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MacDonald Mines Receives up to 5.5 % Cu and 6.45 g/t Au in Surface Grab Samples from the Ashigami Cu-Au-Co showings

Demonstrates Additional Cu-Au Mineralisation along the McLaren Lake Fault Zone

Toronto, Ontario – March 21, 2023 - MacDonald Mines Exploration Ltd. (TSX-V: BMK, OTC: MCDMF) ("MacDonald Mines" or the **"Company")** is pleased to report new surface exploration results from the Ashigami Cu-Au occurrence ("Ashigami"), 4.5 Km SE of the historic Alwyn Mine ("Alwyn"), both located along/adjacent to the McLaren Lake Fault Zone ("MLFZ") on its 100% owned SPJ Property ("SPJ") near Sudbury, Ontario.

Survey Highlights:

- **New grab samples from Ashigami blast pit containing 1.00 to 6.45 g/t gold, 3.11 to 5.55 % copper and 133 to 211 ppm cobalt**. **The reader is cautioned that grab samples are selective by nature and do not necessarily represent the true metal content of the mineralized zones.*
- Mineralization consists primarily of chalcopyrite with pyrite within dense multidirectional networks of quartz-carbonate veins, hosted in Gowganda formation sediments
    - **Very comparable to veining and mineralization observed in the Alwyn Cu-Au trend.**
- Located 4.5 km southeast of the historic Alwyn Mine and adjacent to the prospective MLFZ, Ashigami Cu-Au occurrence may represent a broader extension of the mineralized system observed along the Alwyn Cu-Au trend drilled in 2022.

Greg Romain, President & CEO, commented: "Following our 2022 drilling success in the Alwyn Cu-Au trend, we started to re-examine the showings and occurrences along the MLFZ to test for the presence of Cu-Au mineralization comparable to the Alwyn trend. This initial surface work at the Ashigami showing revealed the presence of Cu-Au-Co mineralization that is comparable to what is observed in the Alwyn Cu-Au trend 4.5 km to the northwest and is suggesting a larger footprint than originally anticipated for polymetallic Cu-Au-Co mineralization along the MLFZ".

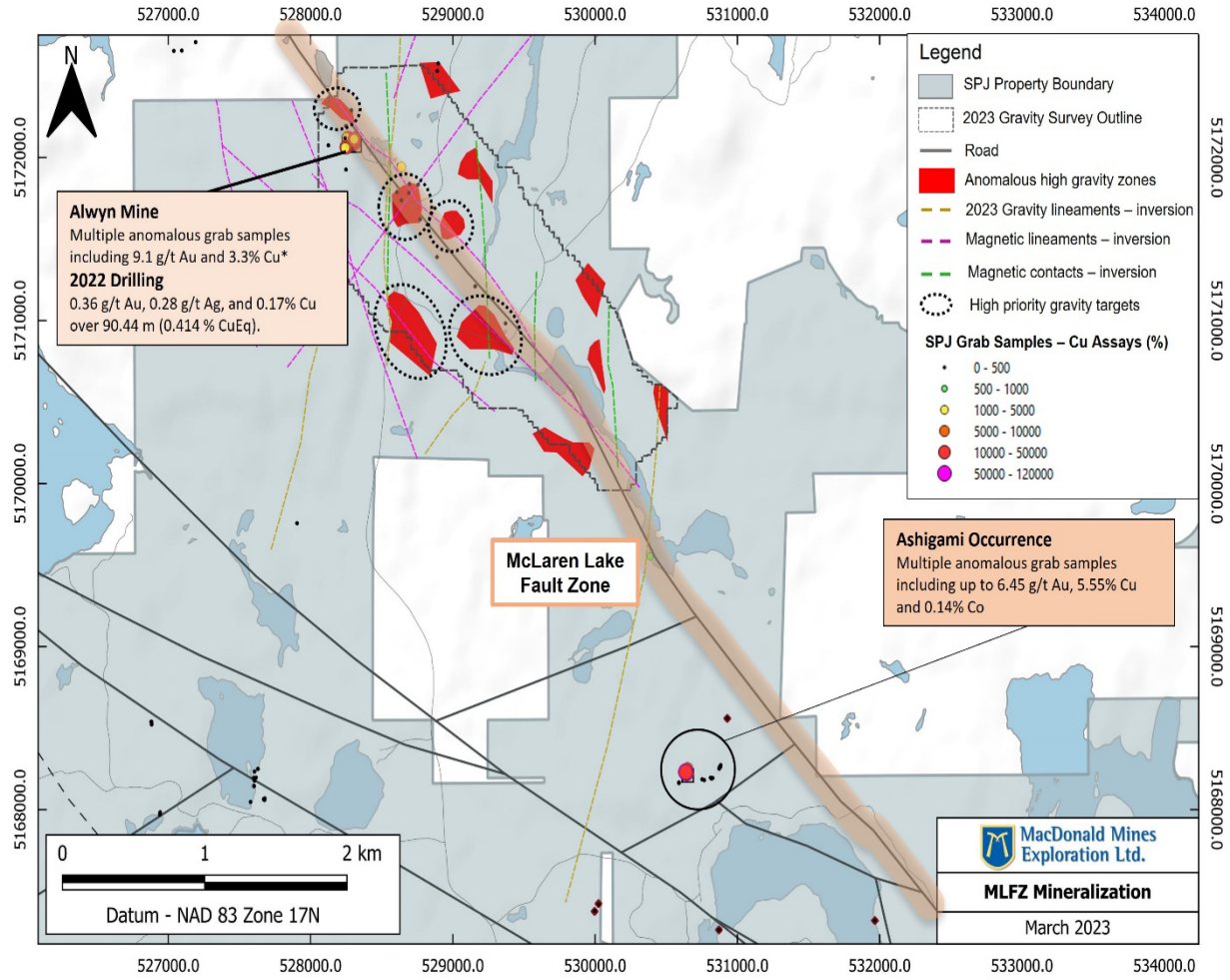

Figure 1. Location of Ashigami Cu-Au-Co occurrence relative to the historic Alwyn Mine and 2022 drilling.

Table 1. Anomalous grab samples collected by MacDonald Mines at the Ashigami Cu-Au occurrence.

Year	Sample No.	Easting	Northing	Au g/t	Cu ppm	Co ppm	Ag ppm
Veined Gowganda Fm Sediments							
2023	610444	530637	5168231	1.00	55500	140.0	7.42
	610445	530637	5168231	3.90	31100	211.0	7.39
	610446	530637	5168231	6.45	31900	133.0	3.34
2019	3482959	530643	5168221	0.60	15790	18.6	0.30
	3482960	530642	5168225	0.49	14850	31.3	0.80
	3482961	530649	5168224	0.46	33270	44.5	3.20
Espanola Fm Limestone – Gowganda Fm Conglomerate Contact							
2019	3482956	530874	5168257	0.10	9.5	64.1	<0.10
	3482957	530872	5168251	4.89	25.7	1356.1	0.10
	3482958	530883	5168273	6.24	2.6	19.3	<0.10

**The reader is cautioned that grab samples are selective by nature and do not necessarily represent the true metal content of the mineralized zones.*

Ashigami Cu-Au and Au-Co showings

Mineralization occurs in two areas at the Ashigami occurrence, located approximately 225 m east-west of each other. In 1981, a 100 ft x 20 ft blast pit was created to bulk sample the first occurrence,

which yielded approximately 0.22% copper and negligible gold values (*OGS assessment report 41I10NE0167*). This occurrence is hosted within Gowganda Fm sediments and has a brecciated appearance due to intense, multi-direction quartz-carbonate veining, which contains primarily chalcopyrite with pyrite mineralization. The blast pit is still well exposed and was resampled this year (new samples 610444 – 610446) in order to test the similarities of the occurrence's geology and mineralization to that of the Alwyn Cu-Au trend.

The second showing, located 225 m east of the blast pit, was sampled in 2019 and occurs at a strongly deformed contact between Espanola Fm limestone and a clast-poor Gowganda Fm conglomerate. The contact is sheared in a N-S orientation and Au-Co mineralization associated with pyrite within the limestone unit. The continuity of Au-Co mineralization at the contact is not yet known.

Based on historic surface sampling, sodic and iron alteration (earthy/specular hematite & chlorite) occur throughout the Ashigami area at variable intensities, with some of the strongest sodic alteration observed directly around the Ashigami showings (OGS report 41I10NE0073). The combination of these new assay results, in addition to the presence of strong sodic and seeping hematite-bearing alteration, further highlight the similarities between Cu-Au-Co mineralization in Ashigami and Alwyn areas and define the Ashigami area as a primary focus for Cu-Au-Co exploration along the MLFZ during the spring and summer of 2023. The Company's primary objective moving forward is to determine the relationship of Cu-Au-Co mineralized showings along the MLFZ, such as Alwyn and Ashigami, and prove the area's potential to host an IOCG and affiliated deposits.

Shares for Payment

The Company, at its option, has issued shares in lieu of cash payment under the terms of the Powerline Property Agreement entered on June 30, 2018 and the Jovan Property Agreement entered into July 10, 2018. A total of 71,429 common shares of the Company were issued based on the closing March 20, 2023 price of $0.07.

Grant of Options

The Company announces the grant, under the Company's stock option plan, of 680,000 stock options to certain directors, officers, employees, and consultants of the Company. The options entitle the holders to purchase the same number of common shares of the Company at a price of $0.10 per share for a period of five years.

About MacDonald Mines Exploration Ltd.

MacDonald Mines is a Canadian gold and base metal exploration company focused on exploring its 100%-owned, 19,720 ha (197 km^2) SPJ Project, 20 km southeast of the prolific Sudbury Mining Camp in Northern Ontario. The Company's focus is to locate what it theorizes to be large gold systems with high-grade gold surrounding the past producing Scadding Gold Mine and potential large gold and polymetallic structures surrounding Alwyn, Glade, MacLeod and Norstar. The Company is also focusing on key critical metal systems surrounding Candore and Jerome within the SPJ Project to supply the renewable energy transition, particularly nickel, copper, and PGE's. The demand and need for critical metals is at an all-time high, and Macdonald Mines' believes the SPJ Property Area has the potential to be part of the solution.

Qualified Person

Jean-François Montreuil, P.Geo., Chief Geologist of MacDonald Mines, is the Qualified Person as defined by National Instrument 43-101 *Standards of Disclosure for Mineral Projects*, responsible for preparing, supervising, and approving this news release's scientific and technical content.

Forward-Looking Statements

This news release may contain certain “forward looking statements.” Forward-looking statements involve known and unknown risks, uncertainties, assumptions, and other factors that 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 the forward-looking statements. Any forward-looking statement speaks only as of the date of this news release and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise.

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To learn more about MacDonald Mines, please visit www.macdonaldmines.com

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