



Critical Resources for Tomorrow

Investor Presentation

May 2024

Disclaimer



The material in this presentation has been prepared by Loyal Lithium Ltd ("Loyal Lithium") and is general background information about Loyal Lithium's activities current as at the date of this presentation. This information is given in summary form and does not purport to be complete. Information in this presentation, including forecast financial information, should not be considered as advice or a recommendation to investors or potential investors in relation to holding, purchasing or selling securities or other financial products or instruments and does not take into account your particular investment objectives, financial situation or needs.

Before acting on any information you should consider the appropriateness of the information having regard to these matters, any relevant offer document and in particular, you should seek independent financial advice. All securities and financial product or instrument transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments and, in international transactions, currency risk.

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 Limited.



**Life's better
with Lithium.**

North American Lithium Opportunity

The Lithium-Ion battery has the highest energy density with battery technology continuing to advance.

Over 400 million registered vehicles in North America - a percentage will transition to Electric Vehicles (EV).

Spodumene is the king of Lithium Natural Resources:

- Spodumene Concentrate represents >50% global supply
- Strong Investment support as it decouples mining from refining
- Traditional mining and processing techniques used

Our Mission & Vision



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



Adam Ritchie
Managing Director



"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."

Our Lithium Portfolio

North American Focussed

 Loyal lithium

Hidden Lake Lithium Project
NWT, Canada

2

Canadian Spodumene

Trieste Lithium Project
Quebec, Canada

1

Scotty Lithium Project
Nevada, USA

3

ASX **LLI**

Corporate Overview

Strong Position to Drive Forward

 **Loyal**lithium

Shares on Issue

102.7M

Share Price

26.5⁽¹⁾c

Market Cap

27.2M

Cash & Credits

5.0M⁽²⁾

Debt

Nil

Enterprise Value

22.2M

Loyal Lithium Limited

ASX LLI

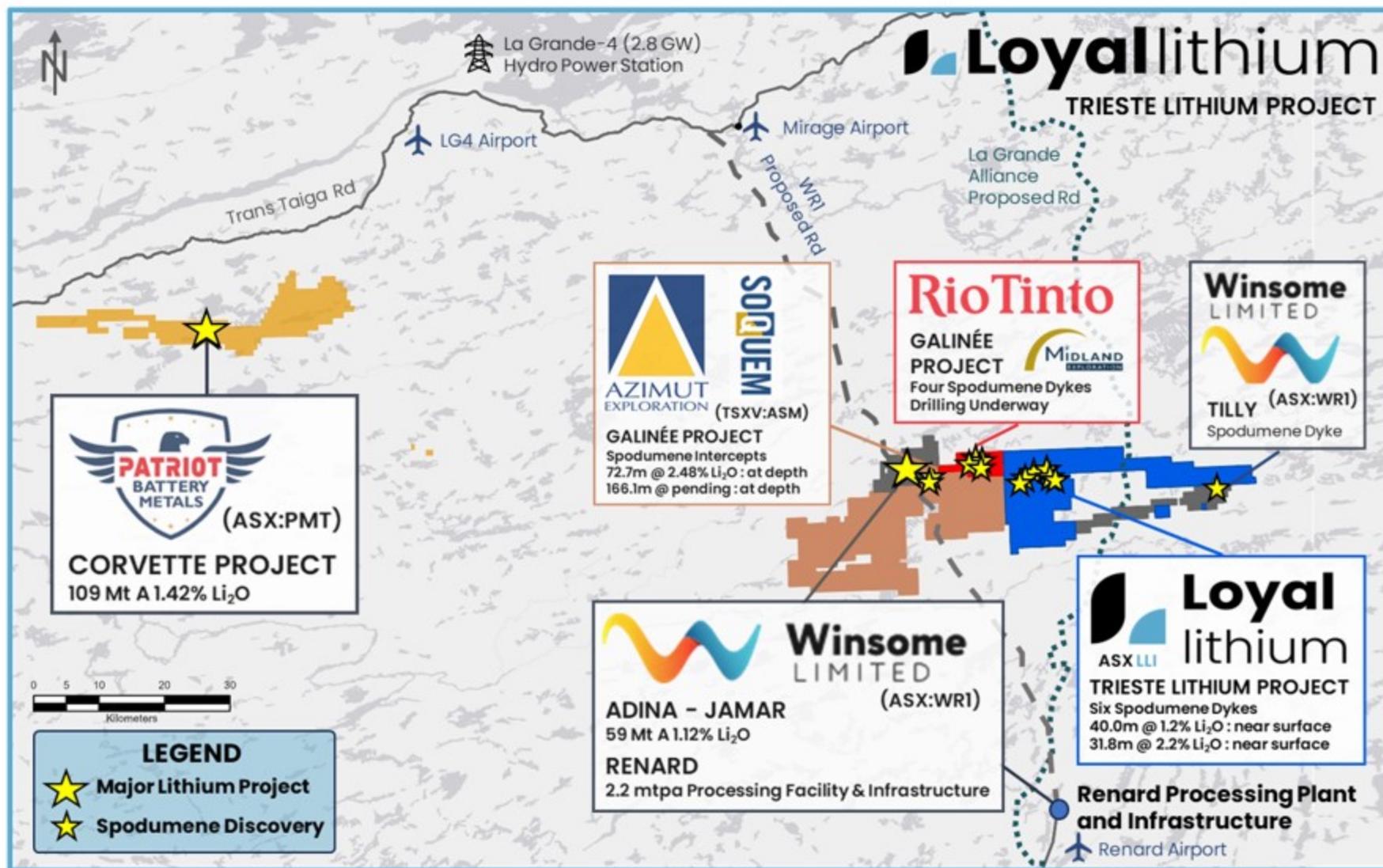


Trieste Lithium Project

James Bay Lithium District
Quebec, Canada

Trieste Lithium Project

James Bay Lithium District



Collaborative Approach

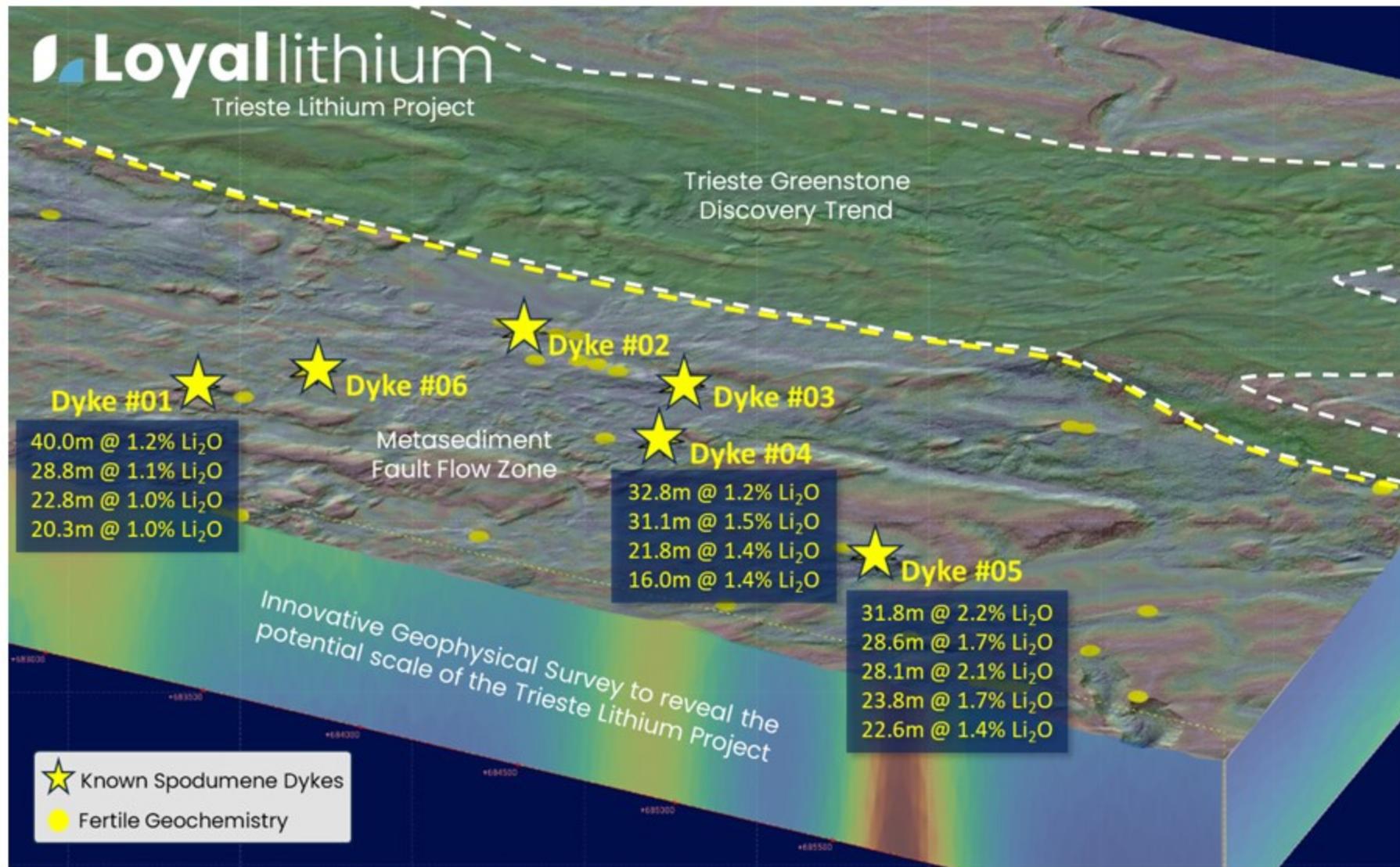
“The Trieste Greenstone Belt is taking shape and with the acquisition of the Renard processing facility and infrastructure by Winsome Resources there is now a clear path forward.”

“Our collaboration MOU with Winsome Resources demonstrates our combined commitment to establishing the region as a premier Lithium hub.”

Adam Ritchie
 Managing Director
 Loyal Lithium Limited

Trieste Lithium Project

All Eyes On The Trieste Lithium Project



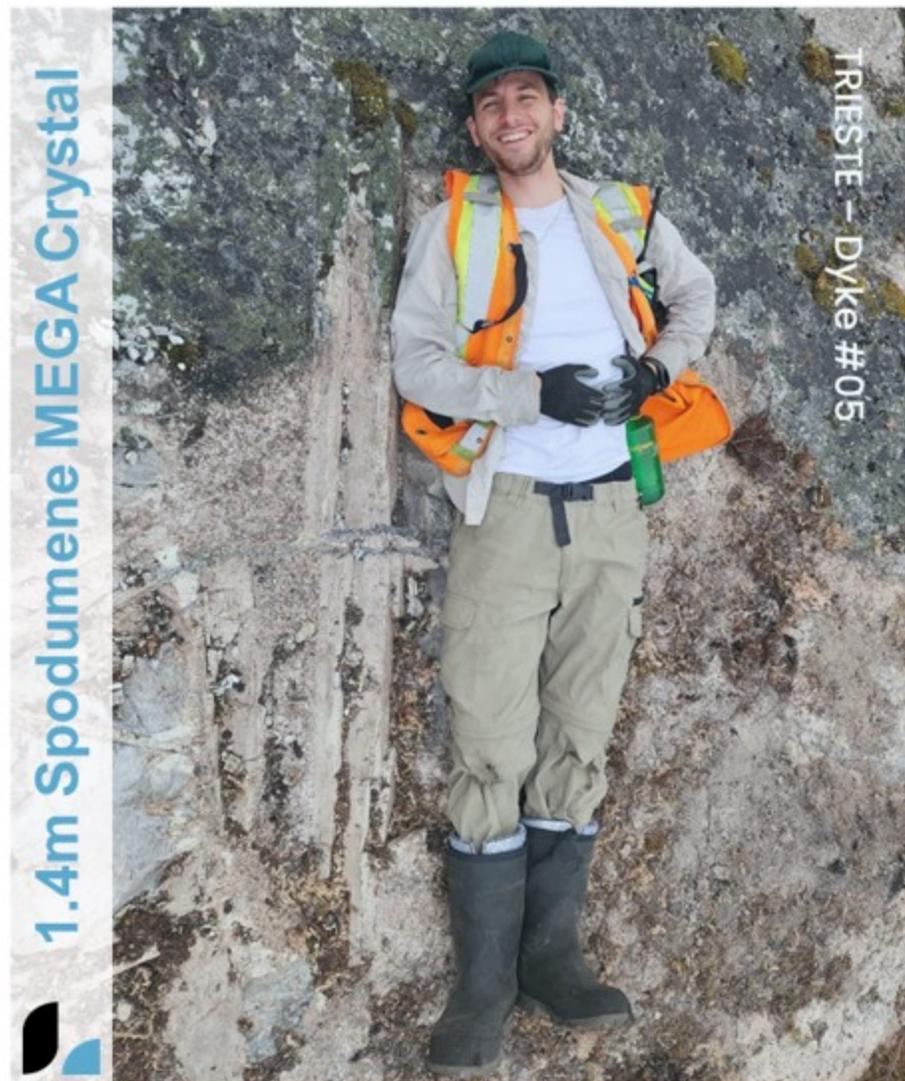
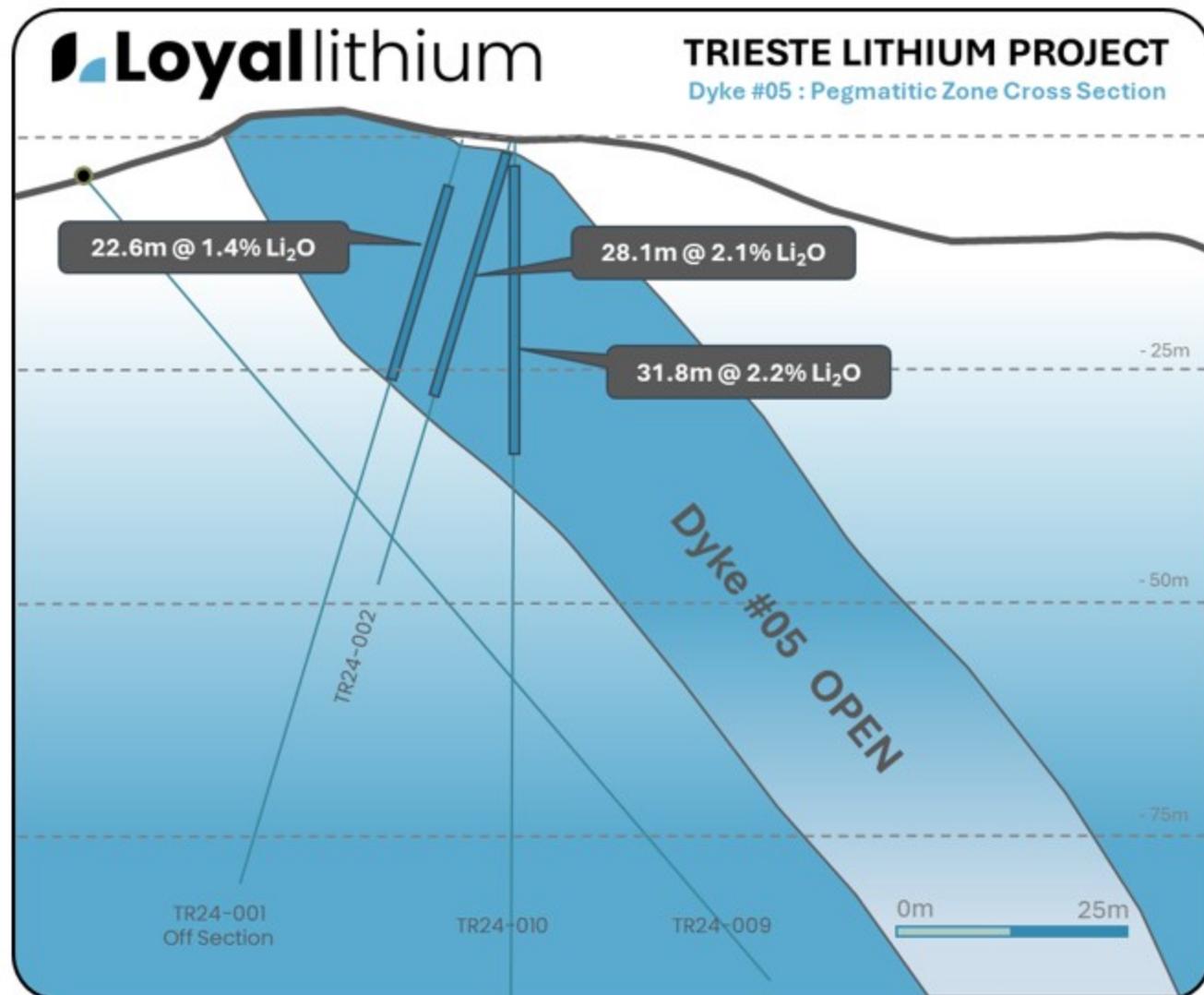
Drilling Success

Additional Discoveries Likely

An innovative geophysical survey is planned for June to generate a detailed 3D model that will reveal Trieste's potential scale and generate surface and subsurface drilling targets, in addition to the three known spodumene dykes (2, 3, 6) yet to be drill tested.

Trieste Lithium Project

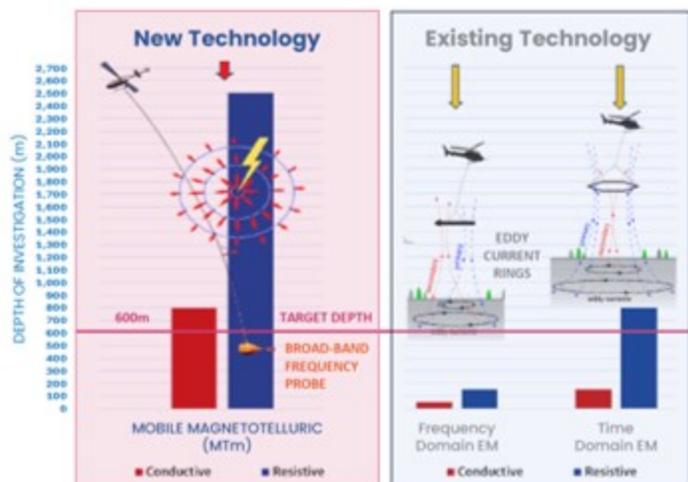
World Class Mineralisation from Near Surface



Trieste Lithium Project

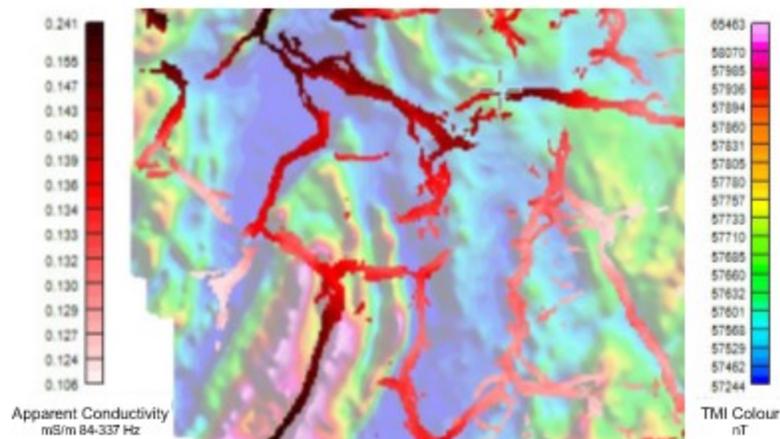
Geophysical Survey Enhanced by Unique Metasediment Geology

MOBILE MTm DIFFERENCE

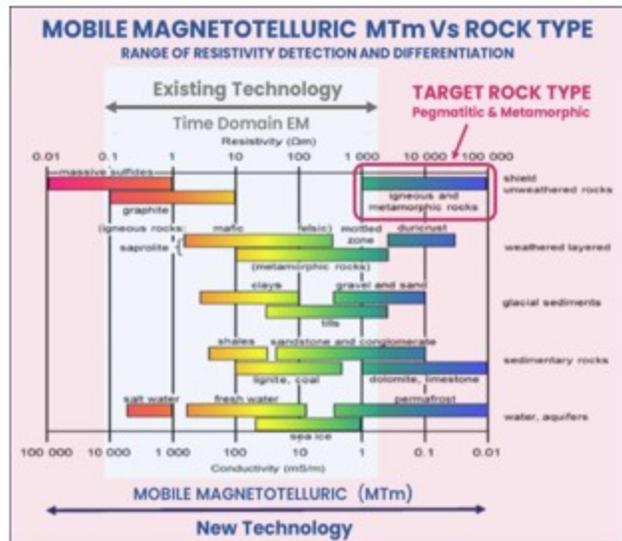
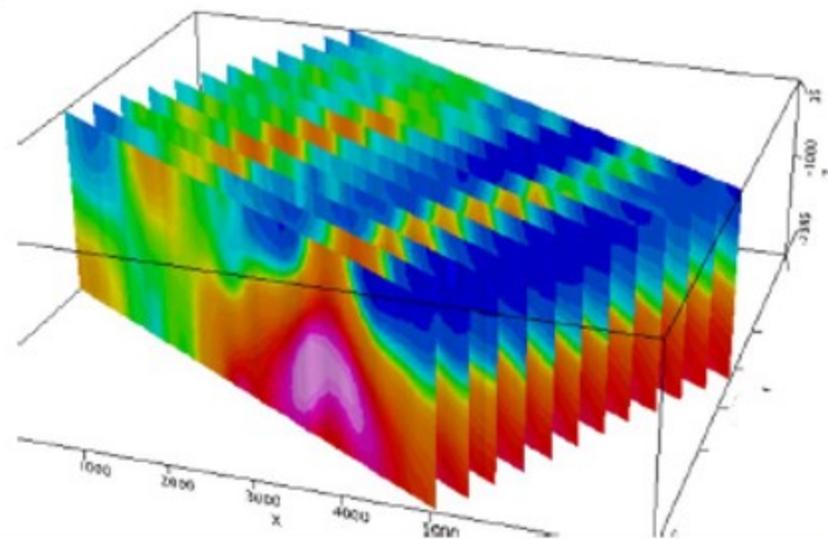


REAL WORLD EXAMPLES

Conductive Structural Features Revealed Within Magnetic Signature



The geophysical survey is expected to reveal conductive and contrasting structural features within Trieste's unique 20km² Metasediment Fault Flow Zone, in which the six prominent spodumene bearing pegmatite dykes have been discovered.

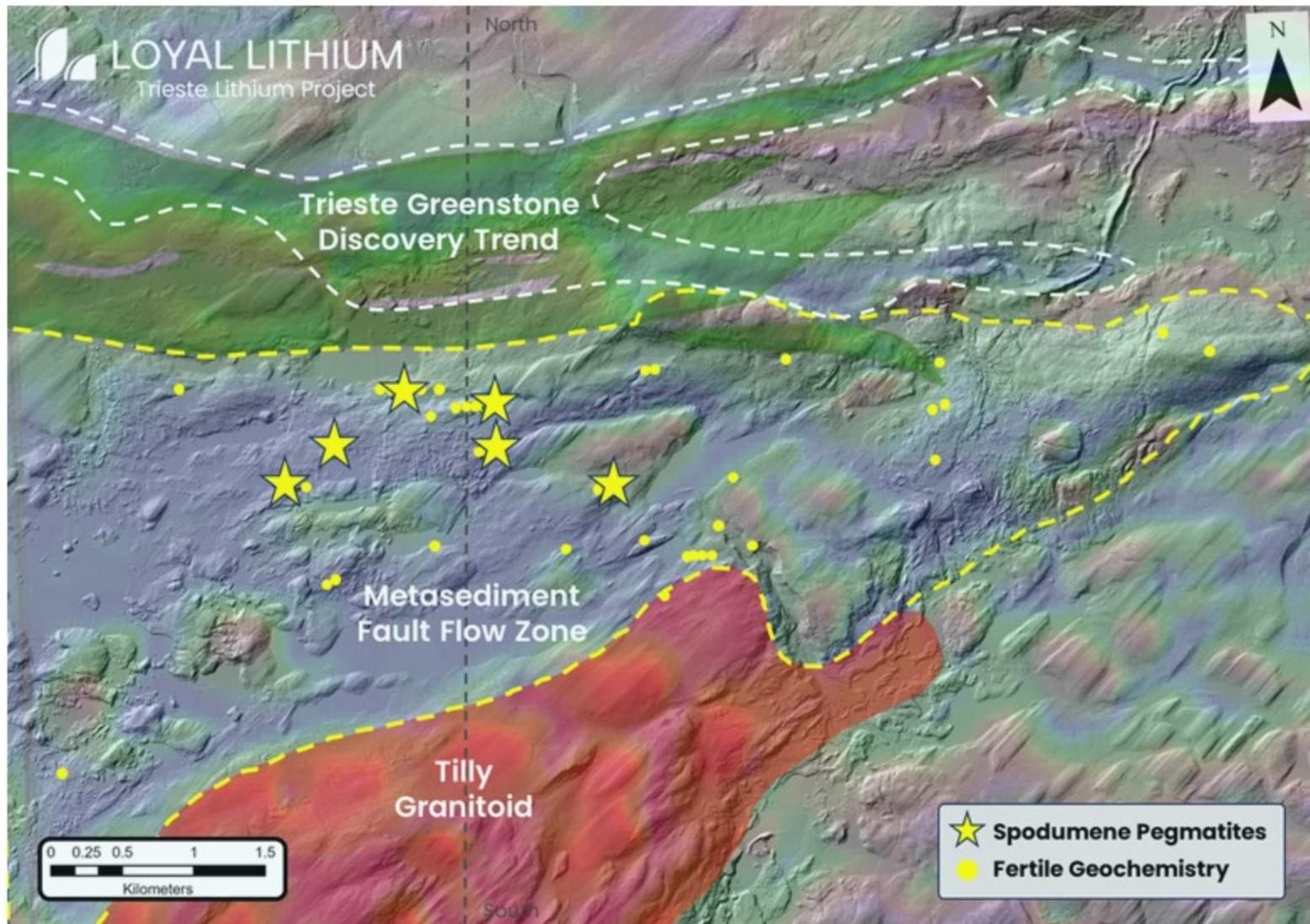


Rock Type Resistivity Discrimination

Multi sensor data analysis is anticipated to generate a detailed 3D model that will generate surface and subsurface drilling targets to complement the existing high-grade lithium assays from completed drill holes.

Trieste Lithium Project

Two Highly Prospective Areas are Underexplored



Fertile Geochemistry Along Heavily Vegetated East-West Trends

To date, six spodumene bearing pegmatite dykes have been discovered within a 20km² Metasediment Fault Flow Zone with drilling results to date confirming a major lithium Spodumene discovery at Trieste.

Additional discoveries are likely within two highly perspective areas - the underexplored Trieste Greenstone Discovery Trend and the Metasediment Fault Flow Zone, which is located south of the Trieste Greenstone Belt.

ASX LLI



Hidden Lake Lithium Project

Yellowknife Lithium Belt
Northwest Territories, Canada

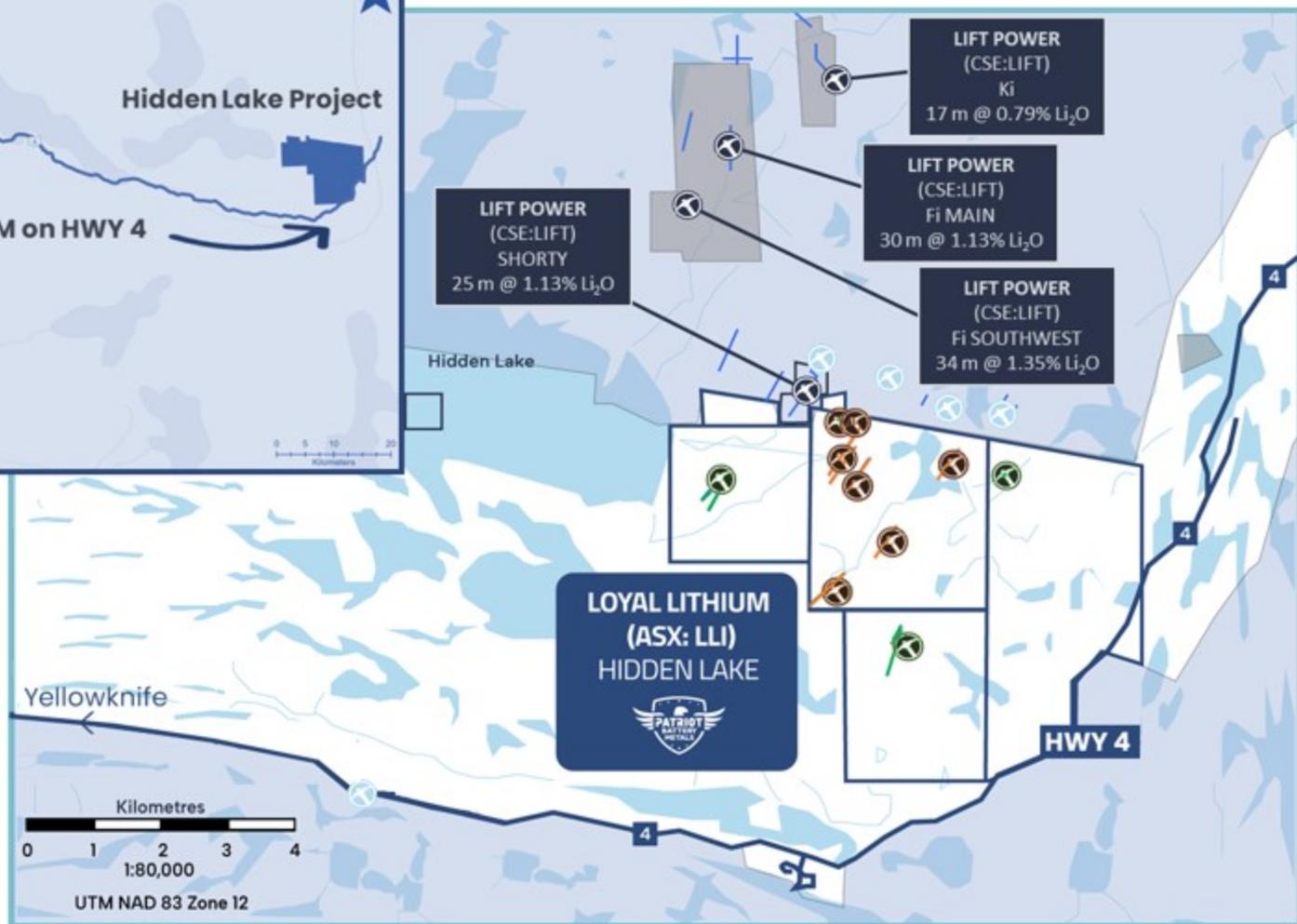
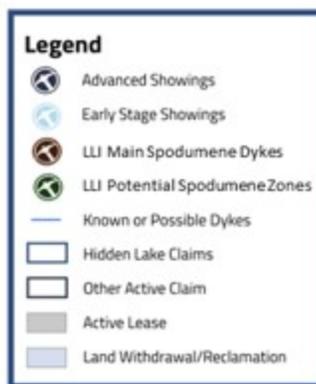
Hidden Lake Lithium Project

We Love It – Under Explored Yet Understood



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

Adam Ritchie
Managing Director
Loyal Lithium Limited

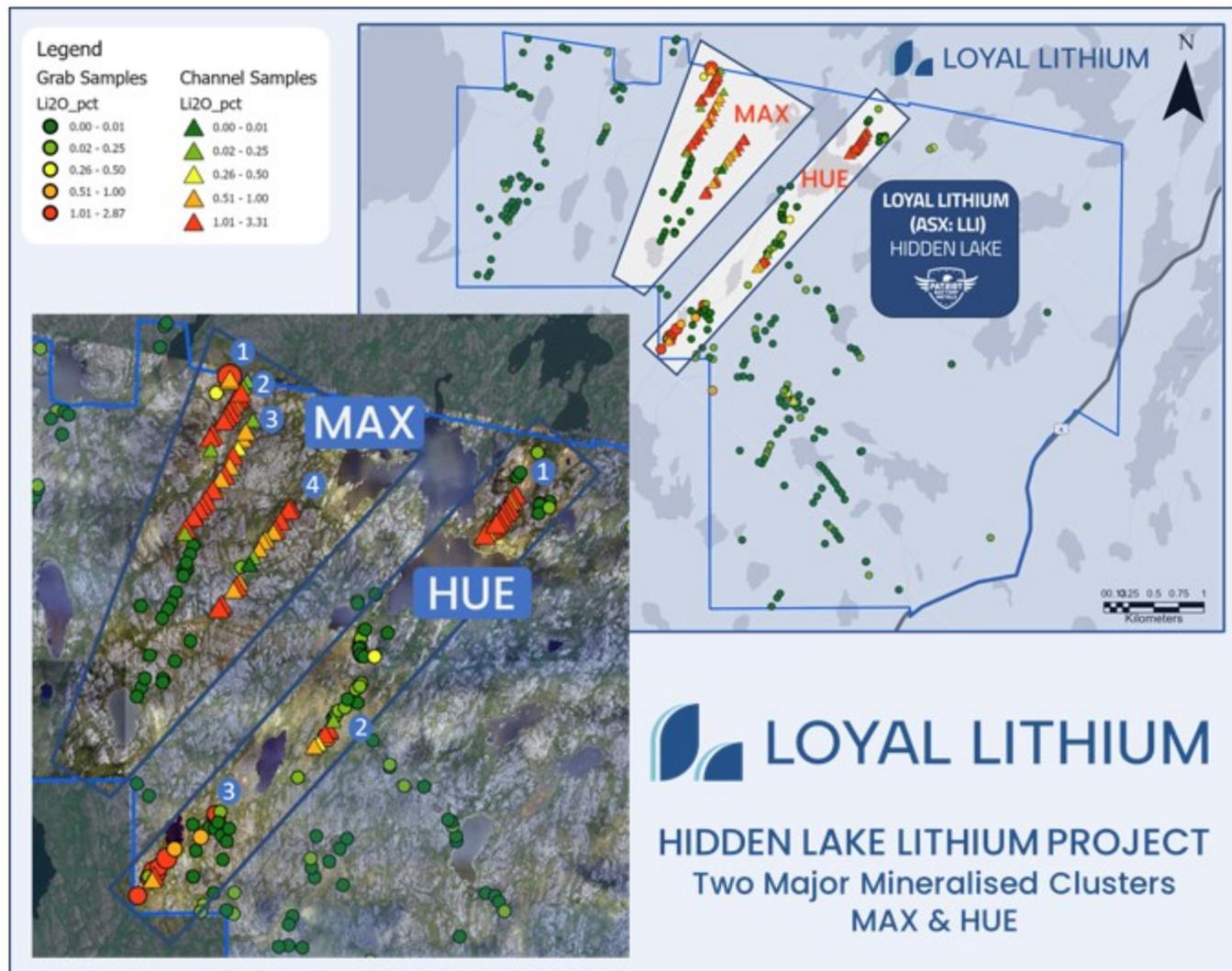


LIFT Drilling Data:

1. September 2023, LIFT Corporate Presentation
2. September 6, 2023 LIFT intersects 22 m at 1.46% Li₂O at the Fi Southwest, 24 m at 1.12% Li₂O at the Fi Main, and reports first results from BIG East and Shorty Pegmatites, Yellowknife Lithium Project, NWT intercepts of up to 1.6% Li₂O over 9.2 metres.
3. November 7, 2023, LIFT intersects 21m at 1.40% Li₂O at the BIG East pegmatite and 19m at 1.16% Li₂O at the Shorty pegmatite, Yellowknife Lithium Project, NWT.

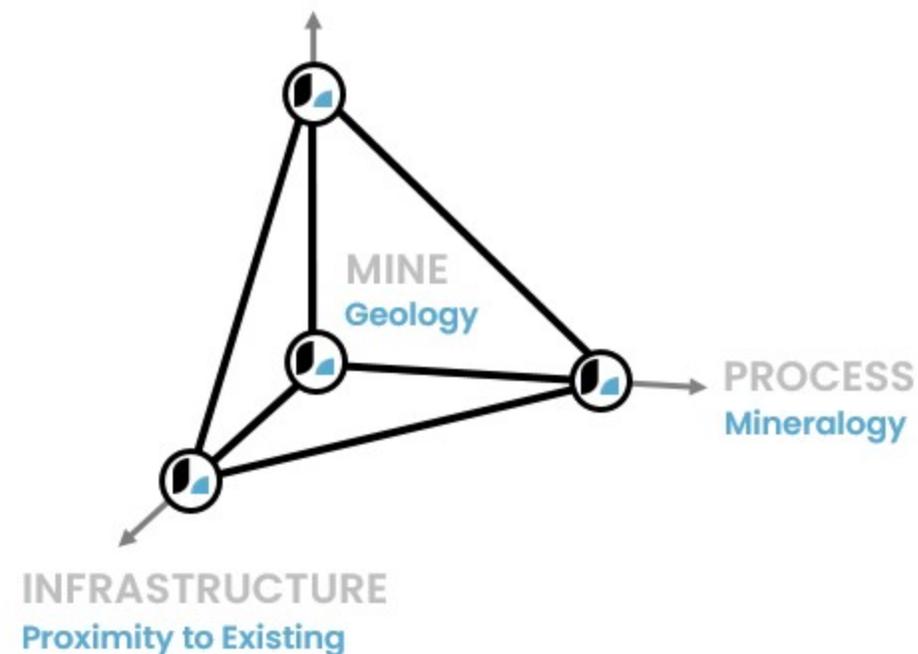
Hidden Lake Lithium Project

Why We Love It – Resource Potential



RESOURCE POTENTIAL

Exploration Work

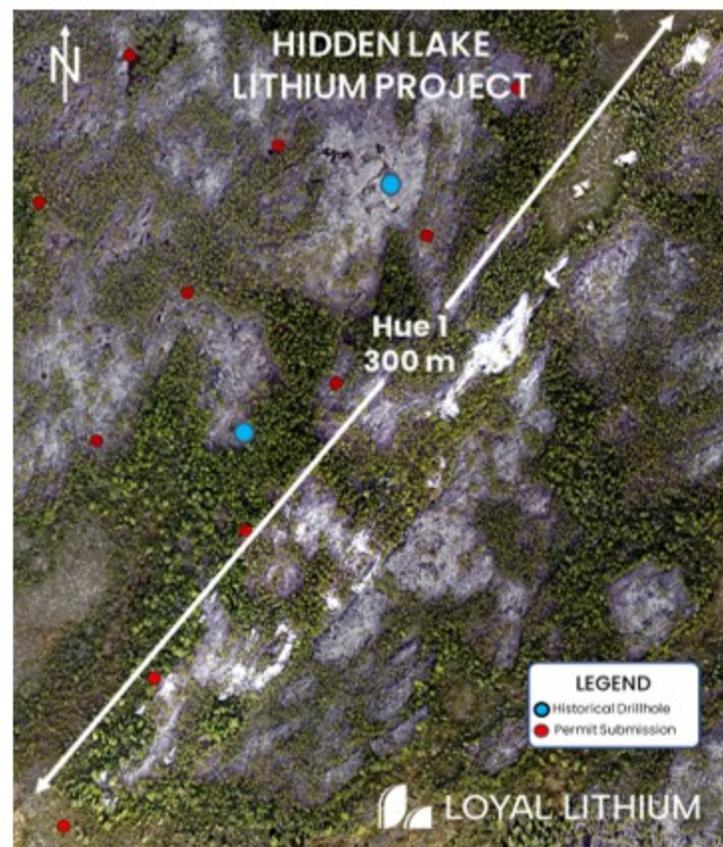
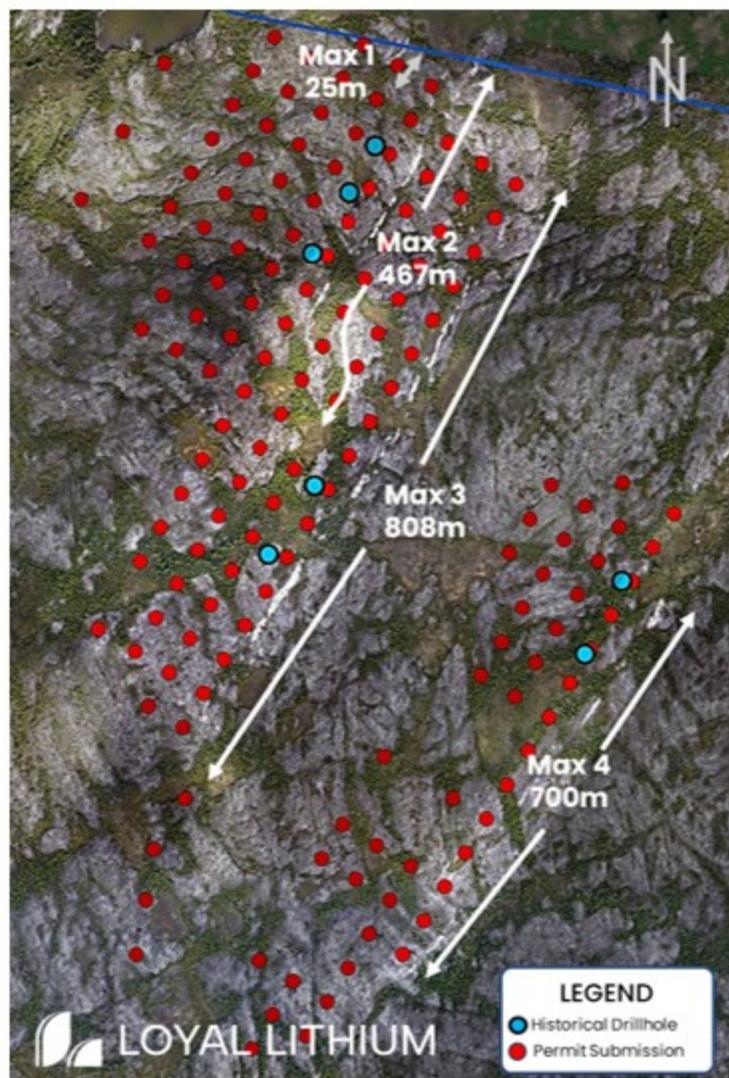


Extensive spodumene bearing pegmatite outcrops identified – 3,250m of Strike Length:

- 2 major mineralized clusters – MAX & HUE
- 4 main spodumene bearing dykes drill tested
- 3 additional spodumene dykes discovered
- Drilling preparations for the Canadian winter

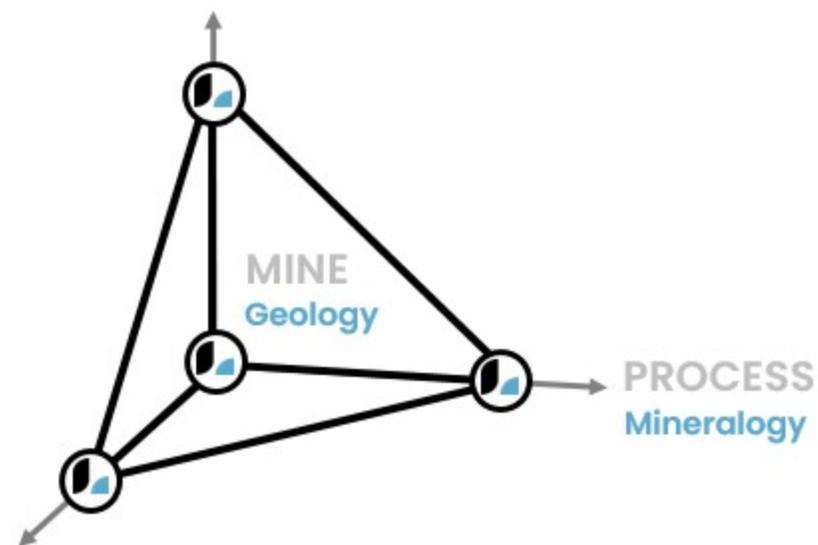
Hidden Lake Lithium Project

Why We Love It – Resource Potential



RESOURCE POTENTIAL

Exploration Work



INFRASTRUCTURE

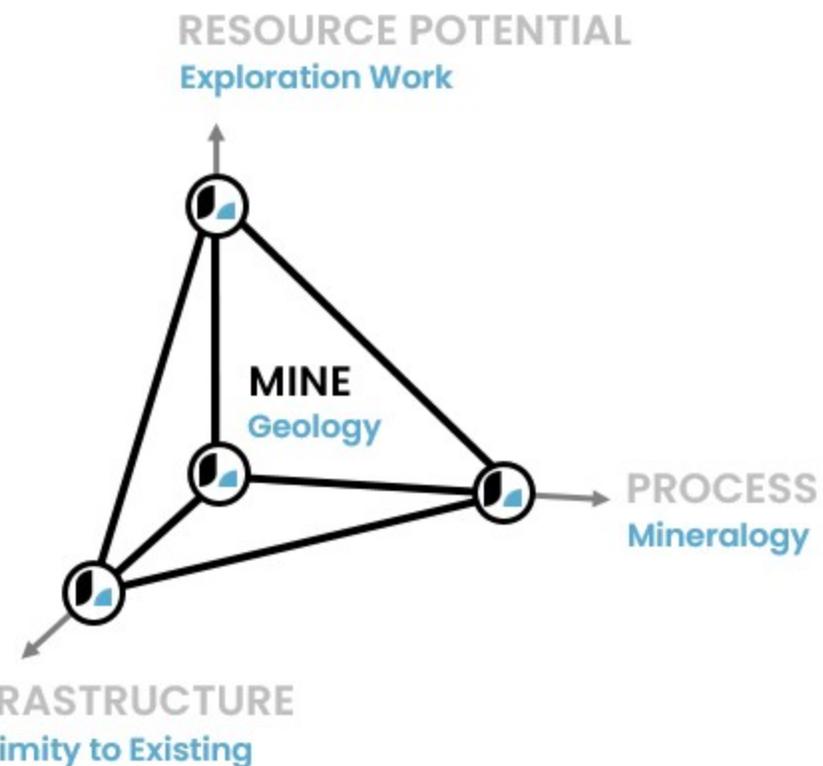
Proximity to Existing

All dykes are clearly visible from surface with the 4 historical Dykes drill tested

- 10 drill holes conducted to 30-50 m vertical confirming mineralisation with grades up to 1.81% Li_2O
- Open along strike and depth

Hidden Lake Lithium Project

Why We Love It – Mineable



Prominent spodumene pegmatite outcrops have a cumulative strike length of ~3,250 m. Surface exposures and drill intercepts imply favourable mining geometries for both open cut and underground operations.

Hidden Lake Lithium Project

Why We Love It – Processing Simplicity

Mineralogy & Metallurgy fundamentals understood

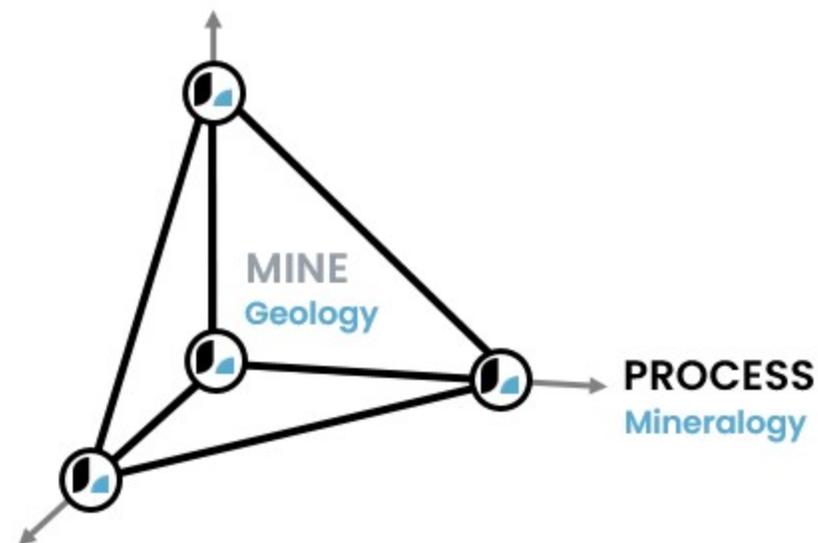
Mineralogy is simple and consistent with low impurities

- Spodumene + Quartz + Feldspars
- < 0.25% FeO



 Loyalithium

RESOURCE POTENTIAL
Exploration Work



INFRASTRUCTURE
Proximity to Existing

Metallurgy supports DMS concentration

- DMS concentrate via pilot plant
- Highly liberated
- 50%+ mass rejection < 0.2% Li₂O loss

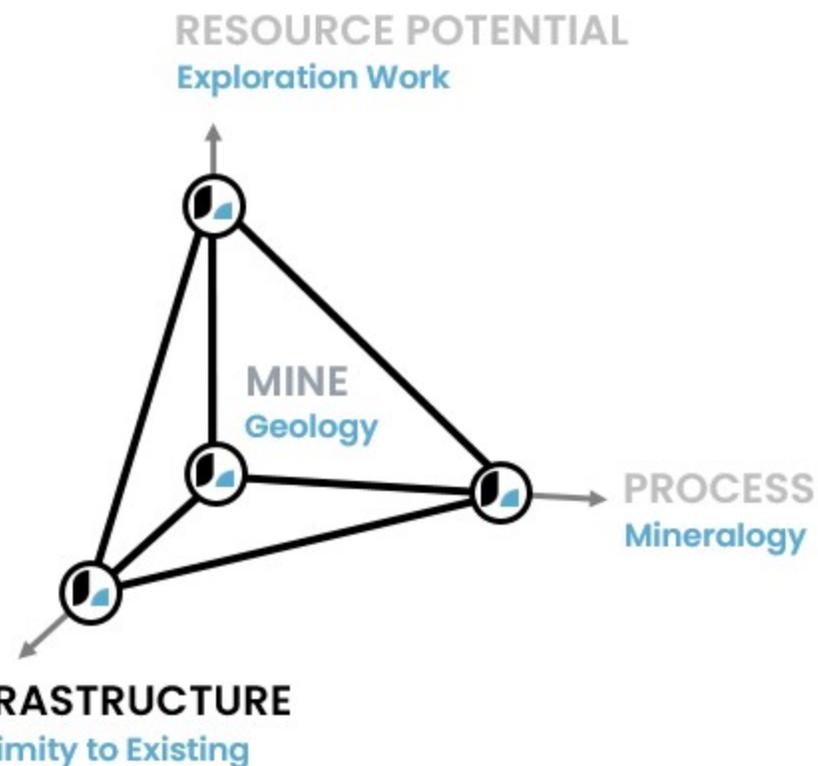
Hidden Lake Lithium Project

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 to Alberta and British Columbia
- Hydroelectric power – 2030 plans for the Lithium Belt



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

- Significant backhaul capacity



Scotty Lithium Project

Nevada, USA

Sediment Hosted Lithium Exploration Target Defined

Scotty Lithium Project, Nevada USA

Drilling assays confirm the presence of a ~165m deep mineralised lithium basin, **from near surface**, at the 100% owned Scotty Lithium Project, with an average grade of 1,120ppm lithium¹.

Geological modelling has determined a large and robust independent exploration target.³

Lower Range

460 Mt

@ 1145 ppm^{1,2,3}

Upper Range

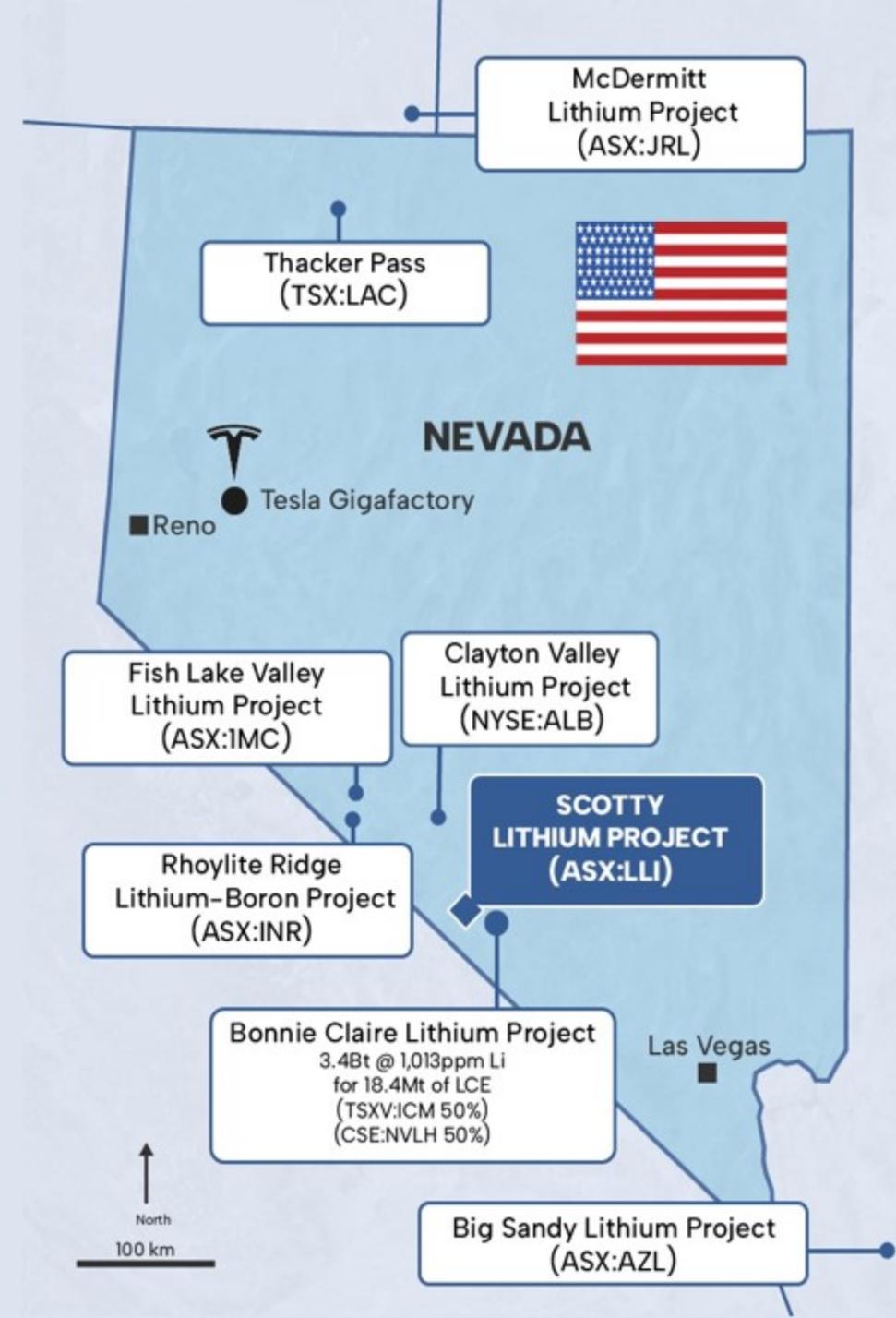
837 Mt

@ 1175 ppm^{1,2,3}

1. At a 700ppm lithium cut-off-grade.

2. The potential quantity and grade is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource and the Company is uncertain if further exploration will result in the estimation of a Mineral Resource.

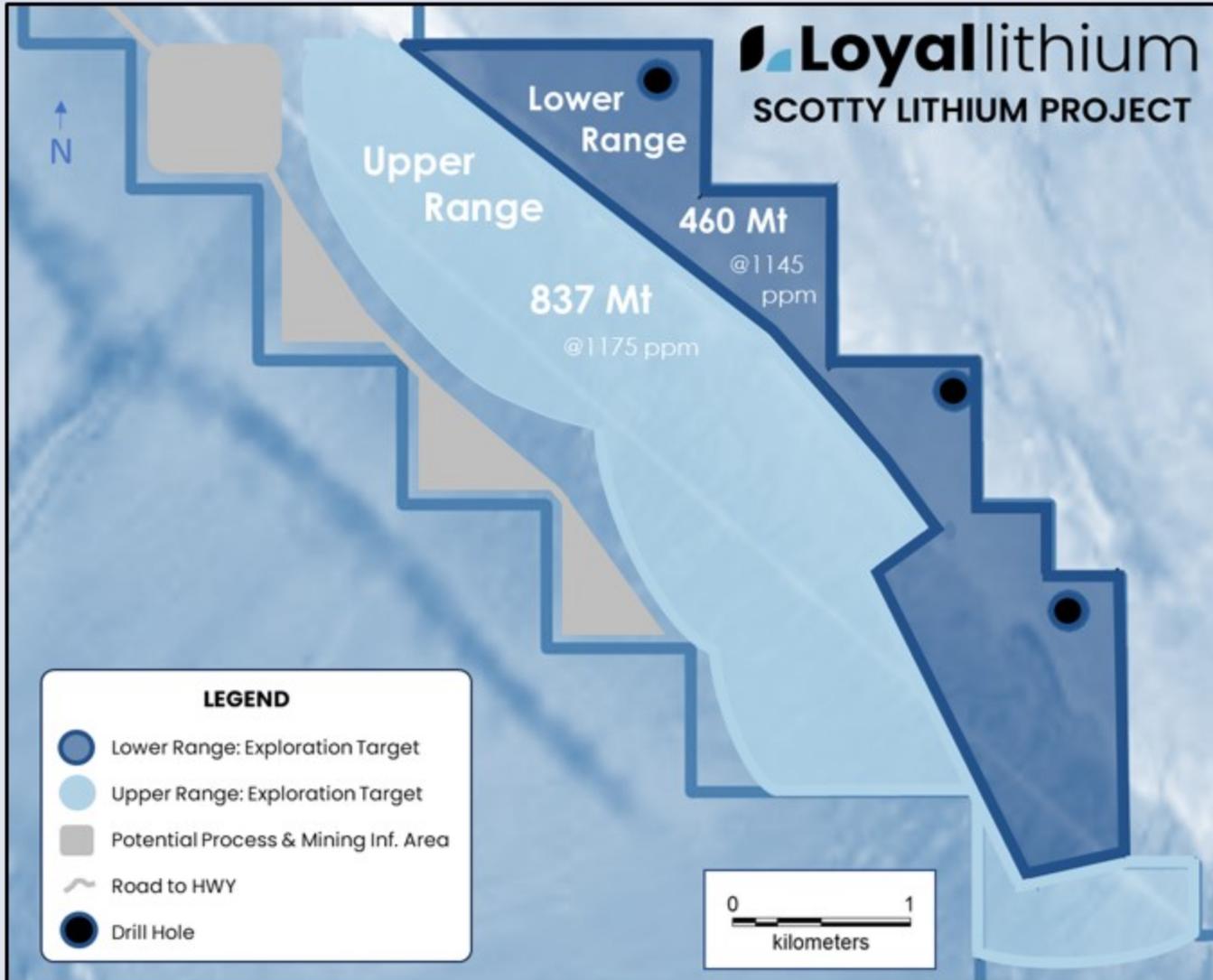
3. LLI ASX Announcement 29 September 2023 - Sediment Hosted Lithium Exploration Target Defined at the Scotty Lithium Project, Nevada, USA.



Exploration Target is Large & Robust



Shallow Mineralisation → Development Concepts



Shallow Mineralisation

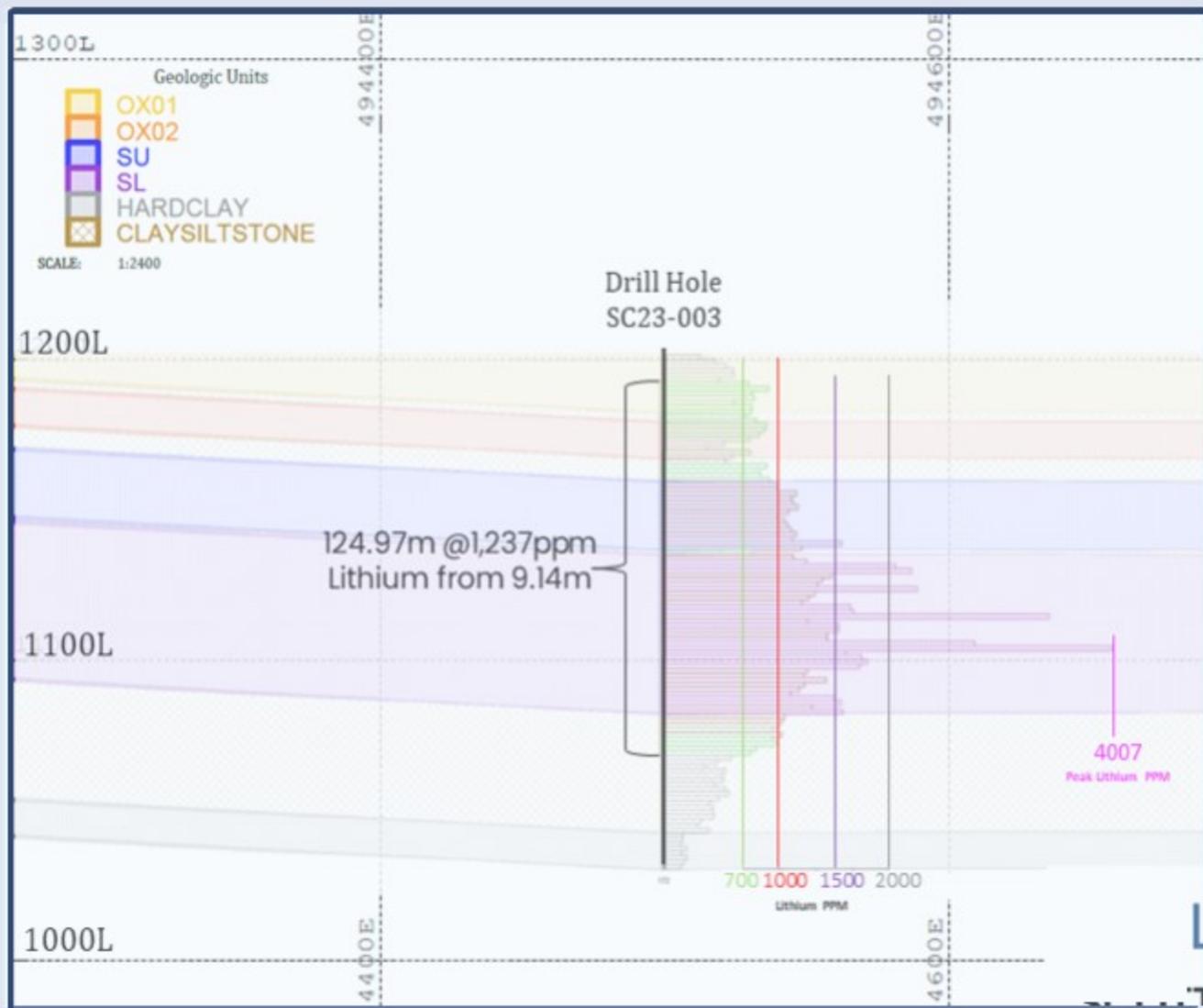
With strong mineralisation from **near surface** and close to the western edge of the basin, Scotty has the potential to adopt a traditional mining solution which supports strong development concepts.

Development Concepts

- Mining Solution: Traditional Truck & Shovel
 - Like Iron Ore and other bulk commodities
- Mining Parameters: Potentially Low Strip Ratio
 - Mineralisation from near surface
- Process & Mining Infrastructure: Western Edge
 - Alluvial fan basin edge is ideal for entering the potential pit and housing mining & processing infrastructure

Drilling Results

Representing Significant Resource Potential



"The Scotty Lithium Project continues to deliver with outstanding drilling assay results confirming strong lithium mineralisation, representing significant resource potential."

"Nevada lithium is alive, and the Scotty Lithium Project has shown its potential to play a significant role in the emerging North American lithium supply chain."

Adam Ritchie
Managing Director
Loyal Lithium Limited

Drill Hole	Intercept Metres	Lithium Grade ppm	Depth From metres	Lithium Max Assay ppm over 1.52m
SC23-001	117.35	813	15.24	1,228
SC23-002	82.30	1,106	21.34	2,156
SC23-003	124.97	1,237	9.14	4,007



 **Loyal**lithium

Our Lithium Future

News Flow

Lithium Exploration

News Flow Ahead

Trieste Lithium Project, James Bay Quebec, Canada

- Focused Winter Drilling Campaign
- Focused Winter Drilling - Drill Core Assays
- Innovative Geophysical Survey
- Summer Field Program
- Targeted Drilling Campaign

Hidden Lake Lithium Project, NWT, Canada

- Geological & Metallurgy Test Work Results
- In-house Geological Modelling
- Environmental Baselineing
- Drilling Campaign

Scotty Lithium Project, Nevada, USA

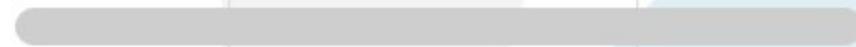
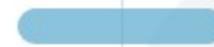
- Development Concept Study & Next Steps

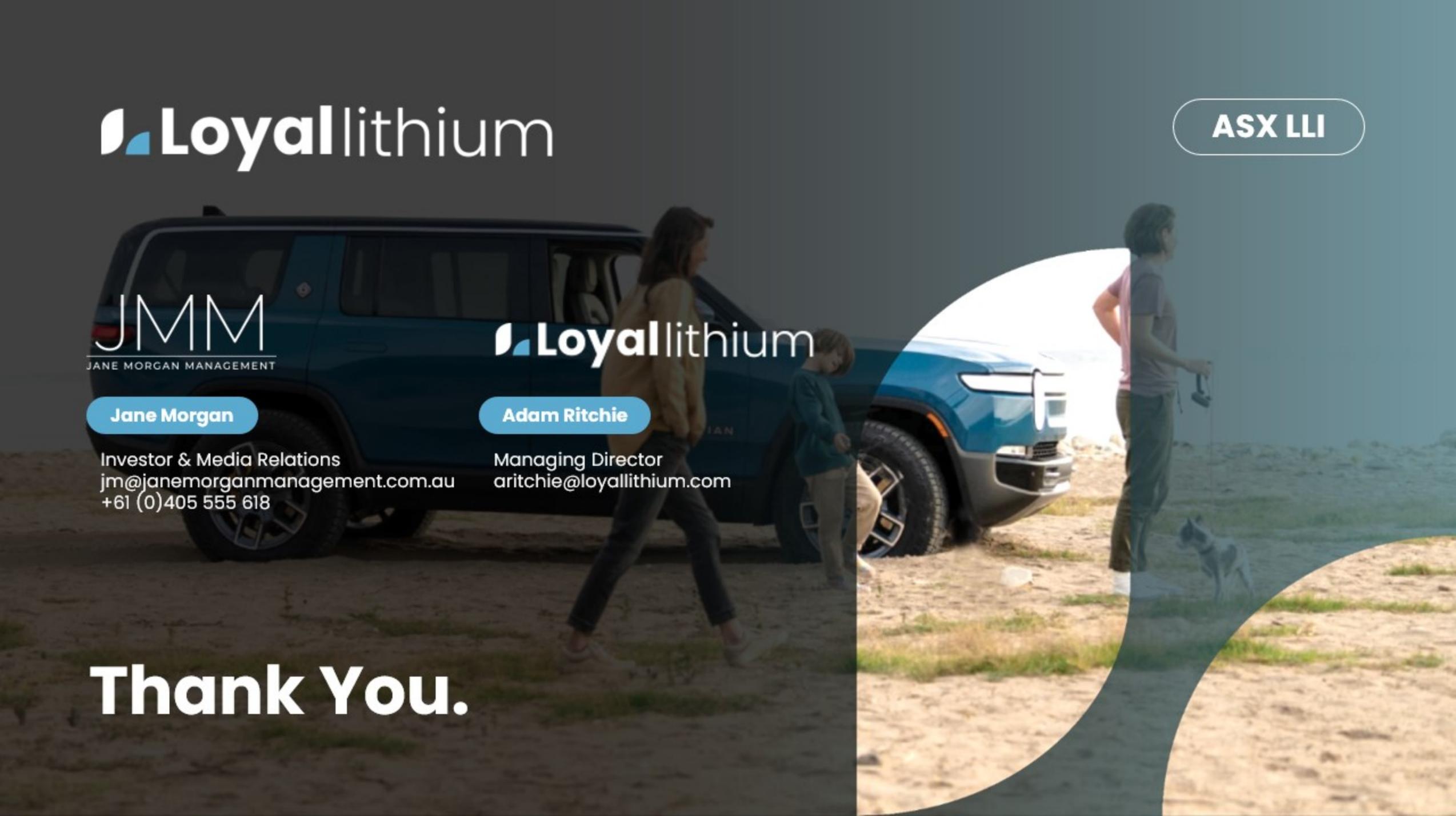
Q1 2024

Q2 2024

Q3 2024

ONGOING





Loyallithium

ASX LLI

JMM
JANE MORGAN MANAGEMENT

Jane Morgan

Investor & Media Relations
jm@janemorganmanagement.com.au
+61 (0)405 555 618

Loyallithium

Adam Ritchie

Managing Director
aritchie@loyallithium.com

Thank You.