

Electra Drilling Intersects High Grade Cobalt, Extends Mineralization at Idaho Project

TORONTO, ON – (May 9, 2022) - **Electra Battery Materials Corporation (NASDAQ:ELBM; TSX-V:ELBM)** ("Electra") is pleased to announce that drilling at its cobalt-copper mineral project in Idaho has successfully extended mineralization by an additional 180 metres to the east of the current deposit as well as down dip from the eastern edge of the resource zone.

HIGHLIGHTS

- Cobalt is an essential ingredient in long range electric vehicle batteries and the U.S. automotive industry is entirely reliant on foreign supplies of this critical mineral
- Five of six exploration holes drilled in the most recent drill campaign intersected high grade cobalt mineralization, including:
 - 2.5 metres at 0.2% cobalt in hole IC21-04
 - 1.4 metres at 0.4% cobalt in hole IC21-05
 - 2.4 metres at 0.2% cobalt in hole IC21-05A
- Cobalt mineralization remains open along strike in both directions and the final three holes to be reported intersected the mineralized stratigraphy over a depth extent of 400 meters to the east of the current resource

"As expected, drill results on the eastern side of the deposit confirm that the mineralized system has considerable growth potential along strike and at depth" said Dan Pace, Principal Geologist. "Additional drilling to the east of Iron Creek will target zones where the cobalt mineralization may thicken in structural traps. Drilling is also planned for the Ruby zone located 1.5 kilometers to the southeast, where cobalt mineralization can be traced for approximately 300 meters on surface, with 27 surface rock chip samples with assays of up to 0.9%."

"At a time of heightened geopolitical risk, America has committed to securing a domestic supply of critical minerals for the green energy transition," said Trent Mell, CEO. "Idaho is arguably the most prospective location in the world to identify new primary sources of cobalt outside the DRC. Electra's ultra low carbon refinery in Canada will create the first domestic supply of battery grade cobalt for EVs later this year and Idaho can become an important part of a continental EV supply chain strategy that is both in the United States' national interest and good for the environment."

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 (Figure 1).

Iron Creek currently has an NI 43-101 compliant Mineral Resource Estimate, outlining 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 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. There is potential to extend mineralization in all directions with ongoing drilling. A copy of the technical report is available on the Company's website at electrabmc.com/our-business/iron-creek.

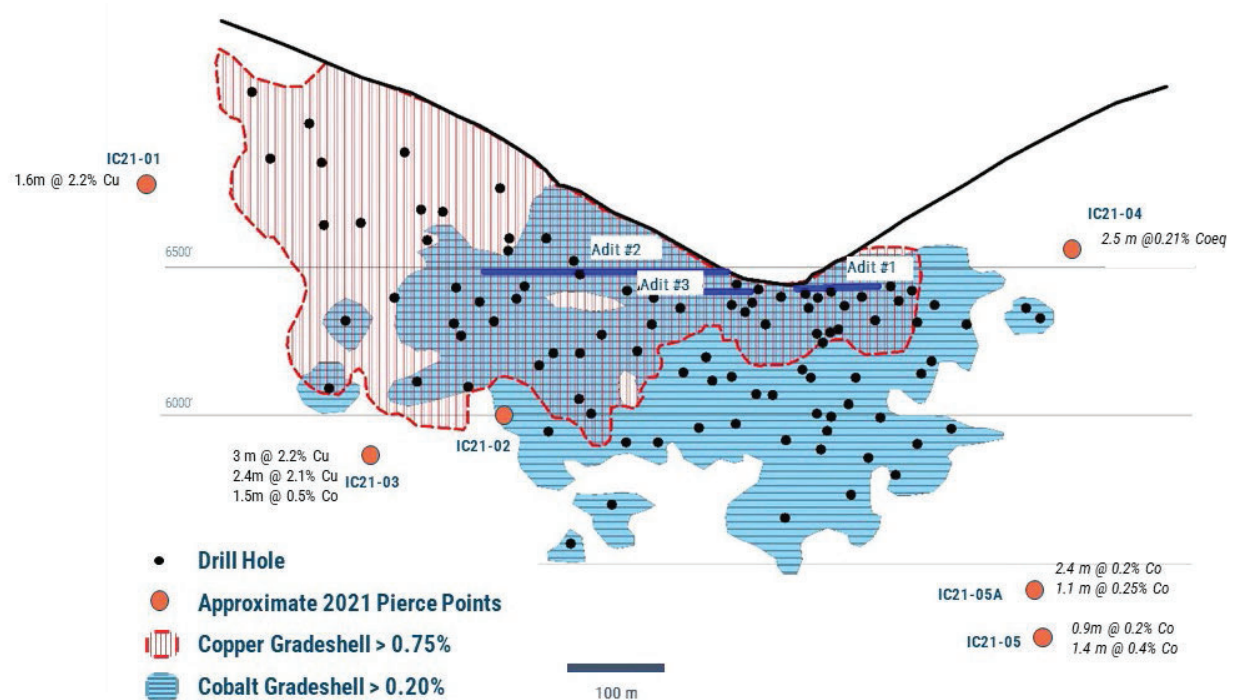


Figure 1. Long section of the Iron Creek Deposit showing 2021 drill holes. Inclined section cut at 340 degrees azimuth dipping 70 degrees to the northeast with a 125m cutting thickness.

In 2021, exploration successfully extended the known mineralization along strike to the east and west as well as at depth (Figure 2). Mineralization remains open in both directions and additional infill drilling could target structural traps within the mineralized stratigraphy where thicker zones of cobalt mineralization may be present. Electra will explore these targets, as well as other mineralized areas within its large and highly prospective land position.

2022 Work Plan

In 2022, Electra plans to advance the Iron Creek project with additional exploration drilling. Phase 1 will target the eastern extensions to the resource area between the resource boundary and these latest intercepts. Drillholes will explore for thicker zones of high grade cobalt mineralization similar to previous drill intercepts from underground adit #1, which included 25.7 metres of 0.35% Co in hole ICS18-03 (see October 24, 2018 press release).

The second phase of drilling will target the Ruby Zone located 1.5 km southeast of the known resource area at Iron Creek. Cobalt and copper mineralization is exposed over a 315-metre strike length, making Ruby a very prospective target. Previous chip channel sampling returned multiple mineralized intervals, including 10.7m of 0.24% Co (including 1.5m of 0.48% Co) and 7.6m of 0.26% Co in a similar setting to Iron Creek (see October 30, 2019 press release). Drilling will target the down dip extension of the surface mineralization from three drill platforms.

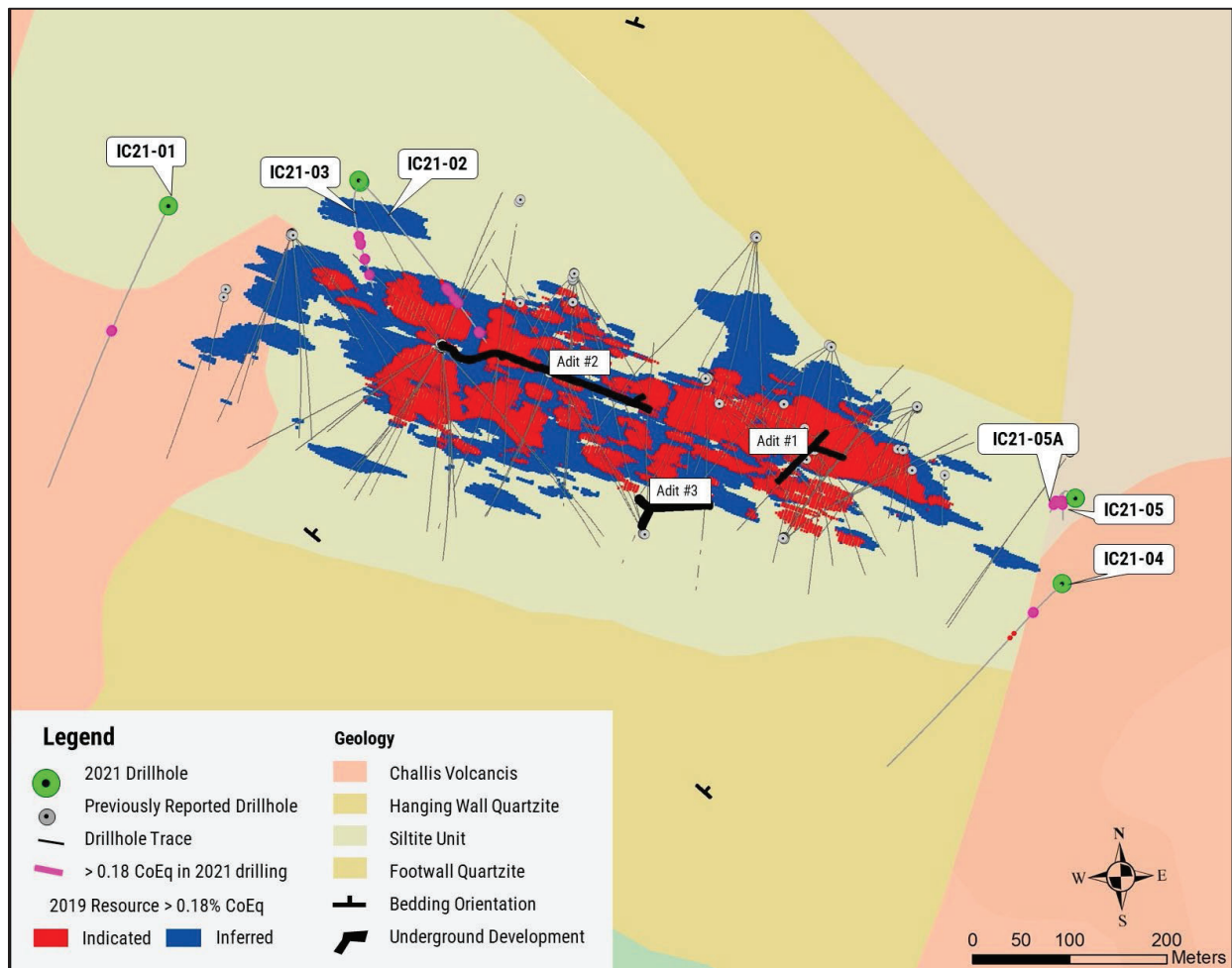


Figure 2. Plan map showing drillholes reported in this press release relative to historic drilling and resource boundary.

Electra's Idaho Property

The Iron Creek Project is located within Electra's Idaho property, which consists of mining patents and exploration claims over an area of 2,300 hectares covering the strike extent of strata hosting mineralization. Historic underground development at Iron Creek includes 600 metres of drifting from three adits. An all-weather 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. Mineralization-style throughout the Belt is considered to be stratabound meta-sedimentary rock hosted. Within Electra's own property boundaries, numerous satellite targets have been identified.

Table 1. Assay Results

Hole ID	From (m)	To (m)	Drilled Length (m)	True Width (m)	Cobalt %	Copper %	CoEq %
IC21-04	79.4	82.7	3.3	2.48	0.18	0.21	0.21
IC21-05	417.9	419.4	1.5	0.64	0.31	-	0.31
IC21-05	440.1	442.3	2.2	0.92	0.21	-	0.21
IC21-05	450.6	453.8	3.2	1.37	0.40	-	0.40
IC21-05A	388.8	393.8	5.0	2.41	0.20	-	0.20
IC21-05A	417.5	419.8	2.3	1.14	0.25	-	0.25

True width estimated from the surveyed drillholes intercept angle with the azimuth and inclination of the grade shell in the 2019 resource model. Cobalt equivalent is calculated as $\%CoEq = \%Co + (\%Cu/8)$. Co intercepts are calculated using a minimum 1 m drilled length at 0.18% CoEq cutoff.

Quality Assurance and Quality Control

Blanks, duplicates, and standards were inserted into the sample chain at the core processing site as part of the QA/QC program. All samples were submitted to ALS laboratories in Twin Falls, Idaho by Company staff. Drill core samples are dried, weighed, crushed to 70% passing -2mm, split to 250g pulps crushed to 85% passing minus 75 microns. Samples were dissolved with a sodium peroxide fusion with gravimetric dilution in glassless labware and analyzed using super trace methods via ICP-MS and ICP-AES. Samples over 2% Copper were analyzed with a HF-HNO₃-HClO₄ digest and analyzed with ICP-AES.

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 as Principal Geologist for Electra Battery Materials Corporation.

About Electra Battery Materials

Electra's core strategy is to produce low carbon, ethically sourced battery materials for the North American electric vehicle supply chain. The Company is specifically focused on creating the first integrated battery materials park in North America, providing refined cobalt, nickel and recycled battery materials to North American battery precursor manufacturers. Electra also owns the advanced exploration-stage Iron Creek cobalt-copper project in Idaho, USA.

On behalf of Electra Battery Materials

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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. 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 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 Corporation, filed on SEDAR at www.sedar.com. Although Electra Battery Materials Corporation 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 time frames or at all. Except where required by applicable law, Electra Battery Materials Corporation disclaims any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.