



## BATTERY MINERAL RESOURCES MCARA RESOURCE - METALLURGICAL SAMPLE ASSAYS YIELD HIGH GRADE COBALT

Vancouver, British Columbia – (May 10th, 2021) – Battery Mineral Resources Corp. (TSXV: BMR) ("**Battery**" or "**BMR**" or the "**Company**") is pleased to provide an update of bedrock stripping and metallurgical sampling of the high-grade cobalt - silver breccia vein material that form the McAra mineral resource (Measured & Indicated 1.1 million pounds grading 1.47% cobalt and 10.28 g/t silver – Battery Mineral Resources Announces Maiden Cobalt Resource, April 22<sup>nd</sup>, 2021 Press Release).

### **Highlights**

- An excavator trenching and bedrock stripping program exposed the McAra cobalt-silver mineralized zone at surface;
- A 202 kilogram ("kg") bulk sample was sent to Dundee Sustainable Technologies ("DST") for assay and a preliminary metallurgical assessment;
- The mineralized material contains on average 10.13% cobalt, 1.64 g/t gold, 30.88 g/t silver, and 1.25% nickel. The assays of the testwork samples are provided in Table 1;
- DST concluded that the McAra high grade cobalt material could be treated by pyrolysis to remove 99% of the arsenic, with no cobalt loss.

**Table 1: Assay analyses of the four McAra metallurgical test work samples**

Sample ID	Cobalt (%)	Arsenic (%)	Silver (ppm)	Gold (ppm)	Nickel (%)	Fe (%)	S <sup>2-</sup>
BMR01-1	9.67	17.18	23.80	1.62	1.19	6.26	7.76
BMR01-2	10.43	18.17	47.60	1.65	1.31	6.66	7.93
BMR01-3	10.79	18.39	25.90	1.64	1.34	6.65	8.17
BMR01-4	9.65	16.65	26.20	1.66	1.17	6.04	7.92
<b>Average</b>	<b>10.13</b>	<b>17.60</b>	<b>30.88</b>	<b>1.64</b>	<b>1.25</b>	<b>6.40</b>	<b>7.95</b>

### **About The Mcara Stripping And Metallurgical Testwork Program**

From 2017 to 2019, BMR completed 56 holes for 10,480 meters to define a NI 43-101 compliant resource and to explore the immediate area for additional cobalt-silver veins.

As part of work program, mechanical stripping of the historic showing was completed by Canadian Exploration Services Limited (Photo 1). BMR completed detailed structural mapping of the exposure that was used in the compilation of a 3D structural/geological model of the McAra mineral resource.

A 202kg sample of breccia vein mineralized material, containing very little barren host rock, was collected and sent to Dundee Sustainable Technologies for assay and

a preliminary metallurgical assessment (Photo 2). An outline of the work undertaken by DST is summarized here.

The sample was crushed and separated into 10kg lots, from these lots, four 100 gram ("g") samples were taken and analyzed. The samples were assayed for gold and silver by fire assay, while the cobalt, arsenic, iron and nickel were assayed by acid digestion followed by ICP (inductively coupled plasma) mass spectrometry analysis. Sample Preparation was as follows:

- The material was crushed, ground, homogenised and packaged into four separate 10kg bags.
- The material was stored in a freezer to preserve sulphide integrity.
- DST's mineral processing circuit comprised of a jaw crusher, hammer mill and a ball mill.
- The circuit allowed for a sample to be ground to a P<sub>80</sub> of 75 micrometres for laboratory testwork.
- 100g was taken from each of the four distinct 10kg bags and assayed. The resulting material was used for the DST testwork.
- Samples were assayed for gold and silver by fire assay; cobalt, arsenic, iron and nickel by acid digestion, then followed by ICP mass spectrometry and sulfur by LECO analyzer.

DST conducted pyrolysis tests on the Cobalt Zone - McAra material to remove the arsenic content by using a laboratory tube furnace with starting conditions: SO<sub>2</sub> neutral, 900°C, 180 minutes. DST concluded that the McAra high grade material could be treated as cobalt concentrate and that pyrolysis could remove 99% of the arsenic, with no cobalt loss and a 20% mass loss to generate a calcine product containing about 10% cobalt, <0.5% arsenic and 6% S<sup>2-</sup>.

Battery CEO Martin Kostuik states; *"We are encouraged that the assays produced from the preliminary metallurgical sample have confirmed the high-grade cobalt-silver mineralization hosted within McAra mineral resource. Further, the tests concluded that standard techniques to remove arsenic were 99% successful- which is an important factor in determining the potential commercial viability of the cobalt bearing material from this deposit. We are looking forward continuing our cobalt drilling program, not only at McAra but throughout our significant land holdings in the greater cobalt embayment."*

## **Background**

The McAra mineral resource is located 100 kilometers ("km") northeast of Sudbury, Ontario and about 30 km southeast of the town of Shining Tree (Figure 1). The McAra deposit is situated in a 65 square km Archean inlier within the Huronian Basin that is referred to as the Cobalt Embayment. Archean basement in the area was deposited in an extensional volcanic arc-back, arc setting and then later deformed during an arc inversion resulting in tight folding and steeply dipping

rocks. The Huronian Basin overlies Archean rocks and comprises Paleoproterozoic sediments with an estimated thickness in the Cobalt area of 6km.

Early exploration in the region began in the 1910s and targeted narrow high-grade silver-cobalt veins like those found in the Gowganda and Cobalt mining camps. No significant silver deposits discovered in the McAra area, but several copper-zinc occurrences were found in the Archean rocks, which prompted exploration for VMS style base-metal mineralization in the area.

Two gossanous zones were discovered near McAra Lake in 1996 by a local prospector which renewed interest in the area. Several companies completed worked on the property including airborne and ground-based geophysical surveys followed by selective drill testing that eventually led to the discovery of the high-grade cobalt-silver vein in 2004.

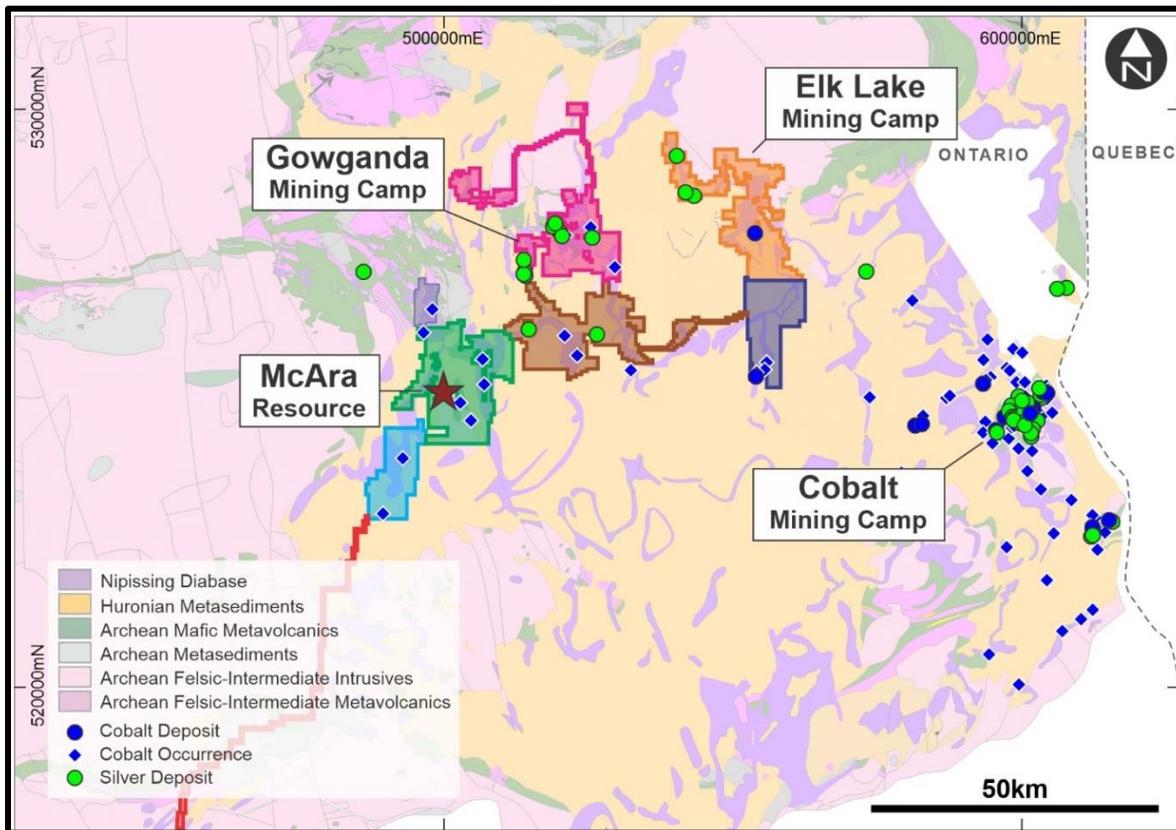


Figure 1: BMR Land Holdings - McAra Location Map



Photo 1: McAra breccia vein(Yellow) and bedrock exposure with oxidized polymetallic exhalative in foreground – view looking west



Photo 2: High grade cobalt breccia-vein from the McAra Trench (20cm long by 18cm wide)

### **Quality Control**

Sample preparation, analysis and security procedures applied on the BMR exploration projects is aligned with industry best practice. BMR has implemented protocols and procedures to insure high quality collection and management of samples resulting in reliable exploration assay data.

Sample preparation was performed by Dundee Sustainable Technologies in Thetford Mines, Quebec. DST analytical facilities are commercial laboratories and are independent from BMR equipped to perform crushing and grinding, comminution, hydrometallurgical and pyrometallurgical test-work services at an industrial scale. All BMR samples were bagged and packed into pails by BMR staff and delivered to DST's technical facility in Thetford Mines, where the material was crushed, ground, homogenized and packaged into 10kg lots then stored in a freezer to preserve sulphide integrity. DST's mineral processing circuit comprises a jaw crusher, hammer mill and a ball mill allowing for the sample to be ground to a P80 of 75  $\mu\text{m}$ , which is

the target grind size for the laboratory test-work. 100g samples were taken from 4 distinct 10kg lots and used for analysis.

Samples were assayed for gold and silver by fire assay, while cobalt, arsenic, iron and nickel were assayed by acid digestion followed by ICP (inductively coupled plasma) mass spectrometry and sulfur was assayed using a LECO instrument.

### **Qualified Persons**

P. J. Doyle, FAusIMM (#208850), Battery Mineral Resources Corp. - Vice President Exploration - Canada, supervised the preparation of and approved the scientific and technical information in this press release pertaining to the Canada Exploration Program.

Technical reports filed by the Company under the Company's profile at [www.sedar.com](http://www.sedar.com): "Technical Report on Cobalt Exploration Assets in Canada" dated as of May 26, 2020 with an effective date of March 31, 2020, prepared by SRK Consulting - G Cole PGeo (APGO#1416).

### **About Battery Mineral Resources Corp**

Battery is a multi-commodity resource company. Battery is engaged in the discovery, acquisition, and development of battery metals (cobalt, lithium, graphite, nickel & copper), in North America and South Korea. Battery is the largest mineral claim holder in the historic Gowganda Cobalt-Silver Camp, Canada, with various high-grade primary cobalt silver-nickel-copper targets located in the Cobalt Belt of Ontario and Quebec. In addition, Battery owns approximately 89% of ESI Energy Services, Inc., a pipeline equipment rental and sales company with operations in Leduc, Alberta and Phoenix, Arizona. Finally, Battery is currently pursuing a concurrent financing and acquisition to acquire the Punitaqui Mining Complex, a copper-gold mine located in the Coquimbo region of Chile.

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### **Forward Looking Statements**

This press release contains "forward-looking information" within the meaning of applicable Canadian securities laws, which may relate to the Company's future outlook and anticipated events or results. In some cases, but not necessarily all cases, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "targets", "expects" or "does not expect", "an opportunity exists", "is positioned", "estimates", "intends", "assumes", "anticipates" or "does not anticipate" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", "will" or "will be taken", "occur" or "be achieved". In addition, any statements that refer to expectations, predictions, indications, projections or other characterizations of future events or circumstances contain forward-looking information. Forward-looking

statements are not historical facts but instead represent management's expectations, estimates and projections regarding future events.

Forward-looking statements may include statements regarding management's beliefs, expectations or intentions regarding the size, completion, expenses and timing of the closing of an offering, industry trends, market growth rates and the Company's future growth rates, plans and strategies, projections of commodity prices and costs, the future financial or operating performance and condition of the Company, including its business, operations and properties, planned exploration and development activities and the costs and timing thereof, the intended use of the net proceeds of an offering, trends in the global cobalt, lithium and graphite markets, the adequacy of the Company's financial resources, timing, receipt and maintenance of approvals, consents and permits under applicable legislation. The foregoing list should not be construed as exhaustive.

These statements and other forward-looking information are based on opinions, assumptions and estimates made by the Company in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors that the Company believes are appropriate and reasonable in the circumstances as of the date of this presentation, including, without limitation, assumptions about the ability to raise additional capital; future prices of cobalt, lithium and graphite; the Company's competitive advantages; current market dynamics; the timing and results of exploration and drilling programs; and the availability and amenability of metallurgical and processing technologies for processing extracted minerals;. There can be no assurance that such estimates and assumptions will prove to be correct. If any of the assumptions or estimates made by management prove to be incorrect, actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking information. Accordingly, prospective investors are cautioned not to place undue reliance on such information. The foregoing list of assumptions should not be construed as exhaustive.

While such opinions, assumptions and estimates are considered reasonable by the Company as of the date such statements are made, they are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information, including but not limited to future requirements for additional capital, a limited operating history, the demand for and prices of lithium, cobalt and graphite, property title risk, exploration risk, mineral processing risk, uncertainty in relation to Inferred Mineral Resources, a negative cash flow; governmental regulation of the mineral exploration and development industry; the loss of an investor's entire investment; an arbitrary offering price; volatility in the price of the ordinary shares; the potential for additional dilution; absence of a market for the ordinary shares and future sales of ordinary shares by directors and officers of the Company. These factors and assumptions are not intended to represent a complete list of the factors and assumptions that could affect the Company.

The forward-looking statements included in this release are expressly qualified by this cautionary statement and are made as at the date of the release. The Company does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable securities laws.