



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*

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 on its SPJ Property located 20 km east of Sudbury.

Highlights of the surface exploration results at the McLeod showing:

- Gold grades between 0.01 and 45.5 g/t and copper grades between 0.023 and 0.39% in grab samples collected by MacDonald.
- **The reader is cautioned that grab samples are selective by nature and do not represent the true metal content of the mineralized zones*
- The surface sampling of 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 could exist in the East-West Ess Creek Deformation Corridor.
- MacDonald secured the mineral rights over the McLeod showing by 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 up to 5.14 g/t gold over 0.61 metre in samples terminating drill holes (AFRI 41I10NE0093). The reader is cautioned that the qualified person has not been able to independently verify those historic drilling results. Following that drilling program, three (3) 75-pound bulk samples were taken from the McLeod showing, those samples were taken in what is now a 67×14 metres pit. No results of

exploration, development or diamond drilling were 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 conducted a surface sampling program at the showing in the Fall of 2021. Combined with the drill logs from the 1974 program, MacDonald'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 from different intensity 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 supports the presence of gold-copper mineralization at the McLeod showing (Table 1).

At a larger scale on the SPJ property, the McLeod showing is part of the Ess Creek Deformation Corridor in which MacDonald'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 | | | 610080 | Edge of pit | 537257 | 5165240 |
| 1.23 | Pending | | 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 represent the true metal content of the mineralized zones.*

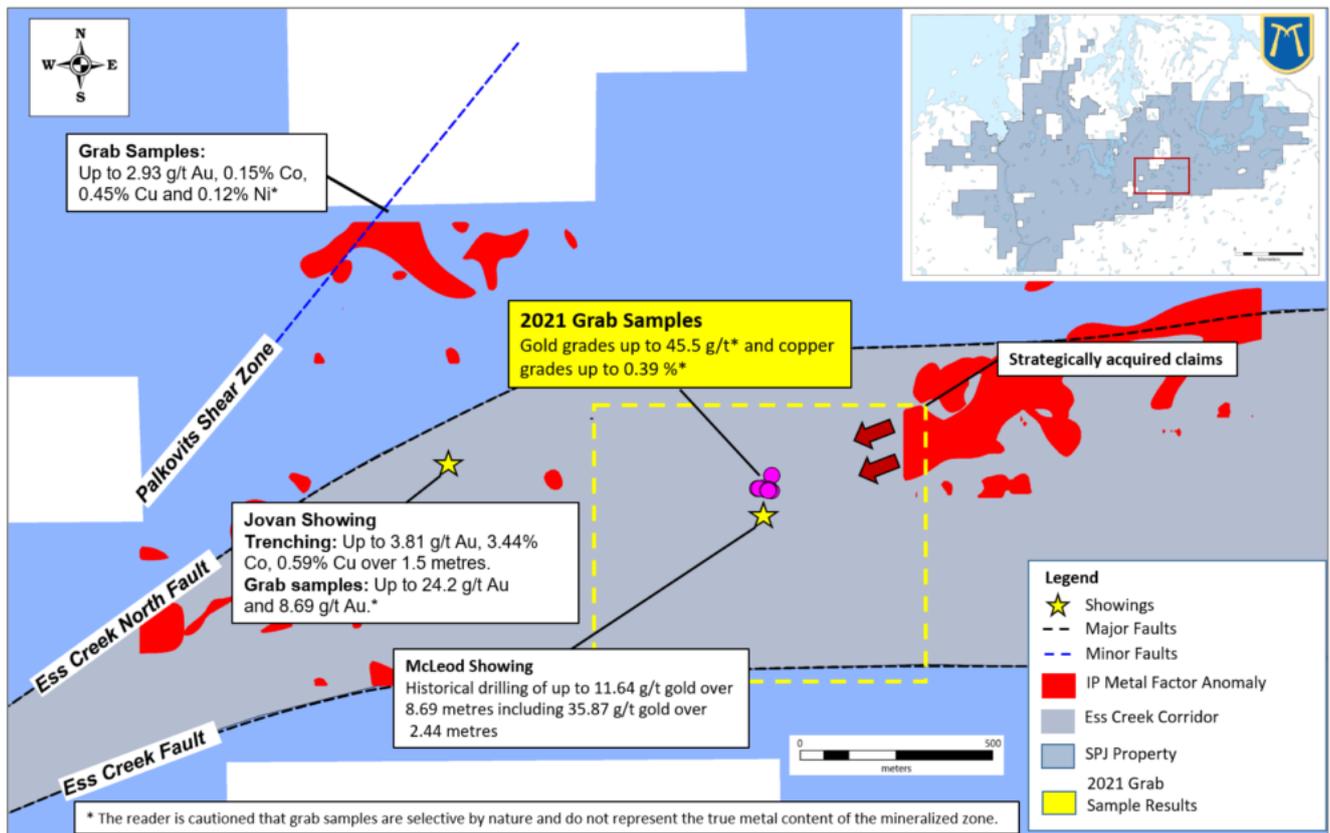


Figure 1 - 2021 grab samples at the McLeod showing

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 if further work or verification is 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 2019/20[SA1] 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 gold/polymetallic mineralization over several kilometres around it.

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

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