



A LITHIUM LED BATTERY MINERALS AND TECHNOLOGY COMPANY

Investor Presentation

MAY 2023

ASX:LLI

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This presentation may contain forward looking statements including statements regarding our intent, belief or current expectations with respect to Loyal Lithium Gold’s businesses and operations, market conditions, results of operations and financial condition, capital adequacy, specific provisions and risk management practices. Readers are cautioned not to place undue reliance on these forward-looking statements. Loyal Lithium does not undertake any obligation to publicly release the result of any revisions to these forward-looking statements to reflect events or circumstances after the date hereof to reflect the occurrence of unanticipated events. While due care has been used in the preparation of forecast information, actual results may vary in a materially positive or negative manner. Forecasts and hypothetical examples are subject to uncertainty and contingencies outside Loyal Lithium’s control. Past performance is not a reliable indication of future performance.

The information in this report that relates to Exploration Results is based on information either compiled or reviewed by Mr Darren Allingham FAIG who is an employee of Loyal Lithium Limited. Mr Allingham is a Fellow of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Allingham consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

This presentation has been approved by the Board of Loyal Lithium Ltd.

OUR MISSION & VISION

MANAGING DIRECTOR – ADAM RITCHIE BEng (hon), MEng, CPEng

“Loyal Lithium aims to play a key role in the North American lithium supply chain by building a business that attracts development opportunity, whilst also adding value to communities and shareholders.”

“We are passionate about lithium and believe we can do it better.”

Highly experienced lithium and development professional



Over 20 years' experience in the resources sector having held senior positions at Australia's leading resources companies including Pilbara Minerals, FMG, Rio Tinto & BHP



Former Project Director of Pilbara Minerals (ASX: PLS) flagship Pilgangoora Lithium Project

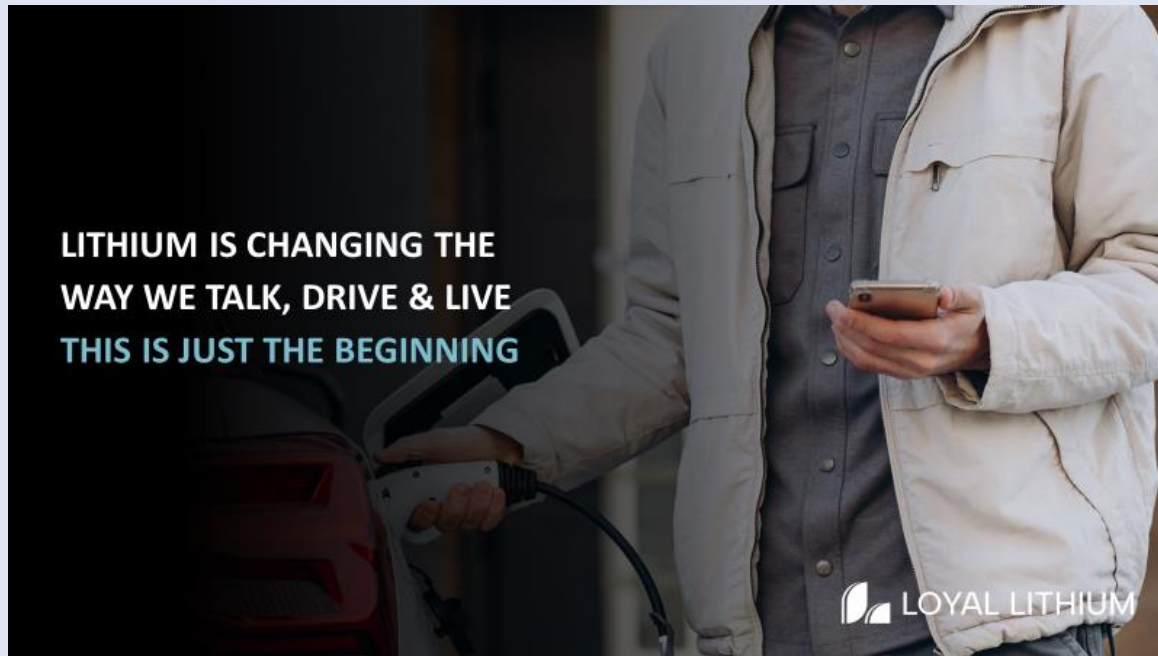


THE NORTH AMERICAN FOCUS

DRIVING TOWARDS DOMESTIC SUPPLY SOLUTIONS

“With over 400 million registered vehicles in North America, the demand for electric vehicles (EV) will only increase. The push for domestic sources of raw materials is heavily supported by both the Canadian and United States Governments.¹”

Adam Ritchie – Loyal Lithium, Managing Director



1 – See Appendix – Lithium is now political. Details of President Biden’s Inflation Reduction Act.

2023 STRATEGIC BUSINESS PLAN

A THREE PRONGED APPROACH

1. Transition

We are transitioning to a lithium led battery minerals and technology company

Invest – Divest – Rebrand

2. Educate

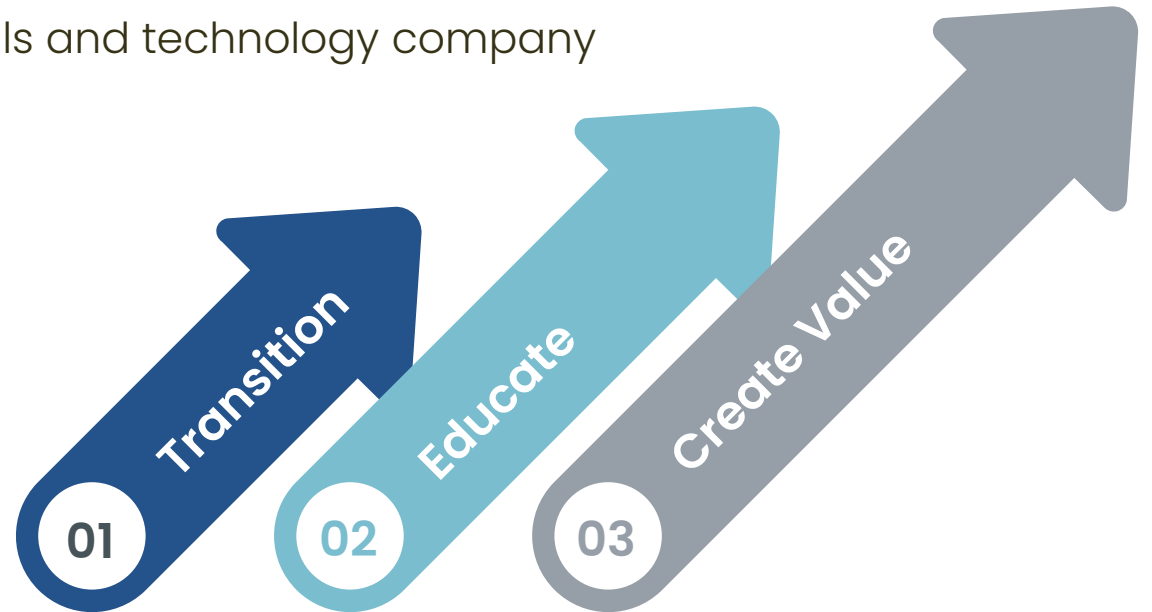
We believe the lithium supply chain is sub optimal and we plan to educate investors on a better way

History – Options – Trends

3. Create Value

We will provide unique value propositions to our partners and shareholders

Find – Define – Mine – Refine



THE FUNDAMENTALS THAT UNDERPIN OUR STRATEGY

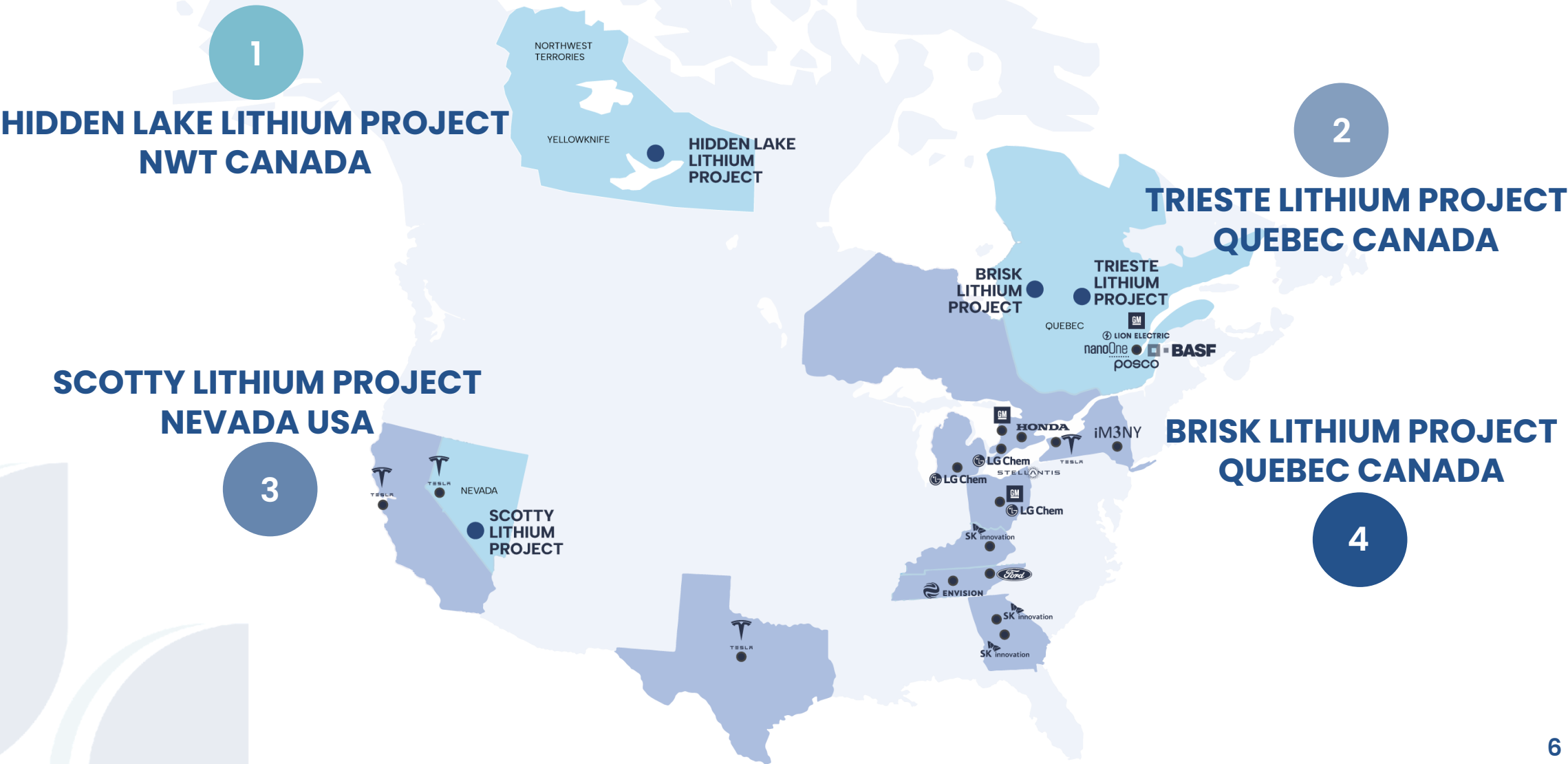
People/Partners: Build a team of industry professionals and like-minded partners to achieve objectives

Process: For each asset consider, in advance, the appropriate development phases with respect to ESG trends and supply chain

Technology: The lithium industry must adopt emerging technology to satisfy demands and compete long term

OUR TRANSITION IS FORMALISED

OUR NORTH AMERICAN LITHIUM PORTFOLIO



HIDDEN LAKE LITHIUM PROJECT

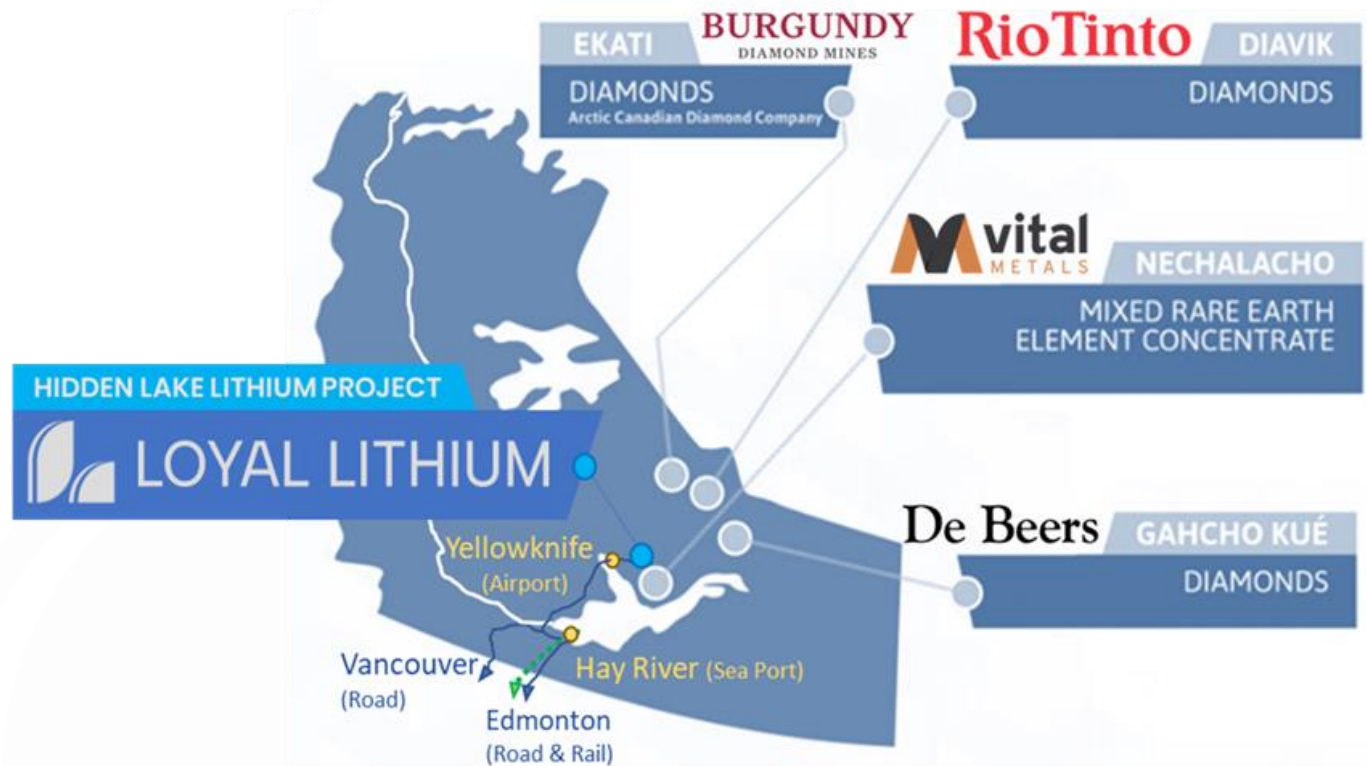
YELLOWKNIFE LITHIUM BELT

NORTHWEST TERRITORIES, CANADA



HIDDEN LAKE LITHIUM PROJECT

WHY WE LOVE IT – UNDER EXPLORED BUT WELL UNDERSTOOD



- 14 lithium spodumene bearing pegmatite outcrops
- 4 drill tested with a cumulative strike of 2,250m
- Known mineralisation is open along strike and depth
- 2,500 ha land position has had limited field mapping conducted and therefore significant scope to expand
- Simple mineralogy with highly liberated spodumene with SC6 DMS Concentrate already produced via pilot plant

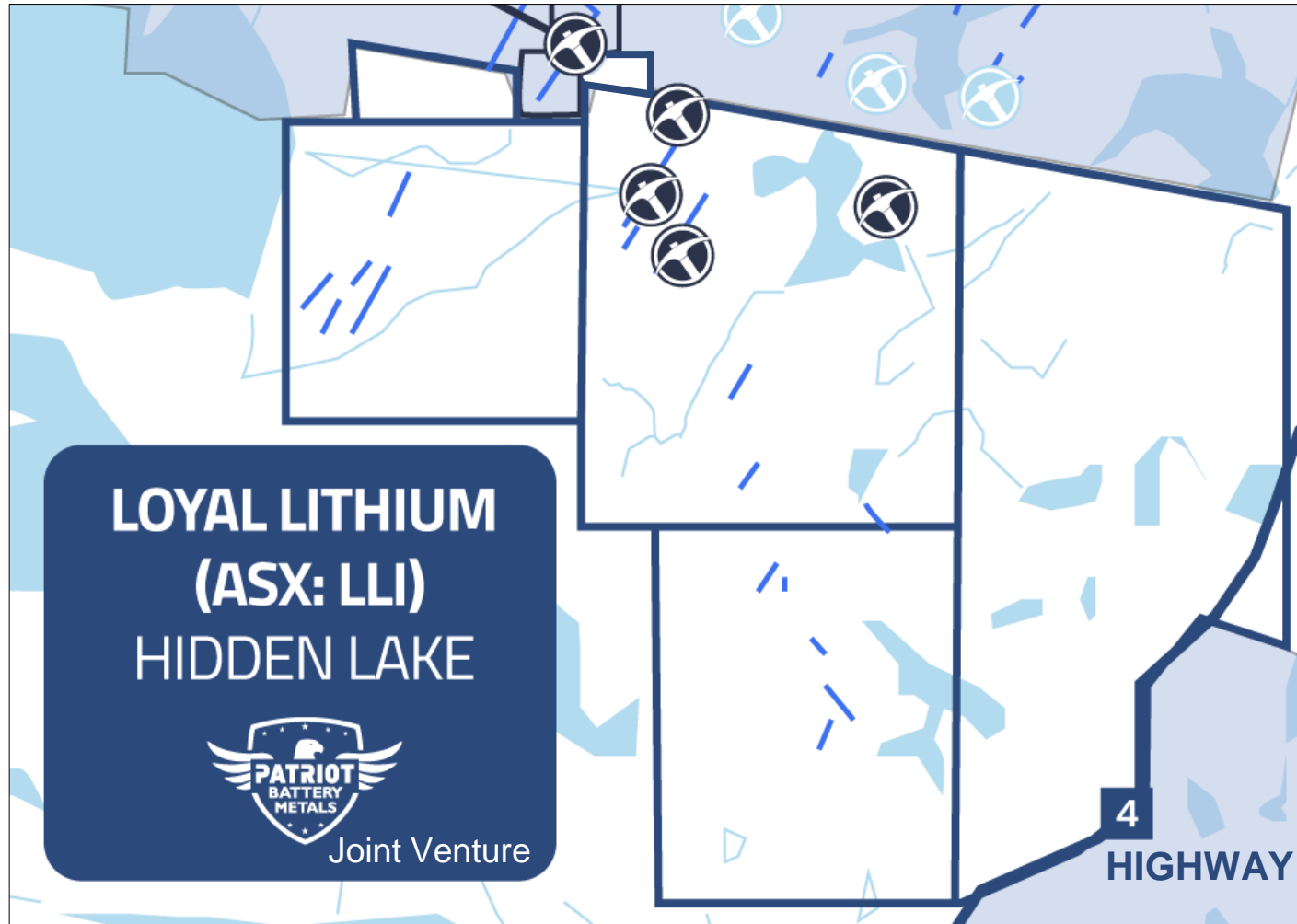


“We are excited to bring fresh ambitions to this notable spodumene project alongside our new joint venture partners in Patriot Battery Metals.”

Adam Ritchie – Managing Director Loyal Lithium

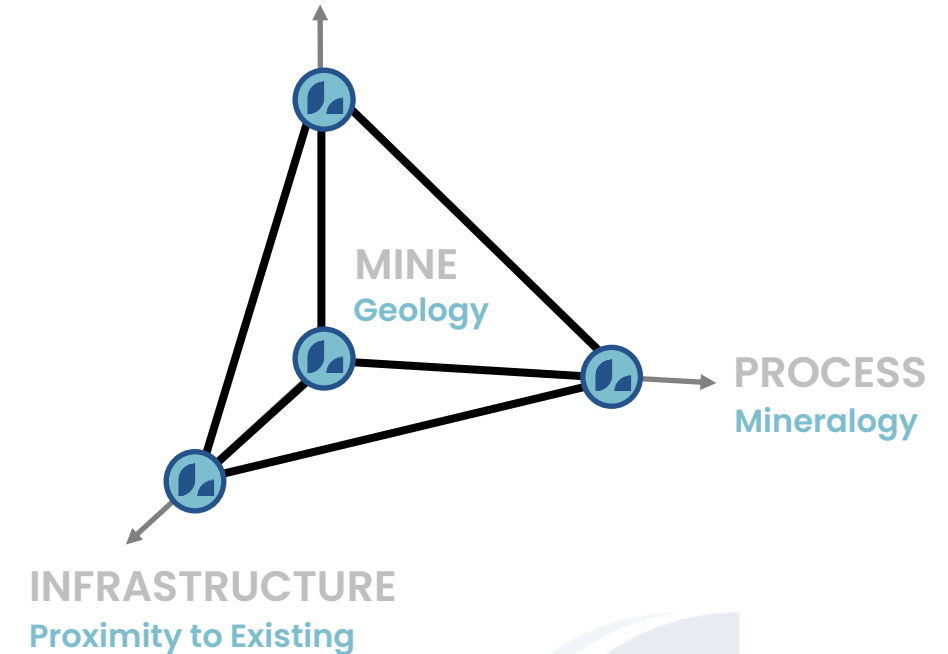
HIDDEN LAKE LITHIUM PROJECT

WHY WE LOVE IT – RESOURCE POTENTIAL



RESOURCE POTENTIAL

Exploration Work

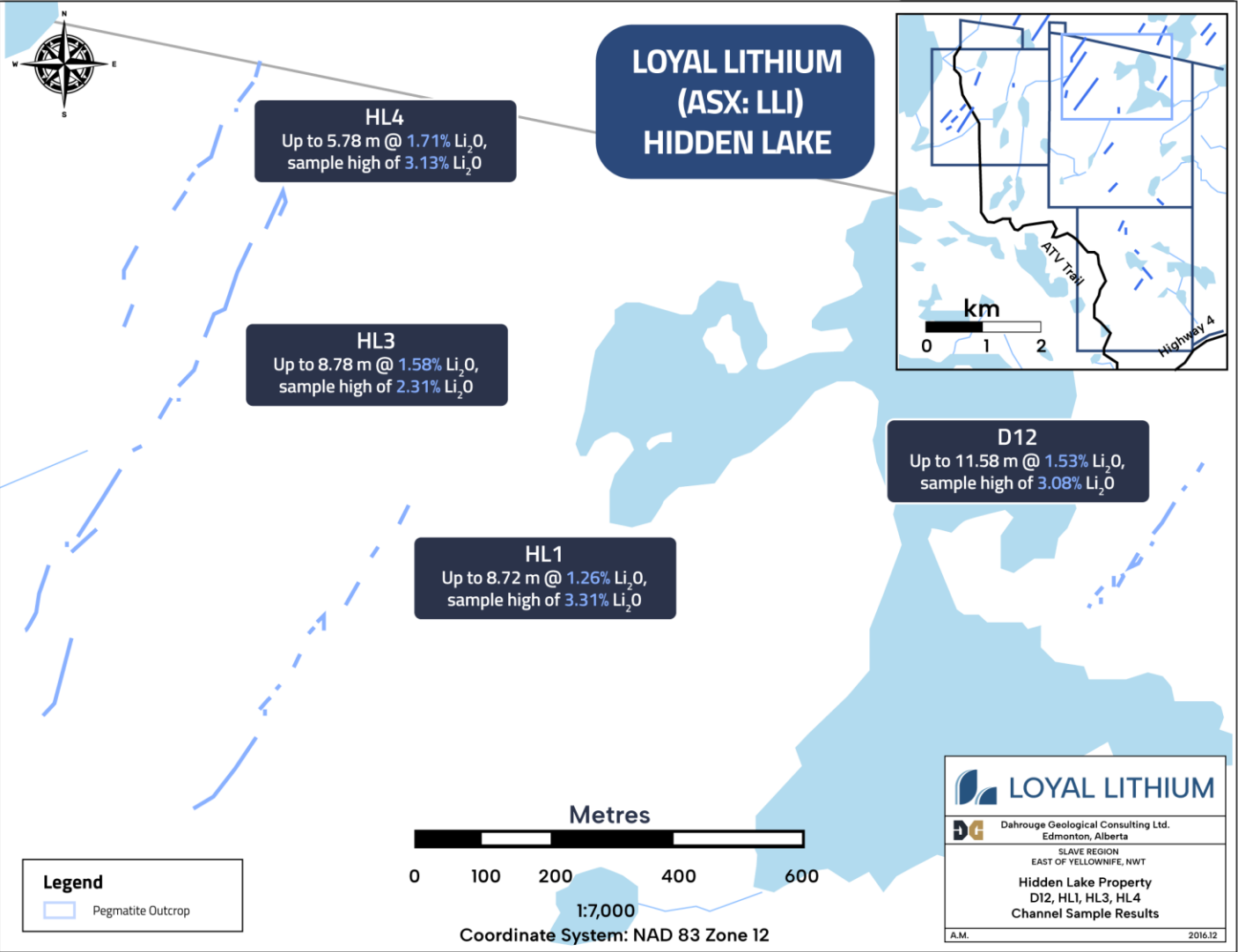


14 Spodumene Baring Pegmatite outcrops

- 4 main dykes drill tested
- 10 remain under explored
- Minimal field mapping conducted
- New exploration techniques available

HIDDEN LAKE LITHIUM PROJECT

WHY WE LOVE IT – RESOURCE POTENTIAL



RESOURCE POTENTIAL

Exploration Work

MINE
Geology

PROCESS
Mineralogy

INFRASTRUCTURE

Proximity to Existing

4 main dykes drill tested with cumulative strike length 2,250m

- 10 drill holes conducted to 30–50m vertical to confirm mineralised with grades up to 1.81% Li₂O
- Open along strike and depth

HIDDEN LAKE LITHIUM PROJECT

WHY WE LOVE IT – MINEABLE

4 main dykes have minable fresh resistive outcropping

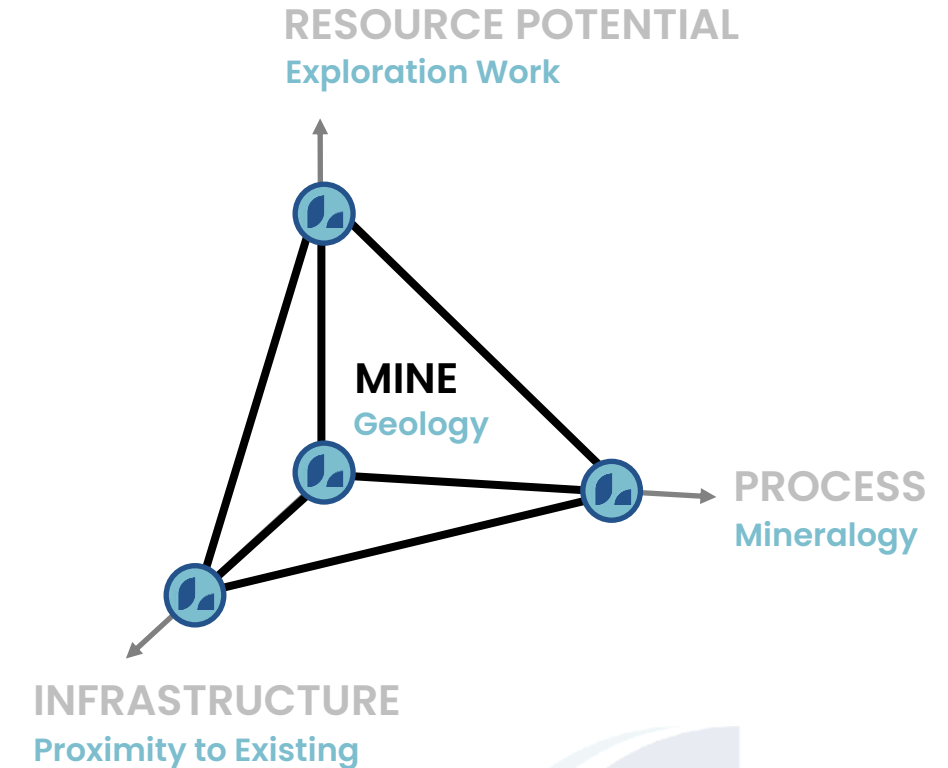
- Fresh rock due to glacial movements
- No oxidised layer
- Prominent outcrops

Significant tonnes at or near surface

- With widths up to 11.58m

Local evidence of underground mining

- E.g. 5km North



Geology-Metallurgical simplicity can lead to some creative low impact and low cost mining solutions...

HIDDEN LAKE LITHIUM PROJECT

WHY WE LOVE IT – PROCESSING SIMPLICITY

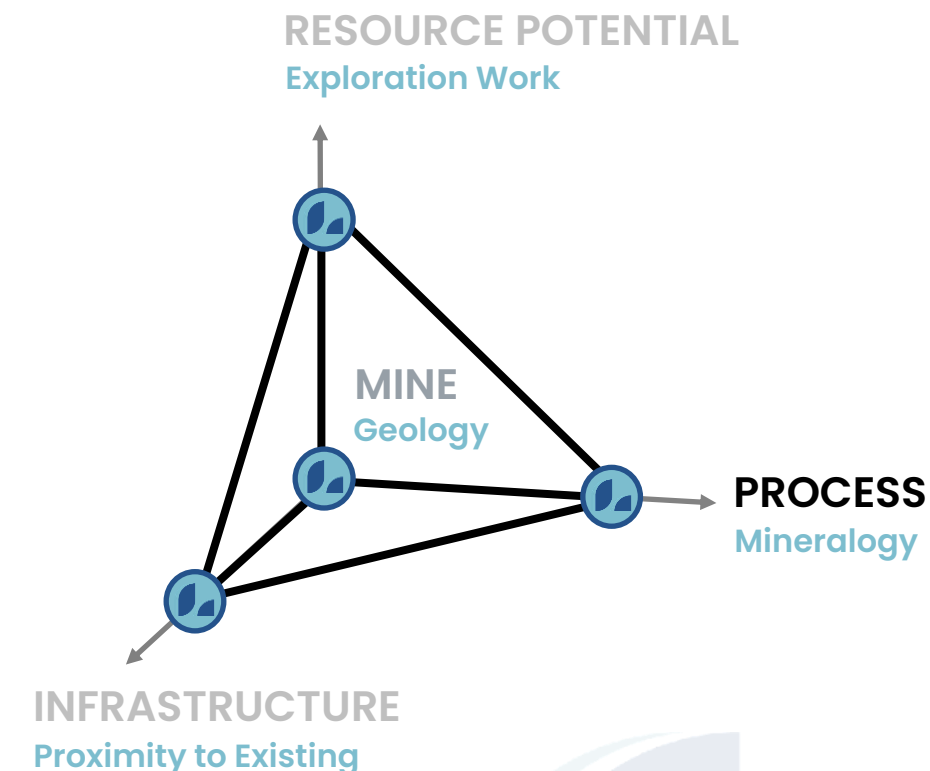
Mineralogy & Metallurgy fundamentals already understood

Mineralogy is simple and consistent with low impurities

- Spodumene
+ Quartz
+ Feldspars
- < 0.25% FeO

Metallurgy supports traditional Concentration techniques

- Highly Liberated
- DMS Concentrate via pilot plant



Geology-Metallurgical relationship

- Simple modular flowsheet possible
- with multi-stage DMS units
- 50%+ Mass Rejection < 0.2% Li₂O loss

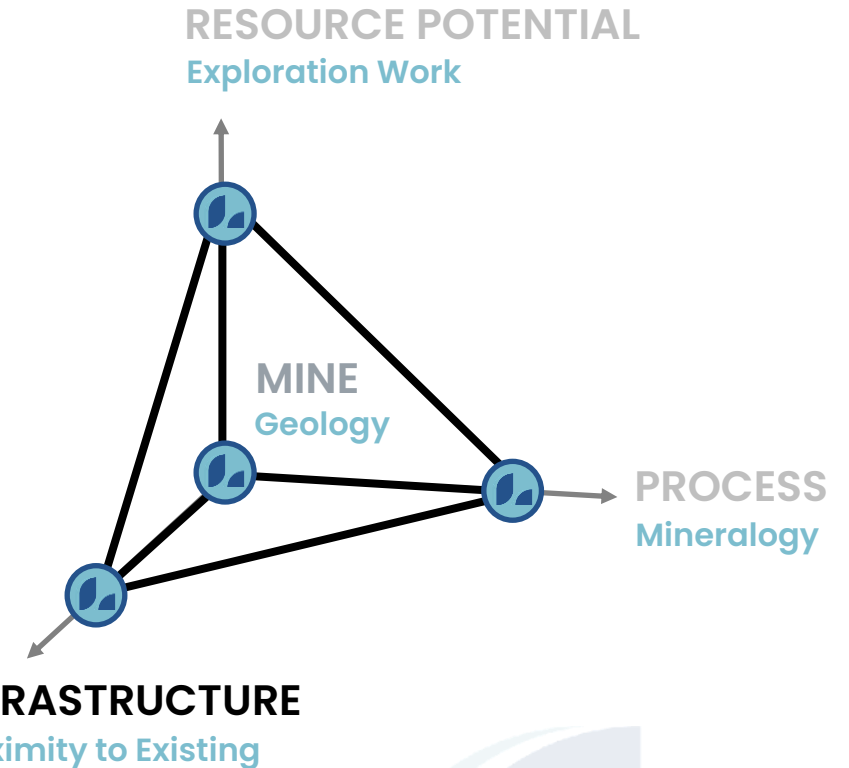
HIDDEN LAKE LITHIUM PROJECT

WHY WE LOVE IT – EXISTING INFRASTRUCTURE

65km drive Highway 4 – Hidden Lake to Yellowknife

Yellowknife – Capital of NWT population of ~20,000

- Well established workforce and support services
- Domestic Airport – daily connections to Canadian cities
- All weather roads – south Alberta and British Columbia
- Hydroelectric power – 2030 plans for the Lithium Belt

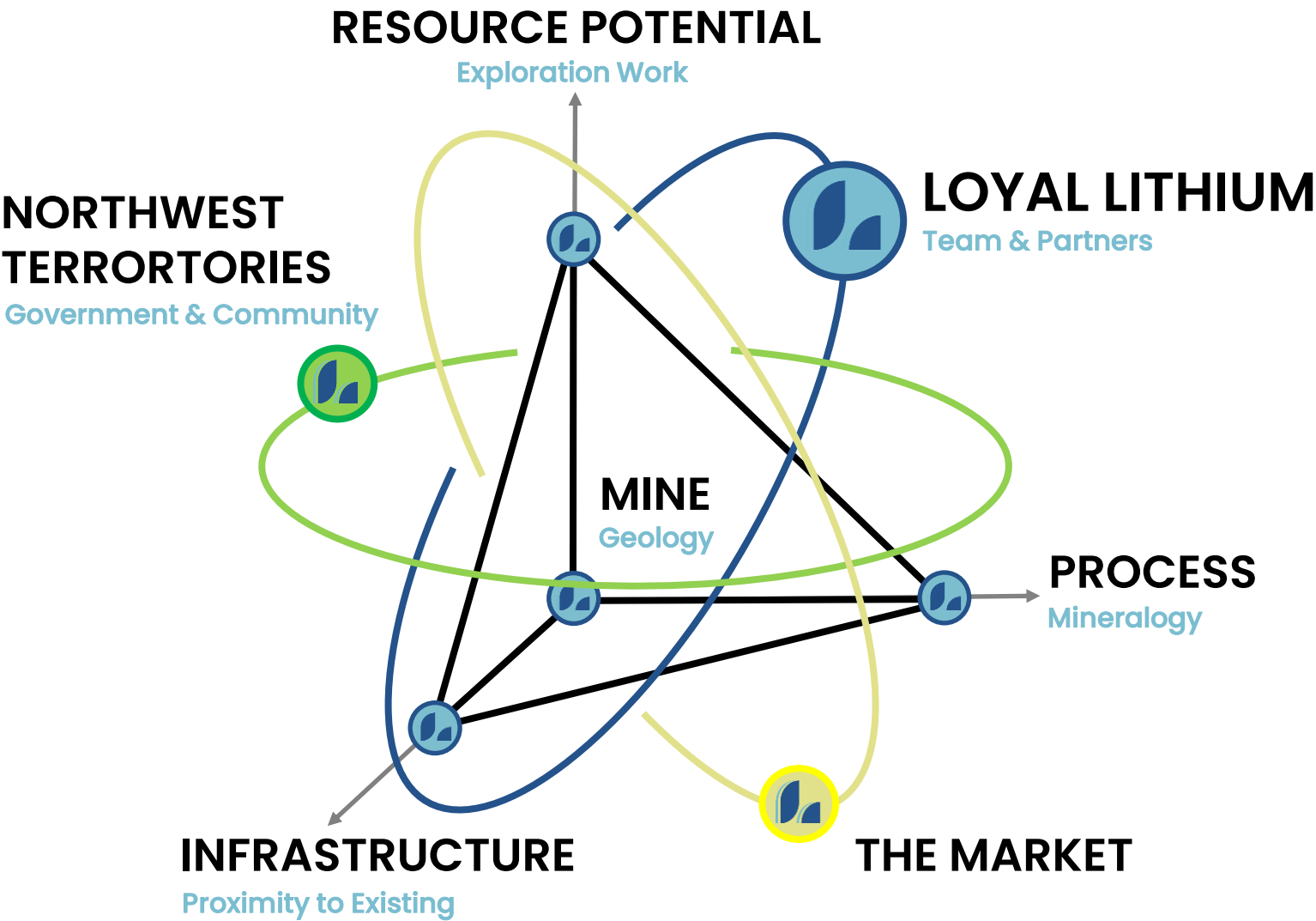


**Hay River Rail Terminal – CN Rail
Canada & United States America**

- Significant backhaul capacity

HIDDEN LAKE LITHIUM PROJECT

WHY WE LOVE IT



HIDDEN LAKE APPROACH

CONCURRENT ONGOING WORKSTREAM

2023 | 2024

LAND & COMMUNITY

- First Nations
- Yellowknife Community
- Government
- Environmental Baseline
- Regulators
- Business Community

EXPLORATION

- Field Mapping
- Assays
- Satellite Imagery
- Drilling
- Resource Modelling

STUDIES

- Environmental Concepts
- Scoping
- Feasibility
- Downstream

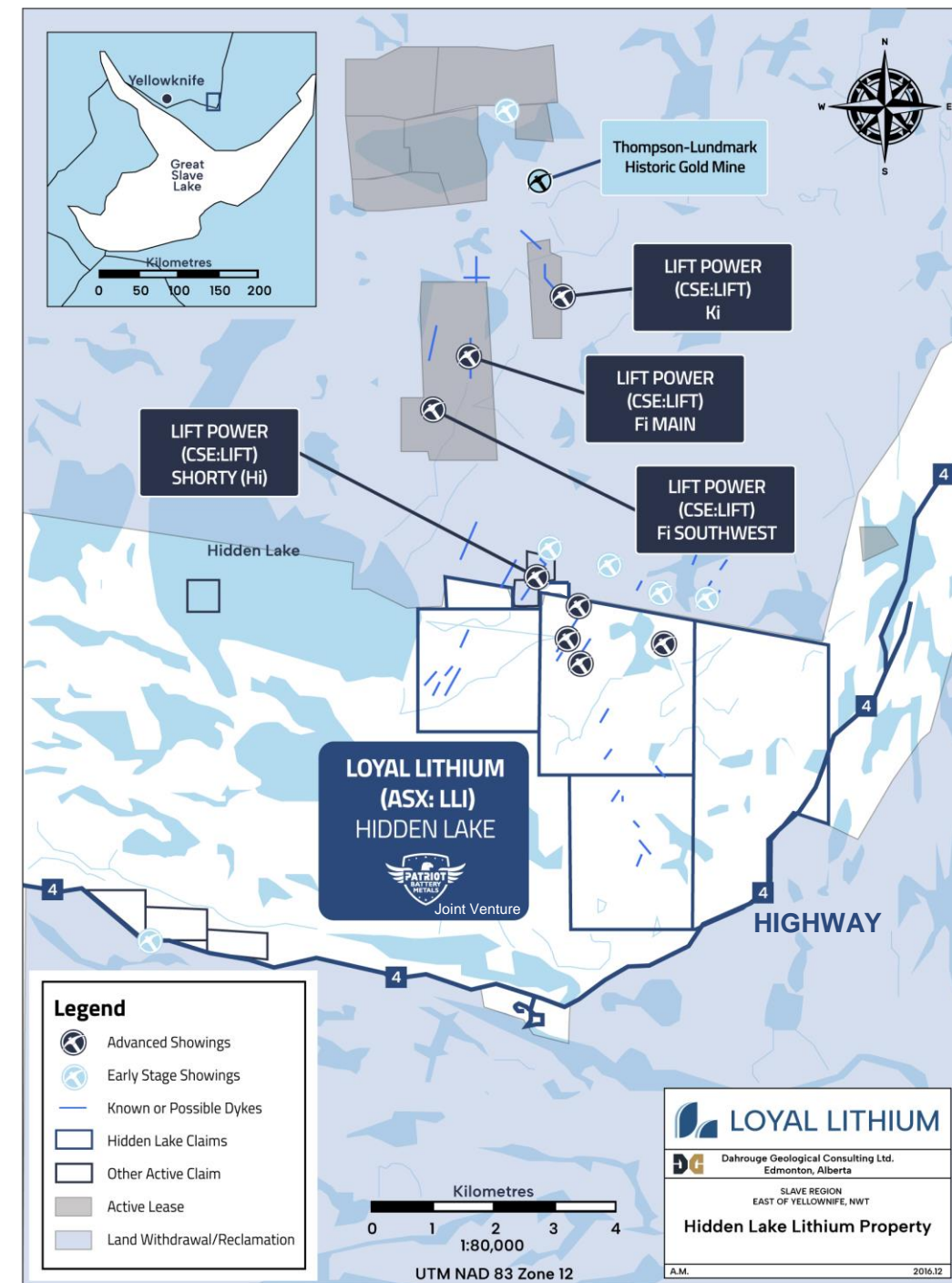
HIDDEN LAKE ACQUISITION

INVESTOR INSIGHTS

In November 2022, Li-FT Power (CSE: LIFT; FSE: WSO) acquired a portfolio of 14 spodumene pegmatites in the Yellowknife region in an all-scrip deal valued at ~CAD\$155m.⁴

Loyal Lithium acquired the Hidden Lake Lithium Project from two independent parties predominantly for scrip. Both vendors will be subject to ASX determined escrow conditions of 18-24 months.

Loyal Lithium is fully-funded to complete the proposed acquisition and undertake exploration and feasibility workstreams into CY2025 utilising existing cash reserves of A\$6.573 million (31 March 2023).



WHAT'S NEXT

PROSPECTUS FOR RECOMPLIANCE PURPOSES

If completed, the Acquisition will result in a formal change of nature for the Company, from a gold exploration company to a lithium exploration and development company. Accordingly, in order to effect the Acquisition, the Company will, inter alia, be required to re-comply with the requirements of Chapters 1 and 2 of the Listing Rules. A Prospectus will be issued to assist the Company to re-comply with those requirements. To satisfy the Listing Rules, the Company will be required to seek shareholder approval for the Acquisition and demonstrate investor spread via a small capital raising.

LLI Transaction	Prior	Effect	Post
Shares on Issue	63m	21m	84m
Share Price	\$0.30	\$0.30	\$0.30
Market Cap	\$19.0m	\$6.3m	\$25.0m
Cash	\$6.5m ¹	\$1.1m	\$6.0m ²
Exploration Budget	\$1.7m	\$1.9m	\$3.5m
Debt	Nil	Nil	Nil
Enterprise Value	\$12.5m		\$19.0m
Top 20	52%		52%+

RAISE TO DEMONSTRATE SPREAD

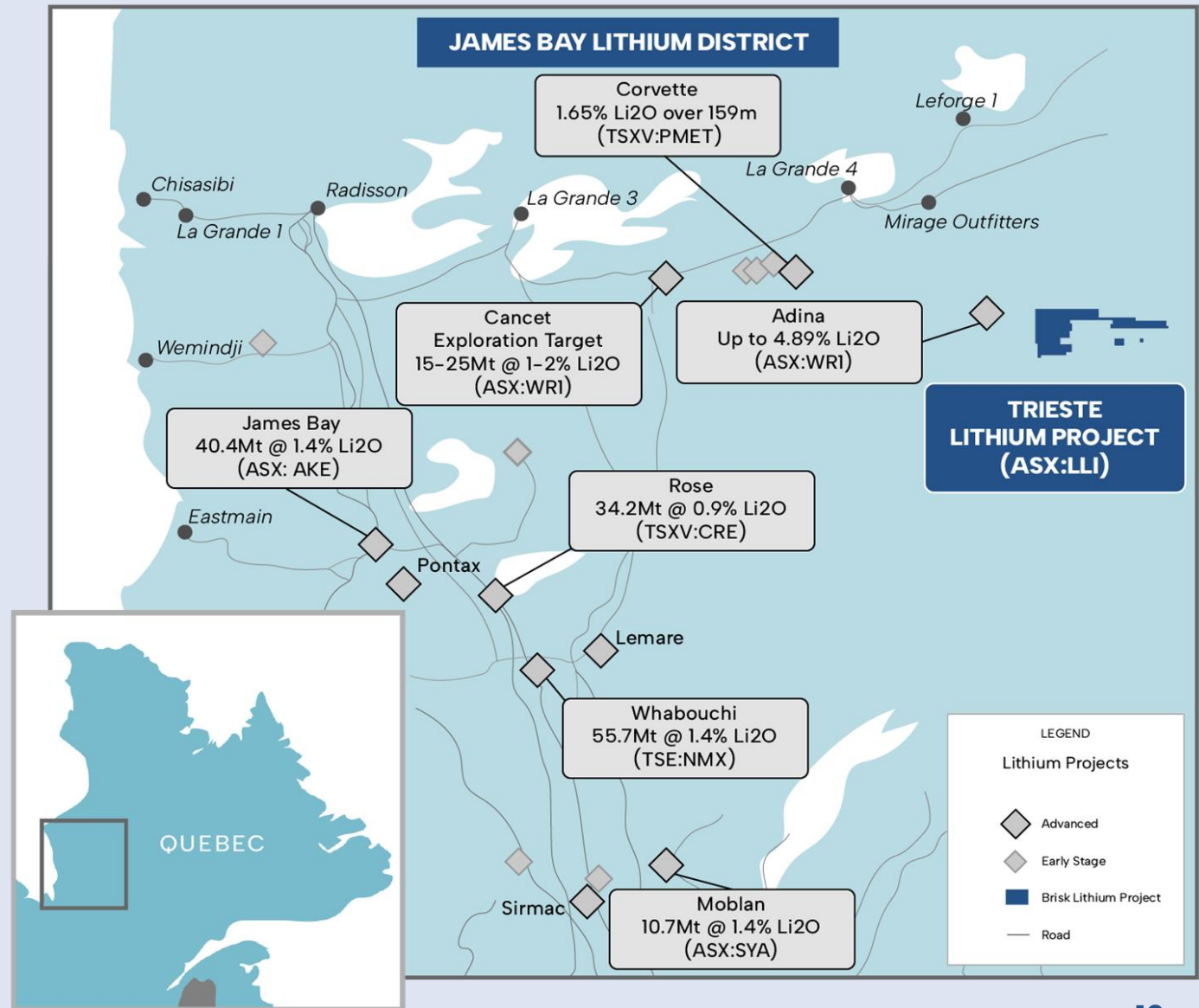
- Capital raising to raise up to a max of \$1.5m
- Satisfy Listing Rules and to demonstrate investor spread of a minimum of 300 non-affiliated shareholders
- Existing shareholder qualify
- Min of \$2,000 and a max of \$5,000 each.
- Capital Raising will be \$0.30 per share

TRIESTE LITHIUM PROJECT
JAMES BAY LITHIUM DISTRICT
QUEBEC, CANADA

TRIESTE LITHIUM PROJECT

JAMES BAY LITHIUM DISTRICT

- ✓ Drilling Success Next door at Winsome Resources' (ASX: WR1) Adina Project only 14km east along strike
- ✓ LLI is the largest land holder in the Trieste Greenstone Belt
- ✓ Extensive historical data via acquisition
- ✓ High value targets identified via multi-spectral Analysis
- ✓ 12-week Summer Field Program to Commence at Trieste in June 2023
- ✓ Pre-emptive drilling permit prepared

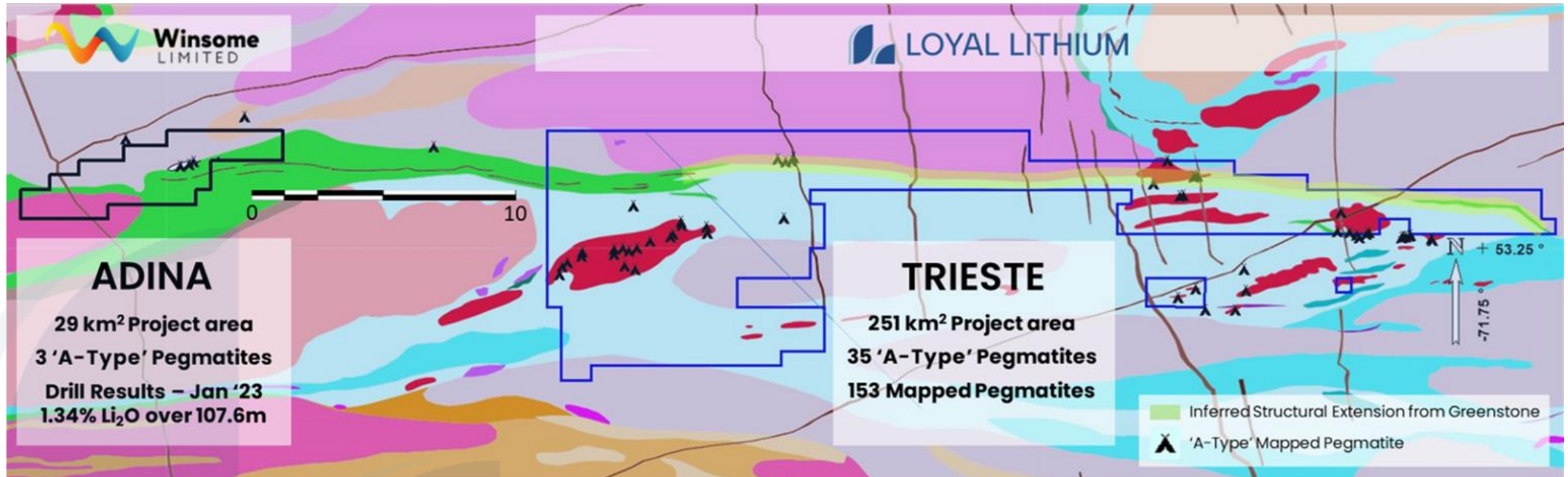


Map not to scale

TRIESTE LITHIUM PROJECT

DRILLING SUCCESS NEXT DOOR

ALL EYES ON THE TRIESTE GREENSTONE BELT



ASX Announcement – 27 March 2023

“With extensive desktop and airborne work now conducted; we are excited to get out on the ground and commence our aggressive exploration strategy.”

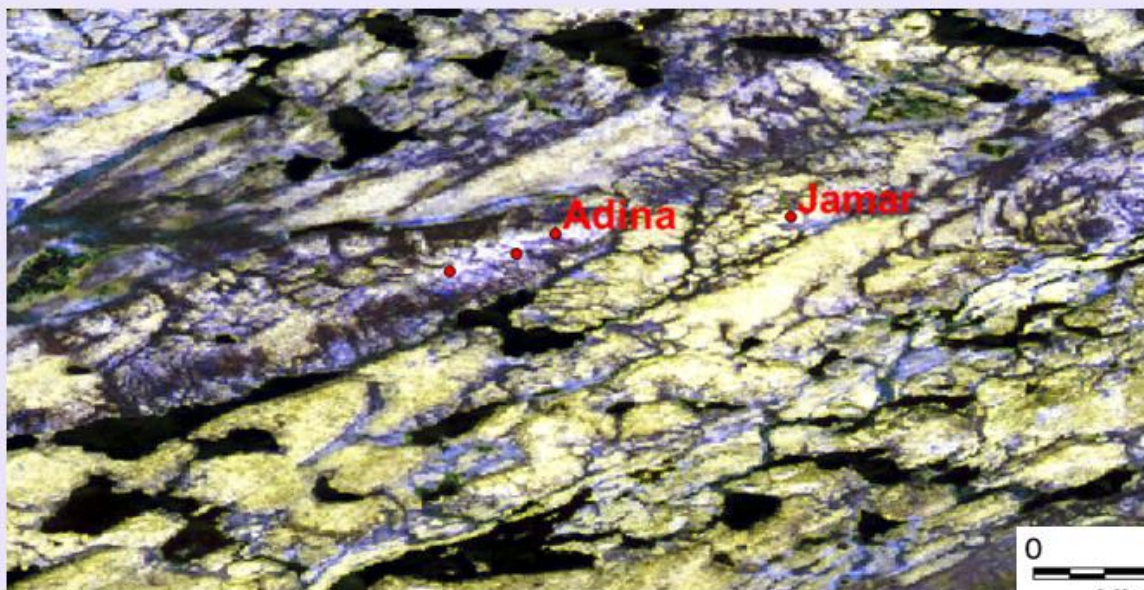
1 – Refer to 31 Sept 2022 – Winsome Resources Limited ASX Announcement entitled Exceptional High Grade Lithium Assays from Adina.
2 – Refer to 28 Oct 2022 – Winsome Resources Limited ASX Announcement Significant Pegmatite Intercept at Adina from Early Drilling.

TRIESTE LITHIUM PROJECT

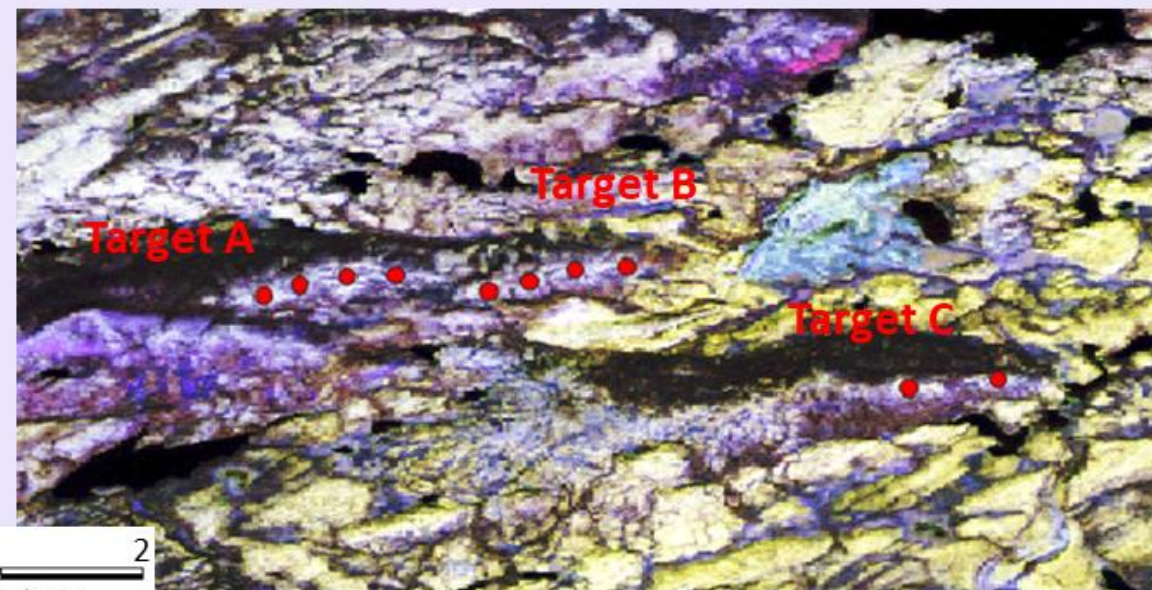
MULTIPLE HIGH VALUE TARGETS IDENTIFIED



ADINA / JAMAR



TRIESTE



Spodumene Spectral Band used

High-value targets identified correlate with known lithium-bearing pegmatites at Winsome Resources' (ASX: WR1) neighbouring Adina Lithium Project where recent drilling campaign has recorded 1.34% Li₂O over 107.6m¹.

3 distinct groupings of high-value targets

At the eastern extension of the greenstone. These targets possess discrete units of similar shape, colour, and texture as locally known lithium-bearing pegmatites.

1 - ASX Announcement WR1 dated 6th January 2023. Entitled "Strong lithium mineralisation recorded from first Adina drill hole assays."

TRIESTE LITHIUM PROJECT

WINTER WORK LEADS TO 12-WEEK FIELD PROGRAM

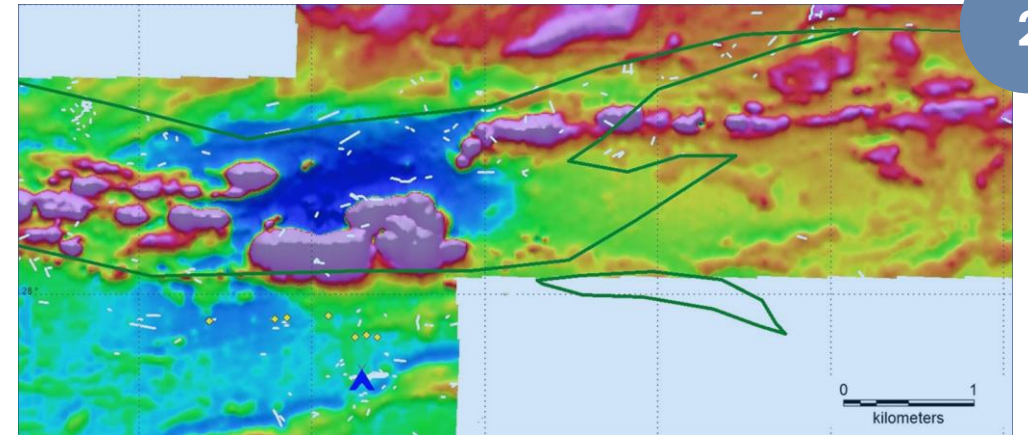
REGIONAL & LOCAL GEOLOGY REVIEW

1



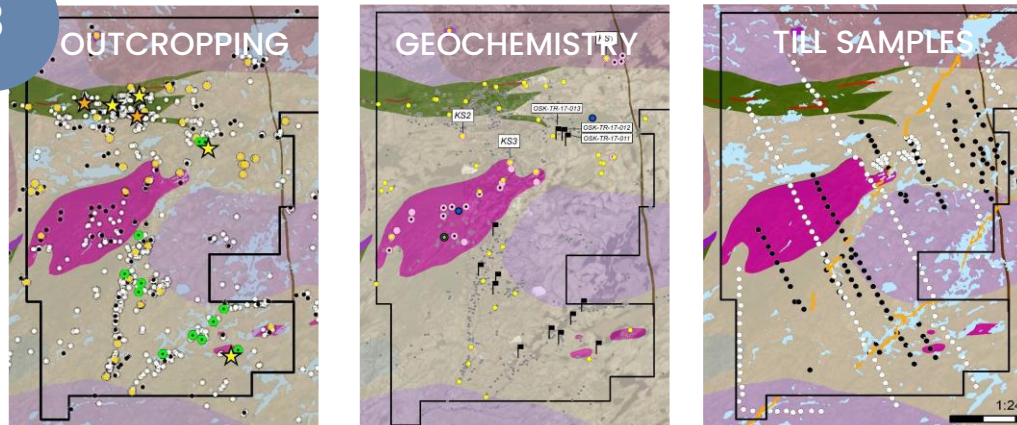
HIGH RES MAGNETIC SURVEY

2



HISTORICAL DATA REVIEW

3



MULTI SPECTRAL

4

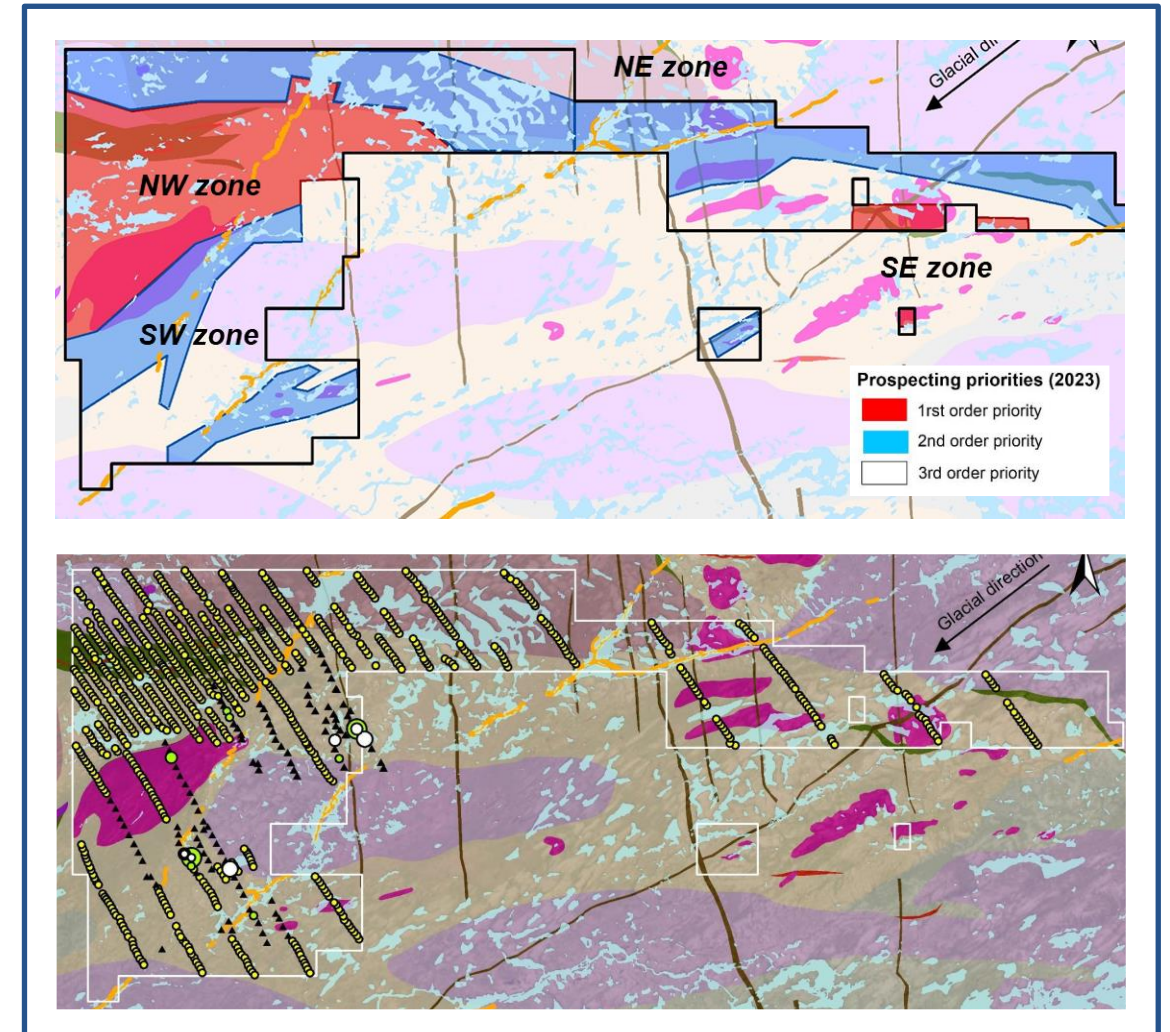


TRIESTE LITHIUM PROJECT

PRIORITISED AND COMPREHENSIVE FIELD PROGRAM PREPARED

12-WEEK PROGRAM – STARTING JUNE 2023

- High Value Zones Identified prioritised
- DGC engaged as field contractor
- 9 field staff in total secured
- Comprehensive 1,720 samples planned
 - 750 Rock chips samples
 - 970 Till samples



SCOTTY LITHIUM PROJECT NEVADA, USA



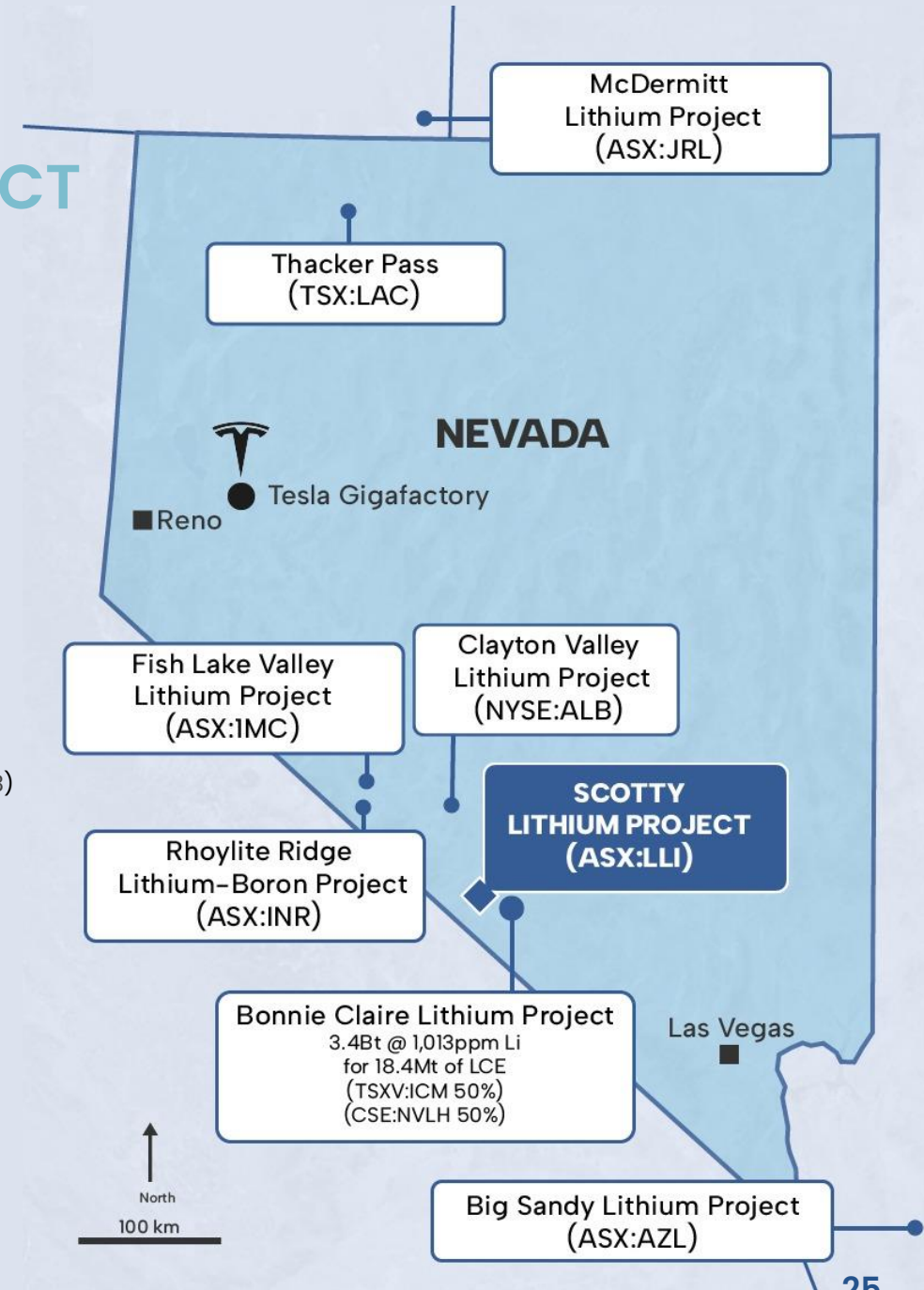
NEVADA LITHIUM IS ALIVE

PRESIDENT BIDEN'S INFLATION REDUCTION ACT

Nevada lithium is poised to be a significant part of global lithium supply, underpinned by President Biden's Inflation Reduction Act, which supports and encourages locally sourced critical minerals.

Recent regional industry catalysts include:

- Ioneer (ASX:INR) obtaining US\$700m loan from U.S. Dept of Energy to develop their Rhyolite Ridge Project in Nevada (Jan 2023)
- General Motors (GM) and Lithium Americas Corp. (NYSE: LAC) partner through US\$650m equity investment and exclusive supply agreement for the Thacker Pass Project in Nevada (Jan 2023)
- Lithium Americas Corp's Thacker Pass Project in Nevada receives favourable federal court ruling allowing construction to commence (Feb 2023)

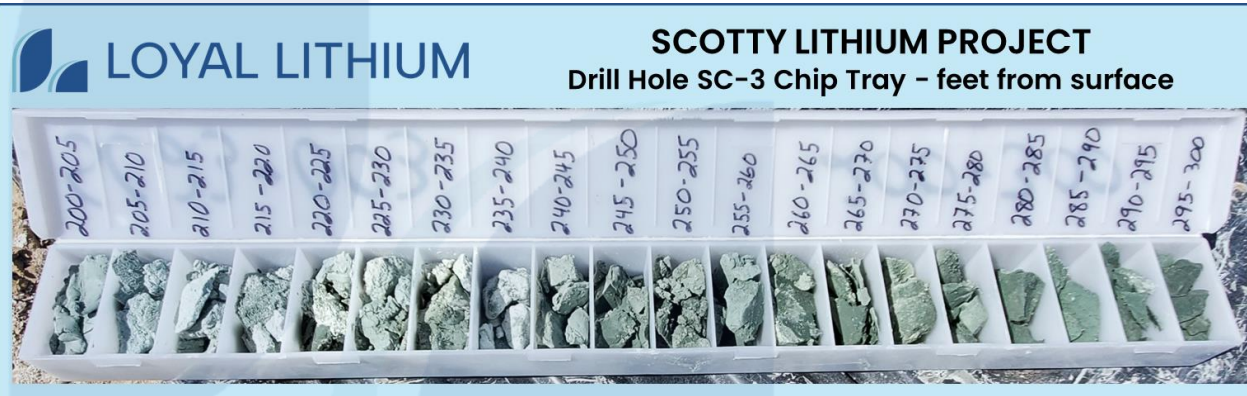


(*) See Appendix for details on Inflation Reduction Act.

SCOTTY LITHIUM PROJECT

DRILLING HAS REACHED HALFWAY

- **Consistent large intervals of sedimentary clays intersected from near surface to 170m vertical depth.**
- Drilling to date has confirmed the MT implied sediment basin in northern region.
- The sonic drill rig used has met or exceeded expectations for drilling penetration rates and has returned high-quality samples for assaying.
- Potential for a maiden JORC lithium Resource estimate, subject to assay results.
- Drilling completion expected in June 2023.



SCOTTY LITHIUM PROJECT

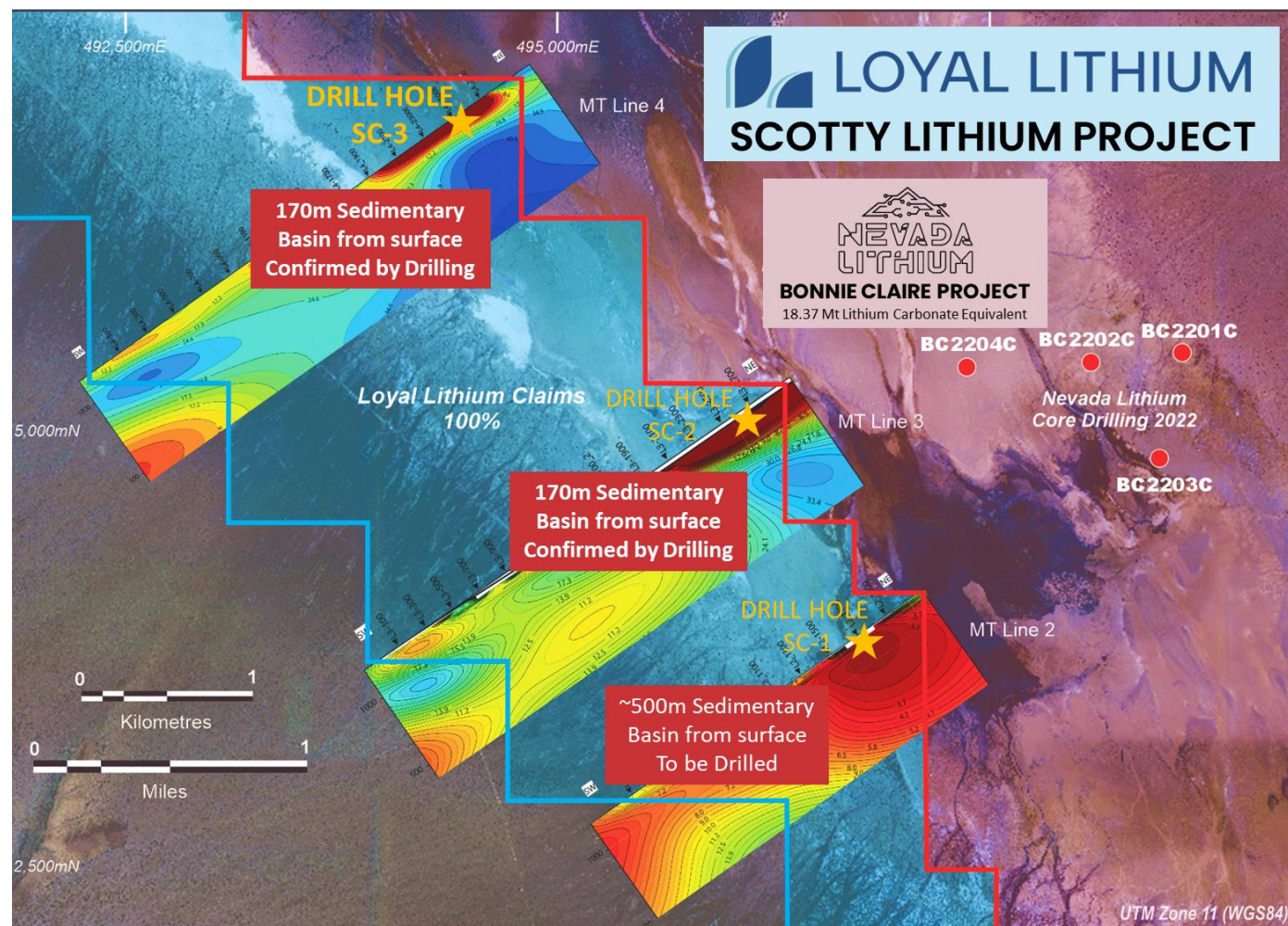
DRILLING VALIDATES MT INTERPRETATION



ASX Announcement – 20 March 2023

“If mineralised, the Target 2 sedimentary basin would indicate a significant quantity of lithium sediments. The implied basin geometry could also support traditional mining methods and we look forward to the imminent drilling campaign at the Scotty Lithium Project.”

- Prior to drilling, the MT interpretation suggested a 3.6km² sedimentary basin extending from near surface to a depth of 170 in the north and deepening to ~500m in the south¹.
- The MT inferred sedimentary basin is beneath the strong lithium-boron soils assay results to a maximum of 448ppm Lithium and 3,360ppm Boron.
- 1km west of Nevada Lithium’s (CSE: NVHL) 2022 drilling, which confirmed 2 layers of lithium mineralisation up to 5,570ppm.

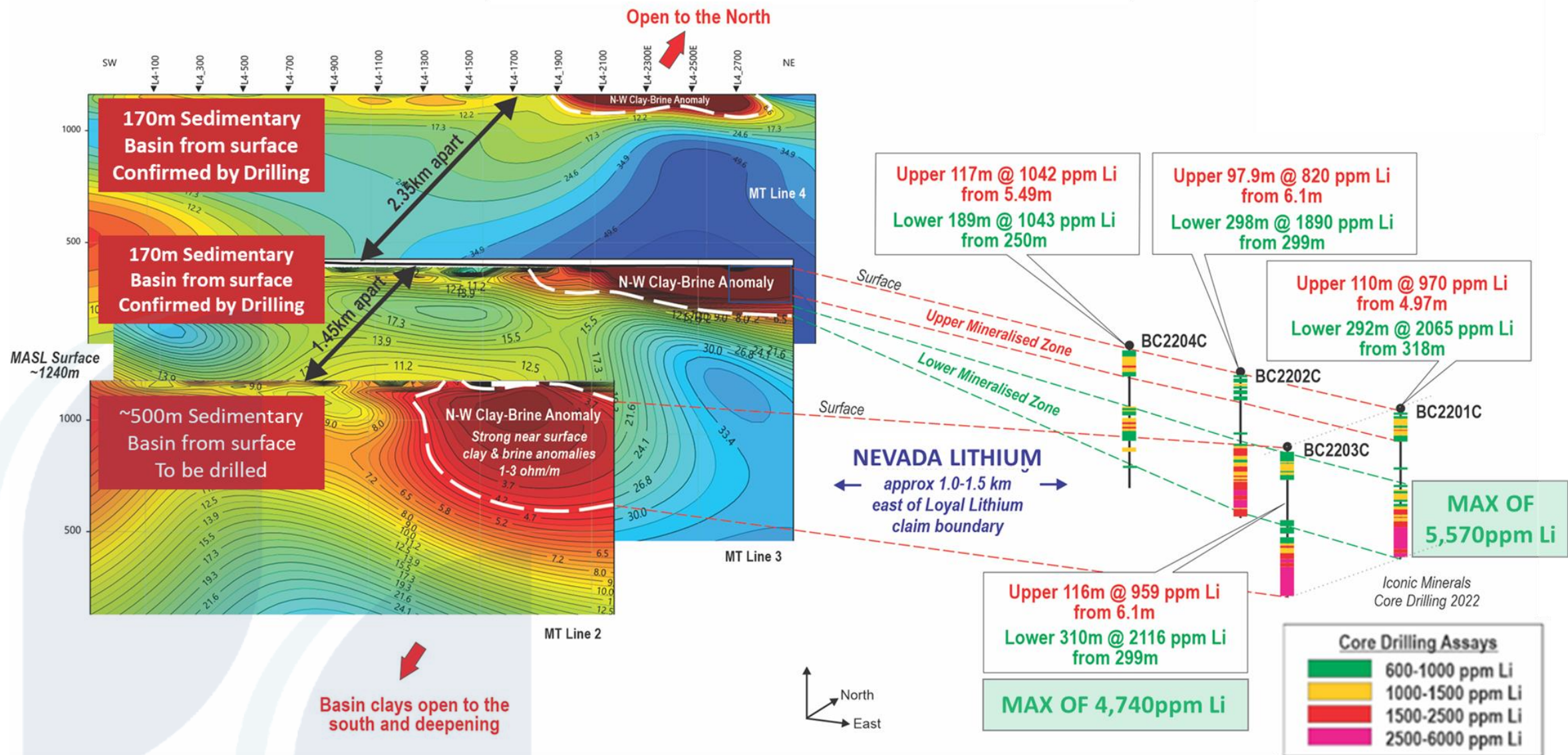


1 – ASX Announcement MMG (LL): Consistent Large Intervals of Sedimentary Clays Intersected at the 100% owned Scotty Lithium Project, Nevada, USA 8th May 2023

SCOTTY LITHIUM PROJECT



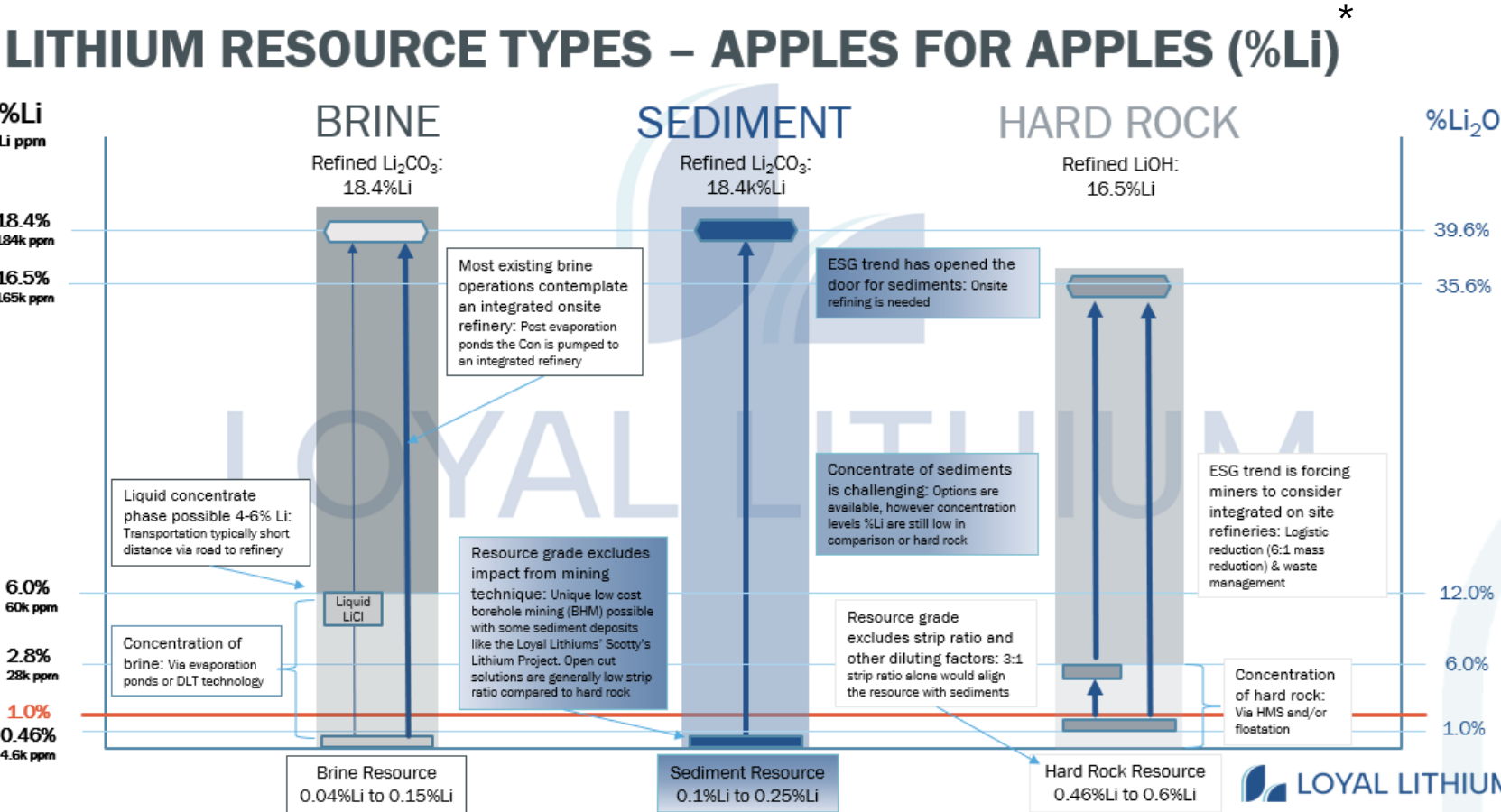
A SUBSTANTIAL SEDIMENTARY TARGET FOR LOYAL LITHIUM



Please refer to documented references for Nevada Lithium's' (Iconic Minerals) reported results.

SCOTTY LITHIUM PROJECT

SEDIMENTS ARE IN PLAY



Bonnie Claire Mineral Resource Estimate

"Bonnie Claire appears to be a new type of deposit that has lithium compounds like lithium carbonate and lithium salts deposited within the fine grain clay, silt, and sand pore space. Although most of the sediment hosted lithium in the literature occurs in clays, it does not at Bonnie Claire."

(*) See Appendix for Lithium Resource Types – Takeaways

BRISK LITHIUM PROJECT

JAMES BAY LITHIUM DISTRICT

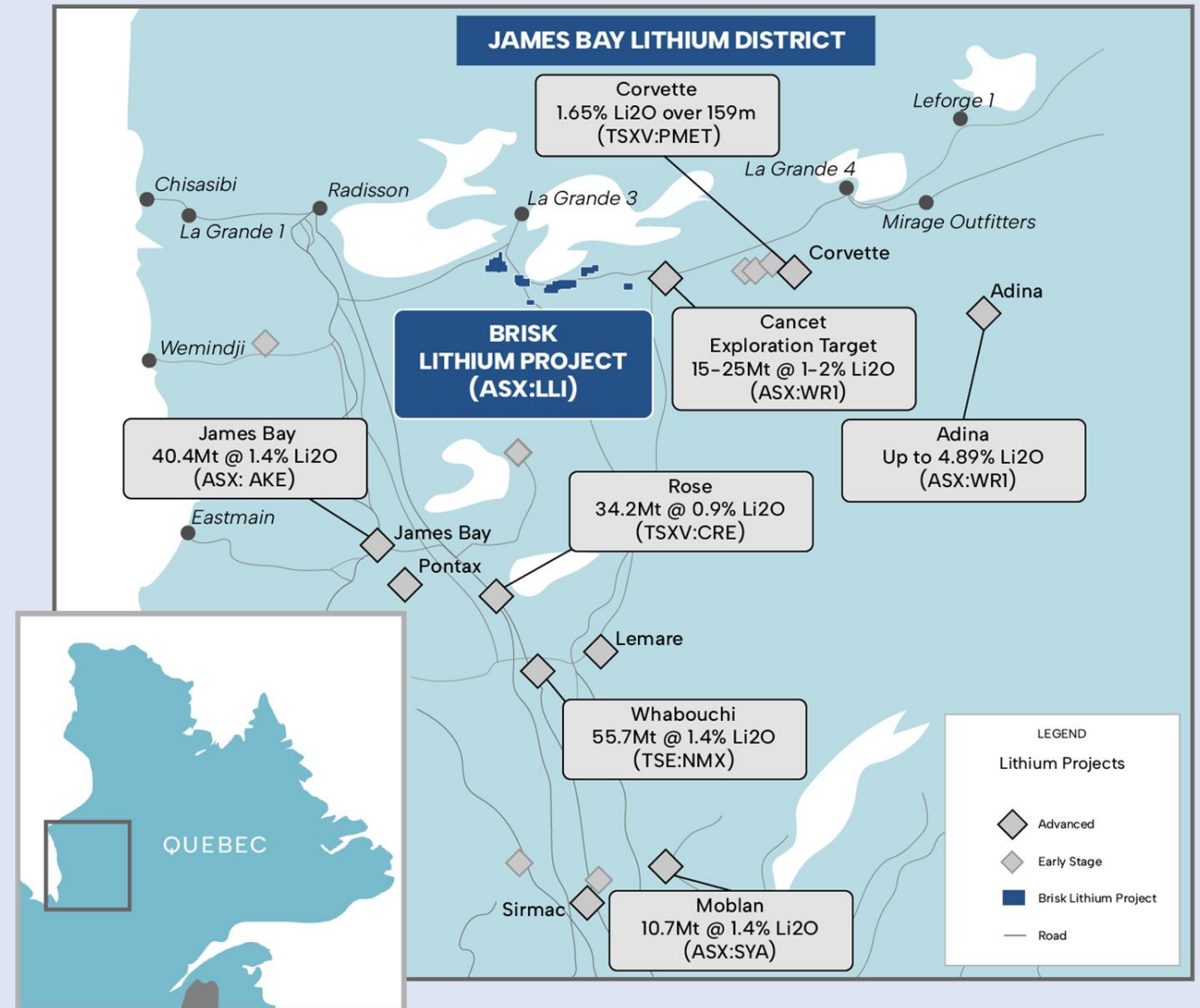
QUEBEC, CANADA

BRISK LITHIUM PROJECT

JAMES BAY LITHIUM DISTRICT

Six prospects over 98.5km² host to several known pegmatite outcrops

- ✓ **Hard Rock Capital**
(of North America)
- ✓ **In-Country Geo Partner**
(DG Resource Management)
- ✓ **Downstream Battery Corridor**
(demand at doorstep)



BRISK LITHIUM PROJECT

SIX PROSPECTS – 98.5km²



- Brisk Lithium Project is located due west of Winsome Resources' Cancet Project, on trend with Cancet and Corvette.
- Located within close proximity to the La Grande Complex (hydroelectric) and associated infrastructure, including the all-weather Trans-Taiga road.



0 Kilometres 25

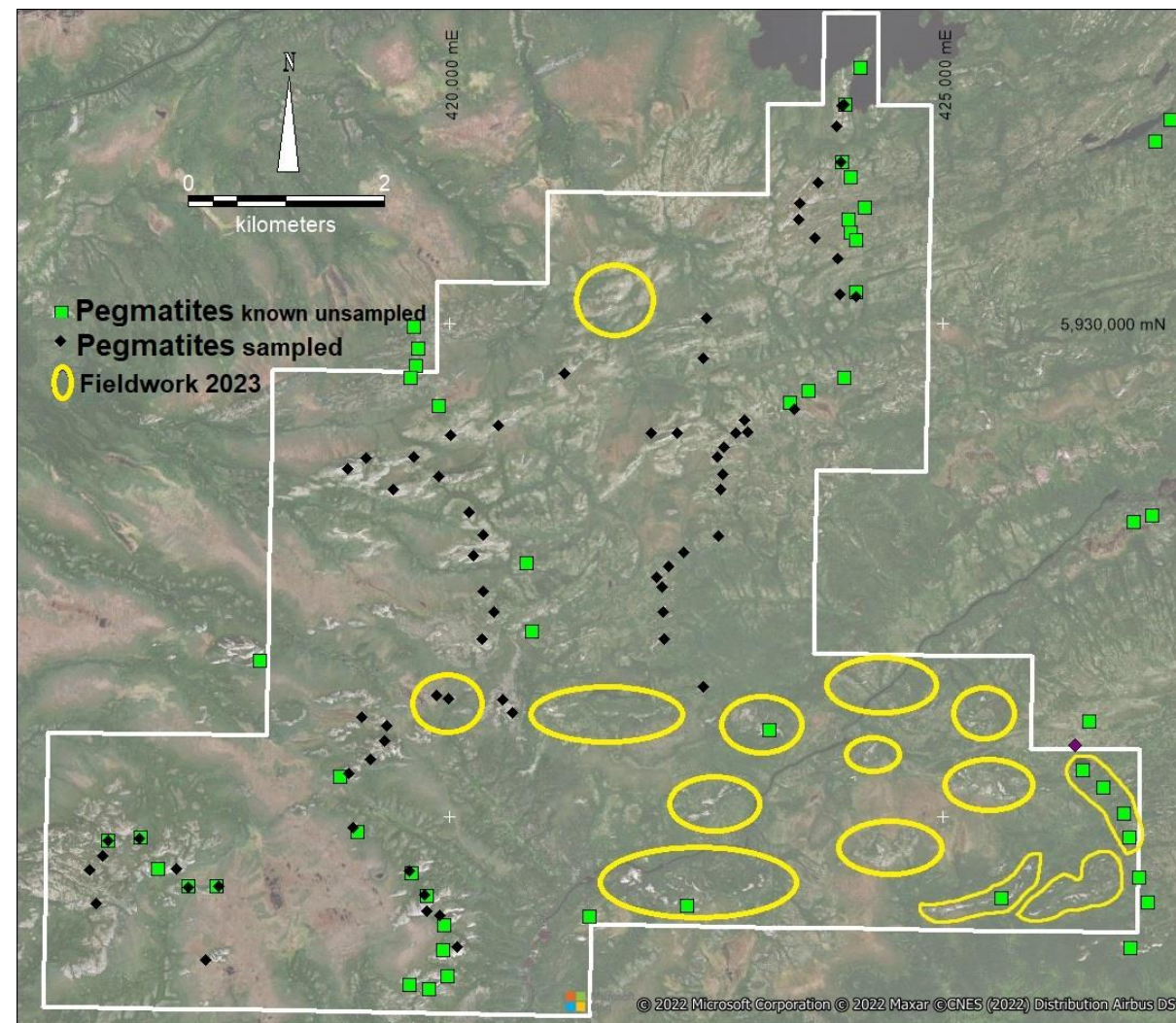
BRISK LITHIUM PROJECT

INAUGURAL EXPLORATION PROGRAM

One day was assigned to each of the 6 areas to traverse the initially identified targets on foot, collect rock chips (every ~1km) and conduct a high-level geological assessment

Highlights

- More pegmatite outcrops than originally anticipated at Area 1
- Area 1 & Area 2 considered prospective for lithium, with further field work recommended
- Multiple samples containing highly fractionated pegmatites with indicator mineralogy (anomalous Lithium, Tantalum, Niobium, Beryllium and Bismuth)



BRISK LITHIUM PROJECT

2023 WORK PLAN DETERMINED

Complete field mapping in Areas 1, 2 & 3

- Conduct field mapping programs on the southeast of Area 1 and prospective portions of Areas 2 and Area 3 that were not covered in the 6-day inaugural field program

Area 1 additional detailed field traverses

- With the support of the inaugural field program geochemical results, additional traverses will be planned for the most prospective pegmatites



CONTACT



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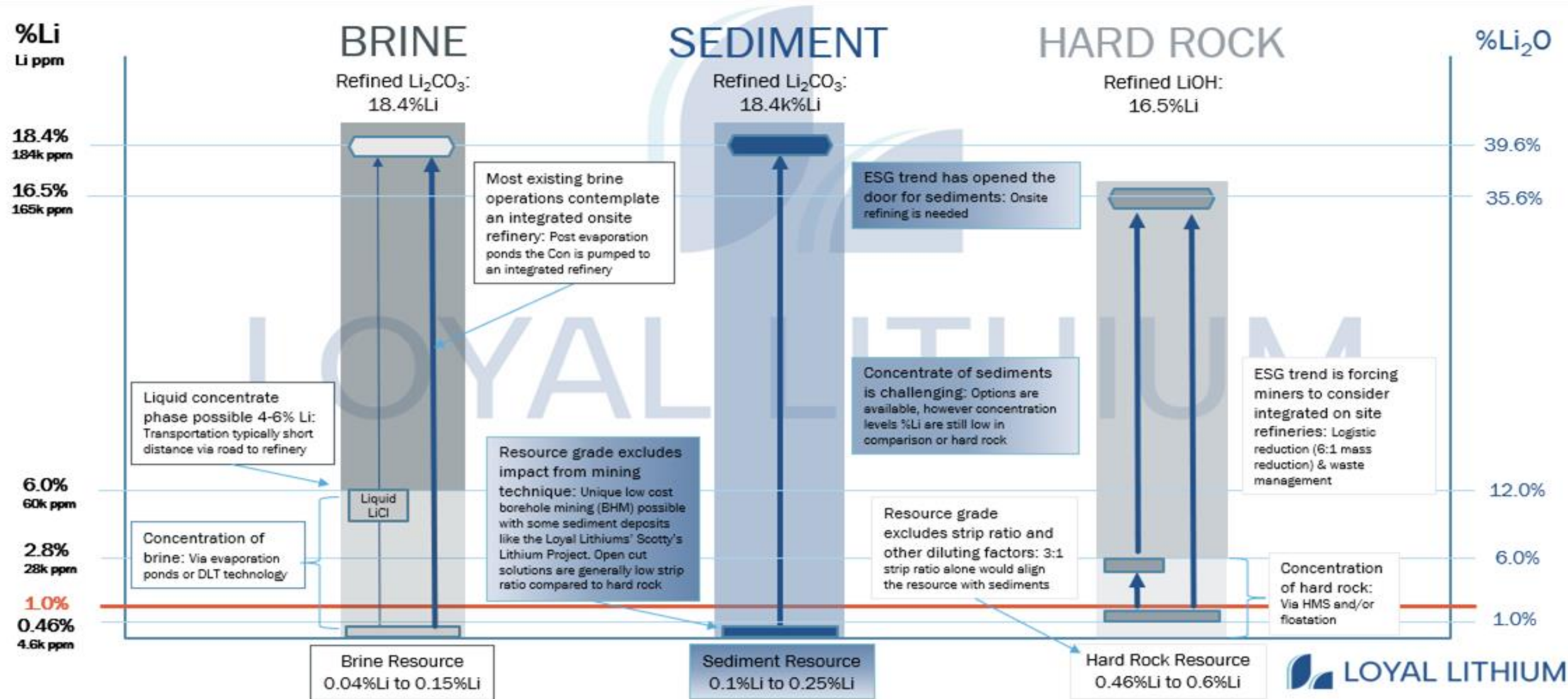
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APPENDIX

LITHIUM RESOURCE TYPES – APPLES FOR APPLES (%Li)



APPENDIX

LITHIUM RESOURCE TYPES – TAKE AWAYS

Apples for Apples



Lithium resources are often quoted with different metrics, due to the differing in-situ forms:

- Brine = %Li or ppm
- Sediment = %Li or ppm
- Hard Rock = %Li₂O

%Li is 46% of the quoted %Li₂O (Lithium Oxide) .

Further consideration must be given to the mining, concentration and extraction technique. E.g. strip ratio, ore dilution and recoveries.

All Low In-situ %Li



The 3 main lithium resource types are created by magma formations – directly or indirectly.

The level of magma exposure has defined the resource type and in turn the level of energy and process complexity to extract the lithium.

Regardless, all resource types have very low in-situ grades (all below 1% Li) and therefore require refining in order to satisfy the market.

Each resource type has unique mining and refining pros and cons

All 3 are in Play



Recent market trends puts all resource types into play:

- Demand is strong: Forecast to continue.
- Investment appetite is growing: Large scale integrated projects now palatable.
- ESG Focus: Low energy processes, low impact mining, reduced logistics, waste management.
- Geopolitical: Regional bias – recently US legislation enforces a minimum level of locally sourced raw materials within the North American U.S battery supply chain.

APPENDIX

FAVOURABLE HOST ROCK CONDITIONS

The Archean Age 2640–2660Ma

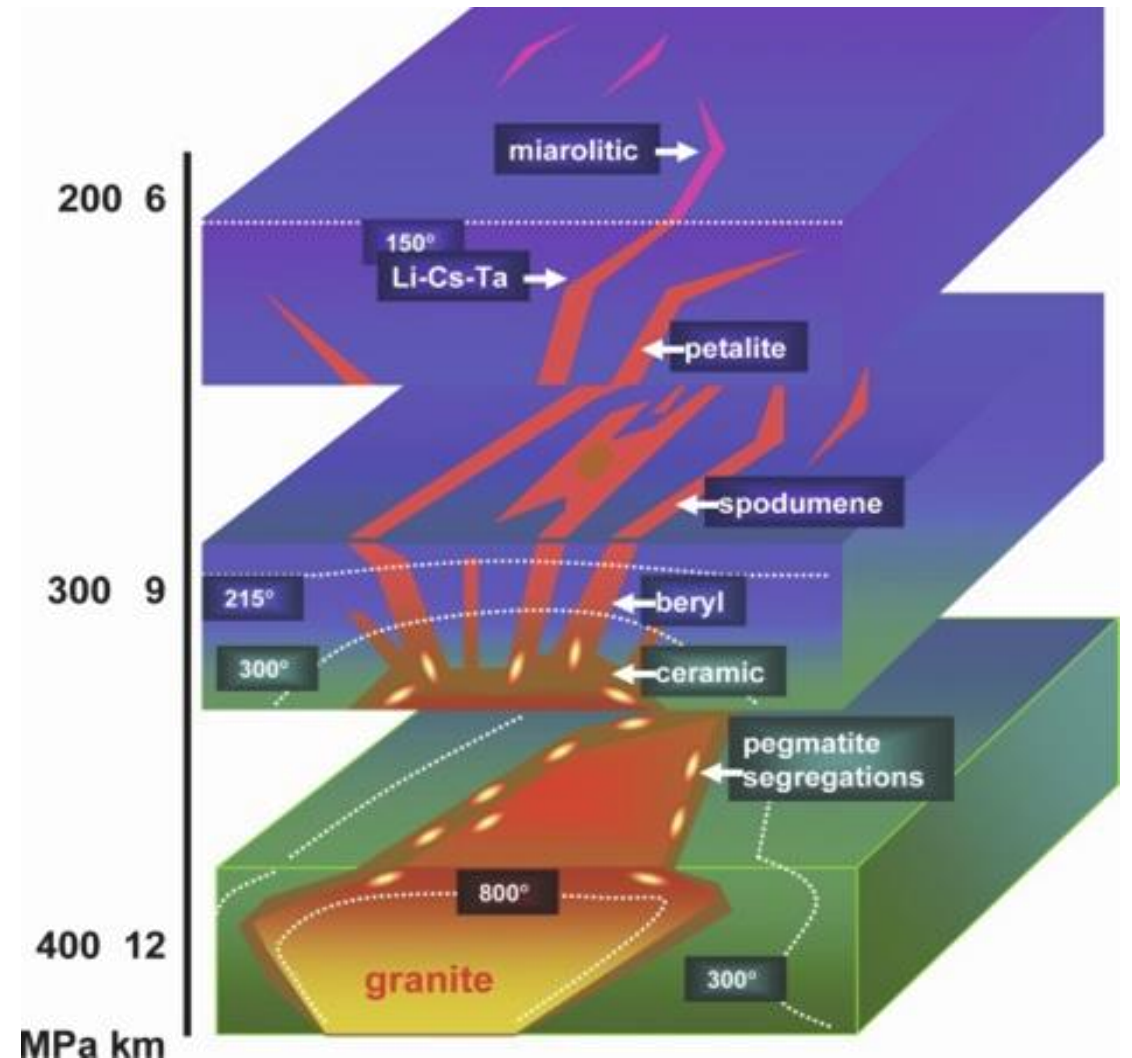
The Creation of Pegmatites

Brisk has 2687/2690Ma host rocks. The intrusions where pegmatites are derived take 10s Ma to solidify allowing enough time for incompatible elements, like Lithium, to concentrate and migrate into intrusions.

Tectonic Intrusions

Pegmatites flow into the gaps

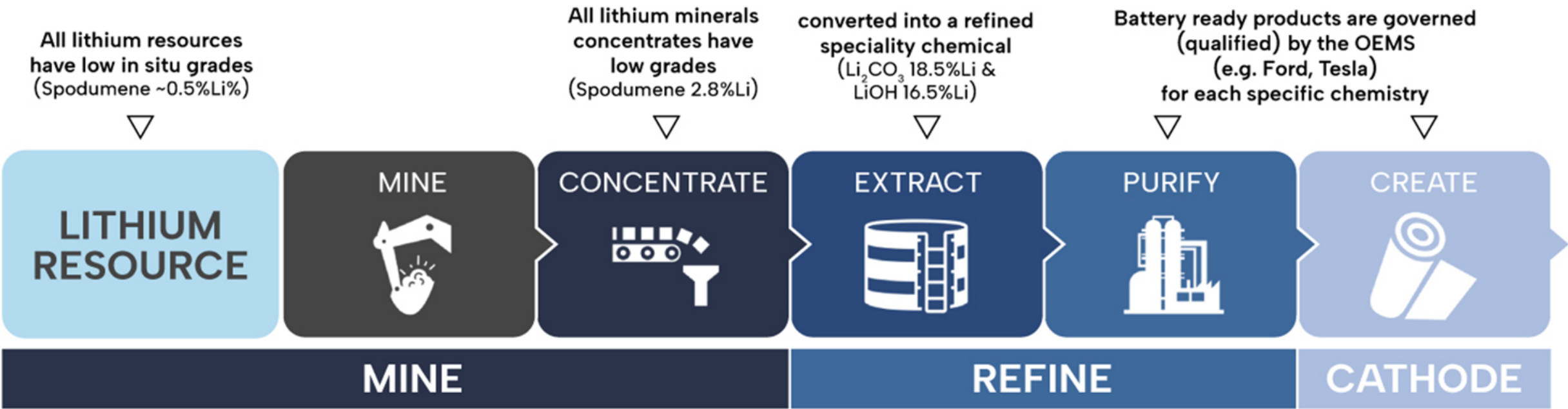
Brisk has many occurrences of complex multiple intrusions which could support the concentration of incompatible elements like Lithium. Pegmatites form late in tectonic history and exploit pre-existing structures i.e they get squeezed into cracks over time.



APPENDIX

LITHIUM SUPPLY CHAIN: WE KNOW IT AND KNOW WHERE TO DRAW THE LINE

Our aim is to capture as much value as possible without meddling with the evolving OEM specifications (purity and cathode chemistry)



Lithium is a technical mineral and the supply chain is unoptimised but evolving:

Current players, processes and economics must be considered against a backdrop of history, ESG trends and emerging technology.

Currently refineries produce battery grade purity. Emerging trend is a midstream product – high concentration but lower purity level.

The Inflation Reduction Act conditions the two-part credits on a certain percentage of materials used in a vehicle's batteries being extracted, processed, manufactured and/or assembled in the US or in certain US-allied countries for example Australia & Canada.

- To qualify for the first \$3,750 credit, a percentage of the value of applicable critical minerals contained in a vehicle's batteries must be extracted or processed in the US or in a country with which the US has a free trade agreement or must have been recycled in North America. Applicable percentages increase from 40 percent prior to 2024, to 80 percent after 2026. Qualifying critical minerals include aluminium, cobalt, lithium, nickel, and graphite, among others.
- To qualify for the second \$3,750 credit, a certain percentage of the value of the battery components in an EV must be manufactured or assembled in North America; applicable percentages increase from 50 percent prior to 2024 to 100 percent after 2028.
- Further, after calendar year 2024, a clean vehicle will not qualify for the tax credit if it contains any critical minerals that were "extracted, processed, or recycled by a foreign entity of concern" – including companies owned by, controlled by or subject to the jurisdiction of the government of the People's Republic of China.
- After December 31, 2023, a vehicle may not qualify for the credit if any "components" contained in its battery are "manufactured or assembled by a foreign entity of concern".

APPENDIX

IN COUNTRY GEOLOGICAL PARTNERS



DG Resource Management are geological project generators with a unique perspective on mineral exploration that has resulted in numerous grass roots discoveries across multiple commodities, including lithium, REE's, uranium and specialty metals.

DG Resource Management identified, acquired and vended the potentially world-class Corvette Lithium Project for Patriot Battery Metals.

The Brisk Lithium Project was generated using similar methods which led to the identification of the Corvette Project.

