

Electra Identifies New Mineralization in Idaho Cobalt Belt

Toronto, Ontario – (August 2, 2022) – **Electra Battery Materials Corporation (NASDAQ: ELBM; TSX-V: ELBM)** ("Electra" or the "Company") today provided an update on its 2022 exploration program at its Ruby prospect, located 1.5 kilometers from its primary Iron Creek cobalt-copper deposit in the Idaho Cobalt Belt. Electra's exploration program is a cornerstone of its strategy to onshore the electric vehicle supply chain by identifying domestic sources of critical minerals for the electric vehicle market.

Highlights

- A strong and open-ended anomaly at Ruby was defined by an Induced Polarization (IP) survey, which measures the chargeability of the subsurface to determine the presence of sulphide minerals.
- Drilling on the eastern margin of the Ruby target area intersected mineralization that is texturally similar to the Iron Creek deposit. Additional drilling is planned to the west, targeting the strongest part of the identified anomaly.
- Surface sampling, geophysical surveys and drilling completed to date suggest that Ruby could be an important new mineralized cobalt and copper target in proximity to Electra's Iron Creek deposit.
- Drill samples have been sent for testing at a third-party laboratory, with assay results expected before the end of Q3 2022.

"It is a testament to the Electra team that our maiden drill campaign at Ruby intersected mineralization exactly where the geophysical survey predicted it would be," said Trent Mell CEO of Electra Battery Materials. "These are early days for this target, but the similarities to our Iron Creek cobalt and copper deposit validate our view that the underexplored Idaho Cobalt Belt remains prospective for new discoveries. Idaho could play an important role in the onshoring of the EV battery supply chain by providing a domestic supply of cobalt in America."

The 2022 drill program was based on the results of a 7.6-kilometer pole-dipole 3D IP survey of the Ruby prospect. The survey defined a strong chargeability anomaly with a 10 mV/V contour open-ended on each side (see Figure 1). Stronger chargeability zones exceeding 30 mV/V occur on the western edge of the survey and remain open-ended, extending toward the Coiner Fault system. The chargeability anomaly is spatially coincident with cobalt mineralization sampled at surface, and 3D modeling indicates it increases in thickness with depth.

Two drill holes have been completed for a total of 824 metres on the eastern side of the target. Both holes intercepted strong zones of pyrite mineralization spatially coincident with the upper edge of the target zone. Additional drilling will move west and target the strongest portion of the anomaly.

Electra previously sampled surface exposure of cobalt mineralization at Ruby across a 295-metre strike extent, returning several high-grade values, such as 10.7 metres at 0.24% cobalt (including 1.5 metre at 0.48% cobalt) and 7.6 metres at 0.26% cobalt (see October 29, 2019 press release).

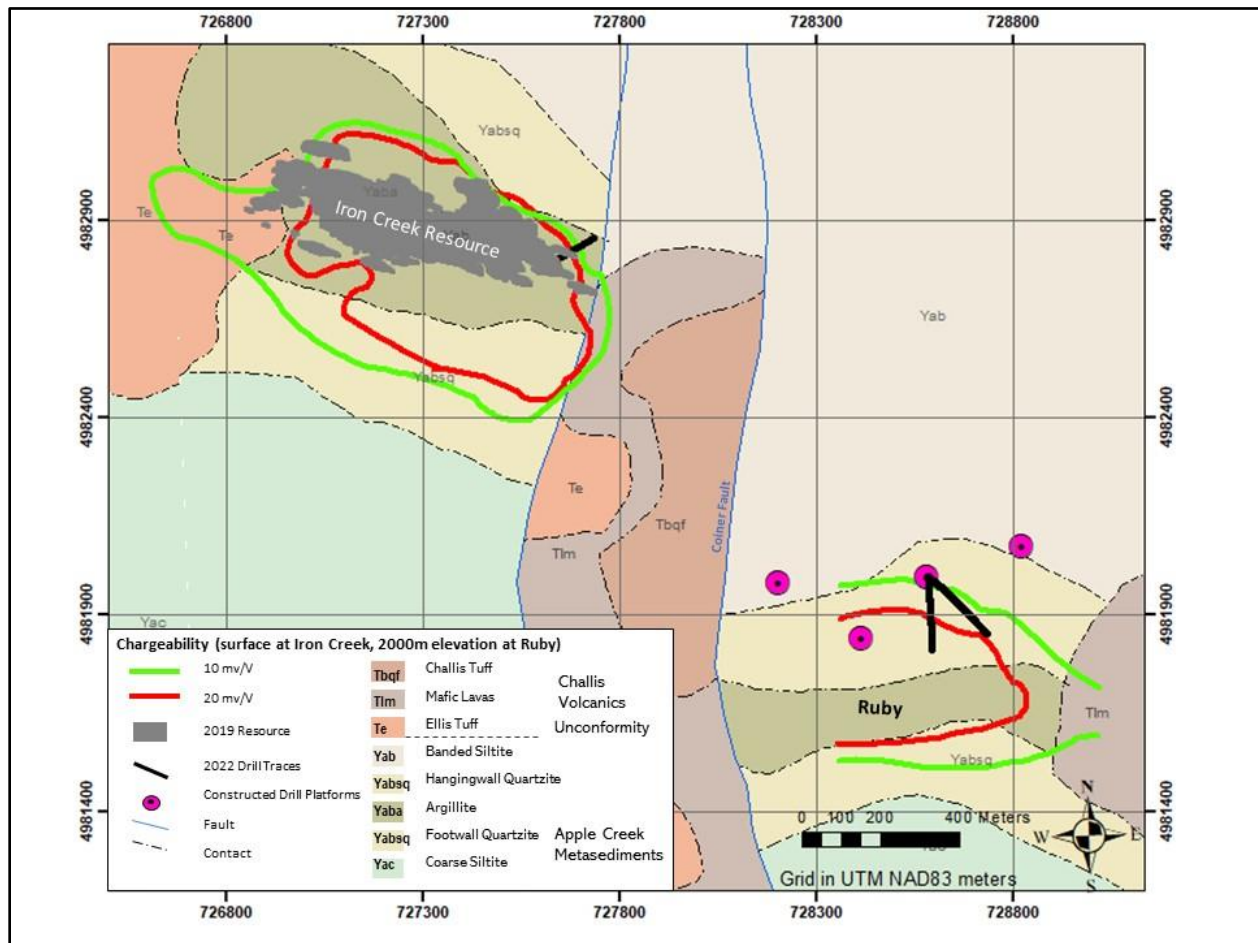


Figure 1. Contoured pole-dipole chargeability anomaly showing current drill traces and additional drill platforms for 2022 exploration program at Ruby. Historic IP contoured at Iron Creek to show comparison and spatial relationship between resource and chargeability anomaly.

Based on bedrock mapping, Ruby may be a separate stratigraphic unit or may be structurally offset from the Iron Creek mineralized horizon by a north-south trending fault. Younger volcanic rocks partially cover the target stratigraphy between Iron Creek and Ruby.

Along with covering Ruby, a single 1.5 km line of pole-dipole IP was completed on the Redcastle property approximately 1.2 km southeast of Ruby. The Redcastle project covers similar stratigraphy to Ruby and Iron Creek occurrences and is being explored for additional zones of sulfide mineralization. The single IP line did not identify any significant chargeability anomalies, however, additional exploration is planned on the Redcastle property. In 2021, Electra entered a joint venture on the 224 hectares Redcastle property with Phoenix Copper Ltd. (see May 25, 2021 press release for terms of JV).

About the Iron Creek Project

Electra's Iron Creek Project is located in the Idaho Cobalt Belt and is one of the few primary cobalt deposits in the world. The Company completed 30,000 metres of drilling from 2017 to 2019 before pausing exploration to focus on developing its battery materials park in Canada, which will be commissioned in phases starting in Q4 2022.

Iron Creek is considered to be amenable to underground mining extraction, which would result in a small footprint and minimize environmental impact. Drilling has demonstrated multiple mineralized horizons continuous along strike and down-dip. Thicker zones of mineralization of up to 30 metres occur in the eastern portions of the resource that also contain higher grades of cobalt.

Iron Creek currently has an Indicated Resource of 2.2 million tonnes at 0.32% cobalt equivalent (0.26% cobalt and 0.61% copper) for 12.3 million pounds of contained cobalt and 29 million pounds of contained copper, as well as an Inferred Resource of 2.7 million tonnes at 0.28% cobalt equivalent (0.22% cobalt and 0.68% copper) for an additional 12.7 million pounds of contained cobalt and 40 million pounds of contained copper. The resource estimate used a 0.18% cobalt equivalent cutoff grade.

Qualified Person Statement

Dan Pace is a Registered Member of the Society for Mining, Metallurgy & Exploration and is the Qualified Person as defined by National Instrument 43-101 who has reviewed and approved the contents of this news release. Mr. Pace is employed on a full-time basis as Principal Geologist for Electra.

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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