotive interiors"

# STRATEGY AND MARKETS

## Staged Approach in specialty chemicals market

Frontier's phased approach provides certainty and aligns optimal timing for Frontier and potential customers in the industrial and battery applications in this fast growing and tightly controlled lithium market. This approach also allows the company to properly address infrastructure challenges on the project with government and northern communities collaboration.

## Leveraging Lithium Expertise

Frontier boasts experienced, hands-on, executive team and board members with decades of knowledge in all aspects of the mining life-cycle, including: exploration, open-pit and underground mining, engineering, processing and reclamation. The Corporation maintains lithium-specific experience from the Greenbushes deposit and the former Canadian producing Tanco mine. Frontier holds a tight share structure with management ownership at 30%.

## Location

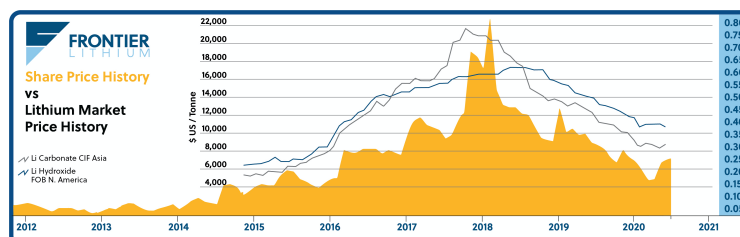
With proximity to the large manufacturing and consumer base of the Great Lakes region, the PAK deposit is located on the other side of the globe from the world-class operating Greenbushes' deposit in Western Australia. Greenbushes has dominated global hard rock supply for years (approximately 30% of the worlds demand for lithium) and supplies virtually all of the technical grade spodumene concentrates consumed in the USA. Frontier's demonstration plant will enable the Corporation to reach out to customers and offer a high quality, reliable, long-term and cost-effective North American alternative.



Always Moving Forward.

**BOTTOMLINE:** The project is strategically located in the great lakes region of North America with the potential to be a secure, long-term supplier of high-purity lithium products. The project is well understood from a concentrate processing aspect and plans to be initially a 'rare' producer of technical grade concentrate with staged optionality to include the production of lithium chemicals. The project is technically robust, albeit with an initial low CAPEX at the first concentrate production phase, and potential for a long mine life, with deposits of similar quality within the area to add to reserves.

[FrontierLithium.com](http://FrontierLithium.com) @frontierlithium



## Cautionary Statement on Forward-Looking Statements

Certain statements in this document may contain "forward looking" statements that involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. This document should be viewed in conjunction with the prospectus, a copy of which be obtained electronically at SEDAR.