



Goodman Gold Challenge

Battery Metal Edition



Priced: Market Close on Tuesday, January 31st, 2023

Forward Looking Statement



This Presentation Should Not be Construed as Investment Advice

The analyses and conclusions of the Queen's Goodman Gold Challenge Team contained herein are based on publicly available information. The analyses provided may include certain statements, estimates, and projections prepared with respect to, among other things, the historical and anticipated operating performance of the companies, access to capital markets, and the values of assets and liabilities.

Such statements, estimates, and projections reflect various assumptions by Queen's Goodman Gold Challenge Team concerning anticipated results that are inherently subject to significant economic, competitive, and other uncertainties and contingencies and have been included solely for illustrative purposes. Actual results may vary materially from the estimates and projected results contained herein.

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Land Acknowledgment

We would like to acknowledge that we are gathered here today on Robinson-Huron Treaty Territory. We also further recognize that Laurentian University is located on the traditional lands of the Atikameksheng Anishnawbek (ah-tig-amay-guh-shing ah-nish-nah-bek), and that the Greater City of Sudbury also includes the traditional lands of the Wahnapiatae First Nation.

We recognize the rich indigenous history and living culture in Ontario, and pledge to promote wisdom, love, respect, bravery, honesty, humility, and truth just as the First Nations have done since time immemorial.



Agenda

Introductions

Executive Summary

Introductions

Analysis of Magna Mining & Generation Mining

Introduction to Frontier Lithium

Investment Thesis

Valuation

Risks & Conclusion

Executive Summary

Frontier Lithium has a high potential for long-term growth



Recommendation: With a target share price of \$4.43, Mr. Goodman should invest in Frontier Lithium

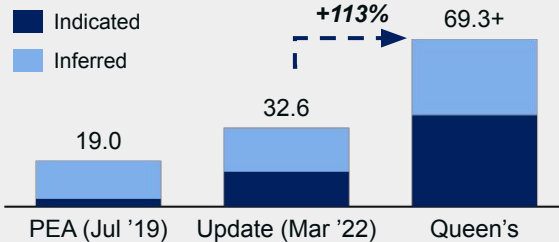
Asset Summary

- Frontier Lithium is focused on developing the PAK Project north of Red Lake
- The PAK Project contains the lithium bearing ore spodumene

Grade & Tonnage

Resource	Tonnage	% Li ₂ O	LCE kt
PAK	9.3 Mt	2.02%	0.46
Spark	69.3 Mt	1.38%	2.36
Total	78.6 Mt	1.46%	2.83

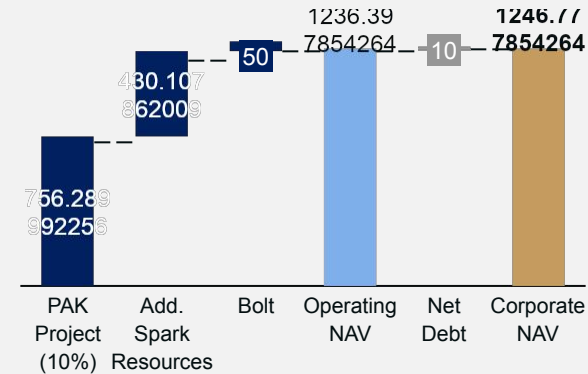
Additional Spark Resources (Mt Li₂O Eq.)



Investment Thesis

- A Lithium Supply Deficit will Sustain Elevated Prices**
 - Legislation and changing consumer preferences will drive EV adoption
 - Current Lithium Hydroxide Monohydrate is at \$71,000, we used a LT price of \$18,000
- Remodeling of Spark Resource Indicates Large Growth**
 - Recent drill hole data indicates 69.3 Mt of indicated and inferred resources (+113%)
 - Modelling shows the deposit is open at depth and has the potential for expansion
- Frontier is a Prime Target for Corporate and Government Support**
 - Canada and Ontario both have Critical Minerals plans to support projects
 - Frontier is Ontario's best Lithium deposit

Key Economics



Method	Weighting	Base Case
DCF (NAV)	50%	\$4.45
Monte Carlo	20%	\$4.53
Comps	10%	\$3.46
Street	20%	\$4.75
Target Price	100%	\$4.43
Current Price		\$2.59
Upside:		71%

Magna Mining

- ✓ The market is currently valuing Magna at \$1.32/shr
- ✗ Their flagship operation, Crean Hill, has multiple mineralization zones but no feasibility study to confirm economics. Lonmin + Wallbridge
- ✓ Low risk investment as Shakespeare has proven economic viability and necessary permitting
- ✗ Shakespeare has low grade reserves and a short LOM

Generation Mining

- ✓ Market is currently valuing Generation at \$0.72/shr
- ✓ Their flagship asset, Marathon, is currently in FS stage
- ✗ FS suggests a >\$1B NPV, but the market and the street are skeptical it will receive funding
- ✗ Large royalties on property limit benefit of further exploration

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Meet the Team

Queen's University



2023 Goodman Gold Challenge Team



Jonah Odlozinski

Faculty of Engineering
Mining Engineering
Class of '23

Professional Experience



Associate Consultant, Toronto
(Incoming)

Kinross, Toronto
Operations Strategy
(2021-22)



Justin Sickert

Faculty of Engineering
Mining Engineering
Class of '23

Professional Experience



Economics and Strategy, Calgary
(Summer 2022)

CNRL, Horizon Mine
Short-Range Mine Planner
(2021-22)



Nick Joannou

Smith School of Business
& Geological Sciences
Class of '23

Professional Experience



Investment Banking, Toronto
(Incoming, Summer 2022-21)

IJW & Co, Toronto
Investment Banking
(Summer 2020-19)



Ryder Germain

Faculty of Engineering
Mining Engineering
Class of '23

Professional Experience



Investment Banking, Toronto
(Incoming, Summer 2022)

Alamos Gold, Young-Davidson
Engineering Intern
(Summer 2021)

Investment Universe

Key Figures



Company Highlights



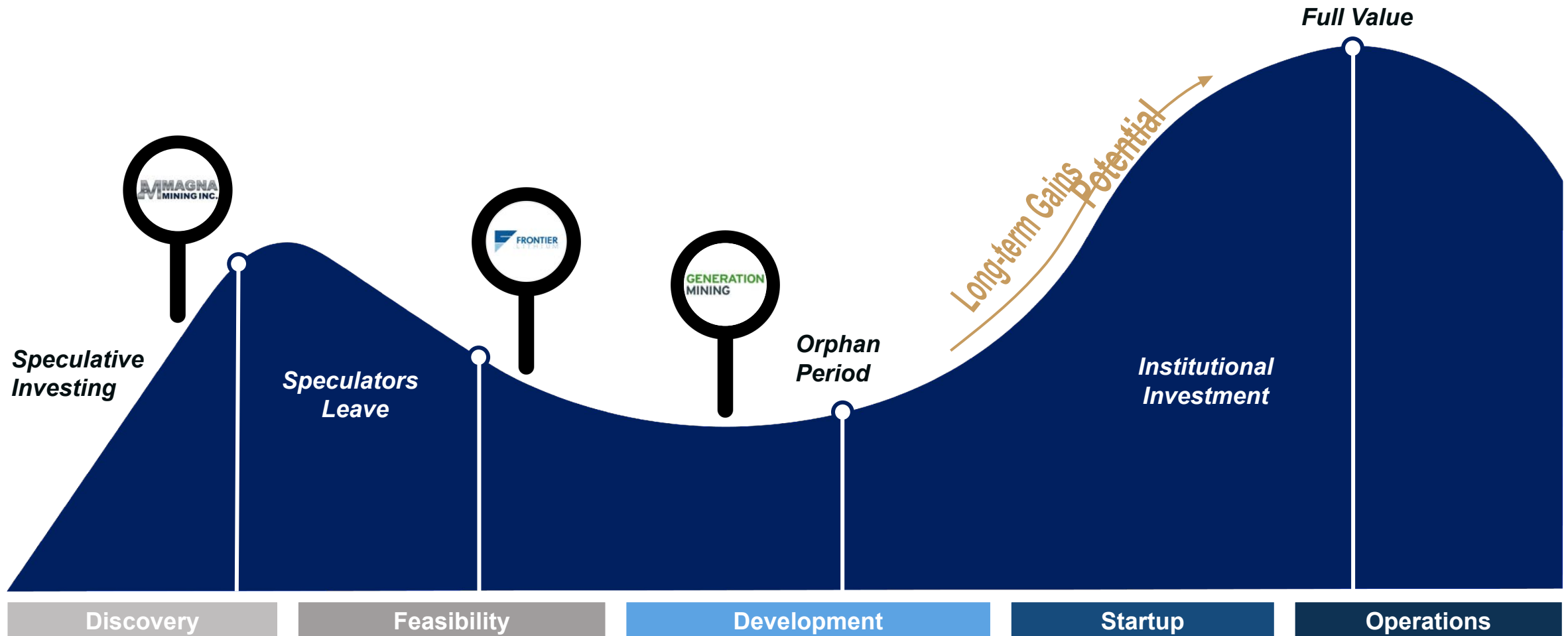
Flagship Asset	Crean Hill	Marathon Project	PAK Lithium Project
Jurisdiction	Sudbury, ON	Marathon, ON	Northwestern Ontario
Project Stage	Resource (Indicated)	Feasibility (P&P)	PEA (M&I)
Deposit Parameters	OP: 16.7 Mt @ 1.08% NiEq UG: 14.5 Mt @ 2.07% NiEq	118 Mt @ 2.67% PdEq	9.3 Mt @ 2.02% Li ₂ O
Market Capitalization	\$208 M	\$123 M	\$581 M

Lassonde Curve Comparison

For Investment Universe



Positioning on Lassonde Curve makes Frontier an Ideal Long-term Investment



Client Profile

Client is looking for long-term value in Mining Assets



Client Information

- Johnathan Goodman serves as the President and CEO of Dundee Corporation
- Mr. Goodman is a veteran of the mining industry and previously served as CEO of Dundee Precious Metals Inc.
- Dundee delivers value to its partners while ensuring that the best Environmental Social Governance (“ESG”) standards are in place



Johnathan Goodman,
P.Eng, CFA, MBA

Investor Appetite

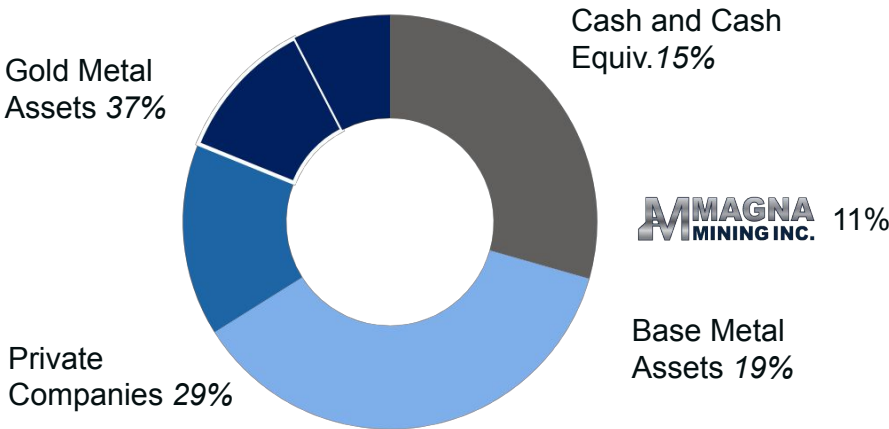
Mr. Goodman’s Analysts have selected three possible investments:
Magna Mining, Generation Mining, and Frontier Lithium

Investment Preferences:

Looking to invest in the Mining Industry

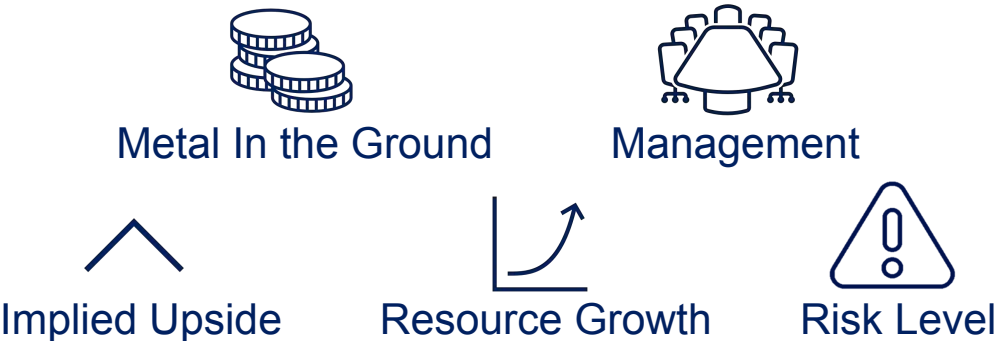
Long-term investor targeting capital appreciation

Current Asset Portfolio



Our Valuation Matrix

Our team will score the companies across five key criteria



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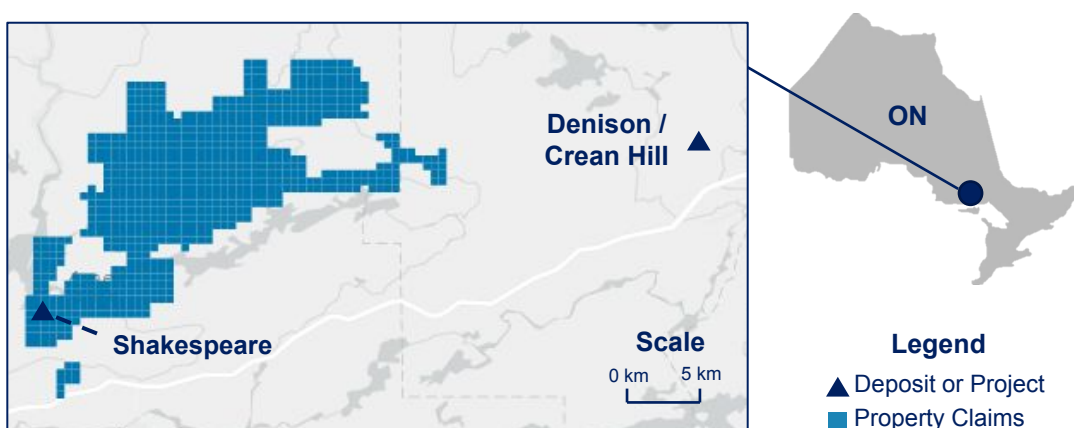
Valuation

Risks & Conclusion

Company Overview

- Magna Mining (TSX.V: NICU) is focused on developing its Shakespeare Ni-Cu-PGM deposit and Crean Hill Pt-Pd-Au deposit, both located in the Sudbury Basin nickel district
 - Shakespeare has 20.34 Mt at 0.55% Ni Eq. of M&I resources
 - Crean Hill has 31.09 Mt at 1.53% Ni Eq. of M&I resources
- Both assets are past producing and inevitably became offline due to low nickel prices in the early 2000s. Shakespeare has permitting to revamp the old mill

Asset Portfolio

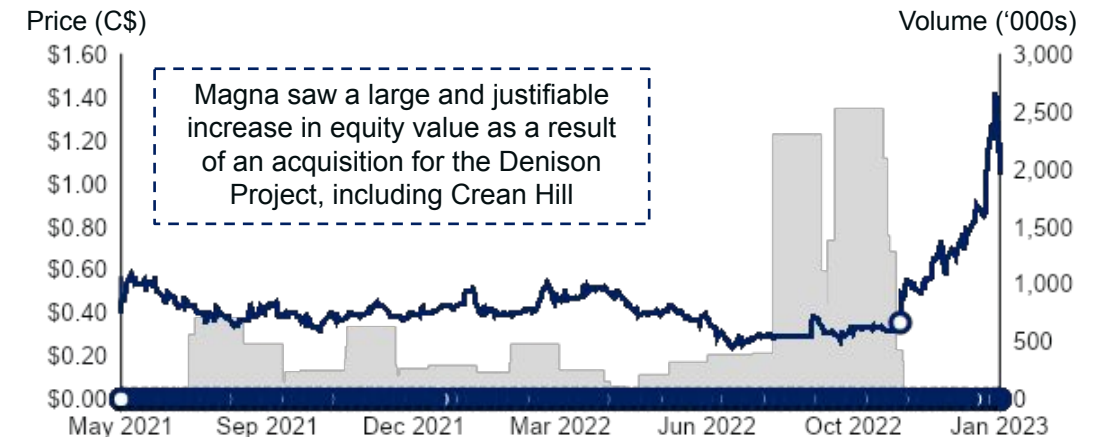


Management Profile



Name	Jason Jessup	Paul Fowler	Derrick Weyrauch	David King
Position	CEO & Director	Senior VP	CFO & Director	Senior VP
Years Exp.	25+	15+	27+	35+
Background	President of Mine Management Partners Ltd.	Capital markets, investment banking & corporate finance	Current CEO of Palladium One & former CFO of Jaguar Mining	VP Exploration & Geoscience for TMAC Resources Inc.

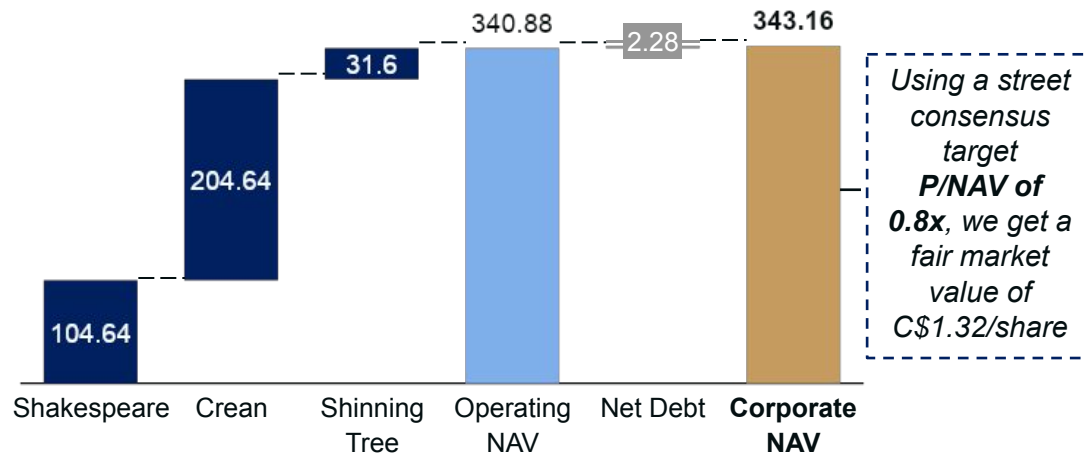
Price/Volume Analysis



Risks Associated with Magna

- Shakespeare is fully permitted but due to low nickel grades it has had trouble sustaining production (Ursa Major Minerals, 2010-2012)
- Like Shakespeare Crean Hill is an old deposit, most recently owned by Lonmin Canada. Lonmin studied operation with Wallbridge in 2019, but sold it to Magna for \$16M in 2022
- Magna has completed positive exploration at Crean, but it is difficult to estimate how this will translate to resources growth implied cash flow
- It is hard to accurately value Magna until a feasibility study is released on Crean Hill

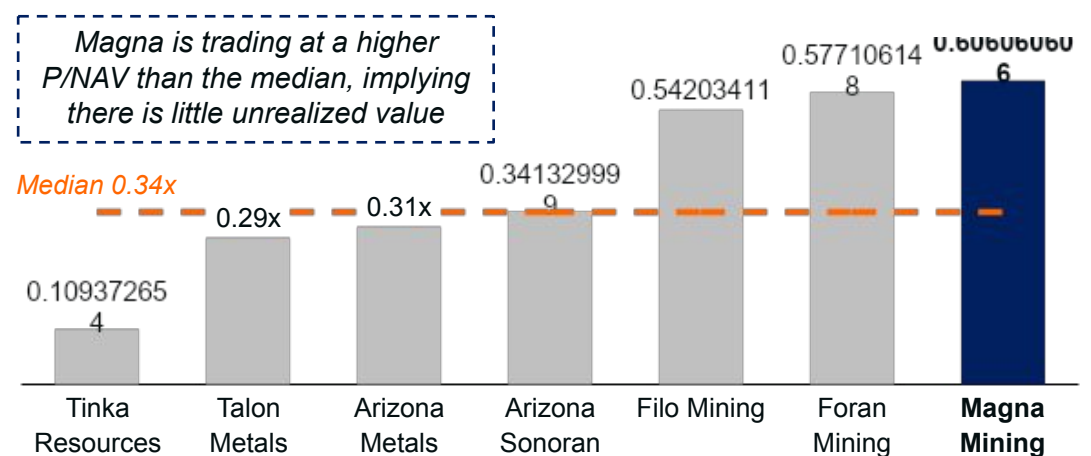
Magna Valuation (C\$ M)



Model Assumptions

Asset	Discount Rate	Opex (C\$/t Ni Eq.)	Capex (C\$ M)	OP LOM (yrs)	UG LOM (yrs)
Shakespeare	10%	\$39.70	\$242.0	9	n.a.
Crean	10%	\$186.22	\$142.2	11	10
Shinning Tree	Used a weighted average \$0.64/lb Ni Eq. in-situ value (based on peer base metal developers) on the 50.0 Mlbs Ni Eq. resources				

P/NAV Multiples of Base Metal Developers¹



Valuation Checklist

Magna Mining Evaluation



Lack of Crean PEA creates uncertainty on Valuation

	Metal in the Ground	Management Experience	Implied Upside	Resource Growth Opportunity	Risk Level
					

GENERATION MINING



Magna Comments	▪ Shakespeare has low grade reserves ▪ The Denison Project has multiple large mineralization zones but no feasibility study to confirm economics	▪ Competent management team, all over +15 years experience ▪ Proven track record of success with Jaguar Mining and Mine Management Partners	▪ Our valuations indicate that Magna is fairly valued, with only a 2% upside ▪ Magna is trading at a greater P/NAV than the median base metal developer.	▪ Crean is a promising deposit but has much uncertainty surrounding its timing and milling ▪ Short LOM for Shakespeare	▪ Strong balance sheet with enough cash to support next year's exploration costs ▪ Complete permitting for Shakespeare ▪ Good community engagement
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Generation Mining

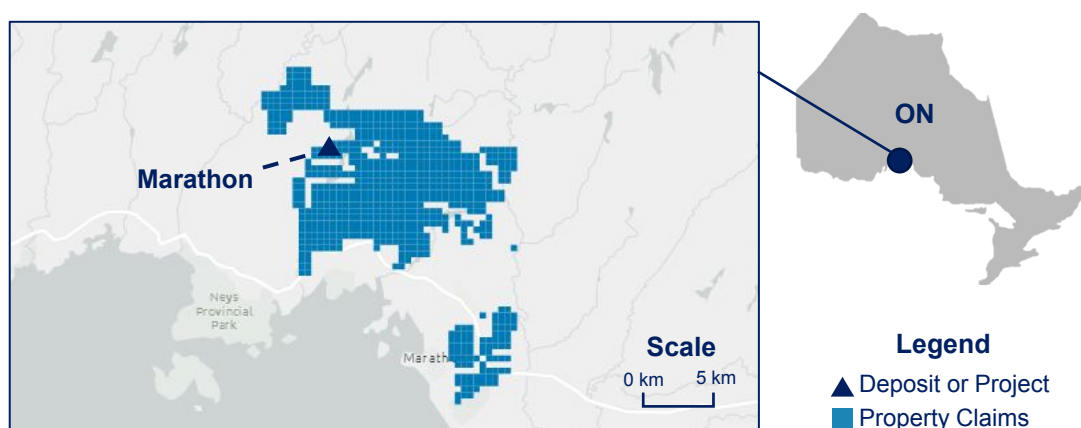
Company Summary

**GENERATION
MINING**

Overview

- Generation Mining (TSX:GENM) is focused on developing its Pd-polymetallic Marathon deposit, located along the Trans-Canada Highway in Northwest, ON
 - The project has a 2021 FS highlighting an NPV of C\$1.07B at 6% DR
 - Marathon is projected to produce an average of 245,000 Oz PdEq over a 13 year life-of-mine ("LOM") with over half of forecasted revenue coming from Pd
- Mineralization: The PGM-Cu mineralizations are hosted within a Gabbro, and are associated with oxide ultramafic inclusions which occur predominantly in the hanging wall of the Marathon deposit
 - Proven and Probable reserves are 117.7 Mt at an average grade of 1.41 g/t Ag, 0.07 g/t Au, 0.21% Cu, 0.62 g/t Pd and 0.20 g/t Pt.

Asset Portfolio

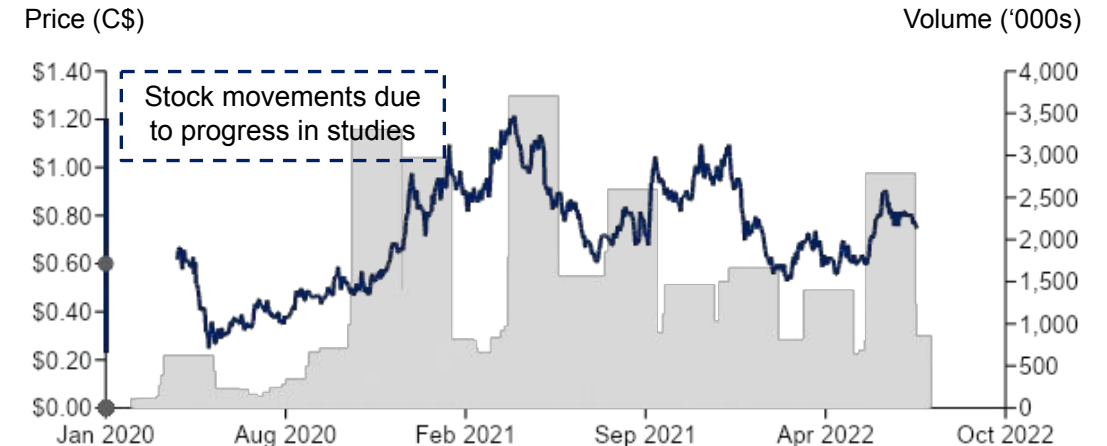


Management



Name	Jamie Levy	Drew Anwyll	Cashel Meagher	Mauro Bassotti
Position	CEO & Director	COO	Chairman	VP Geology
Years Exp.	25+	30+	25+	24+
Background	CEO of Pine Point Mining, acquired by Osisko Metals	SVP Tech. Services, Interim COO & VP Ops. at Detour Gold	COO of Hudbay Minerals	Brownfield & capital drilling, operational geological site functions

Price/Volume Analysis



Generation Mining

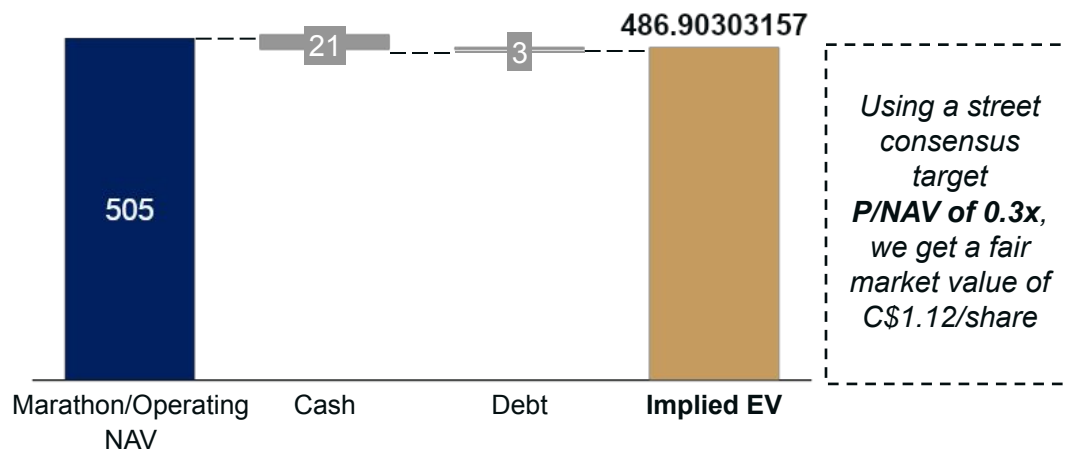
High Costs, Advanced Asset, Exploration Limiting Royalties

**GENERATION
MINING**

Risks Associated with Generation

- Already De-Risked: FS stage project implies costs are priced in
 - No potential upside from progress in economic studies
- High Costs: Complex processing for polymetallic ore
- Exploration Upside Capped: 4% NSR on North Pit payable to Teck and Benton Resources plus the 15-100% Au-Pd NSR payable to Wheaton limits benefit of exploration to Generation
- Market Not Believing FS: The market and street analysts are heavily discounting Generation's FS, leading the belief that the assumptions it presents are unrealistic

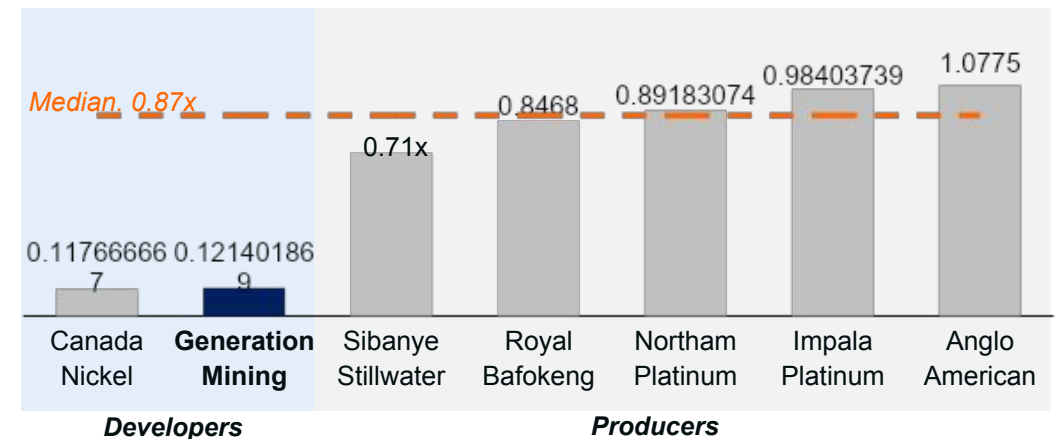
Generation Valuation (US\$ M)²



Key NAV Assumptions: Queen's vs. Marathon FS¹

	First 3 Yr CF	Discount Rate	Construction Start (yr)	Initial Capex	LOM (yrs)	AISC (US\$/PdEq Oz)
 Queen's UNIVERSITY	US\$901M	10%	2025	C\$734M	13.0	US\$809/Oz
 GENERATION MINING	US\$710M	6%	n.a.	C\$639M	12.6	US\$809/Oz
	\$/Pd Oz	\$/Cu Lb	Other Commodity Prices	Modelled Downtime	Cash Cost (US\$/PdEq Oz)	
 Queen's UNIVERSITY	\$1,740	\$4.20	Spot	10 days/yr.	US\$687/Oz	
 GENERATION MINING	\$1,725	\$3.20	Variable	None	US\$687/Oz	

P/NAV Multiples of PGM & Base Metal Peers³



Valuation Checklist

Generation Mining Evaluation

**GENERATION
MINING**

Late Development Stage and Large Royalties on Exploration Properties Limits Upside

	Metal in the Ground	Management Experience	Implied Upside	Resource Growth Opportunity	Risk Level
					
GENERATION MINING					
	Generation Comments - Large, polymetallic orebody at Marathon - P&P reserves proven by economic model Challenging processing of mineralization - Competent management team with all over +25 years experience - Proven track record of success with Pine Point Mining - No potential upside from future economic studies (FS stage) Low ore recovery rates - High NPV in FS suggests company is undervalued - Marathon is their primary deposit - Upside to exploration capped by royalties on properties - Management not currently prioritizing exploration - Market and street skeptical that company will get funding - New study will update cost assumptions				

Agenda

Introduction to Frontier Lithium

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Frontier Lithium

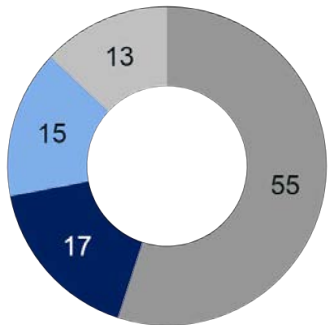
Company Overview



Introduction

- Frontier Lithium (“FL” or “The Company”) is focused on developing its Tier 1 spodumene lithium resource located north of Red Lake, ON
 - The main PAK deposit has an MI&I tonnage of 9.3 Mt of 2.02% Li₂O
- The Company plans to upgrade the Spodumene on site and then further refine the concentrate at a hydroxide plant in Thunder Bay
- Three additional deposits, Spark, Pennock, and Bolt show exploration potential
- Frontier possess the highest quality Lithium deposit in Ontario making it attractive as a “Critical Mineral” investment

Public Ownership Breakdown



Frontier Lithium has **strong Insider ownership at ~17%** of the shares outstanding

Top Shareholders

Rick Walker (Chairman)	12.5%
Garth Drever (VP Expl.)	1.8%
Trevor Walker (CEO)	1.0%

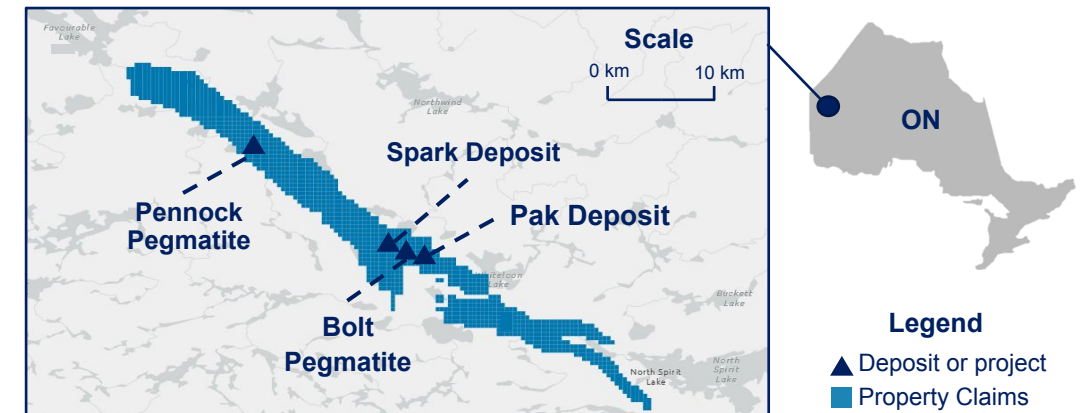


Management Profile



Name	Trevor R. Walker	Dr. Naizhen Cao	Rick Walker	Greg Mills
Position	President & CEO	VP. Technology	Chairman	Director
Years Exp.	25+	30+	45+	35+
Background	Director of Mining for Consbec Construction	Lithium Mining and Concentration in Canada and China	Owner of Largest private Contractor Consbec Inc.	Managing director of RBC Global Equities

Jurisdiction Map



Frontier Lithium

Technical Overview



Property Geology

- There are 4 main mineralized zones on the property: PAK, Spark, Pennock and Bolt
- At each of these zones, mineralization consists of K-feldspar, Na-feldspar, Spodumene + Quartz Intergrowth and Muscovite
- The deposit is a highly evolved pegmatitic granite lithium-cesium-tantalum (LCT) type complex, similar to the operating Tanco mine
- The pegmatite body outcrops near the northwestern margins of the PAK property

Geological Map



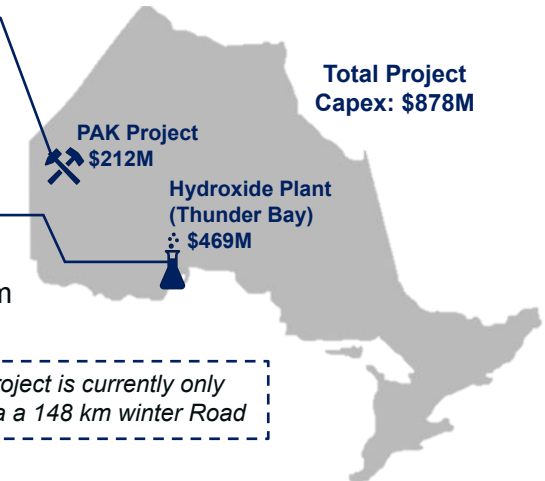
Asset & Capital Expenditures

PAK Project Overview

- Ore will be feed through a DMS and flotation circuit to be upgraded to 6% chemical grade, and 7.2% technical grade

Lithium Hydroxide Plant

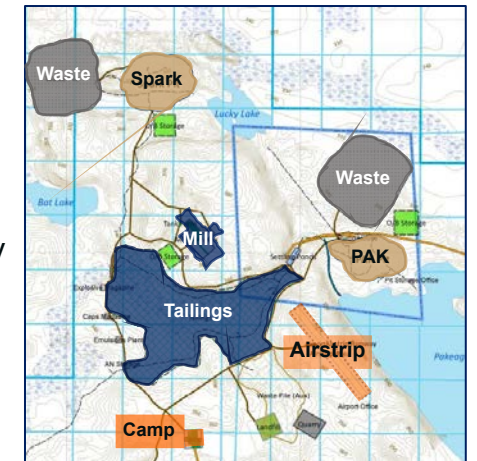
- Chemical grade concentrate will be upgraded to a 56.5% battery grade lithium hydroxide in Thunder Bay



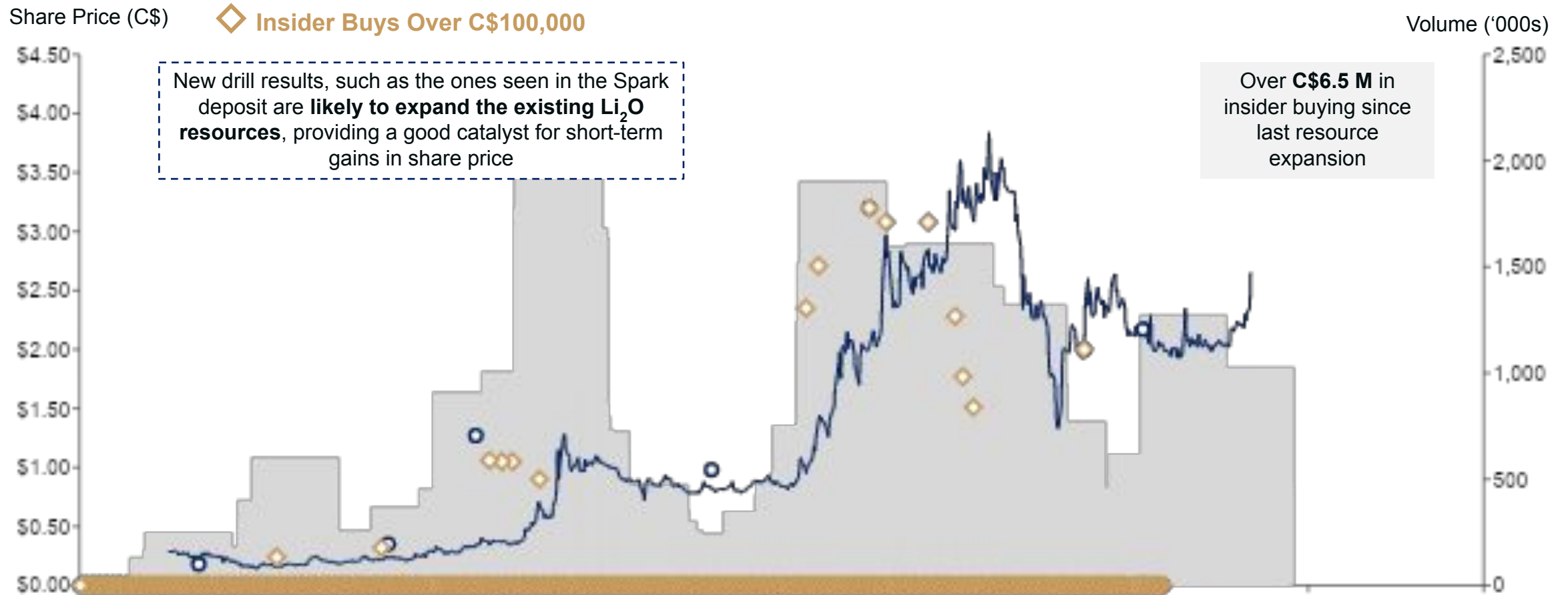
The PAK project is currently only accessible via a 148 km winter Road

Site Layout

- Frontier expects to mine PAK and Spark via open pit extraction
- Other infrastructure will include a small mill (2500 tpd), tailings pond and camp
- With increased commodity prices, and a larger resource at spark, Frontier may increase mining rates in the PFS
- Nearby lakes provide access to water but also increase environmental risks
- Site topography is relatively flat



Significant Price and Volume Increases Are Seen with Strong Drilling, Assay, & Resource Expansion



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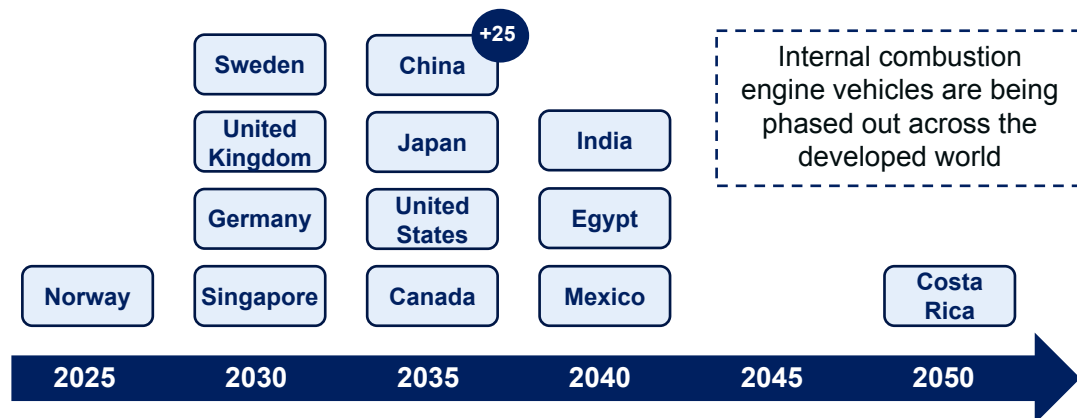
Investment Thesis I

Lithium Supply Deficit will Sustain High Prices

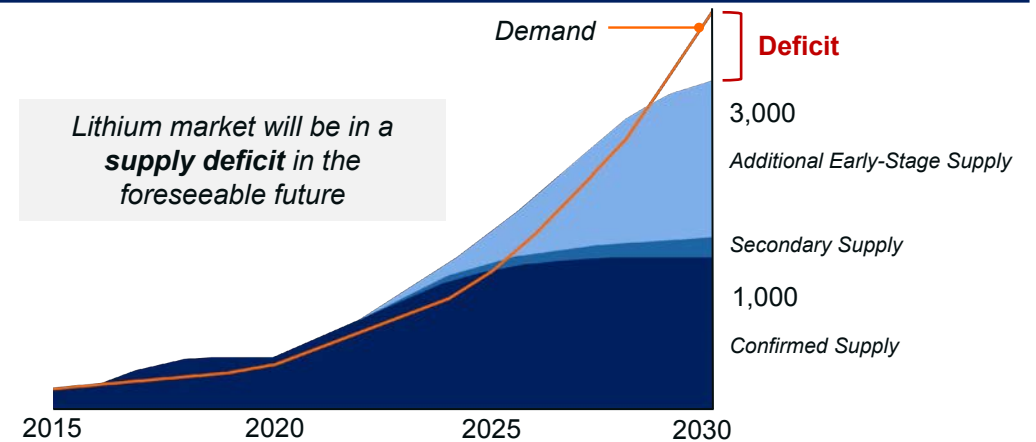
Lithium

- Lithium's Global Demand:
 - Batteries (57%) Ceramics & Glass (22%)
 - Batteries are projected at 95% of demand by 2030
- 6.6M EV's sold globally in 2021, projected 88M+ by 2040
- Canada & the U.S plan to end the purchases of new gas-powered light-duty cars and passenger trucks by 2035
- Currently researched lithium alternatives are not safe to replace lithium – we do not view the substitution risk as a headwind

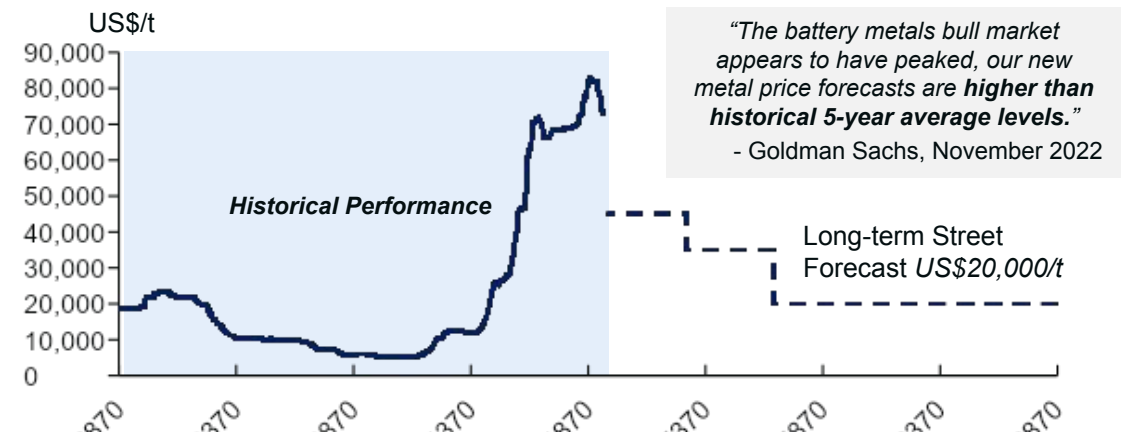
Internal Combustion Engine Bans



Global Lithium Supply & Demand (kt Li₂CO₃ Eq.)



Street Lithium Price Forecast (LiOH 56.5%)



Investment Thesis II

Resource Growth will Extend Mine Life

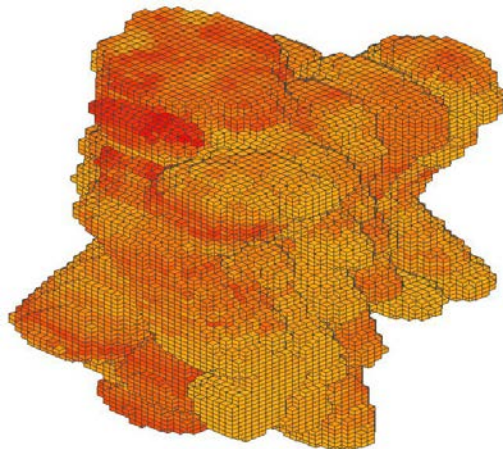
Exploration Potential at Spark

- Press released Li₂O data of the Spark deposit is imported into Vulcan to produce an updated resource model
- Conservative estimation factors are used:
 - Ordinary Kriging** of the 2m composited drillholes
 - 0.3 and 0.5 search ellipse factors** on the constructed variogram to create indicated and inferred resources respectively
 - Swath plot data validation on composited and kriged data

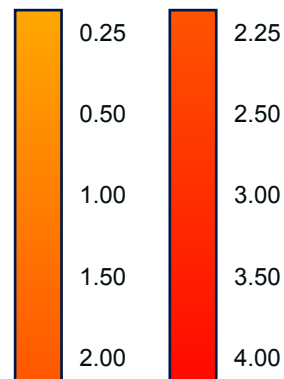


2019 Bernie Schnieders Discovery of the Year Award – Spark

Queen's Block Model – Spark Deposit



Block Grades - % Li₂O



Overheard on the Street

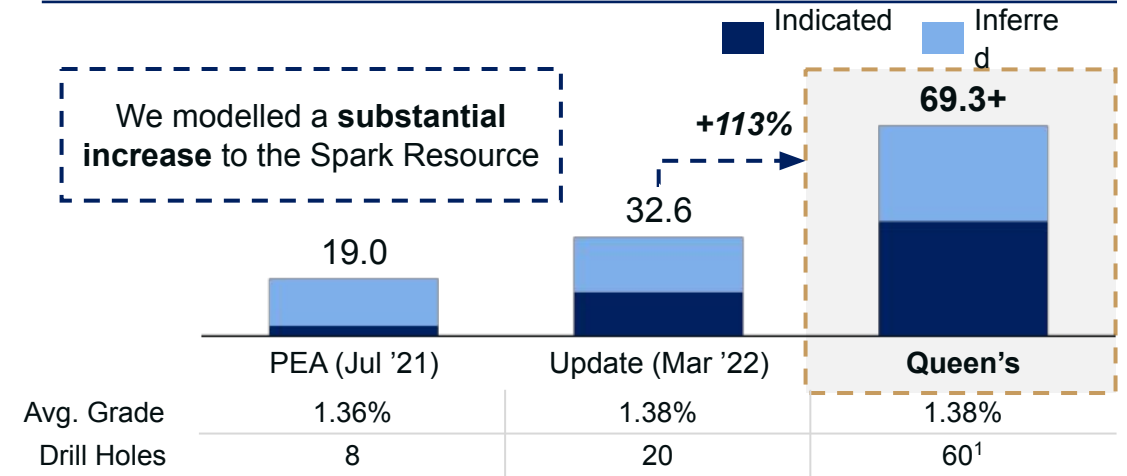
*“We believe that Frontier Lithium is well on its way to defining a resource of ~100Mt at the **PAK Lithium Project**, which would rank the project as one of the **largest and highest-grade in North America.**”*

- Canaccord Genuity, January 2023

*“Frontier Lithium differs from other early-stage hard rock lithium development companies with the **high grades and low impurities** of its deposit at its PAK Project, and **strongly** probably at achieving **substantial resource growth** through continued drilling.”*

- RBC, December 2022

Spark Resource Mt Li₂O Above Cut-off Grade²



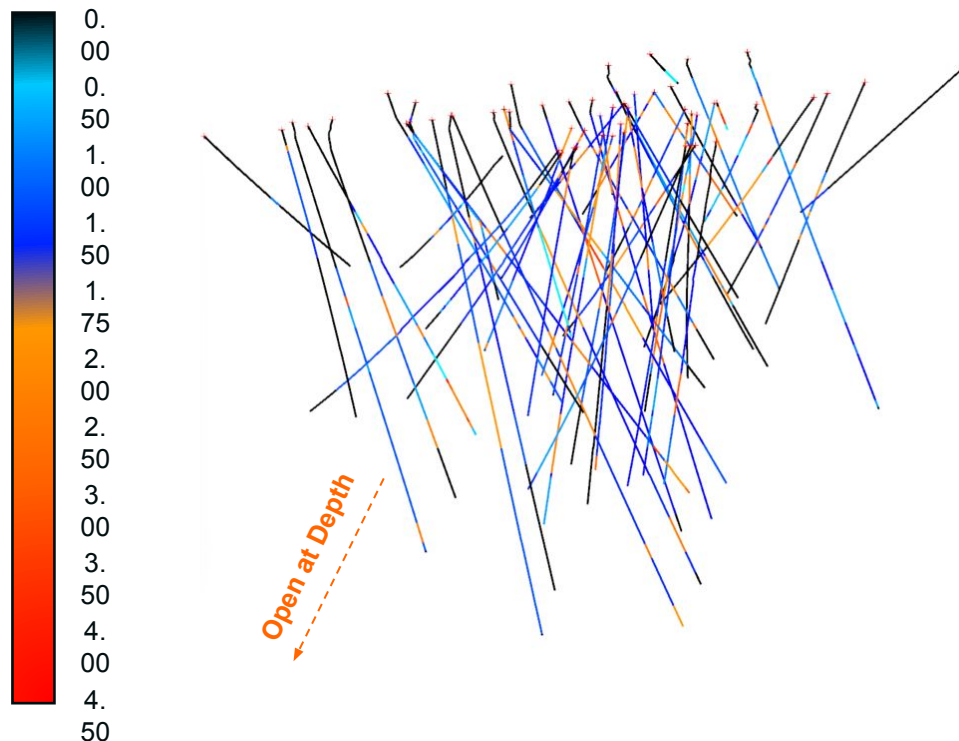
Queen's Block Model

Remodeling of Spark using Press-Released Data



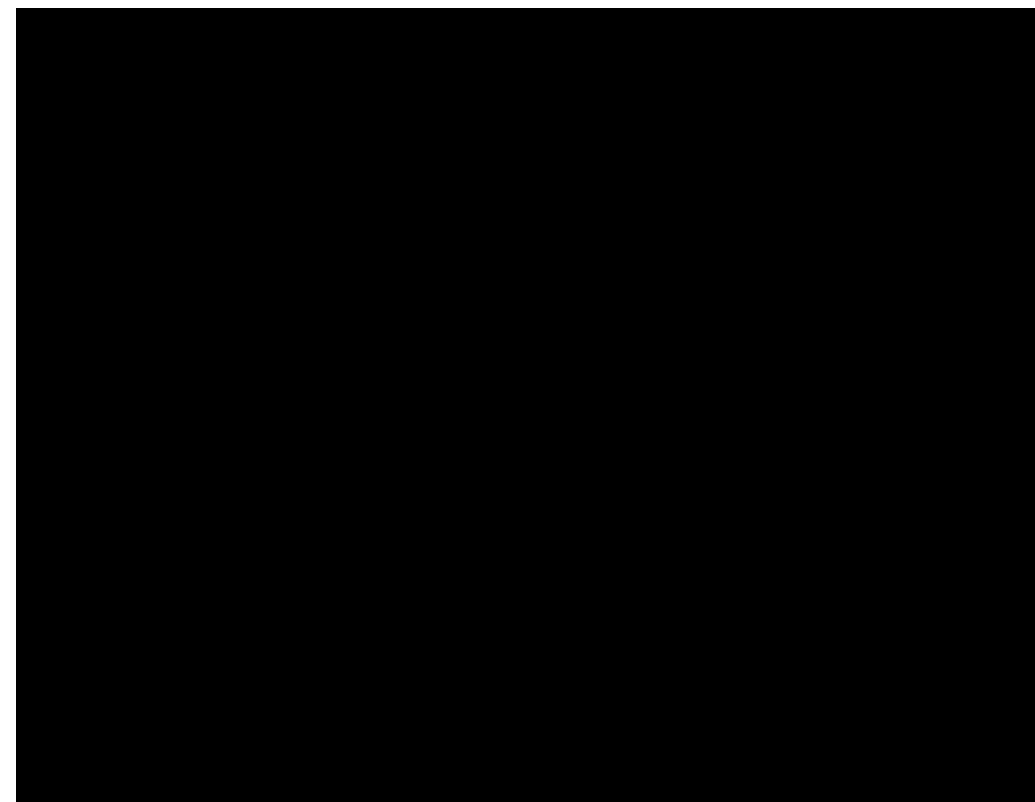
Drill Hole Analysis

Grades - % Li_2O



- A total of 60 drill holes are used: PL-037 to PL-091, PL-GDH-06 to PL-GDH-12
- Drill holes indicate that the Spark Deposit is open at depth
- Indicated and Inferred resources total 69 Mt of Li_2O resources

Resource Model



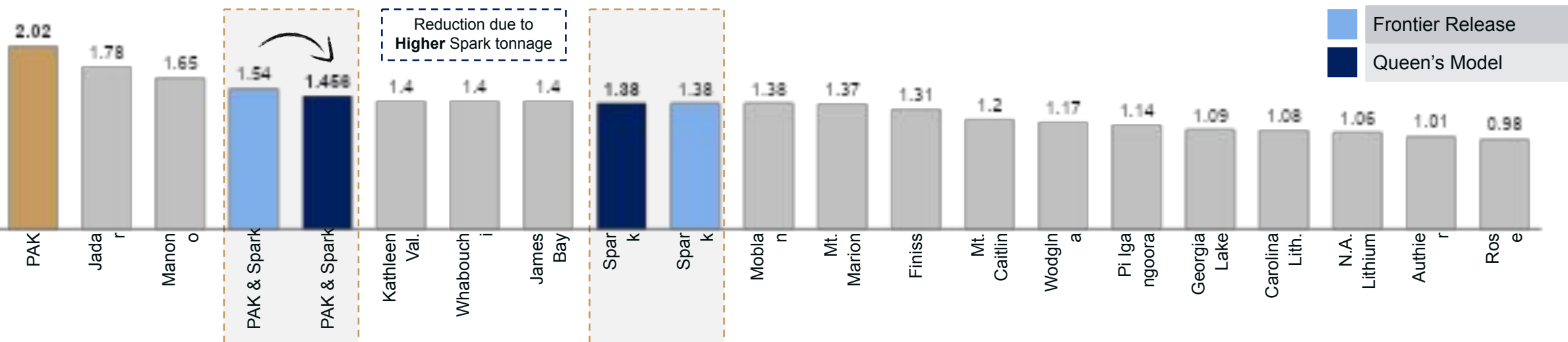
- Passes 1 and 2 use an anisotropic search ellipse factor of 0.3 and 0.5 respectively. Frontier's PEA uses 0.3 -1 search ellipse factors for passes 1-5
- Including passes 1-5 in the Queen's model yields a resource of 134 Mt of Li_2O

Peer Benchmarking

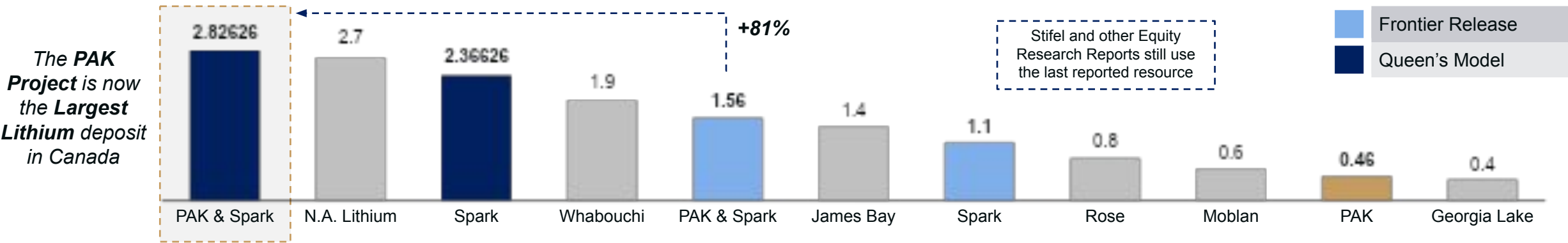
By Lithium Resources & Grade



PAK is Currently the Highest Grade Hard-Rock Lithium Project in North America (%Li₂O)



PAK & Spark Combine to be the Largest Lithium Project in Canada (Mt LCE)



Investment Thesis III

Frontier is a top Candidate for Governmental and Corporate Support

Government Critical Minerals Plans

- The Canadian Critical Minerals Strategy will increase the supply of responsibly sourced critical minerals

Key Highlights:

\$1.5B to fund projects and the regulatory process

The Ontario Gov has already invested \$300,000 in Frontier

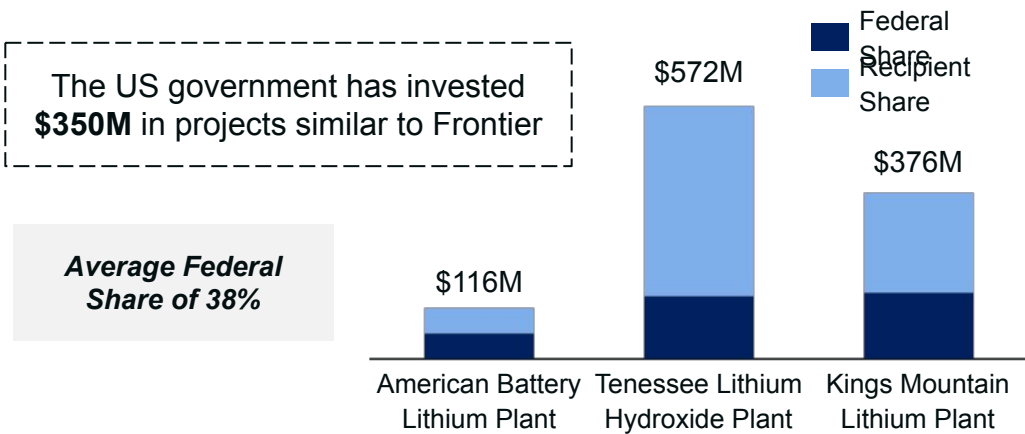
Automotive Companies

- Many automotive companies are becoming concerned with long-term access to Lithium needed to produce batteries
- Recently Tesla has announced lithium off-take agreements with Quebec companies and GM invested \$650M in Thatcher Pass
- Frontier can look to these companies for capital and for commodity price risk reduction

	Grade Li ₂ OE (%)	LCE (Mt)
Queen's PAK	1.46	2.8
Thatcher Pass	0.73	3.7



Benchmark Deals



Catalysts for Frontier

- Frontier should continue to lobby for support from the provincial and federal governments, and automotive manufactures with respect to:

- 1 Funding for Infrastructure
- 2 Permitting Priority
- 3 Road Access

Agenda

Subheading

Executive Summary

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Frontier Lithium - Valuation

Benchmarking and Street Outlook



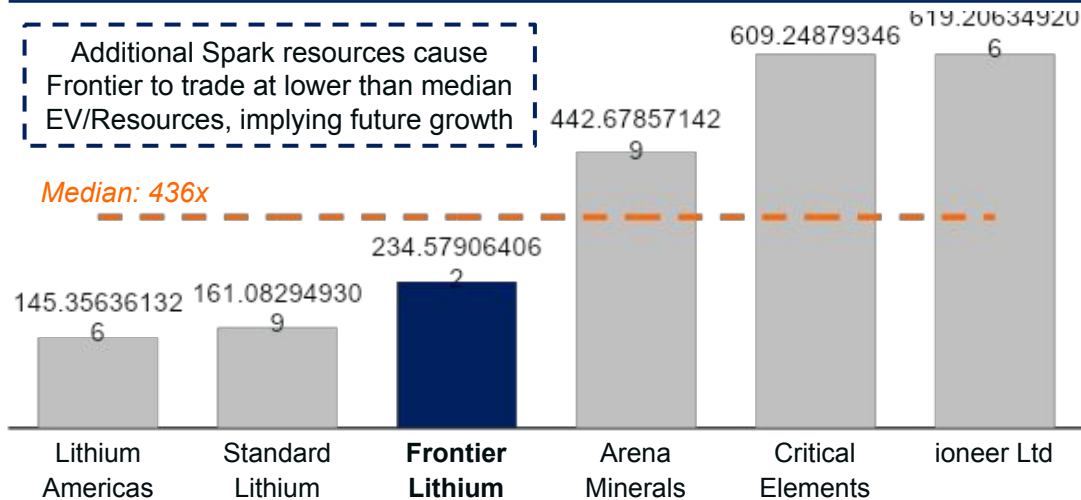
Broker Coverage Themes

Lithium producers P/NAV expected to rise to ~0.8x

Additional Spark resources are expected to increase Frontier's NAV

Generally, the street believes Frontier is undervalued

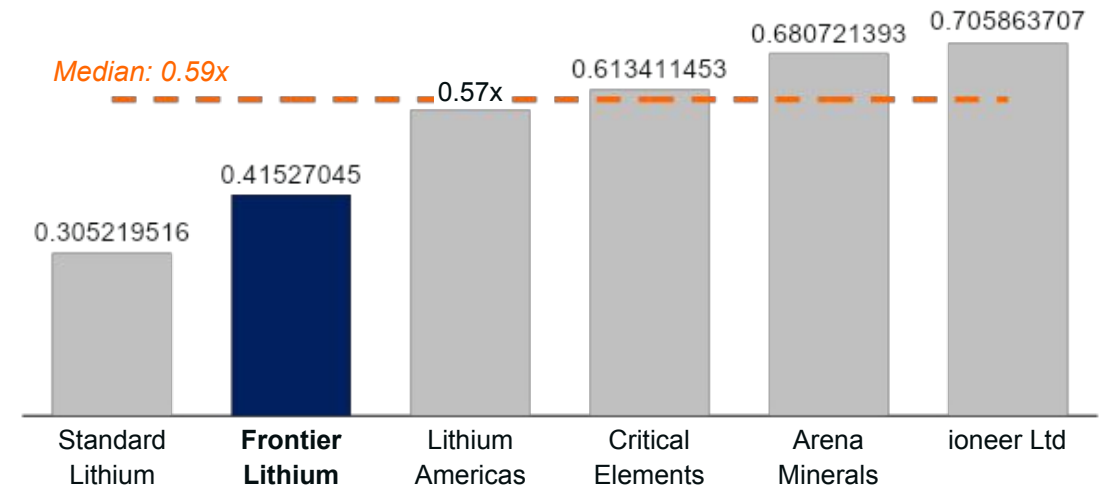
Peer EV/Resources (C\$ M/t LCE)



Positive Street Consensus Outlook

Broker	RBC	Stifel	Canaccord	Median
Target Price	\$3.25	\$4.80	\$4.75	\$4.75
Target P/NAV	0.73x	0.80x	0.80x	0.80x
Rating	Buy	Buy	Buy	Buy

Frontier is Trading at a Lower P/NAV¹



Frontier Lithium - Valuation

DCF Assumptions



DCF at 10% Discount Rate

	Grey Sky 	Base Case 	Blue Sky 
 LT LiOH Price	\$16,000	\$18,000	\$20,000¹ → <i>Street Consensus</i>
 Operating Cost ²	+40%	+30%	+20%
 Capital Cost ²	+80%	+60%	+40%
 Access Road Payment	50%	40%	20%
 Mining Delay	3 yrs	2 yrs	1 yrs
 LiOH Delay	5 yrs	4 yrs	3 yrs

Frontier Lithium - Valuation

NAV – DCF Driven

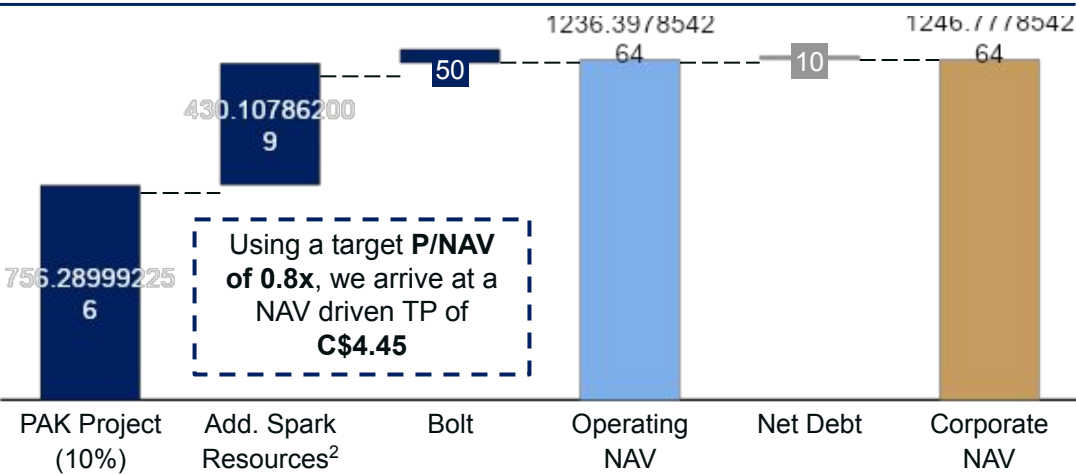


PAK DCF Results at 10% Discount Rate

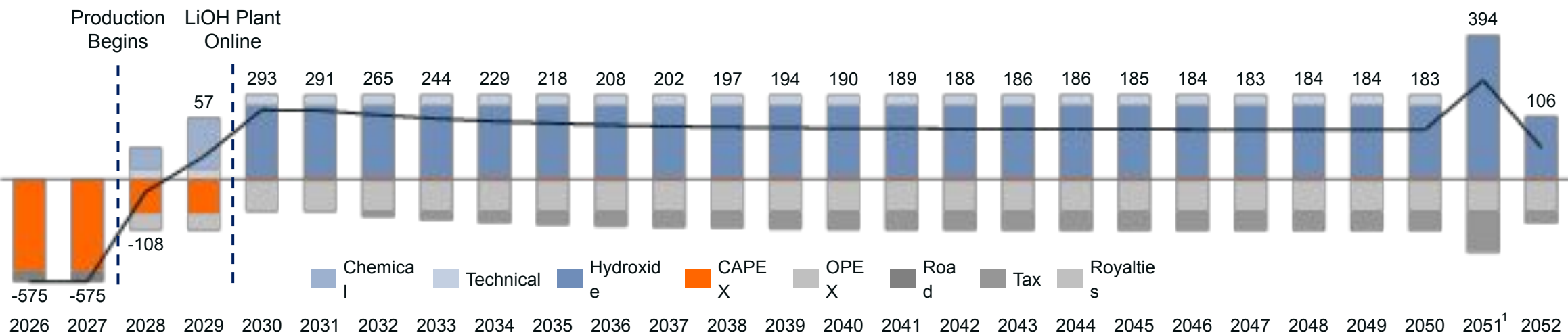
Case	Post-Tax NPV	Post-Tax IRR
	C\$293 M	13.7%
	C\$756 M	19.1%
	C\$1,215 M	24.0%

PAK Project NPV is **highly sensitive** to LiOH prices

Frontier Model NAV (C\$ M) – Base Case



PAK Cash Flow Diagram (C\$ M) – Base Case



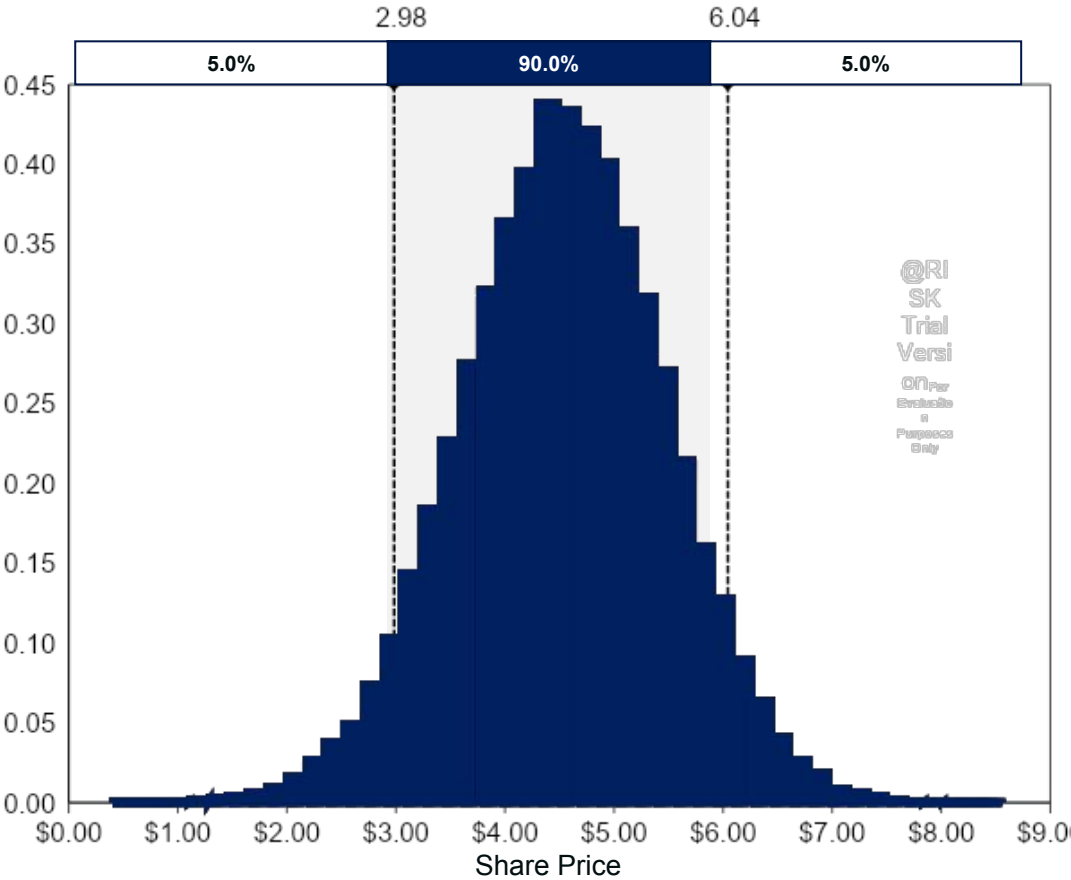
Frontier Lithium - Valuation

Monte Carlo Simulation

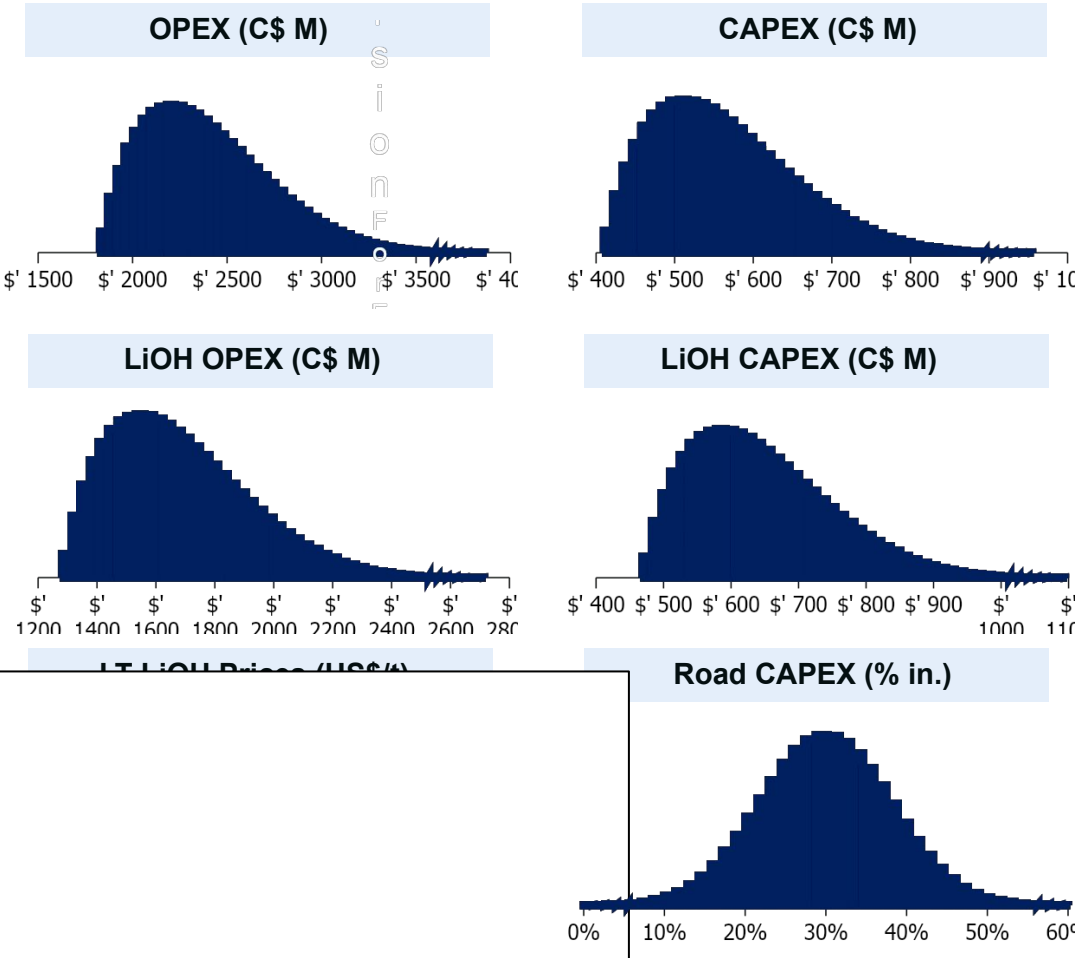


Monte Carlo Simulation on PAK Model

Based on **50,000 iterations**, the simulation of the PAK Project NAV outputted a mean share price of **\$4.53**



Distribution of Key Inputs

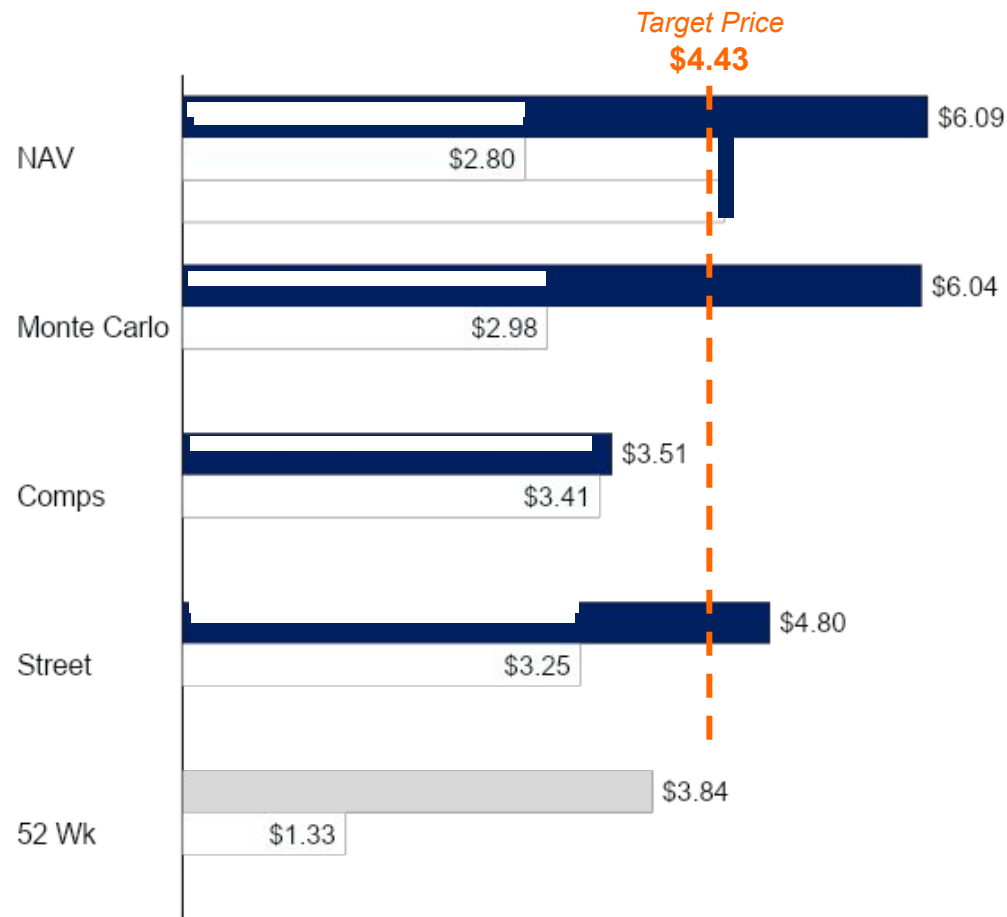


Frontier Lithium - Valuation

Benchmarking and Street Outlook



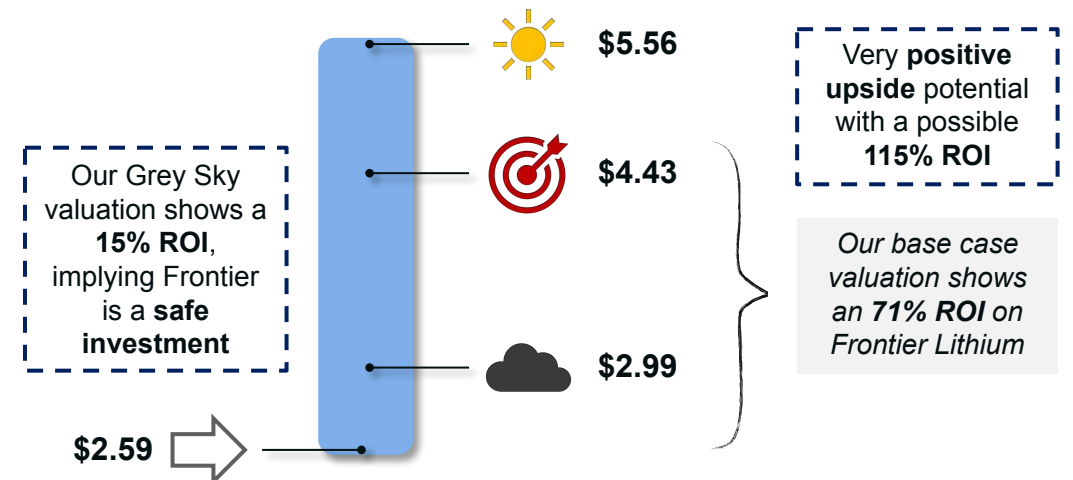
Football Field – Valuation Methodologies



Target Price Methodology

Methodology	Weighting	Base Case
NAV (DCF)	50%	\$4.45
Monte Carlo	20%	\$4.53
Comps	10%	\$3.46
Street Consensus	20%	\$4.75
Target Price	100%	\$4.43

Combined Frontier Share Price Outlook



Agenda

Risks & Conclusion

Executive Summary

Introductions

Analysis of Magna Mining & Generation Mining

Introduction to Frontier Lithium

Investment Thesis

Valuation

Risks & Conclusion

Risks & Mitigations

Key Project Risks have Clear Mitigation Pathways



Project Risk



All-Season Road Construction: Frontier's deposit is currently only accessible with a 148km winter road. Lack of summer access would increase capital and operating costs



Project Agreement with First Nation Groups: The PAK deposit is surrounded by First Nation communities. Failure to reach a mutually beneficial agreement with Indigenous groups could halt the project



Capital Cost Inflation: The PAK PEA was published in April 2021 (a month after inflation broke above 2%). The updated PFS should exhibit capital and operating cost escalations



Access to Capital for the Hydroxide Plant: Frontier's PEA estimated that the Thunder Bay Hydroxide plant will cost 2.2x site infrastructure. Access to this amount of Capex is questionable

Mitigation

- The ON Government is leading the "Berens River Bridge and Road" project
- The road benefits First Nation communities and fits the 'Critical Minerals' plan
- We have modeled a road cost¹ in the worst case, ore is stockpiled until winter

- Frontier has maintained positive contact with locals throughout exploration
- Frontier currently uses the North Spirit Airstrip, depending on the community
- Former Sandy Lake First Nation Chief, Bart Meekis on the Board of Directors

- Inflationary pressures should permanently affect commodity prices (Lithium)
- Frontier is undervalued even with capital and operating cost escalations
- Government investments in "Critical Minerals" could reduce capital

- Evaluated as a stand-alone investment, the hydroxide plant produces an attractive 21% IRR and \$0.8B NPV² (+25% Capex, \$18,000 lithium)
- First Nations, Government, or Vehicle Manufacturers may act as co-investors

The Market is Over Estimating Frontier Lithium's Risk

Frontier's Positive ESG Outlook

ESG Standards Align with Mr. Goodman's Criteria



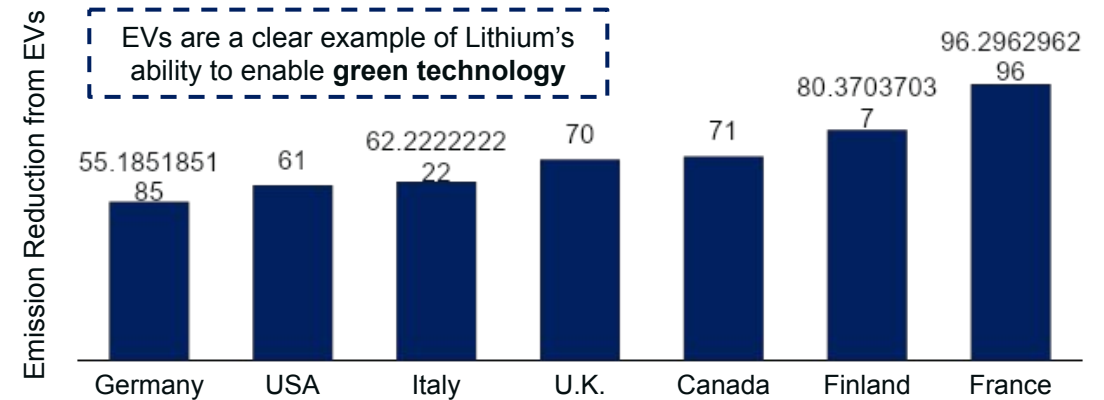
Good Community Engagement

- Frontier Lithium recognizes the importance of developing and maintaining strong relationships with Indigenous peoples
- Next Generation Education Scholarship:**
 - \$2000 to four students pursuing post-secondary education annually
 - One from each; Deer Lake First Nation, North Spirit First Nation, Sandy Lake First Nation, and Keewaywin First Nation
- Bart Meekis, a member of a nearby Oji-Cree community is on the Board of Directors

Environmental Impacts

- Frontier Lithium is committed to develop their mine, mill and lithium plant in a manner that meets or exceeds all environmental regulations
- Concern with the waterbodies close to the PAK and Spark deposits
- The lithium Frontier produces will contribute to a low carbon society
 - ~23 kt of lithium hydroxide frontier produces each year, will take **1.6 million combustion cars off the road annually**¹
- Frontier Lithium is engaging a consulting firm to conduct a life cycle analysis

Lithium's Role is a Greener Future



Corporate Governance

Bart Meekis



- Former Chief of Sandy Lake

Tess Lofsky



- Toronto Airports
- Mining M&A

Stephen Letwin



- CEO IAMGOLD
- CEO TC

Insider ownership at ~17% of the shares outstanding

Valuation Checklist

Frontier Lithium Evaluation



Frontier Lithium Offers the Best Investment Outlook

	Metal in the Ground	Management Experience	Implied Upside	Resource Growth Opportunity	Risk Level
					✓
GENERATION MINING				✗	
	✓		✓	✓	
<i>Frontier Comments</i>	- The PAK project is a world class asset - We believe that Frontier holds the best deposit in Canada, with high grade and tonnage - Management has a lack of experience executing large capital projects - A talented Board of Directors should be able to advise the company - Our valuations show that Frontier has a case base case upside of 71% at low lithium prices - Very high blue sky upside of 115% - We model a very large resource expansion at Spark - Bolt and the Pennock Pegmatite offer additional growth opportunities Lack of clarity on road access, first nation relationships and permitting - The project should benefit from the federal and provincial critical minerals plans				

Final Investment Decision



Rating: BUY
Target Price: \$4.43
Implied Upside: 71%

Appendix A

Economics & Valuation

Financing Alternatives & Assumptions

We'll likely see a 60/40 blend of debt and equity



Equity Financing

NAV	C\$1,247 M
Cash to cover CAPEX	C\$878.8 M
Financed NAV	C\$2,125.8 M
FD ITM Shares	224.1 M
Newly issued shares	339 M
Unfinanced NAVPS	C\$5.56
Financed NAVPS	C\$3.77

100% equity finance is unlikely as it is **VERY** dilutive. CEO, Trevor Walker, is against dilutive financing, however, we assume some degree of it is necessary

Offtake Agreement

Precedent Li Offtake Agreements	
Lithium Americas & GM	US\$650M for Thacker Pass development for 10% of company & binding supply agreement
Critical Metals & BMW	US\$15M repaid through payments equal to a discounted dollar amount in LiOH deliveries
Core Li & Ganfeng	US\$34M to Core Lithium in exchange for 75,000 t of Li ₂ O and 100 core shares
Lithium Americas & GM Offtake Agreement is the most comparable agreement, given that Thacker Pass has half the grade as PAK ² and approximate tonnage after Queen's adjustments (2.8 LCE PAK, 3.7 LCE TP)	

Debt Financing¹

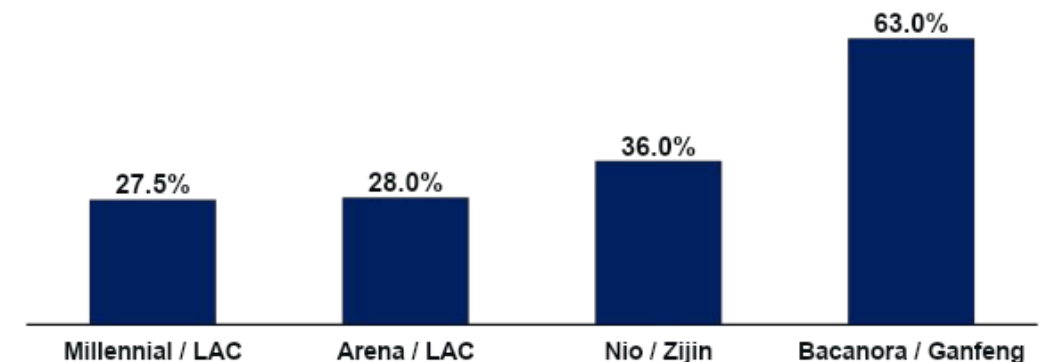
Select Issuances	
Lithium Energi	12%
Sigma Lithium	9.65%
Mountain PD	9%
Median COD	9.65%

Debt issuance of this size are expensive

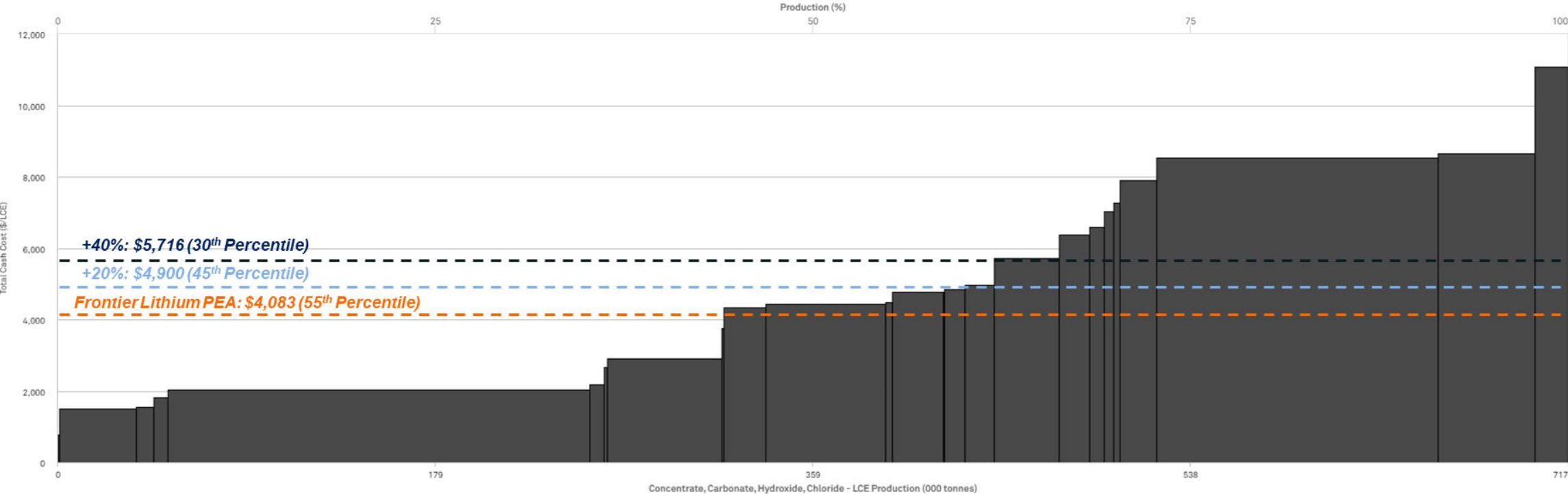
NAV	C\$1,247 M
Cash to cover CAPEX	C\$878.8 M
NPV of Incurred Debt	(C\$1,434.3 M)
Financed NAV	C\$691.5 M
FD ITM Shares	224.1 M
Unfinanced NAVPS	C\$5.56
Financed NAVPS	C\$3.08

Mergers & Acquisitions

Comparable Lithium Developer Takeout Premiums



2022 Lithium Production Ranked on Total Cash Cost (LCE)



Lithium Hydroxide Plant

Hydroxide Plant will Attract Co-Investors



Potential Co-Investors

- If access to capital is an issue, co-investors will be attracted by the hydroxide plant's 22% IRR and \$0.8B NPV

Potential Co-Investors

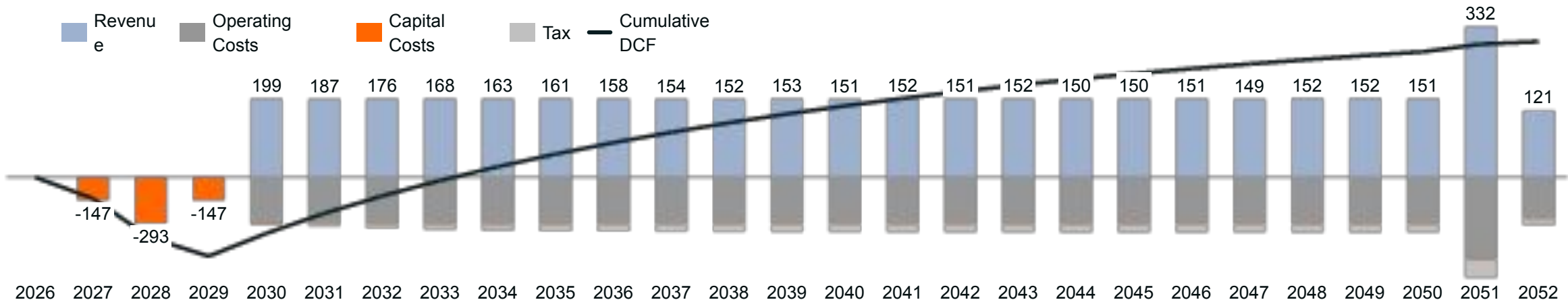


Hydroxide Plant Benchmark

- MinRes projected its 50kt Lithium Hydroxide Plant to cost \$650M (Oct, 2022)
- Frontier's Plant is costed 60% higher (\$350M, 17kt)
- Our models assume additional increases



Cash Flow for Hydroxide Plant (C\$ 000')¹



Commodity Price Forecasts

Street Consensus



Forecasted Prices for All Relevant Commodities

Commodity	Unit	2023	2024	2025	2026	LT
Gold	US\$/oz	\$1,830	\$1,800	\$1,773	\$1,690	\$1,690
Silver	US\$/oz	\$24.78	\$25.80	\$26.41	\$27.30	\$27.30
Platinum	US\$/oz	\$1,003	\$1,100	\$1,230	\$1,200	\$1,200
Palladium	US\$/oz	\$1,986	\$1,937	\$1,998	\$1,620	\$1,620
Copper	US\$/t	\$8,200	\$9,050	\$9,600	\$9,194	\$9,194
Nickel	US\$/t	\$23,750	\$23,500	\$24,950	\$22,250	\$22,250
6% Li2O Spod. Con.	US\$/t	\$3,000	\$3,000	\$1,750	\$1,500	\$1,500
7.2% Li2O Spod. Con.	US\$/t	\$4,320	\$4,275	\$2,250	\$1,500	\$1,500
56% LiOH	US\$/t	\$45,000	\$35,000	\$20,000	\$20,000	\$20,000

Comparable Companies

Frontier Lithium



Lithium Peers

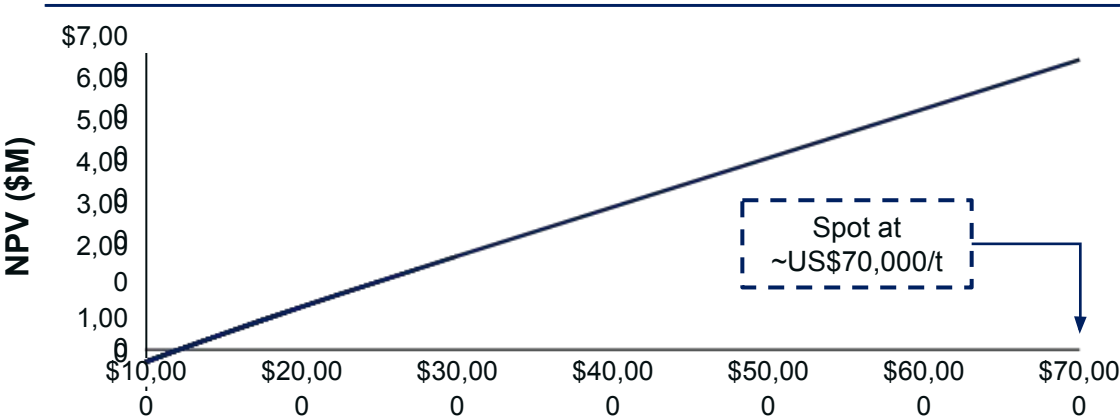
Companies	Price	EV	Res.	NAV ¹	Ratios	
	C\$	C\$ M	Mt M&I LCE	C\$ M	P/NAV	EV/Res.
Lithium America	\$29.36	\$3,307	20.6	\$6,793	0.57x	145.4x
Standard Lithium	\$4.91	\$699	3.14	\$2696	0.31x	161.1x
ioneer Ltd	\$0.45	\$780	1.09	\$1287	0.71x	619.2x
Arena Minerals	\$0.64	\$247	0.56	\$371	0.68x	443.0x
Critical Elements	\$2.40	\$462	0.71	\$806	0.61x	609.2x
Frontier Lithium	\$2.59	\$482	1,752,465	\$931	0.42x	235.0x

PAK Project Discounted Cash Flow

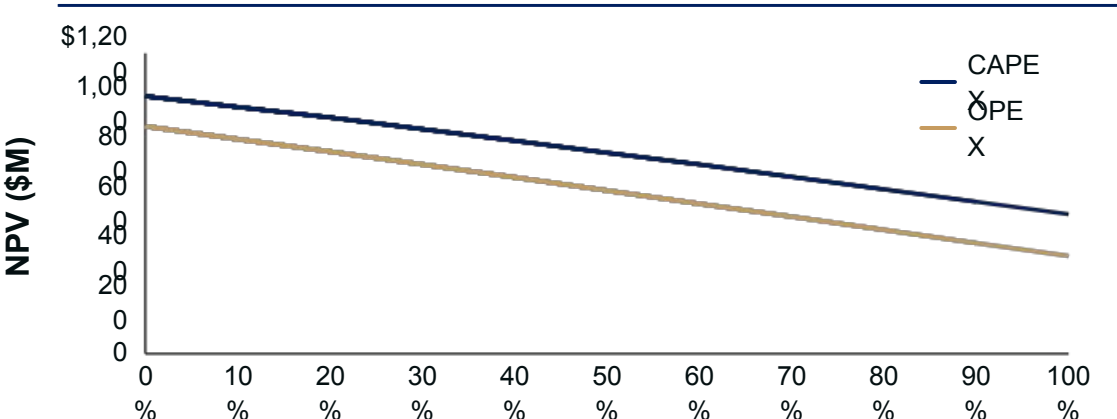
Sensitivity Analysis – All Else Ran at Base Case



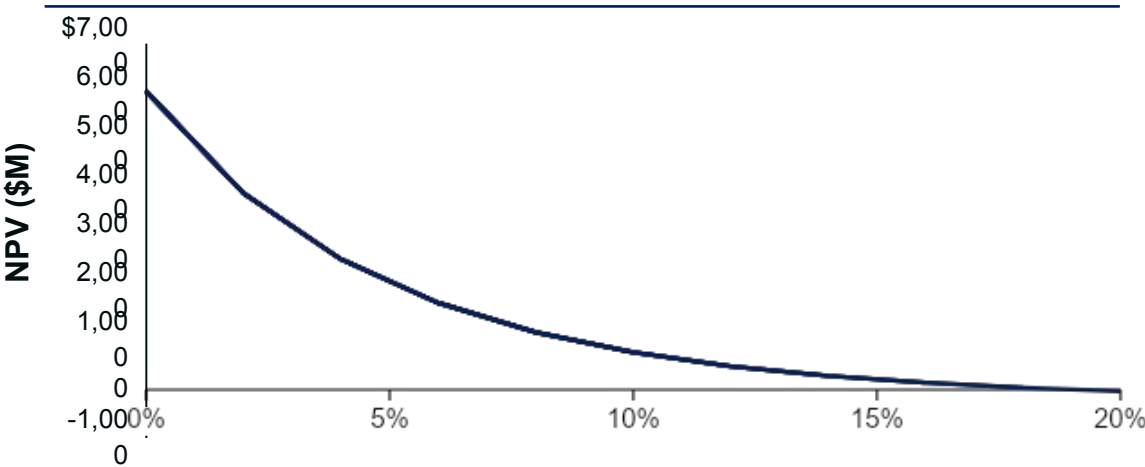
LT LiOH Price



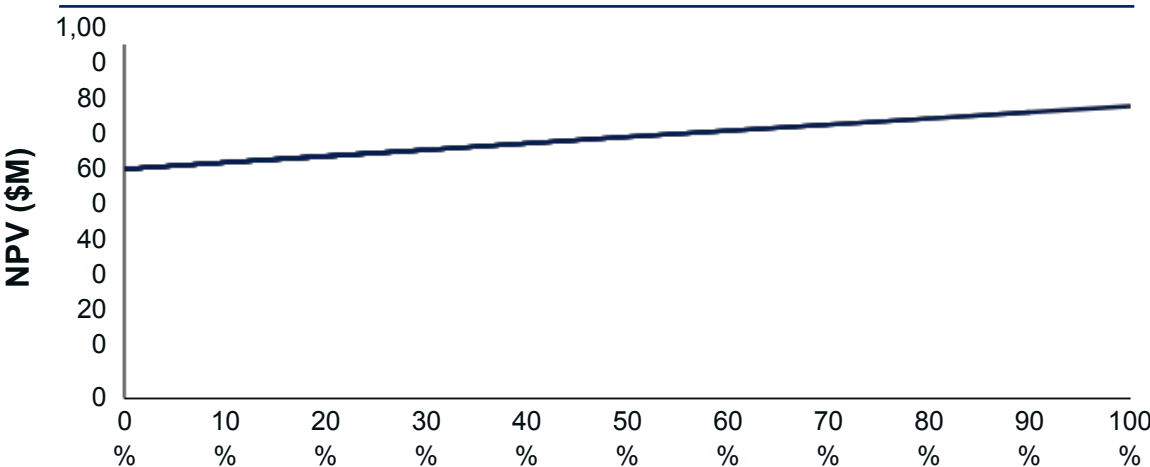
Change in OPEX and CAPEX



Discount Rate



Government Support on Financing Access Road



Large Growth in EV Capacity

North American EV Infrastructure Map



Frontier Lithium's Management

Diverse and Competent Leadership Team



Board of Directors



Rick Walker, Chairman

45+ years Mining/Construction experience



Marc Boissonneault, P.Eng, MBA

Most recently Head of Global Nickel Operations, Glencore



John Didone CPA, CA, CMA, Audit Committee

+35 years Accounting



Mike Koziol P.Geo, P.Eng., Audit Committee

+35 years Exploration Experience,



Stephen J.J. Letwin, Audit Committee

Former President and CEO of IAMGOLD Corporation



Tess Lofsky LLB, Director

Senior Legal Counsel and Corporate Secretary at Bird Construction



Greg Mills

35+ years experience in capital markets former Managing Director of RBC Capital Markets



Bart Meekis

Former Chief of Sandy Lake First Nation

Executive Team



Trevor R. Walker, President and CEO

20+ years in the mining industry, Trevor joined the company in 2010, and since has played a key strategic role in focusing and developing the company's PAK Lithium Project in Northwestern Ontario.



Tony Zheng, Chief Financial Officer

10+ years as a Chartered Professional Accountant with significant experience in finance, risk management, corporate strategy, mergers and acquisitions, with international precious and base metals companies.



Dr. Naizhen Cao, VP Technology

Dr. Cao is an industry veteran having worked both in China and Canada as senior technical leader with expertise in lithium and battery materials.



Garth Drever, VP Exploration

40+ years of mineral exploration experience. He has worked with Frontier Lithium since 2011, and was fundamental in the exploration process that led to new discoveries on the PAK Lithium Project.



David Ewing, VP Sustainability & External Affairs

20+ years of experience in mining, energy and government with significant experience in ESG and regulatory and Indigenous affairs.

Notable Advisors



Mike Tamlin

25+ years of expertise in lithium and tantalum concentrates and chemicals. His lithium experience covers the development of the Chinese chemical and global technical spodumene markets for the Greenbushes Mine in Western Australia, the Zhangjiagang Lithium Carbonate Project and the Rincon Brine Project.



Peter Vanstone, P. Geo

Peter Vanstone maintains specialized experience in rare metals with over 30 years of lithium, tantalum, and cesium exploration and mine production in the Canadian Shield.



Gordon MacKay

Most recently Director of Mineral Development and Lands Branch at the Ministry of Northern Development and Mines.

Lithium Conversions

% Lithium to % Li₂O

$$\text{Conversion Factor} = \frac{\text{Molar Mass}_{\text{Li}}}{\text{Molar Mass}_{\text{Li}_2\text{O}}}$$
$$= 0.23$$

% Li₂O to % LCE

$$\text{Conversion Factor} = \frac{\text{Molar Mass}_{\text{Li}_2\text{CO}_3}}{\text{Molar Mass}_{\text{Li}_2\text{O}}}$$
$$= 2.47$$

Conversion Summary per Deposit

Asset	PAK	Spark	Total
Ore (Mt)	9.3	69.3	78.6
Grade (% Li ₂ O)	2.02	1.38	1.46
Li ₂ O (kt)	0.19	0.96	1.14
LCE (kt)	0.46	2.36	2.83

Appendix B

Vulcan Model

Spark Deposit

Appendix B

Assay Inputs

- Data was retrieved from Frontier Lithium's most recent press releases
- Adjustments were made as necessary to mitigate the effects of grade smearing

DDH PL-037-19											
Designed to test the extent of the Spark pegmatite underneath Channels 37 and 38 drilling from the south. Intersected 2 major pegmatite zones plus others totalling 117.8 m averaging 1.2% Li2O. Host rock is metavolcanic schist. Hole was abandoned due to "jammed corebarrel" and will be lengthened next program.											
Zone	From (m)	To (m)	Width (m)	Horiz. (m)*	Li ₂ O (%)	Cs ₂ O (%)	Ta ₂ O ₅ (ppm)	Nb ₂ O ₅ (ppm)	SnO ₂ (ppm)	Rb ₂ O (%)	Unit
Li Enriched	9.8	15.6	5.8	4.4	1.12	0.01	115	87	80	0.38	Aplite
including	9.8	14.0	4.2	3.2	1.21	0.01	110	83	71	0.39	Aplite
Li Enriched	36.0	109.9	73.9	56.6	1.19	0.01	88	77	96	0.25	LIZ
including	45.6	83.0	37.4	28.7	1.40	0.01	103	80	129	0.29	LIZ
including	97.5	104.5	7.0	5.4	2.17	0.01	71	83	33	0.21	LIZ
Li Enriched	117.3	155.4	38.1	29.2	1.23	0.02	84	82	42	0.25	LIZ
Including	121.0	147.0	26.0	19.9	1.36	0.01	93	98	41	0.29	LIZ
Including	121.0	130.0	9.0	6.9	1.55	0.01	81	75	29	0.25	LIZ

DDH PL-038-19											
Designed to test the extent of the Spark pegmatite underneath Channels 33, 34, 35 and 36 from the south. Intersected 3 major pegmatite zones plus others totalling 215 m averaging 1.4% Li2O. Intersected a 5.3m zone (141 to 146.3m) of anomalous Ta and Sn (>2,000 ppm Ta2O5 and 487 ppm SnO2). Host rock is metavolcanic schist.											
Zone	From (m)	To (m)	Width (m)	Horiz. (m)*	Li ₂ O (%)	Cs ₂ O (%)	Ta ₂ O ₅ (ppm)	Nb ₂ O ₅ (ppm)	SnO ₂ (ppm)	Rb ₂ O (%)	Unit
Li Enriched	16.3	37.0	20.7	15.1	1.26	0.01	79	92	42	0.22	LIZ
	40.0	45.5	5.6	4.1	1.30	0.01	78	74	35	0.17	LIZ
	49.2	57.9	8.7	6.4	1.63	0.01	91	89	39	0.27	LIZ
Li-Ta Enriched	66.0	146.3	80.3	58.7	1.58	0.04	223	91	75	0.28	LIZ/ciz
including	79.0	141.0	62.0	45.3	1.81	0.02	95	92	45	0.29	LIZ
including	141.0	146.3	5.3	3.8	0.33	0.36	2085	117	487	0.43	CIZ
Li Enriched	158.0	258.0	100.0	73.1	1.25	0.04	90	80	70	0.24	LIZ/aplite
Including	196.0	216.0	20.0	14.6	1.83	0.02	95	94	31	0.16	LIZ
Including	212.0	216.0	4.0	2.9	3.64	0.01	25	35	17	0.15	LIZ

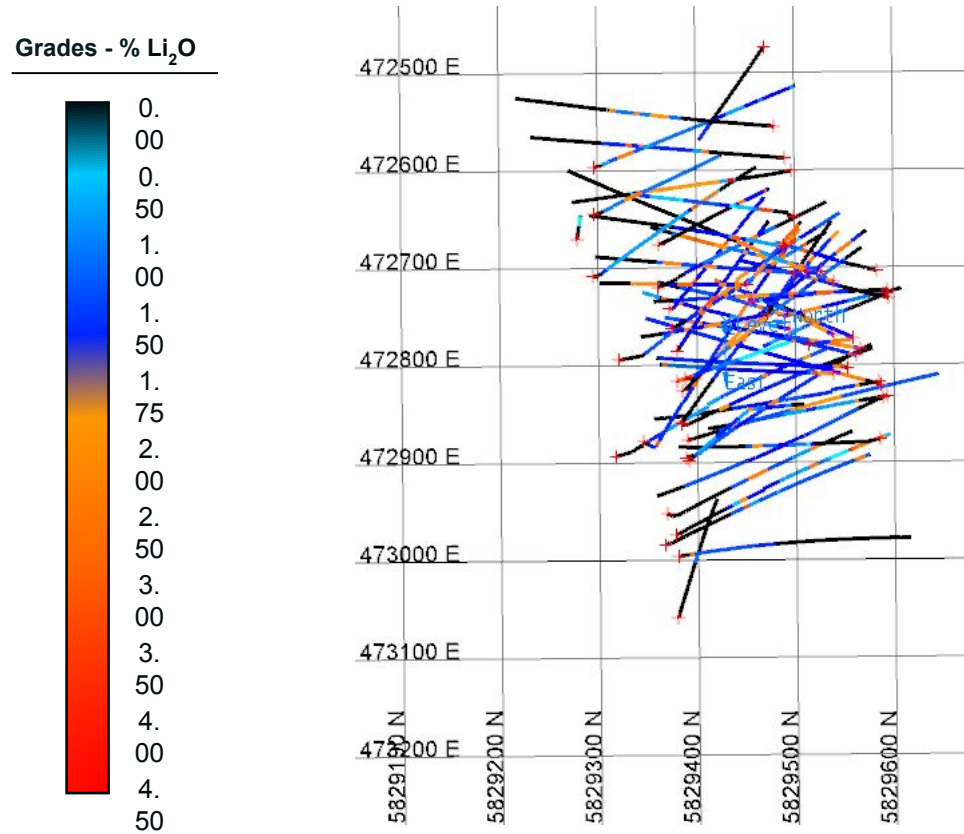
DDH PL-039-19											
Designed to test the extent of the Spark pegmatite underneath the western extent of surface-mapped pegmatite from the south. Intersected 2 major pegmatite zones totaling 84.7 m averaging 1.65% Li2O. Host rock is metavolcanic schist.											
Zone	From (m)	To (m)	Width (m)	Horiz. (m)*	Li ₂ O (%)	Cs ₂ O (%)	Ta ₂ O ₅ (ppm)	Nb ₂ O ₅ (ppm)	SnO ₂ (ppm)	Rb ₂ O (%)	Unit
Lithium Enriched	41.0	70.6	29.6	21.3	1.56	0.01	97	100	71	0.24	LIZ
including	43.0	68.0	25.0	18.0	1.62	0.01	88	100	72	0.24	LIZ
Lithium Enriched	119.2	174.3	55.1	39.6	1.70	0.03	141	85	46	0.33	LIZ
including	121.0	158.9	37.9	27.2	2.07	0.04	157	49	24	0.38	LIZ
including	124.0	149.0	25.0	18.0	2.32	0.03	143	48	49	0.41	LIZ

DDH	Zone	From (m)	To (m)	Width (m)	%Li2O	Geology
PL-037-19	Li Enriched	9.8	15.6	5.8	1.12	Aplite
PL-037-19	Li Enriched	36.0	109.9	73.9	1.19	Pegmatite
PL-037-19	Li Enriched	117.3	155.4	38.1	1.23	Pegmatite
PL-038-19	Li Enriched	16.3	37.0	20.7	1.26	Pegmatite
PL-038-19	Li Enriched	40.0	45.5	5.6	1.30	Pegmatite
PL-038-19	Li Enriched	49.2	57.9	8.7	1.63	Pegmatite
PL-038-19	Li Enriched	66.0	146.3	80.3	1.58	Pegmatite_Pegmatite
PL-038-19	Li Enriched	158.0	258.0	100.0	1.25	Pegmatite_aplite
PL-039-19	Lithium Enriched	41.0	70.6	29.6	1.56	Pegmatite
PL-039-19	Lithium Enriched	119.2	174.3	55.1	1.70	Pegmatite
PL-040-19	Li Enriched	74.7	103.0	28.3	1.25	Pegmatite_aplite
PL-040-19	Li Ta Enriched	109.9	170.6	60.8	1.29	Aplite_Pegmatite
PL-040-19	Li Ta Enriched	190.4	222.3	31.9	1.33	Pegmatite_Aplite
PL-040-19	Li Ta Enriched	243.7	258.1	14.5	2.49	Pegmatite_aplite
PL-040-19	Li Ta Enriched	282.7	302.4	19.7	1.77	Pegmatite
PL-041-19	Li Enriched	3.7	65.9	62.2	1.92	Pegmatite
PL-041-19	Li Enriched	70.2	75.9	5.6	1.55	Aplite
PL-041-19	Li Enriched	102.0	116.1	14.1	1.53	Aplite
PL-041-19	Li Enriched	232.2	262.8	30.6	1.48	Pegmatite
PL-042-19	Li Enriched	55.4	114.7	59.4	1.88	Pegmatite_aplite
PL-042-19	Li Enriched	125.7	170.8	45.2	1.42	Aplite_Pegmatite
PL-042-19	Li Enriched	178.7	305.3	126.6	1.55	Aplite
PL-043-19	Li Enriched	89.0	100.1	11.1	0.99	Aplite
PL-043-19	Li Enriched	115.7	138.8	23.2	1.34	Aplite
PL-043-19	Li Enriched	152.4	178.1	25.8	1.49	Aplite
PL-044-19	Li Enriched	31.0	84.9	53.9	1.54	Pegmatite_aplite
PL-044-19	Li Ta Enriched	90.0	106.0	16.0	1.34	Pegmatite_aplite
PL-044-19	Li Enriched	148.8	160.8	12.0	0.74	Aplite
PL-044-19	Li Enriched	198.0	225.4	27.4	0.87	Aplite
PL-045-19	Li Enriched	11.9	29.0	17.1	0.78	Aplite
PL-045-19	Li Enriched	32.0	37.0	5.0	1.18	Aplite
PL-045-19	Li Enriched	70.8	96.0	25.2	1.48	Aplite
PL-045-19	Li Enriched	103.0	215.0	112.0	1.53	Pegmatite_aplite

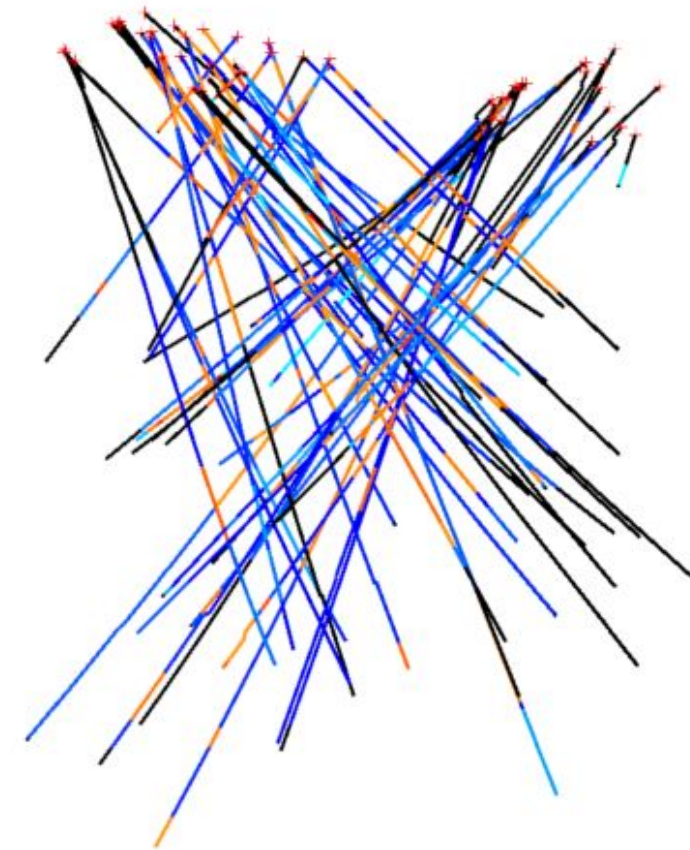
Appendix B

Drill Holes

Plan View



Front View – East Facing



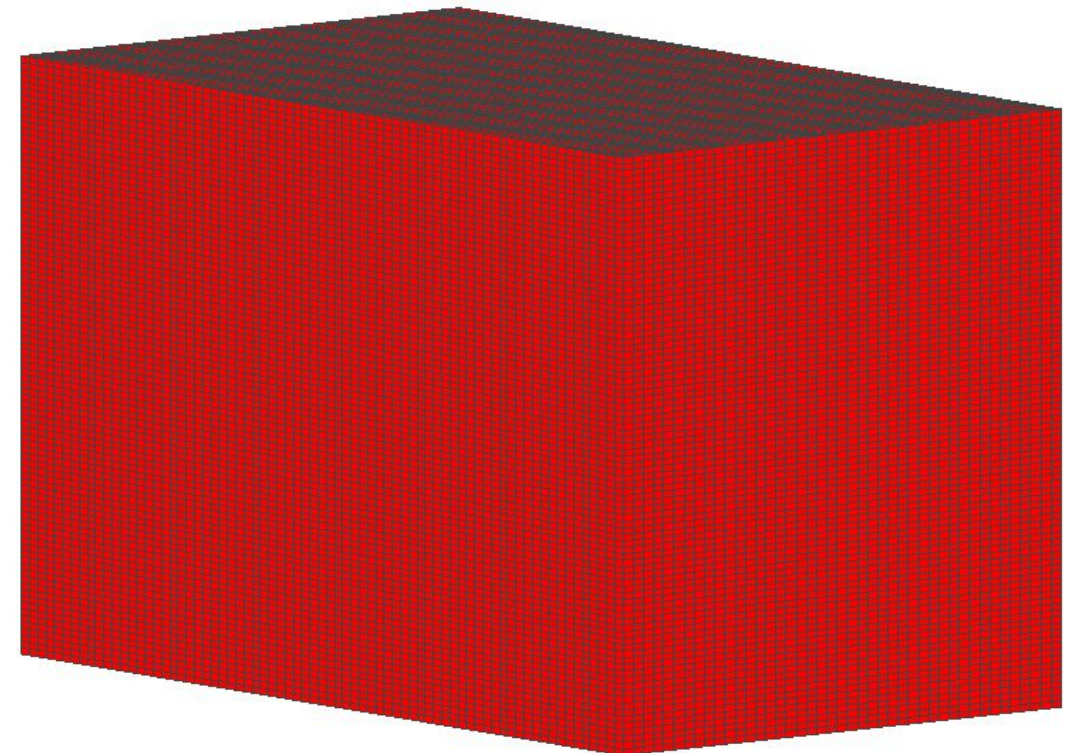
Appendix B

Block Model Genesis

Block Model Parameters

Parameter	Value
Origin X Coordinate	472,390
Origin X Coordinate	5,829,220
Origin X Coordinate	0
Start X Offset	0
Start Y Offset	0
Start Z Offset	0
End X Offset	730
End Y Offset	430
End Z Offset	560
Block X Size	10
Block Y Size	10
Block Z Size	5

Unattributed Raw Block Model Shape



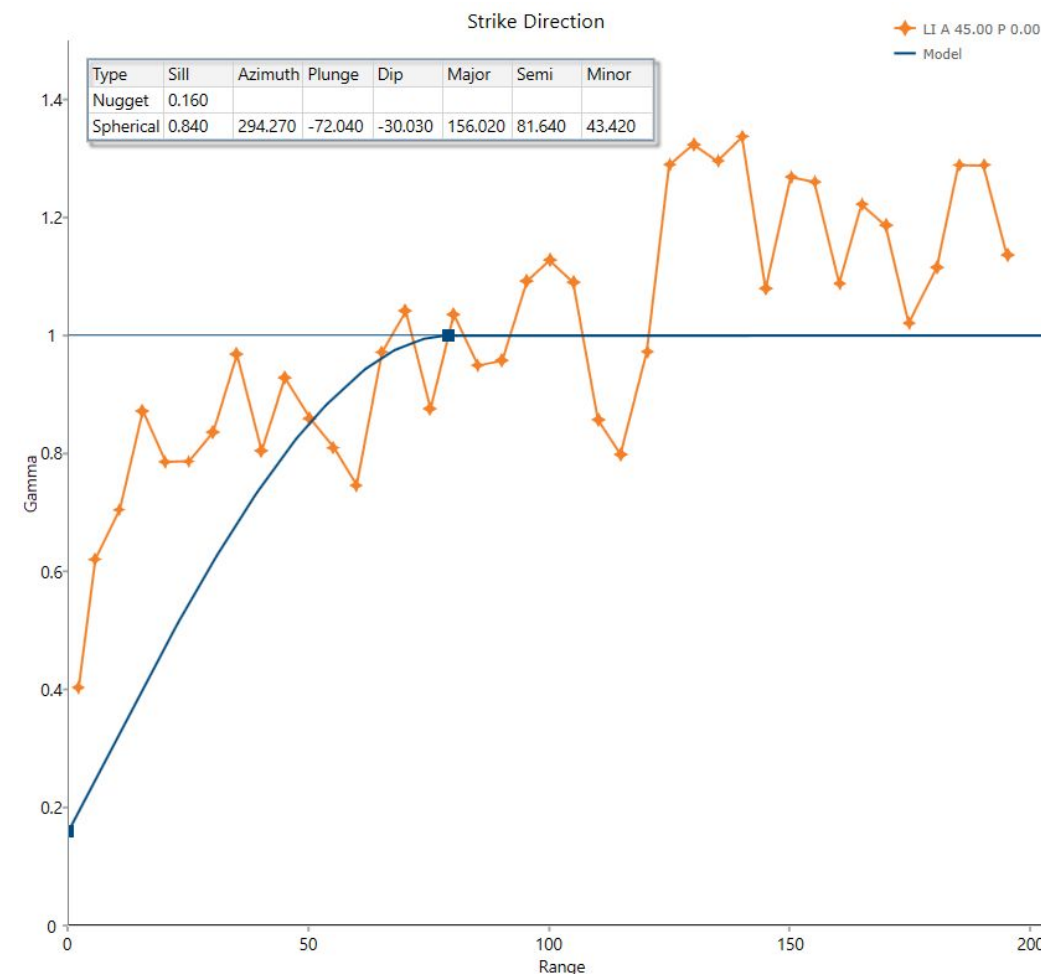
Appendix B

Variogram Analysis

Variogram Parameters

- The drillholes are composited at 2-meter distances to allow for statistical inferencing
- The nugget and spherical parameters are modelled from Frontier Lithium's Spark deposit as noted in the PEA
- The variogram parameters are used in the univariate grade estimation process with ordinary kriging

Variogram



Appendix B

Block Model Estimation



Estimation Pass Statistics

- Univariate estimation with ordinary kriging is used to develop the block model
- In the case of the spark deposit, ordinary kriging provides the lowest kriging variances
- Search ellipse factors for each estimation pass are modelled after the 2021 PEA

Estimation Pass No.	Search Ellipse Factor	Search Ellipse Summary			Search Distance			Minimum No. of Composites	Maximum No. of Composites
		Major Axis	Semi-Major Axis	Minor Axis	Major Axis	Semi-Major Axis	Minor Axis		
1	0.3	156.02	81.64	42.42	46.806	24.492	12.726	6	15
2	0.5	156.02	81.64	42.42	78.01	40.82	21.21	5	15
3	0.75	156.02	81.64	42.42	117.015	61.23	31.815	4	15
4	1	156.02	81.64	42.42	156.02	81.64	42.42	3	15
5	1	156.02	81.64	42.42	156.02	81.64	42.42	2	15

Appendix B

Resource Classification



Estimation Pass Statistics

- Estimation pass 1 and 2 represent indicated and inferred resources, respectively
- When using all 5 estimation passes as was used in Frontier Lithium's 2021 PEA, the estimated resource size of the spark deposit grows to 1.8 Mt of contained Li_2O

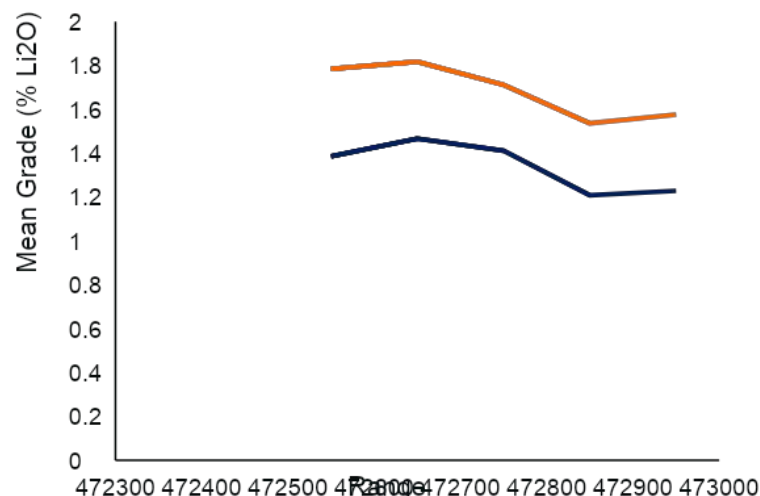
Cut-Off Grade	Resource Classification	Estimation Pass Number	Tonnes (t)	Mean Grade Li_2O (%)	Contained Li_2O (t)
0.70% Li_2O	Indicated	1	37,888,920	1.44	547,116.00
	Inferred	2	31,411,926	1.31	411,496.23
		3	34,737,399	1.29	447,417.70
		4	29,478,069	1.31	384,688.80
		5	490,599	2.02	9,924.82
		Total (Pass 1, 2, 3, 4, 5)	134,006,913	1.34	1,800,643.55
		Subtotal (Pass 1, 2)	69,300,846.00	1.38	958,612.24

Appendix B

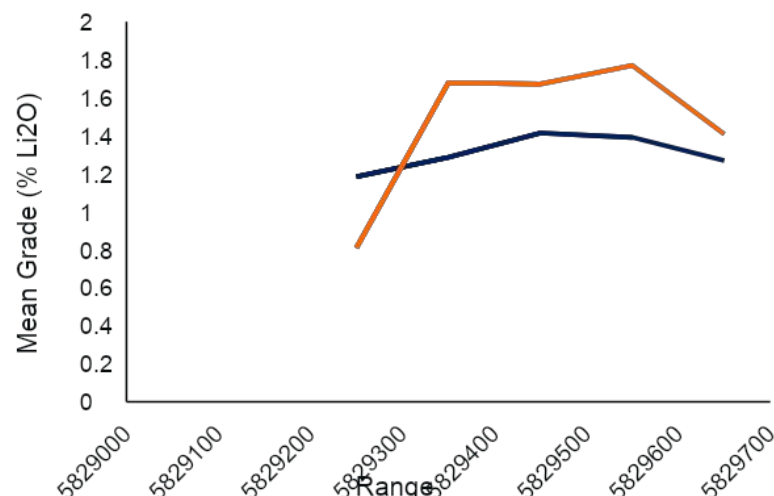
Swath Plots – Block Model Validation



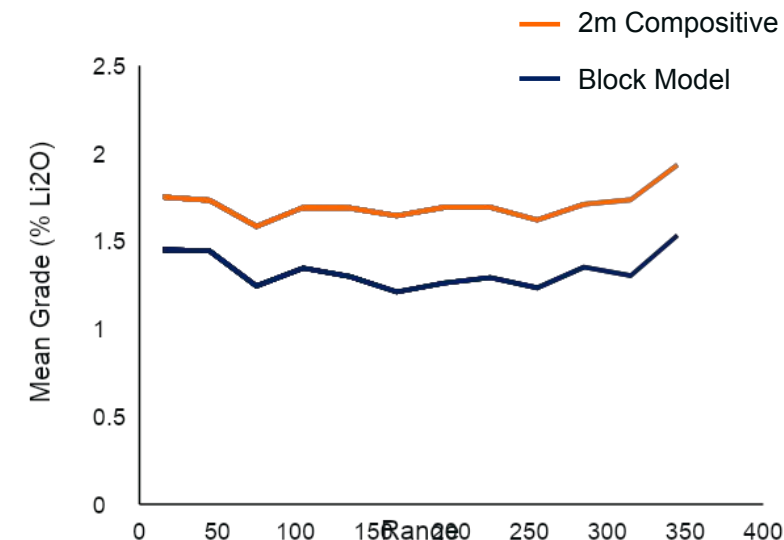
Easting Swath Plot



Northing Swath Plot



Elevation Swath Plot



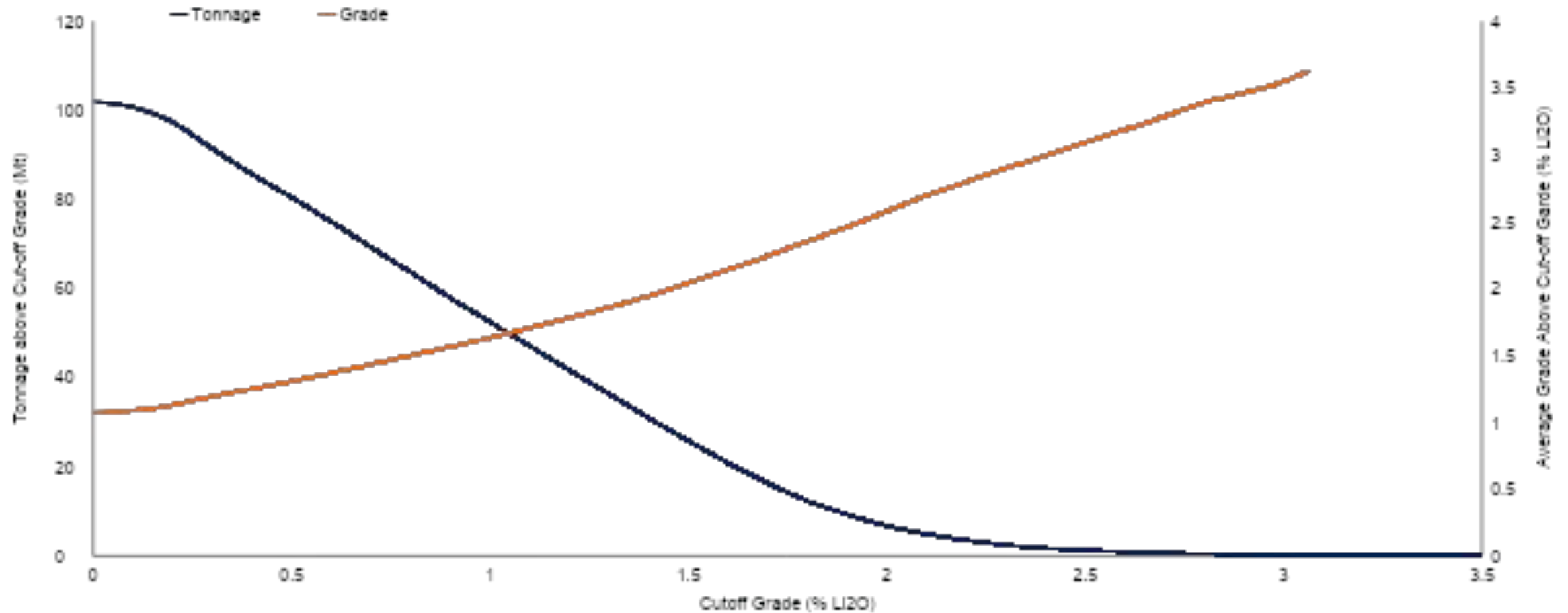
Comments

- Swath plots indicate that the lithium oxide grade at different ranges closely matches the 2m composited drillhole data, validating the model
- Mean grades of the block model are slightly lower than the composited data providing the model more conservative estimates of contained Li₂O in the resource

Appendix B

Grade Tonnage Curve

Grade Tonnage Curve (Pass 1 & 2)



Appendix B

Block Model Estimation Passes 1-5

Pass 1

Pass 2

Pass 3

Pass 4

Pass 5

