MacDonald Mines Reports 8.91 g/t Gold over 1.60 m, including 17.50 g/t Gold over 0.80 m from Further Channel Samples at Glade

News Release

Toronto, Ontario – July 6, 2021 - MacDonald Mines Exploration Ltd. (TSX-V: BMK, OTC: MCDMF) ("MacDonald Mines" or the "Company") announces results from 3 further channel samples taken at the Glade West Showing as part of its ongoing mechanized stripping and channel sampling program at its 100% owned SPJ Project, 30 km east of Sudbury, Ontario. Highlights include channel AGT-21-004B returning 8.91 g/t gold over 1.60 m, including 17.50 g/t gold over 0.80 m.

The channel sampling at Glade continues to show high-grade gold in a set of shears with quartz veins and gold mineralization comparable to the discovery holes (see *May 13, 2021, and June 8, 2021 news releases*). The collar of hole AG-21-096 is located approximately 40 m W-NW from the new channel samples. The gold mineralization observed at Glade is also similar to that intersected at the Scadding Mine, 800 m north of Glade. Further assay results from channel sampling are pending, and a diamond drilling program is planned to follow.

Mia Boiridy, President and CEO, comments, "Our surface exploration program continues to uncover new mineralized structures and extends the known footprint of gold mineralization in the Glade area. As we observed in our discovery holes and at the Scadding Mine, our results suggest that gold mineralization at Glade West occurs in networks of mineralized shear zones and quartz tension veins associated with iron-rich chlorite. The similarities between the mineralization observed at Glade West, Glade East, 225 m away and the Scadding Deposit, 800 m north, could indicate a large system at play in this area. Our systematic sampling of the 9 trenches uncovered is mapping the geometry of the near-surface gold system and guiding our upcoming drilling program."

Table 1. Reported channel sampling assay results

Channel Sample	From (m)	To (m)	Length* (m)	Gold (g/t)	Structure
AGT-21-003A	0.00	3.70	3.70	0.85	
AGT-21-004A	0.00	1.60	1.60	4.51	
	0.00	0.80	0.80	8.47	Alkin-Glade
AGT-21-004B	0.00	1.60	1.60	8.91	
	Including				
	0.00	0.80	0.80	17.50	

^{*}Assay results are presented over the apparent length of the channel samples. Additional work is necessary to define the true width of the zone of mineralization.

Channel sampling detail

Gold mineralization at Glade West is associated with shear zones of different orientations that host networks of gold mineralized, multidirectional and variably spaced quartz tension veins with variable Fe-chlorite.

Channels **AGT-21-004A** and **AGT-21-004B** tested the gold content of an anastomosing network of shear zones, one with an ENE orientation and a prevailing NNE orientated shear. Each shear zone contains networks of deformed quartz veins that are variably mineralized in gold.

Channel **AGT-21-003A** tested a network of quartz veins deformed and transposed into an ENE-oriented shear zone.

Mineralization and deformation are concentrated in the Nipissing intrusion at its northern contact with the Bruce conglomerate along its southern contact with the Espanola limestone. Visible gold was observed in many quartz veins in both holes AG-21-096 and AG-21-097 and in the channel samples taken at Glade East. Surface work at the Glade East showing confirmed similar mineralization 225 m east of the Glade West discovery.

In some quartz veins, visible gold is associated with iron-rich chlorite alteration emplaced and crosscutting the quartz veins. This association between gold and iron-rich chlorite observed at the Glade West Showing is similar to the association between iron-chlorite and gold at the Scadding Deposit.

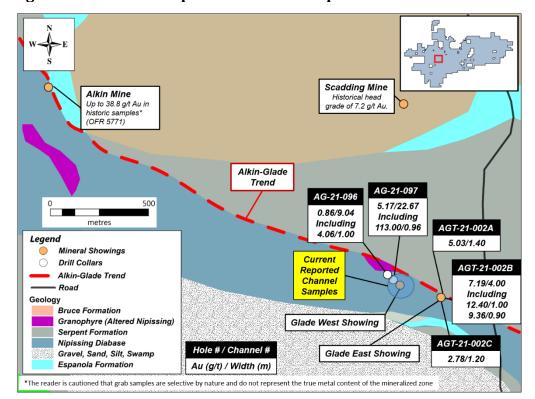


Figure 1. Location of reported channel samples

AGT-21-004A 4.51/1.60 Includina 8.74/0.80 AGT-21-004B 8.91/1.60 Including 17.50/0.80 AGT-21-004C AGT-21-003A Pending AGT-21-005B 0.85/3.70 AGT-21-005A Pending Pending AGT-21-005C Channel # Pending Au (g/t) / Length (m) meters AGT-21-005E Legend ____ Pending Channel Trace AGT-21-005D Geology Nipissing Diabase

Figure 2. Plan map of reported results

Table 2. Coordinates of reported channel samples

Pending

ID	X	Y	Z	Azimuth	Length (m)
AGT-21-003A	529130	5165570	309	318	3.7
AGT-21-004A	529119	5165579	307	322	3.2
AGT-21-004B	529115	5165578	307	310	3.4

Alkin-Glade

The Alkin-Glade trend is located at the contact between a Nipissing intrusion and sedimentary rocks. The structure hosts two significant zones of mineralization - the historic Alkin Mine and the Glade showings. In the Glade area, Ontario Geological Survey maps and historical exploration identified a broad zone of disruption, alteration, deformation and mineralization that extend over a strike length of 300 m. High-grade gold in quartz veins were reported historically.

The historical Alkin gold mine is located 2.3 km W-NW of the Glade showings. At the Alkin Mine, gold mineralization occurs as a network of quartz veins hosted in the felsic phase of the Nipissing Diabase intrusion that also hosts the Glade showings. Reconnaissance work by the Ontario Geological Survey reported gold assays up to 38.8 g/t gold in grab samples taken from the veins exposed at the Alkin Mine (OFR 5771). The reader is cautioned that grab samples are selective by nature and may not represent the actual grade of the targeted mineralization. In

addition, the reader is cautioned that the qualified person has not validated the accuracy of the historical results.

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

Channel 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 has implemented a quality-control program to comply with best practices in sampling and analyzing channel samples. As part of its QA/QC program, MacDonald inserts external gold standards (low to high grade) and blanks every 20 samples in addition to random standards, blanks, and duplicates. All samples over 10 g/t gold or with visible gold are analyzed using a 1 kg metallic screen.

Upcoming Webinar

MacDonald Mines is providing an opportunity for shareholders and other interested parties to participate in a webinar on Monday, July 12, 2021, at 4:00 pm EDT. To register, click on the following link: https://zoom.us/webinar/register/WN-YyI9vEAfTL2W1JC7rAUOLQ
After registering, you will receive a confirmation email containing information about joining the webinar.

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 exploration and drilling campaigns, MacDonald Mines is focused on what it theorizes to be a large gold system at work on the 18,930 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 <u>www.macdonaldmines.com</u>

For more information, please contact:

Mia Boiridy, President & CEO, (250) 575-3305, mboiridy@macdonaldmines.com

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accept responsibility for the adequacy or accuracy of this release.

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.