

MacDonald Mines Drills 11.6 Metres of 2.70 g/t Gold Including 13.40 g/t over 1.3 Metres and 4.32 g/t over 4.5 Metres including 8.80 g/t over 1.3 Metres at Scadding

TORONTO, Feb. 19, 2020 -- MacDonald Mines Exploration Ltd. (TSX-V: BMK) ("MacDonald Mines", "MacDonald" or the "Company") announces that it has received results from the remaining 3 holes from its fall 2019 drill program at the Company's SPJ Property, 40 kilometres east of Sudbury, Ontario.

Results indicate that high-grade gold intervals were intersected at the Villeneuve, Bristol and Monaco structures highlighted by 4.32 g/t gold over 4.5 metres including 8.80 g/t gold over 1.1 metres in SM-19-014 and 2.70 g/t gold over 11.6 metres including 13.40 g/t over 1.3 metres in SM-19-017. Results now show that the high-grade gold mineralization in the Bristol and Monaco structures extends over 350 metres in strike. The Villeneuve Structure extends more than 450 metres along strike. All structures remain open in all directions (Figure 1). Drilling is currently well into the first phase of the 2020 program aimed at continuing to expand the original footprint of the Scadding Deposit. Assays will be announced as they are received.

Quentin Yarie, MacDonald's President and CEO stated, "*The results reported today further trace continuity and substantially increase the strike length of the high-grade gold mineralization at the Bristol and Monaco structures and the Villeneuve Structure. These structures remain open in all directions and are part of the focus of the 2020 drill program already underway. The gold-cobalt mineralization in the Bristol breccia further substantiates the Company's novel, high-grade gold-polymetallic-IOCG model suggesting that Scadding's high-grade gold system is associated with a much larger mineralization system than previously thought.*"

Table 1. Assay highlights from reported holes

Hole	From (m)	To (m)	Length* (m)	Gold (g/t)	Cobalt (wt. %)	Structure
SM-19-014	50.4	54.9	4.5	4.32		Villeneuve/Bugatti
	including					
	52.8	53.9	1.1	8.80		
SM-19-017	68.4	80.0	11.6	2.70		Villeneuve/Bristol/Monaco
	including					
	73.0	74.3	1.3	13.40		
SM-19-024	11.9	21.2	9.3	0.67		Bristol/Monaco
	including					
	17.0	18.0	1.0	2.88		
	156.0	166.0	10.0	0.50		Bristol breccia
including						
159.0	160.9	1.9	1.31	0.017		
	199.9	201.8	1.9	0.11	0.045	

* Assay results presented over core length. They are estimated to represent 75-85% true width.

Table 2. Coordinates of reported holes

Hole ID	Easting	Northing	Elevation	Azimuth	Dip	Depth (m)
SM-19-014	529480	5166433	300.5	315.5	-45.1	142.0
SM-19-017	529209	5166368	307.8	312.9	-45.0	103.0
SM-19-024	529134	5166361	308.1	319.0	-45.0	211.0

Hole SM-19-014 shows the continuity of gold mineralization underneath the western end of the E-W pit. It extended the Villeneuve Structure 70 metres west of hole SM-19-022 and 55 metres down-dip from the gold mineralization at the intersection of the Bugatti and Villeneuve structures in SM-19-025 (see Feb. 11, 2020 News Release). The mineralization remains open in all directions.

SM-19-017 targeted the intersection of the Villeneuve and Bristol/Monaco structural corridors and intersected near-surface gold mineralization. The gold mineralization and chlorite alteration in the Bristol/Monaco structural zones extend over a strike length of 350 metres between SM-19-002 and SM-19-024. It remains open at each end and at depth. In addition, the gold mineralization and chlorite alteration in the Villeneuve Structure extends over a strike length of 450 metres between SM-19-018 and SM-19-017 and remains open in all directions.

Hole SM-19-024 shows the continuity of gold mineralization 65 metres up-dip of SM-19-017 in the Bristol/Monaco structural zones. Results also continue to show wide bands of gold-cobalt mineralization in the Bristol breccia. Mineralization remains open in all directions.

A photo accompanying this announcement is available at

<https://www.globenewswire.com/NewsRoom/AttachmentNg/c26b8cde-6044-4426-bccd-73d9ddf33764>

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

Drill core samples were transported in security-sealed bags for analyses to Bureau Veritas in Timmins, Ontario. Individual samples are labeled, placed in plastic sample bags and sealed. Groups of samples are then placed into durable rice bags and then shipped. The remaining coarse reject portions of the samples remain in storage in case further work or verification is needed.

MacDonald has implemented a quality-control program to comply with best practices in the sampling and analysis of drill core. 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 the samples with abundant visible gold are analysed by 1 kilogram metallic screen.

Issuance of Incentive Stock Options Under the Company’s Stock Option Plan

The Company has granted a total of 4,725,000 options to Officers, Directors, Consultants and Employees of the Company. The exercise price of the options is \$0.08 and the options are exercisable for a period of five years. The options are subject to TSX-V regulations and approval.

SPJ Property highlights

- 100% ownership
- 17,720 hectares in excellent mining jurisdiction and close to infrastructure
- Hosts the high-grade past producing Scadding Gold Mine
- Evidence of polymetallic mineralization at the Scadding Deposit indicative of IOCG potential
- Significant gold, cobalt, copper, silver, nickel and rare earth showings outside of the Scadding Deposit footprint

Historically, the Scadding Mine produced 914 kilograms of gold from 127,000 tonnes of mineralized material grading 7.2 g/t (OFR 5771). MacDonald’s reinterpretation of the geological model at the Scadding Deposit and larger SPJ property indicates that it could host a gold-rich Iron-Oxide-Copper-Gold deposit and that significant gold structures may have been missed by previous operators’ drilling campaigns (2009-2011).

A photo accompanying this announcement is available at

<https://www.globenewswire.com/NewsRoom/AttachmentNg/30b365f8-91c8-40d1-af8a-15717711a25e>

Qualified Person

Quentin Yarie, P Geo. is the qualified person responsible for preparing, supervising and approving the scientific and technical content of this news release.

About MacDonald Mines Exploration Ltd.

MacDonald Mines Exploration Ltd. is a mineral exploration company headquartered in Toronto, Ontario focused on gold exploration in Canada. The Company is focused on developing its large SPJ Project in Northern Ontario.

The Company's common shares trade on the TSX Venture Exchange under the symbol "BMK".

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

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