Electra Secures 10-Year Permit to Advance Exploration for Idaho Copper and Cobalt Properties

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TORONTO, Nov. 19, 2024 - Electra Battery Materials Corp. (NASDAQ: ELBM; TSX-V: ELBM) ("Electra" or the "Company") is pleased to announce that it has secured a 10-year exploration permit for its Idaho copper and cobalt properties, including its Iron Creek project, in the Idaho Cobalt Belt, U.S.A. Covering 91 designated drill pad locations and hundreds of potential drill targets, this long-term permit enhances project certainty, offers greater planning flexibility, and significantly reduces administrative requirements compared to annual permits.

Approved by the U.S. Forestry Service, this permit enables Electra to advance its exploration of critical mineral resources essential to the U.S. economy across the Iron Creek Deposit, the Ruby Project, as well as the neighboring CAS and Redcastle option agreement properties.

Trent Mell, Electra CEO, said, "Securing this 10-year exploration permit is an important milestone for copper and cobalt mining in the U.S. and supports America's commitment to strengthening domestic critical mineral production. This permit provides us the necessary regulatory certainty and flexibility to advance exploration at 91 designated drilling sites, and positions Electra as a potential key contributor to North America's evolving battery supply chain. Our primary near-term focus is completing construction of North America's first battery-grade cobalt refinery, but we see substantial potential in the Idaho Cobalt Belt and are eager to resume drilling and field exploration as conditions and strategy dictate."

The first Trump administration underscored the strategic importance of securing critical minerals with its 2017 Executive Order 13817, which prioritized identifying and developing domestic mineral resources. Today, as the demand for electric vehicles and renewable energy infrastructure surges, the urgency for secure, reliable access to key elements such as lithium, nickel, cobalt and copper continue to grow.

Figure 1. Location of the Iron Creek Property in east-central Idaho:
https://www.globenewswire.com/NewsRoom/AttachmentNg/c07642aa-89a4-4b0a-a0f1-65d1028cad48

The 10-year exploration permit allows the Company to undertake exploration activities including setting up 91 drilling locations, along with constructing temporary access roads and staging areas, over 11.3 acres of the Idaho properties. The Idaho properties consist of mining patents and exploration claims over an area of 73.15 km^2, including the Iron Creek Project, and cover the strike extent of strata hosting the cobalt-copper sulfide mineralization. Iron Creek is one of several cobalt-copper mineral resources and prospects within the Idaho Cobalt Belt, a prospective mineralized system that contains copper and the largest primary cobalt resources in the United States, according to the U.S. Geological Survey.

Historical underground development at Iron Creek includes 600 metres of drifting in three adits. A road connects Iron Creek to a state highway and the nearby towns of Challis and Salmon. Electra's Iron Creek Property position cover a highly perspective and underexplored land package including the Redcastle Property and the CAS Property (Figure 2).

Figure 2. Detail of the Idaho Properties:
https://www.globenewswire.com/NewsRoom/AttachmentNg/c36e5d18-a948-4770-b5a3-16f51768c559

Within Electra's property boundary, there are seven reported occurrences of metallic mineralization exposed on surface or encountered in drilling. Iron Creek is the main mineralized body and Ruby is the second most important target identified to date. The resource area of the Iron Creek project covers an area of 1,652

metres of strike length and 780 metres of width and extends to a height of 852 metres. In March 2023, Electra released an updated Mineral Resources Estimate ("MRE") for the Iron Creek project area. As a result of infill and step-out drilling, Electra upgraded 54% of the Inferred classification of the 2019 MRE to the Indicated classification. Highlights include:

- Indicated Mineral Resource of 4.5 million tonnes grading 0.19% cobalt for 18.4 million pounds cobalt and grading 0.73% copper for 71.5 million pounds of copper;
- Inferred Mineral Resource of 1.2 million tonnes grading at 0.08% cobalt for 2.1 million pounds of cobalt and grading 1.34% copper for 36.5 million pounds of copper;
- The 2023 MRE was prepared for a potential underground scenario with a US$87.00 net smelter return (NSR) cut-off grade; and
- Additional drilling was recommended to connect isolated intercepts by drilling within or along strike and at depth of the Mineral Resources, and advance Ruby by drilling to increase the Inferred Mineral Resources.

The 2023 updated MRE is disclosed in a technical report published by Electra on March 10, 2023 under the title "NI 43-101 Technical Report and Mineral Resource Estimate for the Iron Creek Cobalt-Copper Property, Lemhi County, Idaho, USA". The report was prepared by Martin Perron, P.Eng., Marc R. Beauvais, P.Eng. and Eric Kinnan, P.Geo, and is dated effective January 27, 2023. A copy of the report is available under the Company's profile on www.sedarplus.ca.

Table 1. Mineral Resource Estimate of the Iron Creek Cobalt-Copper Project

Classification	Tonnes	Cobalt (%)	Copper (%)	Cobalt (lbs)	Copper (lbs)	NSR Value/ Tonne (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 on 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. all of InnovExplo Inc.*
3. *The 2023 MRE follows the CIM Standards.*
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 limiting 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 MRE 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. Dynamic anisotropy was used for the interpolation of the mineralized domain.*
9. *A density value of 2.78 g/cm^3 was assigned to the mineralized domain.*
10. *The MRE is classified as Indicated and Inferred. The Inferred classification is defined with a minimum of three 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 classification is defined with a minimum of three drill holes within the areas where the drill spacing shows reasonable geological and grade continuity at half the range of the modelled 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.*

13. *The independent and qualified persons for the 2023 MRE are not aware of any known environmental, permitting, legal, political, title-related, taxation, socio-political, or marketing issues that could materially affect the MRE.*

Figure 3. Longitudinal section showing locations of the Iron Creek Mineral Resources and the Ruby Zone Target:
https://www.globenewswire.com/NewsRoom/AttachmentNg/a6c37b23-56f5-4f39-b388-ea45204c880f

Notes: Longitudinal section view looking north

Qualified Person Statement

The scientific technical content of this press release that relates to mineral exploration and the 2023 Mineral Resource Estimate has been reviewed and approved by Mr. George King, P.Geo. and Dr. William Stone, P.Geo., who are Qualified Persons as defined by National Instrument 43-101. Mr. King is employed as Senior Site Supervising Geologist by Idaho Cobalt. Dr. Stone is employed as Lead Geoscience Consultant by Electra.

About Electra Battery Materials

Electra is a processor of low-carbon, ethically-sourced battery materials. Currently focused on developing North America's only cobalt sulfate refinery, Electra is executing a phased strategy to onshore the electric vehicle supply chain and provide a North American solution for EV battery materials refining. In addition to building North America's only cobalt sulfate refinery, its strategy includes integrating black mass recycling, potential cobalt sulfate processing in Bécancour, Quebec, and exploring nickel sulfate production potential within North America. For more information, please 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.

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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, including statements in this release about the expected use of the proceeds from the Financing. 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". Forward-looking statements are based on certain assumptions, and 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. Among the bases for assumptions with respect to the potential for additional government funding are discussions and indications of support from government actors based on certain milestones being achieved. 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 Corporation, filed on SEDAR+ at www.sedarplus.com and with on EDGAR at www.sec.gov. Other factors that could lead actual results to differ materially include changes with respect to government or investor expectations or actions as compared to communicated intentions, and general macroeconomic and other trends that can affect levels of government or private investment. Although the Company 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, the Company disclaims any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.