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# Nevada Lithium Identifies Extensive High-Grade Boron Mineralization up to 15,000 ppm in the High-Grade Lithium Zone at its Bonnie Claire Lithium Project

**Vancouver, British Columbia** – May 22, 2024 – Nevada Lithium Resources Inc. (CSE: NVLH; OTCQB: NVLHF; FSE: 87K) ("**Nevada Lithium**" or the "**Company**") is pleased to announce the discovery of high-grade boron mineralization at its 100% owned Bonnie Claire lithium project (the "**Project**" or "**Bonnie Claire**"), located in Nye County, Nevada. The Company is also pleased to announce it has initiated work to examine any potential effects on metallurgy for the Project.

*Nevada Lithium's CEO, Stephen Rentschler, commented: "Metallurgical work on the recently discovered high-grade lithium mineralization in the lower mineralized zone has identified the presence of high-grade boron. Boron is a valuable industrial mineral with extensive and diverse uses including computer screens, fertilizers, powerful magnets for wind turbines, ceramics, insulation and more.*

*The high levels of boron appear to be associated with high levels of lithium at Bonnie Claire. Currently, the presence of boron is thought to be laterally extensive and open ended in three directions, coinciding with the high-grade lithium lower mineralized zone (see Press Release dated February 27, 2024). This exciting development presents the potential to generate a significant secondary revenue stream from Bonnie Claire".*

*He continued, "Given the emerging, favorable comparisons between Bonnie Claire's high-grade lithium zone and Ioneer's advanced Rhyolite Ridge lithium/boron project (110km away), we have decided to thoroughly examine the inclusion of boron into a recovery circuit at Bonnie Claire.*

*At Rhyolite Ridge, the boron processing stream material averages 13,900 ppm (1.39%) boron, and the B5 high-grade boron bearing marl zone averages 62 feet (19 meters) thick[1], with a maximum thickness of 131 feet (40 meters). In comparison, the recent Bonnie Claire drill intercepts have been greater than >550 feet (>168 meters) with boron grades averaging above 15,000 ppm (1.50%). Additionally, the average lithium grade of the Rhyolite Ridge processing stream is 1,750 ppm* lithium while the Bonnie Claire lower mineralized zone displays drill intercepts of up to 4,154 ppm lithium over 680 feet (207 meters) (see Press Release dated February 27, 2024).*

*This is a new, very exciting development for Nevada Lithium and we look forward to pursuing it further."*

## Join Stephen Rentschler, CEO of Nevada Lithium, for a LIVE Virtual Event

Date and Time: **Thursday, May 23, 2024 at 12:30 pm ET / 9 am PT**

Click here to register for the event >

# Highlights:

- Drill Hole BC2303C averaged 15,001 ppm (1.50%) boron over 560 feet (171 meters)
- Drill Hole BC2301C averaged 14,195 ppm (1.42%) boron over 620 feet (189 meters)
- Highest-grade boron zones correspond with the highest-grade lithium zones
- XRD of core samples from the deep high grade lithium zone report up to 38% searlesite
- The high grade lithium/boron remains open in multiple directions.
- Global Resource Engineering (GRE) to investigate the possibility of incorporating boron into its ongoing estimation of a new lithium mineral resource estimate.

## Lithium Mineralization

The Company is concentrated on identifying and developing significant lithium mineralization at Bonnie Claire. The 2023 drill program confirmed the presence of two mineralized zones: 1) a lower-grade upper zone and 2) a higher-grade lower zone. The Upper zone starts at surface and exhibits intercepts such as 967ppm lithium over 420ft (20-440ft) in drillhole BC-2303C (news release February 27, 2024). The lower zone is much thicker and exhibits much higher grades, such as 3076 ppm Lithium over 1100ft (1340-2460ft) in drillhole BC-2301C (news release November 20, 2023) and 4,154 ppm Lithium over 680 ft (207 m) from 1820-2500ft in BC-2303C (news release February 27, 2024). Lithium mineralization is hosted within claystone host rocks, disseminated within the minus 10 size fraction. The mineralized claystones are laterally continuous and appear to dip gently to the east and remain open for expansion in several directions.

## Boron mineralization

Elevated boron assays have been encountered at Bonnie Claire since the 2022 drill program, though intercepts were not considered material to include for extraction. In 2023, the Company switched to sample preparation using four-acid digestion to provide more reliable lithium assays, but this preparation technique precluded the analysis of boron. The Company recently reanalyzed the original pulps from BC-2301C and BC-2303C for boron using a sodium hydroxide fusion (FUS-NA02) sample preparation that allows for high grade boron analysis by ICP-AES. The reanalysis of these two holes has returned significantly higher boron grades across longer intercepts than in previous holes. This has piqued the Company's interest in potentially exploiting the boron in the deeper zone. High boron and lithium assays appear to coexist within the lower claystones between approximately 1750 (533m) and 2500ft (762m) in depth. That relationship is illustrated in Table 1 and Figure 1 below.

The recent drill assays have been reinforced by new quantitative X-Ray Diffraction (XRD) analysis results conducted by Hazen Research Inc. They have found that a significant portion (38%) of the lithium high grade zone rock may be comprised of searlesite. Searlesite is a relatively rare sodium borosilicate mineral ($NaBSi_2O_5(OH)_2$), usually found disseminated in fine-grained lacustrine strata and often associated with altering volcanic ash.

| Drill Hole | Boron (ppm) | Lithium (ppm) | Start (ft) | End (ft) | Start (m) | End (m) | Intercept (ft) | Intercept (m) |
|---|---|---|---|---|---|---|---|---|
| BC-2301C | 14195 | 3783 | 1740 | 2360 | 530 | 719 | 620 | 189 |
| BC-2303C | 15001 | 4221 | 1940 | 2500 | 591 | 762 | 560 | 171 |
| BC-2201C | 11664 | 3384 | 1771 | 2001 | 540 | 610 | 230 | 70 |
| BC-2203C | 8383 | 3480 | 1660 | 1998 | 506 | 609 | 338 | 103 |

Table 1: Boron and lithium drill intercepts in holes BC-2301C, BC-2303C, BC-2201C, and BC-2203C

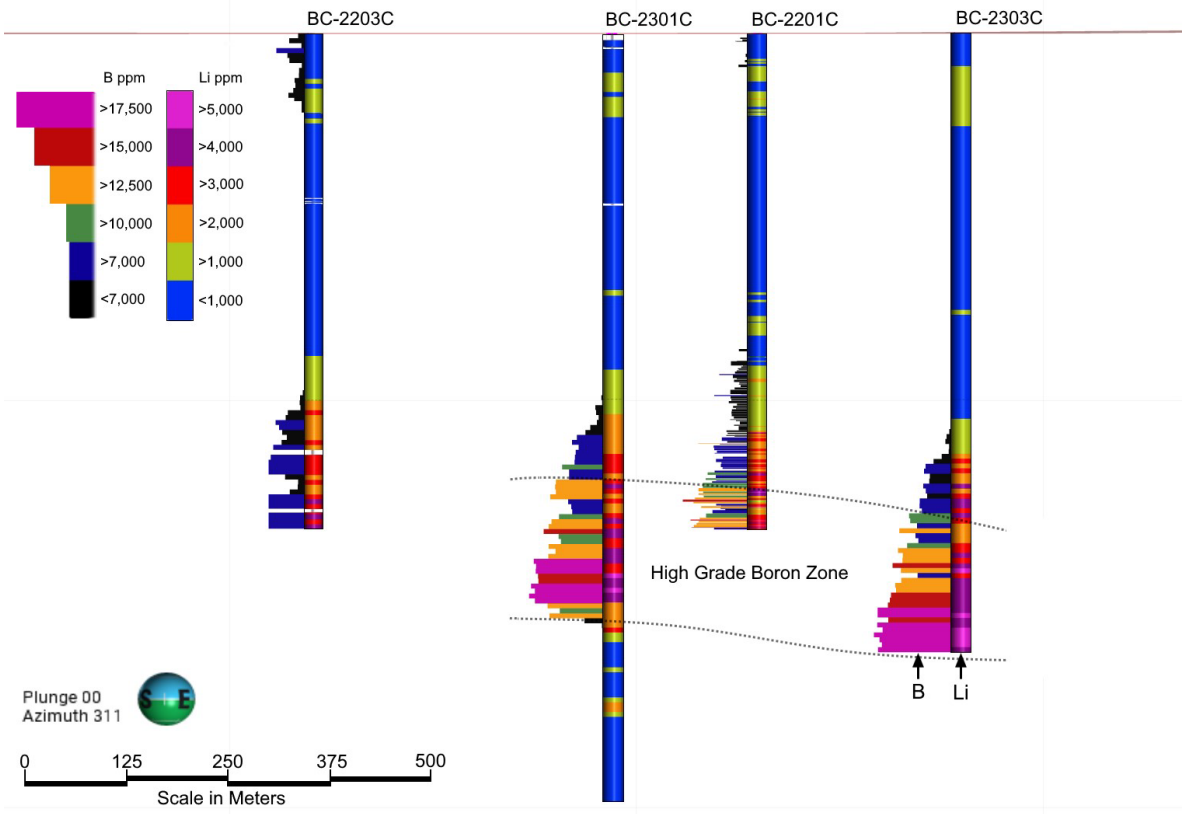


Figure 1: Cross section illustrating downhole lithium and boron assays

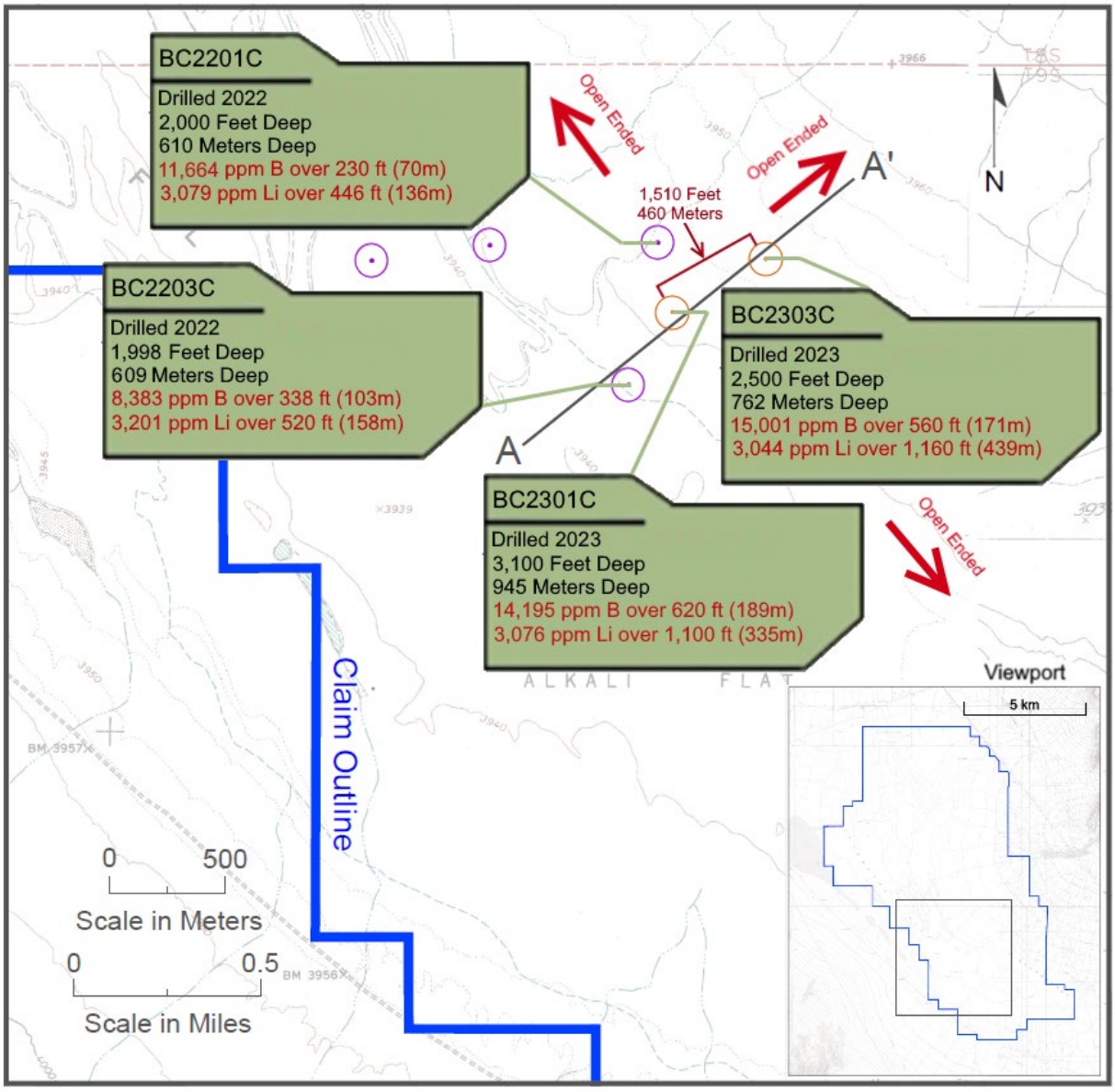


Figure 2: Plan map of drill hole locations and boron intercepts. Boron intercepts as listed in Table 1 above. Lithium intercepts from existing press releases on BC-2201C (September 29, 2022), BC-2201C (December 7, 2022), BC-2301C (November 20, 2023) and BC-2303C (February 27, 2024).

## Metallurgy

Initial metallurgical work by Hazen Labs Inc. suggests that that the presence of significant searlesite affects the physical behavior of the claystone that contains the high-grade lithium mineralization. The Company has engaged Hazen and Global Resource Engineering, Ltd. ("GRE") to evaluate the behavior of the searlesite-rich material and investigate if any modifications may be required in the existing metallurgical circuit.

## Lithium-Boron Mineral Resource Estimate

Because of the potential importance of this boron mineralization, Nevada Lithium has asked Global Resource Engineering (GRE) to investigate the possibility of incorporating boron into its ongoing estimation of a new lithium mineral resource estimate (see news release dated April 16, 2024).

As Hazen proceeds with metallurgical work on the extraction of lithium and boron from the high-grade lower zone, the Company continues to proceed with its plans to publish an updated Preliminary Economic Assessment (see news release dated April 16, 2024.

## About Boron

Boron is the 5th element on the Periodic Table with a powerful combination of physical properties, including hardness, light weight, and heat resistance. Boron's physical properties make it a critical material and limited substitute ingredient in everyday and future facing applications, including permanent magnets, electric vehicles, wind turbines, solar panels, fertilizers, specialty glass in cell phones, etc. 85% of current production is sourced from Turkey and the majority of refined Boron specialty and advanced materials are imported from China. 80% of Boron Carbides are sourced from China today. Demand for high quality boron is estimated to be growing above 4% annually on a base of approximately 5 MM tons produced in 2024. Supply deficits are expected to continue throughout the end of the decade, supporting prices of boron derivative products. (*Source: 5E Advanced Materials, Inc. Form 8K, website, Mordor Intelligence*)

## Quality Assurance / Quality Control (QAQC)

A Quality Assurance / Quality Control protocol following industry best practice was incorporated into the program by Nevada Lithium. Drilling was conducted by Major Drilling. Core was transported by Major from the collar location and received by Nevada lithium staff at the Company storage facility in Beatty, NV. The facility is only accessible to Nevada Lithium staff and remains otherwise locked. Received core was logged and cut at the Facility by Nevada Lithium staff. Logging and sampling included the systematic insertion of blanks and duplicates.

Core samples intended for chemical assay were transported by Company staff to ALS USA Inc.'s laboratory in Reno, NV. for sample preparation (Codes WEI-21 CRU-21, CRU-31, PuI-31, SPL-22Y, CRU-QC, PUL-QC, DIS-REJ21, and LOG-22), then shipped to ALS Vancouver laboratory in Burnaby BC, where the samples were digested with 4 acid (GEO-4A01) and analyzed via ICP-MS (Code ME-MS61), tailored for lithium analyses along with accessory elements. The 4 acid digestion did not allow for a boron assay in the initial multi-element analysis, so the pulps were pulled from internal ALS storage after analysis (FND-02) and subjected to sodium hydroxide fusion (FUS-NA02) for ICP-AES high grade boron analysis (B-ICP82a). Internal ALS Standards duplicates, and blanks in the drill results were approved as acceptable.

Core samples intended for mineralogical analysis were transported to Hazen Research Inc.'s laboratory in Golden CO. The sample was analyzed as received. Analysis was performed using a Bruker D8 Advance XRD with Davinci design and a Lynxeye detector utilizing cobalt radiation produced at 35 kV and 40 mA. The scan range is 5°–85° 2-theta, with a step of 0.02° 2-theta and a time per step of 0.4 s. Mineral quantification was completed using the Rietveld refinement method with Bruker TOPAS version 4.2 software. Please note the detection limit of XRD analysis for certain constituents can be as high as 2 to 5%.

## About Nevada Lithium Resources Inc.

Nevada Lithium Resources Inc. is a mineral exploration and development company focused on shareholder value creation through its core asset, the Bonnie Claire Lithium Project, located in Nye County, Nevada, where it holds a 100% interest.

Bonnie Claire has a current NI 43-101 inferred mineral resource of 3,407 million tonnes (Mt) grading 1,013 ppm Li for 18.372 million tonnes (Mt) of contained lithium carbonate equivalent (LCE), at a cut-off grade of 700 ppm Li[2]

The PEA for Bonnie Claire indicates a Net Present Value (8%) of $1.5 Billion USD (after tax) using $13,400 USD per tonne LCE and after-tax IRR of 23.8%. With an LCE price of $30,000 USD per tonne, the Net Present Value (8%) of the Project is $5.9 Billion USD (after tax) and an IRR of 60.3%[2].

For further information on Nevada Lithium and to subscribe for updates about Nevada Lithium, please visit its website at: https://nevadalithium.com/

## QP Disclosure

The technical information in the above disclosure has been reviewed and approved by Dr. Jeff Wilson, PhD, P.Geo, Vice President of Exploration for Nevada Lithium, designated Qualified Person under National Instrument 43-101.

1 See I Rhyolite Ridge Lithium-Boron Project Definitive Feasibility Study (DFS) Report, produced for IONEER USA Corp. completed in April 2020.

[2]See Preliminary Economic Assessment NI 43-101 Technical Report on the Bonnie Claire Lithium Project, Nye Country, Nevada authored by Terre Lane, J. Todd Harvey, MBA, PhD, Hamid Samari, PhD and Rick Moritz (Effective date of August 20, 2021, and Issue date of February 25, 2022) (the "**PEA**" or the "**Preliminary Economic Assessment**") as summarized in Nevada Lithium's news release dated October 13, 2021, which are available on Nevada Lithium's SEDAR+ profile at **www.sedarplus.ca.** Results of the Preliminary Economic Assessment represent forward-looking information. This economic assessment is, by definition, preliminary in nature and includes inferred mineral resources that are considered too speculative to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the Preliminary Economic Assessment will be realized. Mineral resources are not mineral reserves as they do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted into Mineral Reserves.

On behalf of the Board of Directors of Nevada Lithium Resources Inc.
*"Stephen Rentschler"*
Stephen Rentschler, CEO

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Cautionary Note Regarding Forward-Looking Statements

This news release contains forward-looking statements and forward-looking information (collectively, "forward-looking statements") within the meaning of applicable Canadian securities legislation. These statements relate to matters that identify future events or future performance. Often, but not always, forward looking information can be identified by words such as "could", "pro forma", "plans", "expects", "may", "will", "should", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "believes", "potential" or variations of such words including negative variations thereof, and phrases that refer to certain actions, events or results that may, could, would, might or will occur or be taken or achieved.

The forward-looking statements contained herein include, but are not limited to, statements regarding: the performance of the Project and results of the 2023 Exploration and Development Plan (including, without limitation, its mineral resources, current claims and its ability to utilize global lithium needs); and the performance of lithium as a commodity, including the sustained lithium demand and prices.

In making the forward looking statements in this news release, Nevada Lithium has applied several material assumptions, including without limitation: market fundamentals that result in sustained lithium demand and prices; the receipt of any necessary permits, licenses and regulatory approvals in connection with the future development of Bonnie Claire in a timely manner; the availability of financing on suitable terms for the development; construction and continued operation of Bonnie Claire; the Project containing mineral resources; and Nevada Lithium's ability to comply with all applicable regulations and laws, including environmental, health and safety laws.

Investors are cautioned that forward-looking statements are not based on historical facts but instead reflect Nevada Lithium's management's expectations, estimates or projections concerning future results or events based on the opinions, assumptions and estimates of managements considered reasonable at the date the statements are made. Although Nevada Lithium believes that the expectations reflected in such forward- looking statements are reasonable, such information involves risks and uncertainties, and under reliance should not be placed on such information, as unknown or unpredictable factors could have material adverse effects on future results, performance or achievements expressed or implied by Nevada Lithium. Among the key risk factors that could cause actual results to differ materially from those projected in the forward- looking statements are the following: operating and technical difficulties in connection with mineral exploration and development and mine development activities at the Project; estimation or realization of mineral reserves and mineral resources, requirements for additional capital; future prices of precious metals and lithium; changes in general economic, business and political conditions, including changes in the financial markets and in the demand and market price for commodities; possible variations in ore grade or recovery rates; possible failures of plants, equipment or processes to operate as anticipated; accidents, labour disputes and other risks of the mining industry; delays or the inability of Nevada Lithium to obtain any necessary approvals, permits, consents or authorizations, financing or other planned activities; changes in laws, regulations and policies affecting mining operations; currency fluctuations, title disputes or claims limitations on insurance coverage and the timing and possible outcome of pending litigation, environmental issues and liabilities; risks relating to epidemics or pandemics such as COVID-19, including the impact of COVID-19 on Nevada Lithium's business; as well as those factors discussed under the heading "Risk Factors" in Nevada Lithium's latest Management Discussion and Analysis and other filings of Nevada Lithium filed with the Canadian securities authorities, copies of which can be found under Nevada Lithium's profile on the SEDAR+ at www.sedarplus.ca.

Should one or more of these risks or uncertainties materialized, or should assumptions underlying the forward-looking statements prove incorrect, actual results may vary materially from those described herein as intended, planned, anticipated, believed, estimated or expected. Although Nevada Lithium has attempted to identify important risks, uncertainties and factors which could cause actual results to differ materially, there may be others that cause results not to be as anticipated, estimated or intended. Nevada Lithium does not intend, and does not assume any obligation, to update this forward-looking information except as otherwise required by applicable law.