

Surge Announces Highest Grade Lithium Clay Resource in the USA With 4.67 Mt LCE @2,839 PPM Li Including 4.07 Mt LCE @ 3,167 PPM Li

22.02.2024 | [Newsfile](#)

West Vancouver, February 22, 2024 - [Surge Battery Metals Inc.](#) (TSXV: NILI) (OTCQX: NILIF) (FSE: DJ5) (the "Company" or "Surge") is pleased to report a maiden Mineral Resource Estimate (MRE) on its Nevada North Lithium Project (NNLP). The MRE, which has an effective date of February 16, 2024, was prepared by Dr. Bruce Davis, FAusIMM and includes a pit-constrained Inferred Mineral Resource of 4.67 Mt of Lithium Carbonate Equivalent (LCE) grading 2,839 ppm Li at a 1,250 ppm Li cutoff.

Highlights

- Highest Grade Lithium Clay Resource in the USA with 4.7Mt LCE grading 2,839 ppm Li at a 1,250ppm cutoff.
- MRE includes over 4Mt of LCE grading 3,167 Li PPM at a 2,000 ppm Li cutoff.
- Significant Expansion Potential: The MRE only covers a portion of the known footprint of mineralization with substantial potential for growth.

Mr. Greg Reimer, Chief Executive Officer and Director, commented, "We are thrilled with today's maiden MRE results as they solidify that the NNLP is a significant lithium deposit and one of the highest-grade lithium clay deposits worldwide. At higher grade cutoffs, there are still very appreciable volumes of lithium that are largely contained in the clay horizons nearest surface. We will continue to derisk the NNLP through metallurgical test work, technical studies and permitting. As well, we expect to continue to expand our known resource and certainty around it through drilling."

The lithium mineral resources at the NNLP are hosted by multiple shallowly dipping and laterally extensive clay beds, separated by tuff units. The primary horizon ("Cu3") contains the highest grades and is typically the first horizon intersected in drilling. Clay units primarily consist of massive green and dark brown laminated clay with white carbonate clots and euhedral calcite crystals. Seven lithium-rich beds have been identified to date that range in thickness from >50m to 2.5m and average around 15m thick.

The MRE for the NNLP is based on twenty drill holes completed between 2022 and 2023 under a Notice of Intent (NOI) permit for a total of 2,758m and 1,973 samples. Eight of the twenty drill holes were reverse circulation (RC), five were sonic, and seven were diamond core. The 3D geological model used to inform the block model was developed in Leapfrog™ by SideQuest Geological Modelling.

Many of the metrics used to derive a 1,250 ppm Li base cut-off grade were obtained in part from review of available information for deposits similar to that at the NNLP. It is expected that items such as recovery, bulk density and operating cost will change in the future with additional test work and engineering studies. The metrics used to derive a 1,250 ppm Li base case cut-off grade and define the resource pit shell include:

- Operating Cost per Resource Tonne: US\$88.50
- LCE Price: US\$20,000/t LCE
- Recovery: 73.5%
- Bulk Density: 1.79 t/m³
- Pit Slope: 27°
- Li to LCE conversion factor: 5.323

The inferred lithium mineral resource estimate is shown in bold in Table 1. The table includes the tonnage sensitivities to different cutoff grades up to a maximum of 4,000 ppm Li. The inferred resource estimate includes 100% of the resources on Surge's 100% owned ground and 25% of resources within the private block of ground in which Surge owns 25% of the subsurface rights.

Table 1. 2024 NNLP Inferred Resource in bold and sensitivity to different cutoff grades.

Cutoff (Li ppm)	Tonnes (Mt)	Grade (Li ppm)	Lithium (Mt)	LCE (Mt)
1,000	310.3	2,834	0.879	4.68
1,250	309.3	2,839	0.878	4.67
1,500	293.7	2,918	0.857	4.56
1,750	267.3	3,042	0.813	4.33
2,000	241.4	3,167	0.765	4.07
3,000	143.6	3,662	0.526	2.80
4,000	28.1	4,289	0.121	0.64

1. The MRE has been prepared by Dr. Bruce Davis, in conformity with CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines and are reported in accordance with the Canadian Securities Administrators NI 43-101 requirements.
2. Resources are constrained by a pit shell using Hexagon MinePlan™ 3D software.
3. The pit shell defined uses a 27° pit slope and assumes a US\$88.50/t operating cost, 73.5% recovery and a US\$20,000/t LCE price.
4. A Li to Li₂Co₃ factor of 5.323 was used.
5. A fixed density of 1.79 t/m³ was used.

Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that any mineral resource will be converted into a mineral reserve.

Technical Report

Under NI 43-101, Section 5.3(1)(c), Surge must file a technical report regarding the MRE within forty-five (45) days of the date of this news release.

Next Steps

The remainder of 2024 will be a busy year as the company prepares for a much larger and expanded drill program upon receiving its Exploration Plan of Operations Permit. In 2024, Surge plans to complete the following:

- Metallurgical and Flowsheet Test Work
 - Metallurgical test work is well underway with Kemetco. We anticipate releasing the results of this testing in Q1 of 2024.
- Surface Exploration Programs
 - In 2024, Surge plans to complete a detailed surface mapping program over the property and additional soil sampling. Combined, these will help identify additional areas of outcropping clay units and help to improve our geological understanding.
- Spring / Summer Expansion Drilling
 - In early spring, Surge will work with the BLM to determine how much disturbance can be reclaimed under the current NOI permit to complete additional drilling in 2024. As well, Surge plans to drill on the M3 JV property.
- Preliminary Economic Assessment (PEA)
 - Surge expects to undertake a PEA study on the NNLP with an anticipated target reporting date in Q4 of 2024.

Qualified Person as Defined Under National Instrument 43-101

Alan J. Morris, MSc, CPG of Spring Creek, Nevada, a Qualified Person as defined under National Instrument 43-101 has reviewed and approved the technical aspects of this news release.

This news release, including disclosure of the MRE has also been reviewed by Dr. Bruce Davis, FAusIMM, a Qualified Person as defined under NI 43-101 and is independent of Surge.

About Surge Battery Metals Inc.

Surge Battery Metals, a Canadian-based mineral exploration company, is at the forefront of securing the supply of domestic lithium through its active engagement in the Nevada North Lithium Project. The project focuses on exploring clean, high-grade lithium energy metals in Nevada, USA. Lithium is a crucial element for powering the electric vehicles of tomorrow. With a primary listing on the TSX Venture Exchange in Canada and the OTCQX Market in the US, [Surge Battery Metals Inc.](#) is strategically positioned as a key player in advancing lithium exploration, contributing significantly to the sustainable future of the electric vehicle industry. At Surge Battery Metals, we are not just exploring minerals; we are pioneering the path to a cleaner and more sustainable future, driving innovation in the lithium sector, and contributing to the evolution of the electric vehicle industry.

About the Nevada North Lithium Project

The Company's Nevada North Lithium Project, located in the Granite Range southeast of Jackpot, Nevada 73 km north-northeast of Wells, Elko County, Nevada. The first two rounds of drilling, completed in 2022 and 2023, identified a strongly mineralized zone of lithium bearing clays occupying a strike length of more than 3,500 meters and a known width of up to 950 meters. Highly anomalous soil values and geophysical surveys suggest there is potential for the clay horizons to be much greater in extent. The Nevada North Lithium Project has a pit-constrained Inferred Resource containing an estimated 4.67Mt of Lithium Carbonate Equivalent (LCE) grading 2,839 ppm Li at a 1,250 ppm cutoff.

On behalf of the Board of Directors

"Greg Reimer"

Greg Reimer,
President & CEO

Contact Information

Email : info@surgebatterymetals.com
Phone : 778-945-2656
Website: surgebatterymetals.com

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

This document may contain certain "Forward-Looking Statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and applicable Canadian securities laws. When used in this news release, the words "anticipate", "believe", "estimate", "expect", "target", "plan" or "planned", "possible", "potential", "forecast", "intend", "may", "schedule" and similar words or expressions identify forward-looking statements or information. These forward-looking statements or information may relate to future prices of commodities including lithium and nickel, the accuracy of mineral or resource exploration activity, reserves or resources, regulatory or government requirements or approvals including approvals of title and mining rights or licenses and environmental, local community or indigenous community approvals, the reliability of third party information, continued access to mineral properties or infrastructure or water, changes in laws, rules and regulations including in the United States, Nevada or California or any other jurisdiction which may impact upon the Company or its properties or the commercial exploitation of those properties, currency risks including the exchange rate of USD\$ for Cdn\$ or other currencies, fluctuations in the market for lithium related products, changes in exploration costs and government royalties, export policies or taxes in the United States or any other jurisdiction and other factors or information. The Company's current plans, expectations, and intentions with respect to development of its business and of its Nevada properties may be impacted by economic uncertainties arising out of any pandemic or by the impact of current financial and other market conditions (including US government subsidies or incentives) on its ability to secure further financing or funding of its Nevada properties. Such statements represent the Company's current views with respect to future events and are necessarily based upon several assumptions and estimates that, while

