



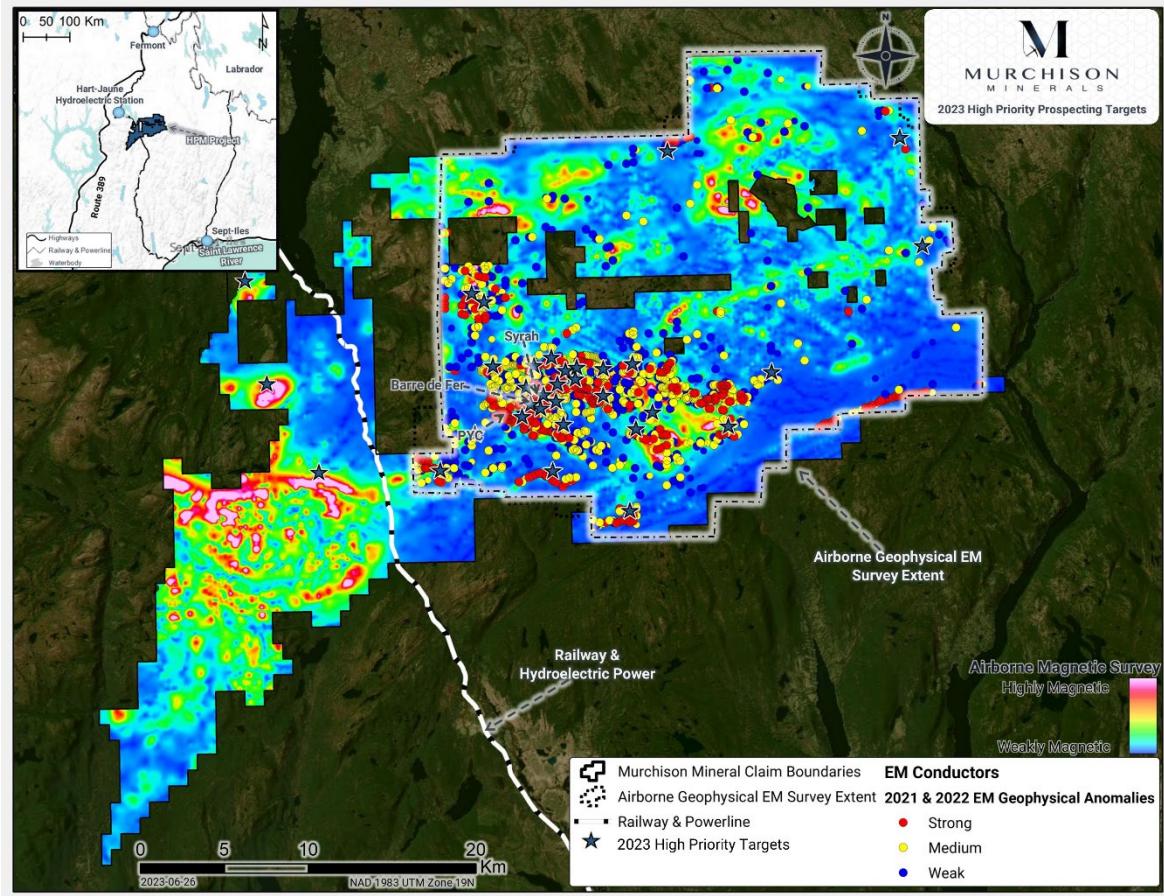
## News Release

# Murchison Minerals Commences Summer Exploration Program at HPM Nickel-Copper-Cobalt Project

## Highlights

- **Two-pronged 2023 Summer Exploration Program designed to optimise targets at the HPM project for future drill programs, consisting of:**
  - **Prospecting**
  - **Ground electromagnetic (EM) survey**
- **The wide scale prospecting program will explore the majority of the 34 high-priority targets previously identified during its 2023 detailed data analysis, for targets similar to the BDF Zone.**
- **Targets will be refined using a “Beep Mat” and then sampled with a backpack drill - this method has proven to be exceptionally effective at HPM due to minimal overburden cover.**
- **The detailed ground EM survey will utilize SQUID (Superconducting Quantum Interference Device) technology.**
- **The tool is designed to identify mineralization at depth, the survey will focus on areas proximal to the BDF Zone and the Syrah target, identifying areas for expansion during future drill programs.**

August 16<sup>th</sup>, 2023 (Burlington, Ontario): **Murchison Minerals Ltd. (“Murchison” or the “Company”)** (TSXV: MUR | OTCQB: MURMF) is pleased to announce the commencement of its 2023 summer exploration program at its 100%-owned Ni-Cu-Co HPM Project in Quebec. The program is two pronged with both prospecting on high-priority anomalies, and a deep penetrating ground electromagnetic (EM) survey being conducted. The prospecting component of the summer exploration program will identify additional targets with nickel-bearing sulphide mineralization on or near surface, adding de-risked high-priority targets. The ground EM component will target nickel bearing sulphide mineralization at depth within the BDF Zone and the Syrah target. Anomalies identified during prospecting and the SQUID survey will be used to prioritize exploration and expansion targets, respectively, during future diamond drill programs at the HPM Project.



**Figure 1:** Location map of high priority prospecting targets at the HPM project.

## HPM Prospecting Program

During the winter of 2023, Murchison’s technical team with the assistance of Dr. Peter Lightfoot, completed a detailed review of all relevant structural, geochemical and geophysical data collected at the HPM Project. The review identified 34 high-priority targets (Figure 1) for follow-up testing with prospecting crews. All geophysical anomalies present on the property were classified using multiple criteria which included conductive strength, magnetic correlation, interpreted depth, lack of historic exploration, and rock type, if available. Prospecting has proven effective at discovering high-grade nickel-copper-cobalt mineralization at the HPM project. The BDF Zone along with additional nickel-bearing sulphide showings were first discovered via prospecting commencing in 1999. The newly identified targets share similar geophysical characteristics with those previous discoveries. Murchison’s helicopter supported prospecting campaign consists of two teams of two. The teams will utilize a “Beep Mat” which is a geophysical tool that is dragged along surface by an operator, which can locate nickel-bearing sulphide mineralization (a conductor) at depths of up to 5 metres. Once the operator identifies the source of the anomaly on surface, the outcrop or boulder is sampled using a backpack drill.

## HPM Geophysical Survey

Discovery Geophysics out of Saskatoon, Saskatchewan is contracted to complete a ground EM survey over key areas on the highly prospective BDF trend. The survey will utilize a low temperature (liquid helium cooled) super conductor technology called Jessy Deep SQUID. The Jessy Deep SQUID system is considered to be the most sensitive currently in use and Discovery Geophysics has exclusive rights to the technology in North America. This type of EM system is an ideal survey type to identify so called “super conductors” which are electromagnetic anomalies that are too conductive to be effectively measured and identified by airborne EM systems. This super conductive phenomenon is typical in many of the worlds magmatic nickel mining camps such as Voisey’s Bay or Sudbury. The recent geophysical modelling at the BDF zone from borehole EM data demonstrates that this zone is indeed super conductive such as last year’s intercept in hole two which intercepted 121.2 metres of 1.02% Ni, 0.56% Cu, and 0.07% Co (BDF22-002, see release dated [November 29, 2022](#)). Murchison strongly suspects a similar super conductor is being observed at the Syrah target and this geophysical survey will be critical for drill targeting.

**Murchison Minerals’ CEO, President, & Director Troy Boisjoli comments:**

*“With the recent turmoil in Niger causing uncertainty in the uranium supply it’s a reminder as to why the western world needs to discover and develop its own supplies of critical and strategic minerals. At Murchison’s HPM Project in Quebec we’ve identified the high-grade Ni-Cu-Co BDF Zone, and the 5 km long BDF trend that hosts numerous mineralized showings. It’s a property with a substantial metal endowment that has true camp scale potential. Additionally, there is advanced infrastructure such as heavy rail and hydro power within kilometres of the project site, lowering the hurdle rate for any future development. In the context of worldwide projected nickel and copper supply deficits appearing quickly on the horizon, and the need for stable supplies within North America, the HPM Project is one of only a few nickel sulphide projects that can help fill that gap.”*

**Murchison Minerals’ Vice-President of Exploration John Shmyr comments:**

*“We couldn’t be more eager to get back to the HPM project, after last summer’s success the project is shaping up to be one of the premier nickel exploration projects in North America. The sheer number of high priority targets we have identified, paired with the lack of historic exploration, clearly demonstrated the huge potential of the HPM Project.”*

**Qualifying Statement**

The foregoing scientific and technical disclosures on the HPM Project have been reviewed by John Shmyr, P.Geo., VP Exploration, a registered member of the Professional Engineers and Geoscientists of Saskatchewan and current holder of a special authorization with the Ordre des Géologues du Québec. Mr. Shmyr is a Qualified Person as defined by National Instrument 43-101. The Qualified Person has verified the data disclosed in this release, including sampling, analytical and test data underlying the information contained in this release. Mr. Shmyr consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Some data disclosed in this News Release relating to sampling and drilling results is historical in nature. Neither the Company nor a qualified person has yet verified this data and therefore investors should not place undue reliance on such data. In some cases, the data may be unverifiable due to lack of drill core. Mineralization hosted on adjacent and/or nearby and/or geologically similar properties is not necessarily indicative of mineralization hosted on the Company's properties.

### **About Murchison Minerals Ltd. (TSXV: MUR, OTCQB: MURMF)**

Murchison is a Canadian-based exploration Company focused on nickel-copper-cobalt exploration at the 100% - owned HPM Project in Quebec and the exploration and development of the 100% - owned Brabant Lake zinc-copper-silver project in north-central Saskatchewan.

Additional information about Murchison and its exploration projects can be found on the Company's website at [www.murchisonminerals.ca](http://www.murchisonminerals.ca) . For further information, please contact:

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#### **Forward-Looking Information**

*The content and grades of any mineral deposits at the Company's properties are conceptual in nature. There has been insufficient exploration to define a mineral resource on the property and it is uncertain if further exploration will result in any target being delineated as a mineral resource.*

Certain information set forth in this news release may contain forward-looking information that involves substantial known and unknown risks and uncertainties. This forward-looking information is subject to numerous risks and uncertainties, certain of which are beyond the control of the Company, including, but not limited to, the impact of general economic conditions, industry conditions, and dependence upon regulatory approvals. FLI herein includes, but is not limited to: future drill results; stakeholder engagement and relationships; parameters and methods used with respect to the assay results; the prospects, if any, of the deposits; future prospects at the deposits; and the significance of exploration activities and results. FLI is designed to help you understand management's current views of its near- and longer-term prospects, and it may not be appropriate for other purposes. FLI by their nature are based on assumptions and involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such FLI. Although the FLI contained in this press release is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure shareholders and prospective purchasers of securities of the Company that actual results will be consistent with such FLI, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such FLI. Except as required by law, the Company does not undertake, and assumes no obligation, to update or revise any such FLI contained herein to reflect new events or circumstances, except as may be required by law. Unless otherwise noted, this press release has been prepared based on information available as of the date of this press release. Accordingly, you should not place undue reliance on the FLI or information contained herein. Furthermore, should one or more of the risks, uncertainties or other factors materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in FLI. Assumptions upon which FLI is based, without limitation, include: the ability of exploration activities to accurately predict mineralization; the accuracy of geological modelling; the ability of the Company to complete further exploration activities; the legitimacy of title and property interests in the deposits; the accuracy of key assumptions, parameters or methods used to obtain the assay results; the ability of the Company to obtain required approvals; the results of exploration activities; the evolution of the global economic climate; metal prices; environmental expectations; community and nongovernmental actions; and any impacts of COVID-19 on the deposits, the Company's financial position, the Company's ability to secure required funding, or operations. Risks and uncertainties about the Company's business are more fully discussed in the disclosure materials filed with the securities regulatory authorities in Canada, which are available at [www.sedar.com](http://www.sedar.com). Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.