Electra Updates Mineral Resource Estimate at its Iron Creek Cobalt-Copper Project in Idaho

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Electra Battery Materials Corp. (NASDAQ: ELBM; TSX-V: ELBM) ("Electra", or the "Company") announced today an updated mineral resource estimate ("2023 MRE") for its Iron Creek Cobalt-Copper Project located in the Idaho Cobalt Belt, a 34-mile-long formation containing some of the largest primary cobalt deposits in North America, that paves the way for additional exploration activities and development of a preliminary economic assessment.

This press release features multimedia. View the full release here:
https://www.businesswire.com/news/home/20230310005243/en/

Figure 1 - 2023 resource showing the indicated and inferred resource domains as well as blocks with NSR values that are not included in the resource due to insufficient drilling to establish connectivity and DSO outlines. (Graphic: Business Wire)

Highlights

- Indicated resource of 4.4 million tonnes grading at 0.19% cobalt for 18.4 million pounds cobalt and grading at 0.73% copper for 71.5 million pounds of copper.
- Inferred resource of 1.2 million tonnes grading at 0.08% cobalt for 2.1 million pounds of cobalt and grading at 1.34% copper for 36.5 million pounds of copper.
- As a result of infill and step-out drilling completed to date, Electra has upgraded 54% of the Inferred Resource category of the 2019 MRE to the Indicated category in 2023.
- The mineral resource area of the Iron Creek Project covers an area of 1,652 metre strike length at a 780 metre width and extending to a height of 852 metres.
- Within the Iron Creek project boundary there are seven document occurrences of metallic mineralization exposed at surface or encountered by drilling. Iron Creek is main mineralized body and Ruby is the second most important occurrence.
- The 2023 MRE was prepared for a potential underground scenario with a US$87.00 net smelter return (NSR) cut-off grade.
- Additional drilling is recommended to connect isolated intercepts on the east and at depth with the resource area, and advance the Ruby target to increase the inferred mineral resource.

"Continued exploration and development of the Idaho Cobalt Belt will help to reduce North America's reliance on foreign sources of cobalt supply particularly as demand for critical minerals will grows exponentially in the coming years," said Trent Mell, CEO of Electra. "Our updated mineral resources estimate, which reflects the encouraging results of drill programs completed to date, paves the way for continued exploration activities and development of a preliminary economic assessment."

Mineral Resource Estimate

Iron Creek Project	Mineral Resources	Tonnes	Cobalt (%)	Copper (%)	Lbs of Cobalt	Lbs of Copper	NSR Value (US$)
	Indicated	4,451,000	0.19	0.73	18,364,000	71,535,000	123.65
	Inferred	1,231,000	0.08	1.34	2,068,000	36,485,000	118.48

Notes to the 2023 MRE

1. The effective date of the 2023 MRE is January 27, 2023.
2. The independent and qualified persons for the 2023 MRE are Martin Perron, P. Eng. and Marc R. Beauvais, P.Eng. each from InnovExplo Inc.
3. The 2023 MRE follows the 2014 CIM Definition Standards on Mineral Resources and Mineral Reserves.
4. These mineral resources are not mineral reserves, because they do not have demonstrated economic viability. The results are presented undiluted and are considered to have reasonable prospects of economic viability.
5. The estimate encompasses one large, mineralized envelope using the grade of the adjacent material when assayed or a value of zero when not assayed. Dilution zones encompassing all mineralized zones were created as part of the mineralized domain to reflect the dilution within the constraining shapes.
6. High-grade capping supported by statistical analysis was done on raw assay data before compositing and established on a per-metal basis, having a limitating value at 1% for cobalt and 10% for copper. Composites (1.5 m) were calculated within the zones using the grade of the adjacent material when assayed or a value of zero when not assayed.
7. The estimate was completed using a sub-block model in Surpac 2022. A 4m x 4m x 4m parent block size was used.
8. Grade interpolation was obtained by Inverse Distance Squared (ID2) using hard boundaries.
9. A density value of 2.78 g/cm^3 was assigned to the mineralized domain.
10. The mineral resource estimate is classified as Indicated and Inferred. The Inferred category is defined with a minimum of three (3) drill holes within the areas where the drill spacing shows reasonable geological and grade continuity at the maximum range of the modelized semi-variogram. The Indicated mineral resource category is defined with a minimum of three (3) drill holes within the areas where the drill spacing shows reasonable geological and grade continuity at half the range of the modelized semi-variogram.
11. The 2023 MRE is locally constrained within Deswik Stope Optimizer shapes using a minimal mining width of 2.0m for a potential underground LH. An NSR-based cut-off grade was calculated using the following parameters: mining cost = US$55.00/t; processing cost = US$22.00/t; G&A = US$10.00/t. The cut-off grade should be re-evaluated in light of future prevailing market conditions (metal prices, mining costs etc.).
12. The number of metric tonnes was rounded to the nearest thousand, following the recommendations in NI 43-101 and any discrepancies in the totals are due to rounding effects. The metal contents are presented in pounds of in-situ metal rounded to the nearest hundred.

Mineral Resource Estimation Methodology

Electra retained InnovExplo Inc. ("InnovExplo") to prepare an updated mineral resource estimate for the Iron Creek project and a supporting technical report.

The 2023 MRE is based on diamond drill holes drilled between 2017 and 2022 and a litho-structural model constructed in Leapfrog.

The diamond drill hole database contains 86 surface (26,304.8 metres) and 31 underground diamond drill holes (5,670.8 metres). The database also contains 23,308 sampled intervals taken from 29,481 metres of drilled core. All the sampled intervals were assayed for copper and cobalt. The database also includes lithological, alteration as well as structural descriptions and measurements taken from drill core logs.

The mineral resource database covers the strike length of the mineral resource area at variable drill spacings ranging mainly from 10 to 50 metres

In addition to the tables of raw data, the mineral resource database includes tables of calculated drill hole composites and wireframe solid intersections, which are required for the statistical evaluation and mineral resource block modelling.

The Technical Report has been prepared in accordance with Canadian Securities Administrators' National Instrument 43-101 Respecting Standards of Disclosure for Mineral Projects ("NI 43?101") and its related Form 43?101F1.

The 2023 MRE has an effective date of January 27, 2023. It represents an update of the previous mineral

resource estimate contained in the technical report titled "Technical Report with Updated Estimate of Mineral Resources for the Iron Creek project dated November 27, 2019 with an effective date of November 27, 2019, published by Steven J. Ristorcelli, C.P.G., P.G. and Joseph Schlitt, MMSA QP (the "2019 MRE").

InnovExplo is an independent geology and mining engineering consulting firm based in Val-d'Or, Québec, Canada, with other provincial offices in Québec City and Longueuil. Outside of these offices, InnovExplo also employs professional consultants in Montréal, Trois-Rivières in Québec and Sudbury in Ontario, Canada.

Recommendations

Based on the results of the 2023 MRE, the authors of the report recommend that the project move to a two-phased work program. Phase one would include exploration drilling to drill off the Ruby Zone, step out from the current resource at 100 m stepouts, and evaluate the CAS target area. A phase two program would be conditional on favorable results from phase 1 and include completion of a preliminary economic assessment and updated technical report in phase 2.

Electra's 2023 MRE will be filed in the coming days.

About Iron Creek
The Iron Creek Project consists of mining patents and exploration claims over an area of 3,300 hectares covering the strike extent of strata hosting mineralization. Historic underground development at Iron Creek includes 600 metres of drifting from three adits. A road connects the property to a state highway and nearby towns, Challis and Salmon. Iron Creek is one of several cobalt-copper resources and prospects within the Idaho Cobalt Belt, a prospective mineralized system that contains the largest primary resources of cobalt in the United States, according to the U.S. Geological Survey. A corporate video of the Iron Creek Project is available at https://youtu.be/QGz9Ga0mqd8 and the Company's website, www.electrabmc.com.

Qualified Person Statement
The scientific technical content of this press release that relates to the resource estimate has been reviewed and approved by Martin Perron, P. Eng. who is a Qualified Person as defined by National Instrument 43-101.

About Electra Battery Materials
Electra is a processor of low-carbon, ethically-sourced battery materials. Currently commissioning North America's only cobalt sulfate refinery, Electra is executing a multipronged strategy focused on onshoring the electric vehicle supply chain. Keys to its strategy are integrating black mass recycling and nickel sulfate production at Electra's refinery located north of Toronto, advancing Iron Creek, its cobalt-copper exploration-stage project in the Idaho Cobalt Belt, and expanding cobalt sulfate processing into Bécancour, Quebec. For more information visit www.ElectraBMC.com.

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Cautionary Note Regarding Estimates of Resources

Readers are cautioned that mineral resources are not economic mineral reserves and that the economic viability of resources that are not mineral reserves has not been demonstrated. The estimate of mineral resources may be materially affected by geology, environmental, permitting, legal, title, socio-political, marketing or other relevant issues. The mineral resource estimate is classified in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum's (CIM) "2014 CIM Definition Standards on Mineral Resources and Mineral Reserves" incorporated by reference into NI 43-101. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies or economic studies except for a Preliminary Economic Assessment as defined under NI 43-101. Readers are cautioned not to assume that further work on the stated resources will lead to mineral reserves that can be mined economically. An Inferred Mineral Resource as defined by the CIM Standing Committee is "that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling". Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that

the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. United States investors are cautioned that CIM and NI 43-101 standards for resource classification and public disclosure differ from the requirements of the U.S. Securities and Exchange Commission (SEC) and resource information contained in this news release may not be comparable to similar information disclosed by domestic United States companies subject to the SEC's reporting and disclosure requirements.

Cautionary Note Regarding Forward-Looking Statements

This news release may contain forward-looking statements and forward-looking information (together, "forward-looking statements") within the meaning of applicable securities laws and the United States Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, are forward-looking statements. Generally, forward-looking statements can be identified by the use of terminology such as "plans", "expects', "estimates", "intends", "anticipates", "believes" or variations of such words, or statements that certain actions, events or results "may", "could", "would", "might", "occur" or "be achieved". Such forward-looking statements include, without limitation, statements regarding the attributes of the Notes, the closing date of the Note Offering, the listing of the underlying Common Shares and the expected use of proceeds of the Offering. Forward-looking statements involve risks, uncertainties and other factors that could cause actual results, performance, and opportunities to differ materially from those implied by such forward-looking statements. Factors that could cause actual results to differ materially from these forward-looking statements are set forth in the management discussion and analysis and other disclosures of risk factors for Electra Battery Materials Corp., filed on SEDAR at www.sedar.com and with on EDGAR at www.sec.gov. Although Electra Battery Materials Corp. believes that the information and assumptions used in preparing the forward-looking statements are reasonable, undue reliance should not be placed on these statements, which only apply as of the date of this news release, and no assurance can be given that such events will occur in the disclosed times frames or at all. Except where required by applicable law, Electra Battery Materials Corp. disclaims any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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