

ASX Announcement | 6 December 2022

Lithium Operational Update – Nevada, USA

Highlights:

- **Exploration work in motion at Scotty Lithium Project:**
 - ✓ Extensive soils program completed – 540ppm peak Lithium¹ recorded
 - ✓ In-Country geological partner engaged – Dahrouge Geological Consulting
 - ✓ Drilling program optimised via historical data and 3D basin model
 - ✓ Regulator drilling approvals submitted in August 2022
 - ✓ Drilling pre-approval environmental survey completed
 - ✓ MT geophysics survey commenced – completion late Dec. 2022
 - ✓ Drill contractors short listed – rig availability and regulatory approval to define start date. Anticipated within Q1 2023.
- **Strong lithium-boron results reported 4km east of LLI's Scotty Target 2 on the adjacent Bonnie Claire Project. Three mineralised layers and assays to a maximum of 5,570ppm Lithium and >10,000ppm Boron²**
- **Scotty Target 2 soils shows a lithium-boron anomalous assays results to a maximum of 448ppm Lithium and 3,360ppm Boron**
- **Growing demand for Nevada lithium with the USA's Inflation Reduction Act encouraging fulfilment of lithium production via FTA approved critical minerals resources**

Loyal Lithium Limited (**ASX:LLI, Loyal** or the **Company**) is pleased to provide this operations update and the engagement of Dahrouge Geological Consulting Ltd (**DGC**) as our in-country geological partner, adding significant intellectual and practical value to the Scotty Lithium Project. This partnership with DGC specialists has provided connections with local on-the-ground services to facilitate the BLM drill program – approval and execution. Including sourcing a suitable drill contractor to complete the program, testing beneath the large high-tenor lithium and boron in soils recently discovered by LLI¹.

Commenting on the Nevada Operational Update, Loyal CEO, Mr Adam Ritchie, said:

"We are encouraged by our neighbours' recent drill results – just 4km from our lease boundary – as they support our strong lithium-boron soil results announced in September."

"The Nevada lithium boom has placed increased pressure on regulatory approvals and availability of resources, however the support gained from our in-country geological partner has helped navigate these challenges. We look forward to completing the MT survey with plans to commence our inaugural drill campaign in Q1 2023."

PROGRESSING SCOTTY LITHIUM PROJECT

LLI's primary target is the evaporitic lithium compounds found in fine-grained clay-sized sediments. Soil geochemistry and MT geophysics surveys were used to effectively target drilling that discovered Iconic Minerals Ltd's adjoining Bonnie Claire Lithium Resource (NI 43-101 Inferred Resources comprises 3.4Bt @ 1,013ppm Li for 18.3Mt of LCE³). LLI have followed a similar formula to initially target a sedimentary resource at the Scotty Lithium Project.

LLI believes the most prospective areas for this target align with the two best soil targets located in the north and west – Target Area 1 & Target Area 2. This is supported by the sheer size and relatively high grades found on surface and the following exploration milestones have been completed to confirm extensions of lithium and boron into the substrata on LLI's claims:

- ✓ **Extensive soils program completed:** Strong soil assay results of up to 540ppm Li defines targets – each target holding standalone exploration potential (LLI Announcement 21 September 2022)
- ✓ **In-Country Geological Partner Engaged:** LLI has engaged the services of DGC to support the exploration program (approvals & execution).
- ✓ **Drilling program optimised:** Historic exploration data has been analysed to develop a 3D basin model to assist the optimisation of the inaugural drilling campaign. The data included;
 - Gravity geophysics survey
 - Magnetotelluric (MT) geophysical survey data
 - Data from one completed drill hole
- ✓ **Regulator drilling approvals submitted:** A notice to conduct exploration was submitted to the Bureau of Land Management (BLM), Tonopah in August 2022. LLI was informed that a targeted environmental survey was required.

- ✓ **Targeted Environmental Survey Complete:** In November 2022 an environmental survey commenced via consultants Knight and Levitt. Findings submitted to the BLM to support the drilling notice.
- ✓ **Magnetotelluric (MT) geophysics survey commenced:** A MT Contractor has been engaged to determine the depth of lithium host basin sediments in order to further optimise drilling programs and assist maiden resource estimate domain boundaries. This survey is planned for completion in December 2022.
- ✓ **Drill contractors short-listed:** On receipt of expressions-of-interest and quotations, with rig availability being determined, in conjunction with start dates and dependent regulatory approval.

LITHIUM-BORON POTENTIAL

Iconic Minerals recent 2022 drill campaign has recorded remarkable lithium values to a maximum of up to 5,570ppm and boron to >10,000ppm² just 4km east of LLI's Target 2 boundary.

Target 2 is in the mid-west of the project area covering an area in excess of 10km² with >165ppm lithium and a peak value of 448ppm lithium, which is more than 40% higher than the maximum soils value found on the adjacent Bonnie Claire resource surface, which occurs over an approximate 16km² area at depth.

Target 2 soil assay results have confirmed anomalous boron values with a maximum of up to 3,360ppm. The below table provides an overview of Target 2's Lithium-Boron assay results.

TARGET 2 SOIL ASSAY RESULTS				
LITHIUM				BORON
Samples >200ppm Li	Samples >264ppm Li	Max Li ppm	Area >165ppm Li (km ²)	Max B ppm
99	61	448	10.0	3,360

Table 1: Target 2 Lithium-Boron Soil Assay Results

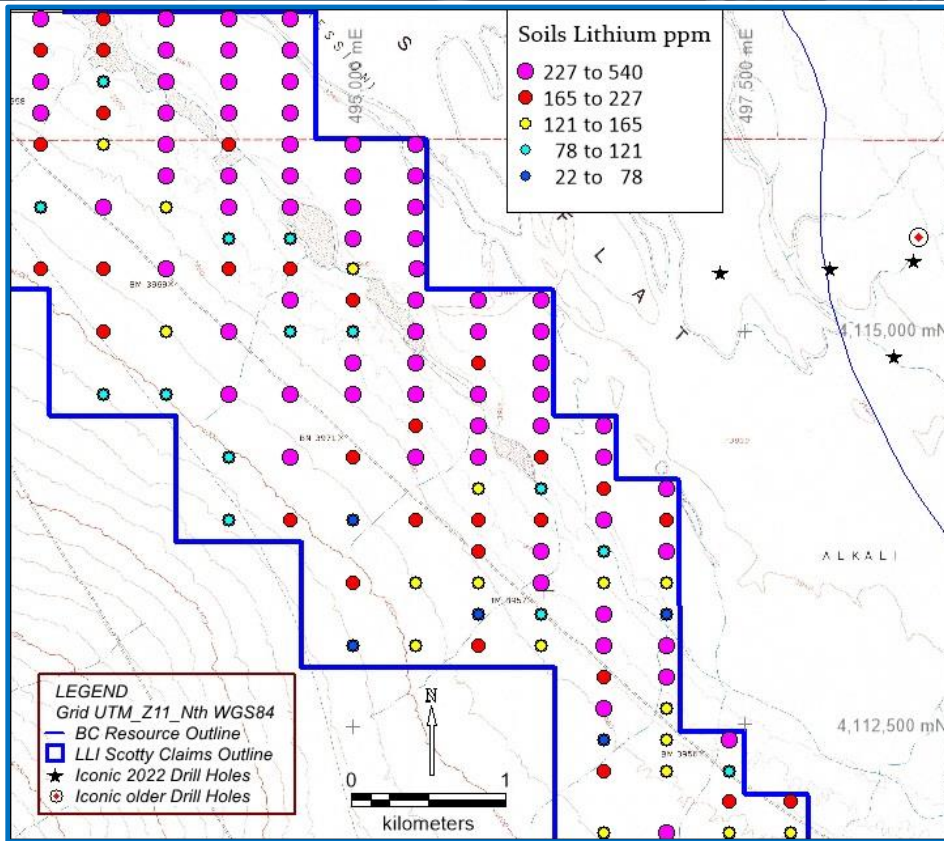


Figure 1: Target 2 Lithium ppm Soil Assay Results

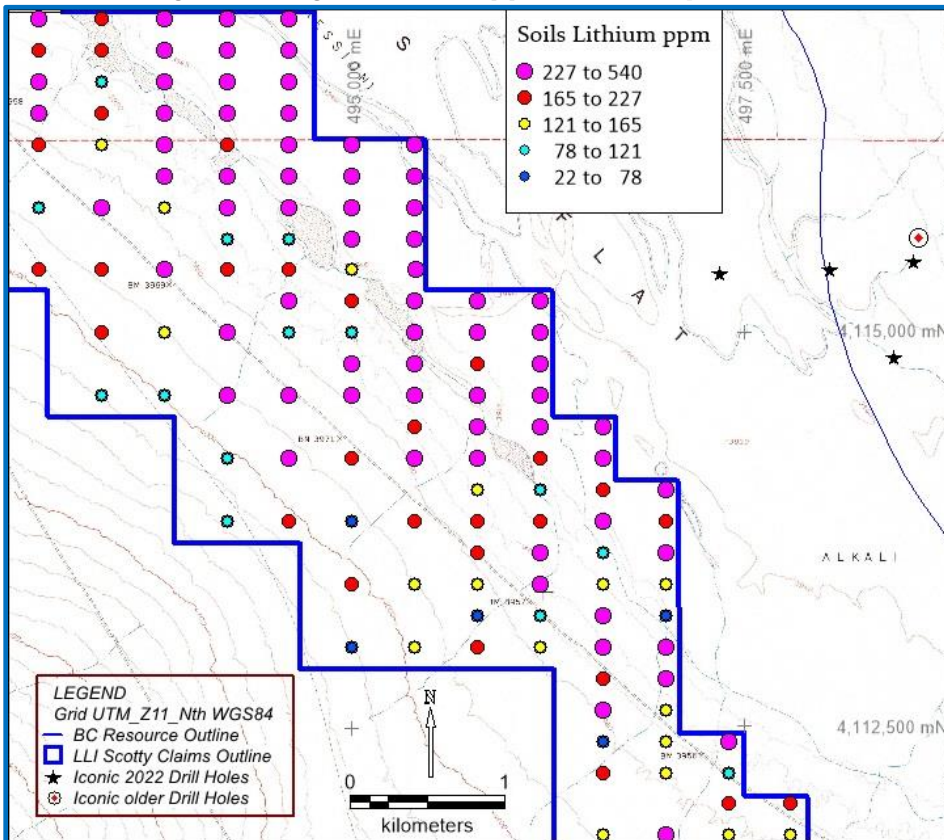


Figure 2: Target 2 Boron ppm Soil Assay Results

SCOTTY LITHIUM PROJECT

The Scotty Lithium Project covers 78.1 km² and is located 189km northwest of Las Vegas and 517 km from Reno in the Tier 1 mining jurisdiction of Nevada USA. The Scotty Lithium Project has twin prospects of lithium brines and lithium sediments and is adjacent to the existing Iconic Minerals Ltd (TSXV: ICM) Bonnie Claire Project, with similar geology. Scotty is also less than 100km from Albemarle’s operational Silver Peak Operation in Clayton Valley (NYSE:ALB) and Ioneer’s Rhyolite Ridge Lithium-Boron Project (ASX:INR).

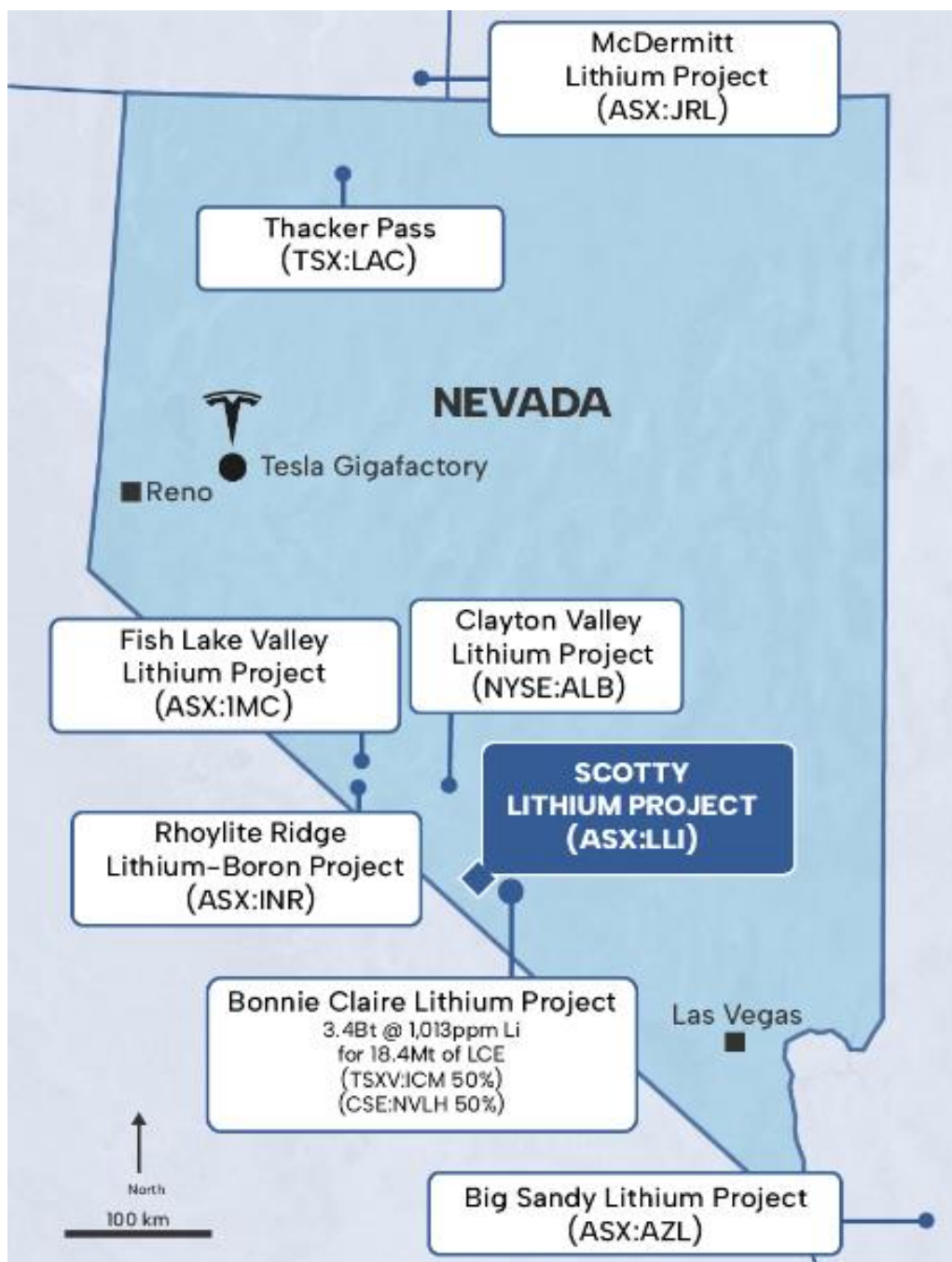


Figure 3 – Scotty Lithium Project well positioned within Nevada

NEVADA LITHIUM

The US currently only has one operating lithium mine, Albemarle’s Silver Peak Operation in Nevada. This requires the US to import lithium in from overseas, leaving the nation reliant on others to fulfil its increased lithium demand.



Figure 4 – Scotty Lithium Project amongst the North American Battery Supply Chain

With rising costs, the US has been forced to re-evaluate its current energy dependence on adversarial nations, creating a renewed emphasis on a domestic transition towards renewable sources. If the US is serious about energy independence, it must commit to the development of a national supply chain that can supply a variety of much-needed minerals. This goal can be achieved by further turning to Nevada and its modern mining industry.

Nevada’s potential as a domestic lithium source Answers to the US’ lithium gap can be found in Nevada. There are currently 15,500 active lithium claims in the state and experts believe that as projects come online, it can put Nevada on the map as a leading global producer.

Projects like Lithium Nevada’s Thacker Pass Mine and Loneer’s Rhyolite Ridge, that are nearing shovel readiness, can help Nevada lead the way in creating a domestic supply chain. Loyal Lithium is a firm believer that all resource types will play a part in satisfying the future demand and is well positioned to be a fast follower in the Nevada Lithium space.

Approved by the board of Loyal Lithium Limited.

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About Loyal Lithium

Loyal Lithium Limited (ASX: LLI) is a well-structured listed resource exploration company with projects in Tier 1 North American mining jurisdictions in Nevada, USA and the James Bay Lithium District in Quebec, Canada. Through the systematic exploration of its projects, the Company aims to delineate JORC compliant resources.

References

¹ ASX Announcement MMG (LLI): Strong Soil Assay Results Define Targets at the Scotty Lithium Project, Nevada USA 21st September 2022

² Iconic Intercepts Lithium Grades up to 5570ppm at Bonnie Claire Project Vancouver, British Columbia – (Newsfile Corp. – September 29, 2022) – Iconic Minerals Ltd. (TSXV: ICM) (OTCQB: BVTEF)

³ Global Resource Engineering, 2022. Preliminary Economic Assessment NI 43-101 Technical Report Bonnie Claire Lithium Project Nye County, Nevada. Iconic Minerals Inc. <https://nvlithium.com/bonnie-clair-project/>

Future Performance

This announcement may contain certain forward-looking statements and opinion. Forward-looking statements, including projections, forecasts and estimates, are provided as a general guide only and should not be relied on as an indication or guarantee of future performance and involve known and unknown risks, uncertainties, assumptions, contingencies and other important factors, many of which are outside the control of the Company and which are subject to change without notice and could cause the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such statements. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Nothing contained in this announcement, nor any information made available to you is, or and shall be relied upon as, a promise, representation, warranty or guarantee as to the past, present or the future performance of Monger Gold Ltd.

Competent Person Statement

The information in this announcement that relates to exploration results, is based, and fairly reflects, information compiled by Mr Darren Allingham, who is the Company's geologist. Mr Allingham is a Fellow of the Australian Institute of Geoscientists. Mr Allingham has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results and Mineral Resources (JORC Code). Mr Allingham consents to the inclusion in the announcement of the matters based on the information in the form and context in which it appears.