



MacDonald Mines Exploration Ltd.

MacDonald Mines Receives Up to 45.5 g/t Gold and 0.39% Copper in Surface Grab Samples at the McLeod Showing*

News Release

Toronto, Ontario – November 23, 2021 - MacDonald Mines Exploration Ltd. (TSX-V: BMK, OTC: MCDMF) (“MacDonald Mines” or the “Company”) is pleased to report new surface exploration results from the McLeod showing at its SPJ Property located 40 km east of Sudbury.

Highlights of the surface exploration results at the McLeod showing:

- Gold grades between 0.01 g/t and 45.5 g/t and copper grades between 0.023 % and 0.39 % in grab samples collected by MacDonald Mines.
- **The reader is cautioned that grab samples are selective by nature and do not necessarily represent the true metal content of the mineralized zones*
- The surface sampling by MacDonald, combined with the historic drilling results reported for the showing (up to 35.87 g/t gold over 2.44 metres; AFRI 41I10NE0093), suggests that high-grade gold zones may exist in the East-West Ess Creek Deformation Corridor.
- MacDonald Mines secured the mineral rights over the McLeod showing through a strategic land transaction reported on March 24, 2021.
- Additional exploration will be conducted to define the grade, geometry and size of mineralization zones at the McLeod showing.

Geological Context of the McLeod Showing in the Ess Creek Deformation Corridor

In 1974, seven (7) short holes were drilled in the McLeod showing (AFRI 41I10NE0093). The best results were obtained in drill hole D1 that intersected 11.64 g/t gold over 8.69 metres core length, including 35.87 g/t gold over 2.44 metres. The complete assaying of four (4) holes during the drilling program indicate that the assayed drill holes were stopped in mineralized rocks with assays of up to 5.14 g/t gold over 0.61 metres in samples terminating the drill holes (AFRI 41I10NE0093). The reader is cautioned that the Qualified Person has not independently verified these historic drilling results. Following the drilling program, three (3) 75-pound bulk samples were taken from the McLeod showing. The samples were taken in what is now a 67 metre x 14 metre open pit. No results of exploration, development or diamond drilling have been reported from the McLeod showing since the exploration programs of the 1970s.

With the objective of validating gold grades reported by historic diamond drilling at the McLeod showing, MacDonald Mines conducted a surface sampling program at the showing in the Fall of 2021. Combined with the drill logs of the 1974 program, MacDonald Mines’s fieldwork indicates that gold-copper mineralization is associated with networks of pyrite, arsenopyrite and chalcopyrite veins that are variably crosscutting albitized rocks of the Southern Province.

Representative grab samples of different intensities of mineralization were collected in bedrock along the edge of the pit and from waste piles located beside the pit. The results of the 2021 sampling program support the presence of gold-copper mineralization at the McLeod showing (Table 1).

At a larger scale on the SPJ property, the McLeod showing is deemed part of the Ess Creek Deformation Corridor in which MacDonal Mine’s drilling program in the winter of 2021 identified multiple zones of anomalous Au, Ni and Ag mineralization. The confirmation of gold-copper mineralization at the McLeod showing extends the footprint of the mineralized system identified in 2021 along the Ess Creek Deformation Corridor over a strike length of 530 metres.

Table 1 – Metal content* and locations of the 2021 grab samples at the McLeod showing

Au (gpt)	Ag (gpt)	Cu (ppm)	Sample ID	Sampling location	X	Y
0.652	0.16	283	610069	Edge of pit	537277	5165238
0.495	0.23	230	610070	Edge of pit	537271	5165241
1.19	Pending		610080	Edge of pit	537257	5165240
1.23			610081	Edge of pit	537261	5165240
2.13			610082	Edge of pit	537294	5165274
0.01			610084	Close to pit	537293	5165234
17.1	1.27	1,220	610071	Waste pile	537284	5165236
0.372	0.28	1,870	610072	Waste pile	537284	5165236
45.5	2.64	3,150	610073	Waste pile	537285	5165237
0.994	0.2	1,500	610074	Waste pile	537286	5165238
18.3	1.7	470	610075	Waste pile	537285	5165237
8.13	0.63	3,910	610076	Waste pile	537285	5165235

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

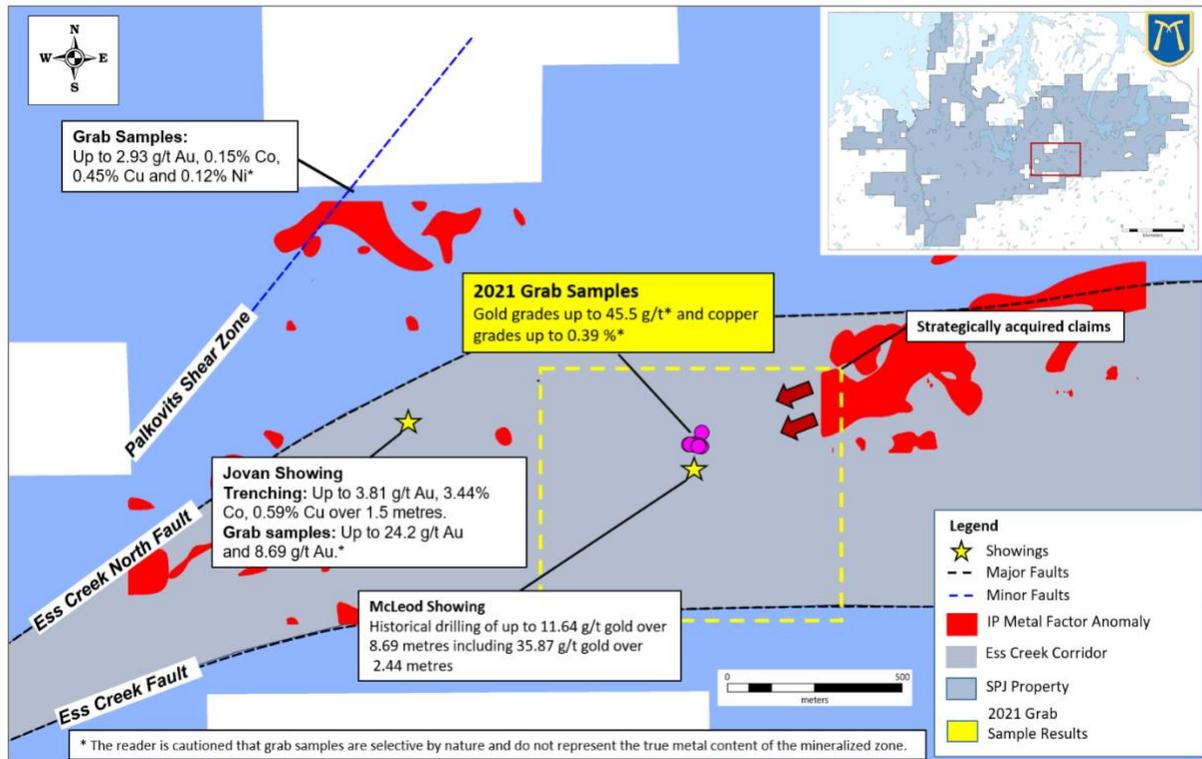


Figure 1 - 2021 grab samples at the McLeod showing

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.

On-site Quality Assurance/Quality Control (“QA/QC”) Measures

Surface samples were transported in security sealed bags for analyses to Actlabs in Ancaster, Ontario. Individual samples are labelled, placed in plastic sample bags and sealed. Groups of samples are then placed into durable rice bags and then shipped. The samples transported to Actlabs were dropped in rice bags with security seals by Manitoulin Transport. The remaining coarse reject portions of the samples remain in storage for further work or verification as needed.

MacDonald Mines has implemented a quality-control program to comply with best practices in the sampling and analysis of surface samples. As part of its QA/QC program, the Company inserts external gold standards (low to high grade) and blanks for every batch of surface samples. All samples over 10 g/t gold, or the samples with abundant visible gold, are analyzed using a 1-kilogram metallic screen. Check assays are routinely performed for samples with visible gold to ascertain the gold content of the mineralization zone.

COVID-19 Precautions

MacDonald Mines has developed and implemented precautions and procedures that are

compliant with Ontario's health guidelines. Strict protocols are in place to ensure the safety of all staff, thereby reducing the potential for community contact and spreading of the virus.

About MacDonald Mines Exploration Ltd.

MacDonald Mines Exploration Ltd. is a mineral exploration company headquartered in Toronto, Ontario that trades on the TSX Venture Exchange under the symbol "BMK".

The Company is focused on developing its 100%-owned SPJ Project in Northern Ontario. Following up on its successful 2019-2021 exploration and drilling campaigns, MacDonald Mines is focused on what it theorizes to be a large gold system at work on the 19,380 ha property with high-grade gold surrounding the past-producing Scadding Gold Mine and surrounding gold/polymetallic mineralization over several kilometres.

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

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This News Release contains forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may", "should", "expects", "plans", "anticipates", "believes", "estimates", "predicts", "potential" or "continue" or the negative of these terms or other comparable terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

Although the Company believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.