



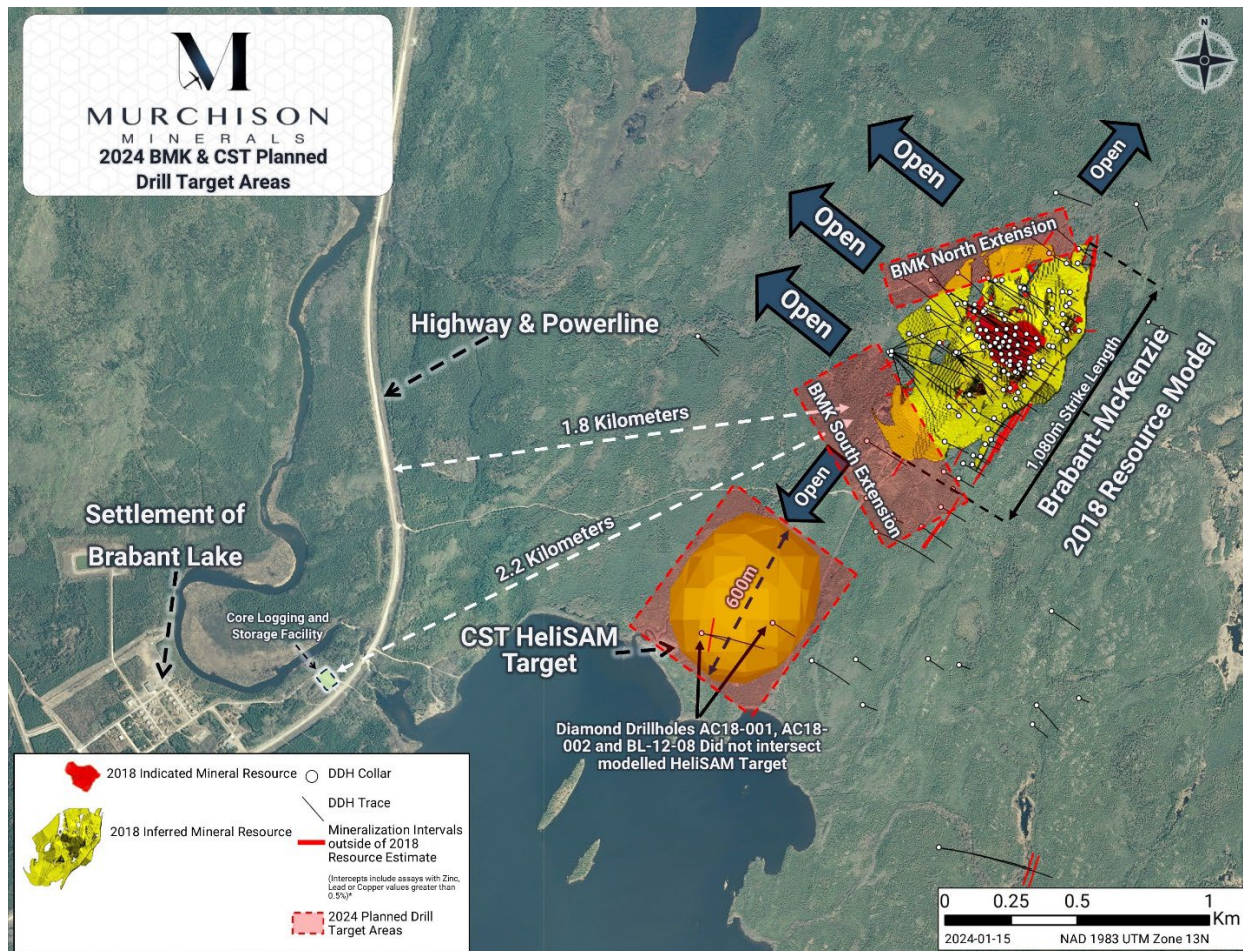
## News Release

# Murchison Minerals Commences Drilling at BMK Project Targeting Copper-Rich Stockwork Zone

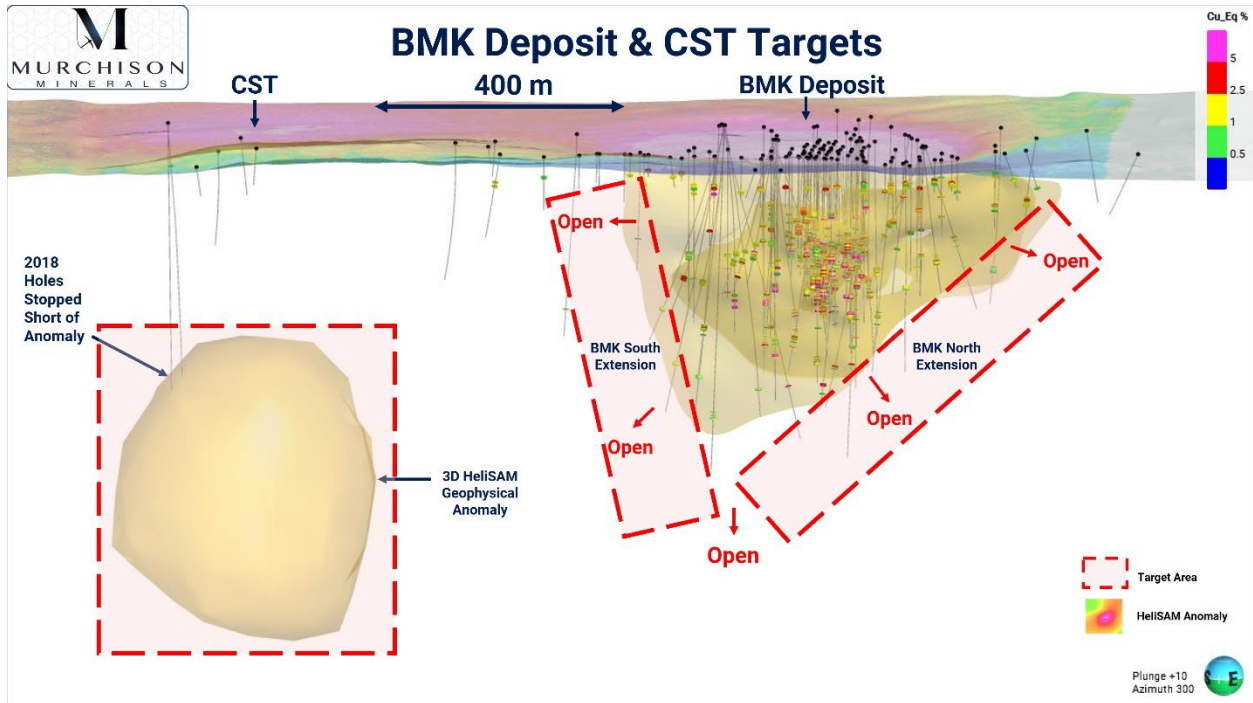
## Highlights

- Commencement of the 2024 Winter Exploration Program consisting of diamond drilling proximal to the high-grade BMK Cu-Zn-Ag-Pb-Au VMS Deposit
- The Objective of the 2024 Program is the discovery of the copper stockwork zone associated with the formation of the BMK Deposit
- Priority targets for testing of copper rich zones are:
  - CST, a HeliSAM target, which lies 400 m along strike to the southwest of the BMK Deposit
  - BMK South Extension - expansion area with copper rich intercepts at the southern extent of the BMK Deposit
  - BMK North Extension – expansion area with copper rich intercepts at the northern extent of the BMK Deposit
- The Program is anticipated to drill 3,500 m

January 22<sup>nd</sup>, 2024 (Burlington, Ontario): **Murchison Minerals Ltd.** (“**Murchison**” or the “**Company**”) (TSXV: **MUR** | OTCQB: **MURMF**) is pleased to announce the commencement of the 2024 Winter Exploration Program (the “**Program**”) at its 100%-owned Cu-Zn-Ag-Pb-Au Volcanogenic Massive Sulphide (VMS) BMK Project in Saskatchewan. The Program is comprised of diamond drilling totaling approximately 3,500 m and is expected to be completed by mid-March. Cyr Drilling of Sunnyside, Manitoba was selected as the drill contractor. The objective of the Program is the discovery of the copper-rich stockwork zone predicted – due to the high-grade nature – to be associated with the formation of the of the BMK VMS Deposit. The Program will focus on testing three target areas: CST, BMK North and BMK South Extensions.



**Figure 1:** Plan Map View of BMK Deposit and CST zone with drill target areas highlighted in red.



**Figure 2-** Long Section View of BMK Deposit and CST Geophysical Anomaly, highlighting target areas for 2024 drill program.

### 2024 Winter Exploration Program:

The Program will focus on diamond drill exploration, utilizing one drill. Murchison maintains a year-round core processing facility, and accommodations within the nearby – 2.5 km – community of Brabant Lake, SK. The BMK Project site is easily accessible with maintained road access within 1.8 km of the Deposit, while exploration target areas have well established drill-trails. The Company has secured all necessary permits and approvals for the Program.

The BMK Deposit has a 2018 NI 43-101 resource estimate of 2.1 Mt indicated at 0.69% Cu, 7.08% Zn, 0.49% Pb, 39.6 g/t Ag, 0.23 g/t Au and 7.6 Mt of inferred at 0.57% Cu, 4.46% Zn, 0.19% Pb, 18.42 g/t Ag, and 0.1 g/t Au (See [NI 43-101 dated September 4, 2018](#)) and remains open along strike and at depth. Recent work completed by subject matter expert Dr. Stephen J. Piercy, Professor at Memorial University NFLD, has aided in an updated geological interpretation of the BMK Deposit. The updated geological interpretation indicates that the BMK Deposit should have an associated copper stockwork zone (see [release dated June 7, 2023](#)) which is typical in most VMS deposits, and has yet to be discovered at BMK. The copper stockwork zone represents a target which could considerably add to the BMK resource, and its identification is of top priority for Murchison.

During the Program, the Company will drill test three high priority areas. i). The CST target (Figure 1 & 2), a large geophysical anomaly, reidentified in a 2017 Heli-SAM survey (hybrid ground/airborne electromagnetic survey). The target is considered prospective due to its similar

conductance to that of the BMK Deposit, as well as being only 400 metres south of the BMK Deposit directly along strike. The large size and proximity of the anomaly to the BMK Deposit may indicate a copper stockwork zone or an additional lens of massive sulphide mineralization. ii). BMK South Extension target, located south of the current extents of the defined BMK Deposit. The target area is along strike from multiple high-grade copper intercepts at the southern edge of BMK. iii). BMK North Extension target, located north of the current extents of the defined BMK Deposit. The target area is along strike from multiple high-grade copper intercepts at the northern edge of BMK Deposit.

### **2023 Fall Exploration Program at BMK:**

Murchison has recently received geophysical data from the fall 2023 ground electro-magnetic (EM) survey over the CST target ([see release dated November 8, 2023](#)). The EM survey consisted of two lines, 1 line was 2 km long and the other 1 km long with 50-metre spaced reading stations oriented perpendicular over the CST anomaly. The survey was used as confirmation of the 2017 geophysical data, and they survey successfully confirmed a strong EM response coincident with the previously modelled anomaly. This geophysical survey provided confidence in the robustness of the previous geophysical anomaly and confirmed it as high priority drill target for Murchison.

One (1) hole drilled in 2021 was also selected for a borehole EM survey. This hole detected a significant off-hole anomaly but unfortunately the hole was plugged at the 400-metre level which is approximately where the anomaly was located, and where mineralization had been encountered in the hole. The blocked hole was a hindrance to be able to provide full resolution to the borehole EM results however there is still sufficient data to highlight a significant response directly west of the hole. This off-hole anomaly is located at the far southern extent of the BMK Deposit and is planned to be drill tested during the winter program.

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

*"The 2024 Exploration Program at the BMK Project is the culmination of many months of planning and preparation. The team has spent months updating our geologic interpretation of the BMK Deposit and it has reinforced our views on the high potential of the project. The work that Dr. Piercy has done gives us a tremendous amount of confidence in our thesis that a copper stockwork zone should be associated with the BMK Deposit. Additionally, the team is particularly excited about the CST target since it is only 400 meters away from the Deposit, directly on strike. The 2024 Program is the first step in unlocking the potential of the BMK Project, and we are thrilled to be back here exploring."*

### **OTC Venture Market**

The Company wishes to announce that its last day of trading on the OTC Venture Market ("OTCQB") will be on January 31, 2024. For February 2024 onwards, US investors will still be able to trade the common shares of the Company via OTC's "Pink Sheet".

### **Qualifying Statement**

The foregoing scientific and technical disclosures on the BMK Project have been reviewed by John Shmyr, P.Geo., VP Exploration, a registered member of the Professional Engineers and Geoscientists of Saskatchewan. 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 the BMK Project**

The Brabant-McKenzie Project is located 175 kilometres northeast of La Ronge, Saskatchewan and approximately three kilometres from the community of Brabant Lake. The area is accessed year-round via provincial Highway 102 and is serviced by grid power. The project hosts the Brabant-McKenzie VMS Deposit, and the mineral claims total 664 square kilometres, that cover approximately 37 kilometres of strike length of the favourable BMK trend. The project contains multiple known mineralized showings such as the Main Lake and Betty Showings and with many identified geophysical conductors that have yet to be drill tested.

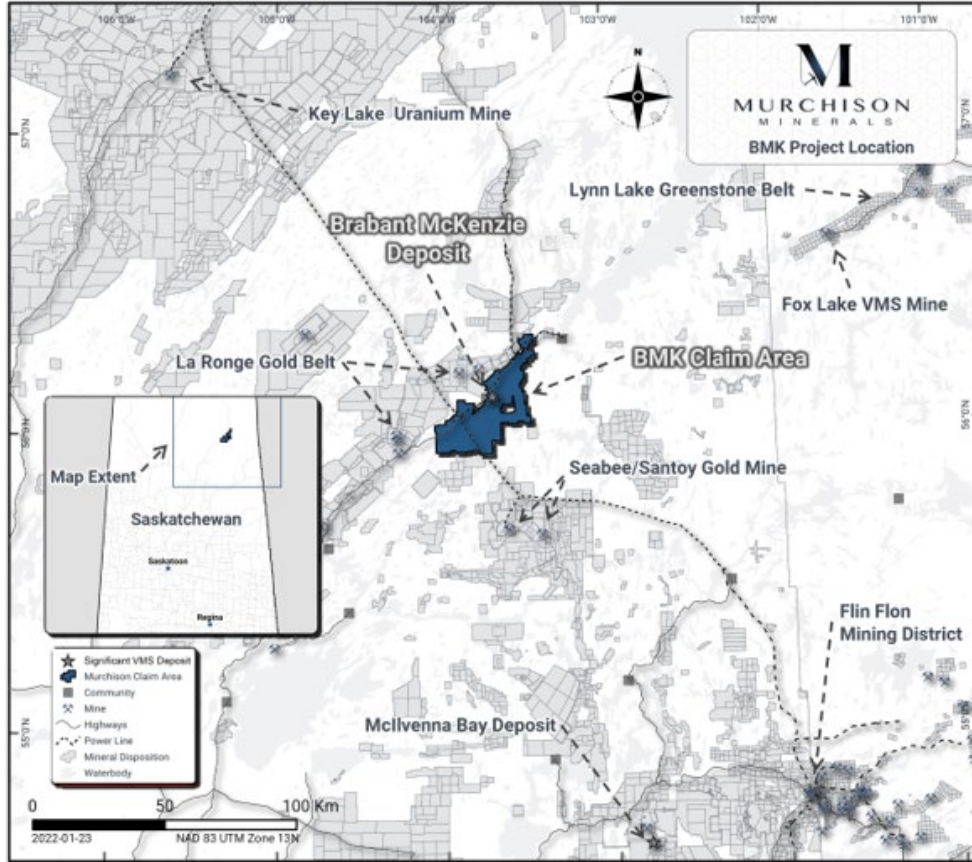


Figure 3: Location map of BMK Project.

### Mineral Resource Summary for BMK VMS Deposit

2018 BMK Deposit Resource										
Domain	Tonnes	Contained Grade							Contained Metal	
		Cu (%)	Zn (%)	Ag (g/t)	Pb (%)	Au (g/t)	Cu Eq. (%)	Zn Eq. (%)	Cu (000 lbs)	Zn (000 lbs)
<b>INDICATED MINERAL RESOURCE</b>										
Lower Zone	1,200,000	0.75	8.13	48.00	0.67	0.28	5.56	11.53	19,842	215,083
Upper Zone	900,000	0.60	5.70	28.52	0.24	0.17	3.82	7.93	11,905	113,097
<b>Total Indicated</b>	<b>2,100,000</b>	<b>0.69</b>	<b>7.08</b>	<b>39.60</b>	<b>0.49</b>	<b>0.23</b>	<b>4.82</b>	<b>9.98</b>	<b>31,945</b>	<b>327,783</b>
<b>INFERRED MINERAL RESOURCE</b>										
Lower Zone	2,700,000	0.55	4.88	29.02	0.42	0.14	3.43	7.14	32,739	290,481
Upper Zone	4,900,000	0.57	4.22	12.46	0.06	0.08	2.79	5.81	61,575	455,871
<b>Total Inferred</b>	<b>7,600,000</b>	<b>0.57</b>	<b>4.46</b>	<b>18.42</b>	<b>0.19</b>	<b>0.10</b>	<b>3.03</b>	<b>6.29</b>	<b>95,504</b>	<b>747,278</b>

The above mineral resource estimate for the Brabant-McKenzie VMS Deposit was prepared by an independent qualified person (“QP”) Finley Bakker, P. Geo., and has an effective date of September 4, 2018. The NI 43-101 Technical Report named Technical Report on the Resource Estimate Update for the Brabant-McKenzie Property, Brabant Lake, Saskatchewan is available on the Company’s website and on SEDAR. The Mineral Resource of the Brabant-McKenzie VMS Deposit was estimated based on metal prices of USD \$1.20/lb Zn, \$2.50/lb Cu, \$1.00/lb Pb, \$16.00/Oz. Ag, and \$1,200/Oz. Au, and a USD exchange rate of \$1.25. A Net Smelter Return (NSR) cut-off of \$90/tonne and a 3.5% zinc equivalent based on above metal prices and an average recovery of 75% for all metals.

### **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. Murchison currently has 260.8 million shares issued and outstanding.

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:

Troy Boisjoli, President and CEO,  
Erik H Martin, CFO, or  
Justin LaFosse, Director Corporate Development  
Tel: (416) 350-3776  
[info@murchisonminerals.com](mailto:info@murchisonminerals.com)

#### **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.

